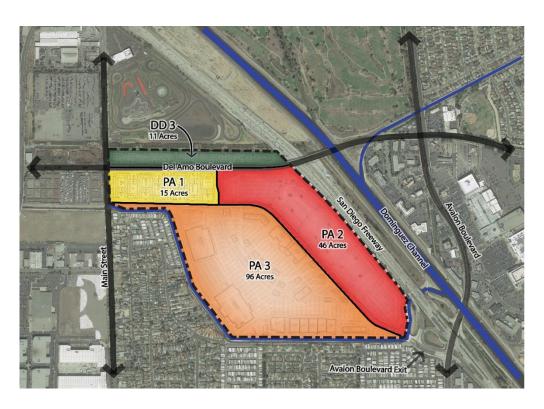
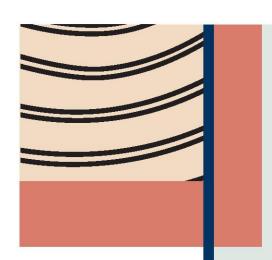


THE DISTRICT AT SOUTH BAY SPECIFIC PLAN PROJECT



SCH No. 2005051059



VOLUME I

DRAFT SUPPLEMENTAL ENVIRONMENTAL IMPACT REPORT

THE DISTRICT AT SOUTH BAY SPECIFIC PLAN PROJECT

LEAD AGENCY

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SCH No. 2005051059



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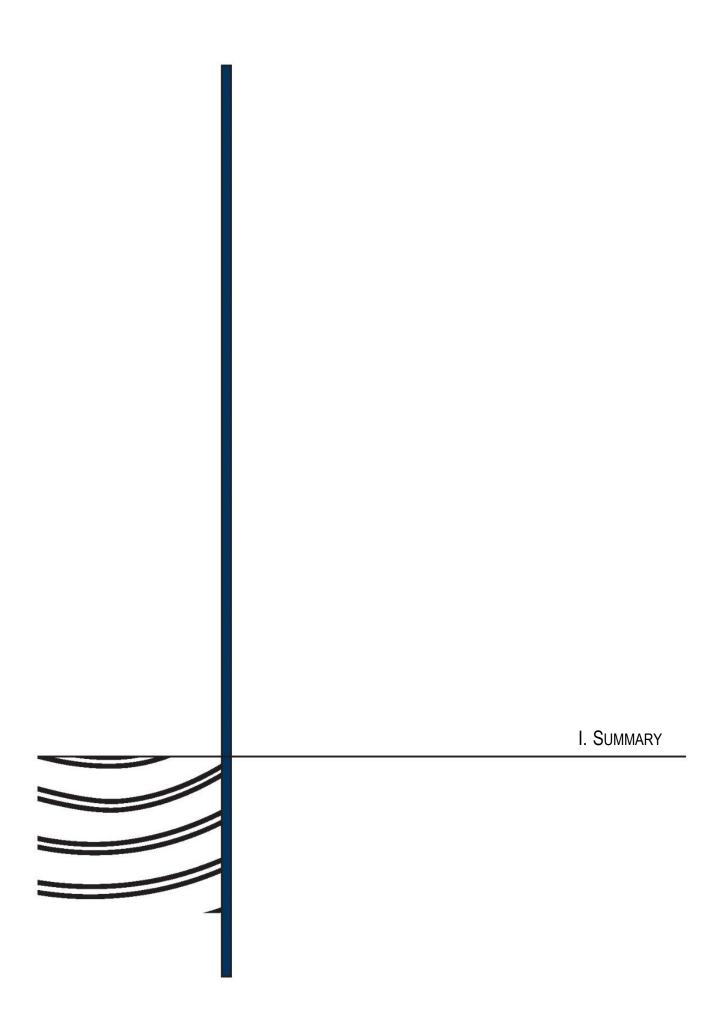
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I. SUMMARY

1. PURPOSE OF THE SEIR

This Supplemental Environmental Impact Report (SEIR) supplements the previously approved Final EIR (FEIR) prepared for the Project in 2006 with respect to the Specific Plan (known then as the Carson Marketplace Specific Plan) for a 168-acre Project site, which included 157 acres of land located south of Del Amo Boulevard (the 157-acre portion of the Project site is referred to herein as the Property), which operated as a Class II landfill from 1959 until 1965, and 11 acres of land north of Del Amo Boulevard (Development District 3 [DD3]), which did not have landfill uses. In 2009, an addendum to the 2006 FEIR was prepared and subsequently adopted to discuss changes in the remediation activities at the Property. In addition, in 2011, the City of Carson (City), relying upon the FEIR, amended the Carson Marketplace Specific Plan and, as part of that amendment, renamed the Specific Plan as The Boulevards at South Bay Specific Plan. During its period of ownership, Carson Marketplace LLC began to implement certain remedial actions to enable development of the approved mixed-use development project. The current proposed development of the site is an amendment to The Boulevards at South Bay Specific Plan, which is proposed to the renamed as The District at South Bay Specific Plan (herein called the Specific Plan Amendment [SPA]).

This SEIR was prepared as a supplement to the previously approved FEIR in order to evaluate the changes to the approved Project proposed by the modified development plan, SPA, and related entitlements (the proposed modified Project) and to determine whether substantial changes in circumstances surrounding the Property and the approved Project (if any), and new information of substantial importance (if any), require further analysis under CEQA.

2. SEIR FOCUS AND EFFECTS FOUND NOT TO BE SIGNIFICANT

In compliance with CEQA Section 21080.4, a Notice of Preparation (NOP) was prepared by the City and distributed for public comment to the State Clearinghouse, Office of Planning and Research, responsible agencies, and other interested parties on August 1, 2017. During the NOP review period, a public scoping meeting was held at the Carson Community Center on August 23, 2017. The purpose of the scoping meeting was to obtain input from the public regarding the scope of the issues and the alternatives that would be analyzed in the Draft SEIR.

CEQA Guidelines Section 15128 requires that an EIR contain a brief discussion stating the reasons why various possible significant effects of a project were determined not to be significant and are, therefore, not discussed in detail in the EIR. In addition, there are some issue areas for which no change in circumstances or change as a result of the proposed modified

Project relative to the approved Project have occurred since the FEIR was certified. Therefore, no further analysis is warranted in this SEIR.

The City determined that implementation of the proposed modified Project may either by in itself or in conjunction with past, present, and reasonably foreseeable future development in the vicinity, have new significant effects in the following areas:

- Traffic and Circulation;
- Air Quality; and
- Noise.

As with the approved Project, visual qualities with regard to the conversion of the appearance of the Project site would continue to be a significant effect for the proposed modified Project, but is not a new impact as compared to the approved Project.

The approved FEIR determined that the Project would not have the potential to cause significant impacts in the following areas: Agricultural Resources, Biological Resources, Mineral Resources, Cultural Resources, Hydrology (Drainage and Groundwater Quality), and Population and Housing. The City also found the proposed modified Project would not have a potential to cause significant impacts in the following areas: damage scenic resources in a state scenic highway; create objectionable odors affecting a substantial number of people; expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving for landslides; 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; conflict with any applicable habitat conservation plan or natural community conservation plan; project located within an airport land use plan area, or, where such a plan has not been adopted, in an area within two miles of a public airport; a project located in the vicinity of a private airstrip; result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks; substantially increase hazards due to a design feature; and result in inadequate emergency access. Therefore, these areas are not examined in this SEIR. The rationale for the finding that no significant impacts would occur for these areas is provided in the approved Project's Initial Study and subsequent analysis.

Nevertheless, the SEIR still includes a brief discussion of effects not found to be significant including, as stated above, topic areas where no substantial changes in circumstances were determined since the FEIR was certified. In cases in which mitigation measures were adopted in the Mitigation Monitoring and Reporting Program (MMRP) for the FEIR and are

relevant to the modified proposed Project to reduce significant impacts to a less than significant level, the mitigation measures from the MMRP are included and listed below:¹

a. Hazards and Hazardous Materials

- **Mitigation Measure D-1:** To the extent the Applicant desires to refine or modify requirements in the RAP, the Applicant shall provide documentation to the City indicating DTSC approval of such refinements or modifications <u>prior to commencement of construction</u>.
- **Mitigation Measure D-2:** The Applicant shall provide documentation to the City indicating DTSC shall permit the any proposed residential uses in Development District 1 prior to issuance of any permits for such residential development in Development District 1 a building permit for residential development.
- Mitigation Measure D-3: The Applicant shall provide documentation to the City indicating both on- and off-site risks associated with RAP construction have been evaluated to the satisfaction of the DTSC, and at a minimum, perimeter air monitoring shall be completed for dust, particulates, and constituents determined to be Constituents of Concern (COCs). Should the air monitoring indicate any violations of air quality as defined in the RAP, then construction activities causing the exceedance shall cease until modifications have been implemented to remedy the exceedances.
- Mitigation Measure D-4: The Applicant shall provide to the City, documentation indicating that (1) a post remediation cell-specific risk assessment has been prepared by the Applicant and approved by DTSC; demonstrating that the risk of exposure for occupancy of that cell is within acceptable levels to DTSC and (2) DTSC has eertified approved a remedial action completion report documenting that the remedial systems are properly functioning prior to issuance of a Certificate of Occupancy.
- Mitigation Measure D-5: The Applicant shall provide documentation to the City indicating that applicable remedial systems and monitoring plans, including the location of the flare and treatment facility are in accordance with applicable SCAQMD regulations.²
- Mitigation Measure D-6: The Applicant's construction contractor shall incorporate the contingency plan recommended under the July 9, 2008, Oil/Water Well Investigation report by Arcadis into construction specifications. The contingency plan shall be physically on site during any earthwork activities and implemented in the event that a previously unknown well is encountered at the Property.

The mitigation measures below are updated from those set forth in the FEIR. For clarity, the changed text is marked as follows: new text is <u>underlined</u>, and deleted text is shown in strikeout format.

² Mitigation Measure D-5 no longer applies as the flare and treatment facility have already been constructed.

b. Surface Water Quality

The FEIR contained Mitigation Measure F-1 in Section IV.F, Surface Water Quality; however, it pertained specifically to what was known as Development District 3 (DD3), which is the development that has already been constructed north of Del Amo Boulevard, and, therefore, is no longer part of the Project.

Mitigation Measure F-1: Soils in Development District 3 shall be tested prior to the issuance of a grading permit, in accordance with the recommendation of Blasland, Bouck and Lee, Inc.'s (BBL's) Preliminary Draft Phase I and Initial Phase II Environmental Site Assessment Summary, Del Amo Gardens Site (July 6, 2005). If contaminants are found in excess of State of California maximum contamination levels (MCLs), the soils shall be addressed in accordance with a DTSC approved program.

c. Fire Protection

- **Mitigation Measure I.1-1:** Prior to construction, the Applicant shall submit building plans to the Los Angeles County Fire Department (LACoFD) for review. Based on such plan check, any additional fire safety recommendations shall be implemented to the satisfaction of the LACoFD.
- **Mitigation Measure I.1-2:** The Applicant shall provide adequate ingress/egress access points for emergency response to the satisfaction of the LACoFD.
- **Mitigation Measure I.1-3:** The Applicant shall comply with all applicable fire code and ordinance requirements for construction, access, water mains, fire flows, and fire hydrants as required by the LACoFD.
- **Mitigation Measure I.1-4:** Every building shall be accessible to Fire Department apparatus by way of access roadways, with an all-weather surface of not less than the width prescribed by the LACoFD. The roadway shall extend to within 150 feet of all portions of exterior building walls when measured by an unobstructed route around the exterior of the building.
- **Mitigation Measure I.1-5:** Requirements for access, fire flows, and hydrants, shall be addressed during the City's subdivision tentative map stage.
- **Mitigation Measure I.1-6:** Fire sprinkler systems shall be installed in all residential and commercial occupancies to the satisfaction of the LACoFD.
- **Mitigation Measure I.1-7:** The Applicant shall <u>asen</u>sure that adequate water pressure is available to meet Code-required fire flow. Based on the size of the buildings, proximity of other structures, and construction type, a maximum fire flow up to <u>5,0004,000</u> gallons per minute (gpm) at 20 pounds per square inch (psi) residual pressure for up to a four-hour duration may be required.

- **Mitigation Measure I.1-8:** Fire hydrant spacing shall be 300 feet and shall meet the following requirements:
 - No portion of a lot's frontage shall be more than 200 feet via vehicular access from a properly spaced fire hydrant;
 - No portion of a building shall exceed 400 feet via vehicular access from a properly spaced fire hydrant;
 - Additional hydrants shall be required if spacing exceeds specified distances;
 - When a cul-de-sac depth exceeds 200 feet on a commercial street, hydrants shall be required at the corner and mid-block;
 - A cul-de-sac shall not be more than 500 feet in length, when serving land zoned for commercial use; and
 - Turning radii in a commercial zone shall not be less than 32 feet. The measurement shall be determined at the centerline of the road. A turning area shall be provided for all driveways exceeding 150 feet in length at the end of all cul-ede-sacs, to the satisfaction of the LACoFD.
- **Mitigation Measure I.1-9:** All on_site driveways and roadways shall provide a minimum unobstructed (clear-to-sky) width of 28 feet. The on_site driveways shall be within 150 feet of all portions of the exterior walls of the first story of any building. The centerline of the access driveway shall be located parallel to, and within 30 feet of, an exterior wall on one side of the proposed structure or otherwise in accordance with the City Fire Code.
- Mitigation Measure I.1-10: All on_site driveways shall provide a minimum unobstructed, (clear-to-sky) width of 28 feet. Driveway width shall be increased under the following conditions:
 - If parallel parking is allowed on one side of the access roadway/driveway, the roadway width shall be 34 feet; and
 - If parallel parking is allowed on both sides of the access roadway/driveway, the roadway width shall be 36 feet in a residential area or 42 feet in a commercial area.
- Mitigation Measure I.1-11: The entrance to any street or driveway with parking restrictions shall be posted with LACoFD-approved signs stating "NO PARKING FIRE LANE" in 3-inch-high letters, at intermittent distances of 150 feet. Any access-way that is less than 34 feet in width shall be labeled "Fire Lane" on the final tract map and final building plans.
- **Mitigation Measure I.1-12:** The following standards apply to the Project's residential component only:
 - A cul-de-sac shall be a minimum of 34 feet in width and shall not be more than 700 feet in length;

- The length of the cul-de-sac may be increased to 1,000 feet if a minimum 36-foot-wide roadway is provided; and
- An LACoFD-approved turning radius shall be provided at the terminus of all residential cul-de-sacs.
- Mitigation Measure I.1-13: The Applicant shall pay a fair share contribution for the improvement of fire service facilities and equipment that is required to off-set impacts of the Project, as determined by the County of Los Angles Fire Department and the City of Carson.

Per the LACoFD comment letter on the NOP (Appendix A), the following mitigation measures have been added to the proposed modified Project:

<u>Mitigation Measure I.1-14:</u> All access devices and gates shall meet the following requirements:

- Any single-gated opening used for ingress and egress shall be a minimum of 26 feet clear-to-sky;
- Any divided gate opening (when each gate is used for a single direction of travel, i.e., ingress or egress) shall be a minimum width of 20 feet clear to sky;
- Gates and/or control devices shall be positioned a minimum of 50 feet from a public right-of-way and shall be provided with a turnaround having a minimum of 32 feet of turning radius. If an intercom system is used, the 50 feet shall be measured from the right-of-way to the intercom control device;
- All limited access devices shall be of a type approved by LACoFD; and
- Gate plans shall be submitted to LACoFD prior to installation. These plans shall show all locations, widths, and details of the proposed gates.
- <u>Mitigation Measure I.1-15:</u> All proposals for traffic calming measures (speed humps/bumps/cushions, traffic circles, roundabouts, etc.) shall be submitted to LACoFD for review prior to implementation.
- Mitigation Measure I.1-16: Provide three sets of alternate route (detour) plans with a tentative schedule of planned closures prior to the beginning of construction.

 Complete architectural/structural plans are not necessary.
- Mitigation Measure I.1-17: Any temporary bridges shall be designed, constructed, and maintained to support a live load of at least 70,000 pounds. A minimum vertical clearance of 13'6" shall be required throughout construction.
- Mitigation Measure I.1-18: Disruptions to water services shall be coordinated with LACoFD, and alternate water sources shall be provided for fire protection during such disruptions.

d. Police

- **Mitigation Measure I.2-1:** The Applicant shall provide private security services within the areas of Districts 1, <u>Planning Areas 2</u>, and 3 that are occupied by commercial development. On-site security services shall maintain an ongoing dialogue with the Sheriff's Department so as to maximize the value of the security service that are provided.
- Mitigation Measure I.2-2: The Applicant shall incorporate into the Project design a Community Safety Center space for a Sheriff's substation for use by the Project's private security force and the Los Angeles County Sheriff's Department. It shall include the following features at a minimum: a front desk/reception area, a community meeting room, work space for law enforcement and public safety personnel, a video monitoring console, and restrooms. The Center shall be staffed by either a Sheriff's Department Community Services Officer or by personnel approved by the Sheriff's Department.
- **Mitigation Measure I.2-3:** The Applicant shall install video cameras throughout the commercial development within Districts 1, Planning Areas 2, and 3 with a digitally recorded feed to the Community Safety Center substation that is also accessible via the internet at the Carson Sheriff's Station.
- **Mitigation Measure I.2-4:** The Applicant shall develop jointly with the Sheriff's Department a community policing plan, subject to final review and approval by the Sheriff's Department.
- Mitigation Measure I.2-5: The Applicant shall <u>confer with the Sheriff's Department</u>
 <u>and, if private security is not sufficient, shall fund Deputy Sheriffs on an overtime basis to augment security during peak periods, as jointly determined by the Applicant or its successor, and the Sheriff's Department.</u>
- **Mitigation Measure I.2-6:** The management of the entertainment venues located within the Project site shall notify the Sheriff's Station in advance of planned activities (i.e., movie schedules).
- **Mitigation Measure I.2-7:** The Sheriff's Department Crime Prevention Unit shall be contacted for advice on crime prevention programs that could be incorporated into the proposed <u>modified Project</u>, including Neighborhood Watch.

Based on the Sheriff's Department comment letter on the NOP (Appendix A), the following Mitigation Measure has been added to the proposed modified Project:

Mitigation Measure I.2-8: Applicant(s) for Planning Areas 1, 2, and 3 shall pay a fair-share contribution for Sheriff department services, facilities, and equipment that is required to offset the impacts of the proposed modified Project, as determined by the City of Carson after consultation with the Sheriff's Department.

e. Parks and Recreation

- **Mitigation Measure I.4-1:** Residential uses of tThe Project shall provide park and recreation facilities pursuant to Section 9207.19, equivalent to three3 acres per 1,000 population, that would be met through the provision of park space, on-site improvements, and/or, the payment of in-lieu fees.
- **Mitigation Measure I.4-2:** Residential uses of tThe Project shall meet the intent of Municipal Code Sections 9128.54 and 9128.15 through the provision of private open space as defined therein and/or the provision of additional amenities that meet the recreational needs of Project residents, e.g., health clubs.
- Mitigation Measure I.4-3: Public open space for residential uses of the Project shall meet the requirements of Municipal Code Section 9126.28 by demonstrating that the Project's common open space area meets the 40% standard established therein. be calculated on a per-unit basis:
 - For PA 1:
 - Studio and 1-Bedroom Units: a minimum of 150 sq.ft. per unit
 - 2-Bedroom Units: a minimum of 220 sq.ft. per unit
 - 3+-Bedroom Units: a minimum of 250 sq.ft. per unit
 - All with a minimum dimension of 15 feet in any direction
 - For DD3:
 - All Units: a minimum of 300 sq.ft. per unit with a minimum dimension of 15 feet in any direction

f. Libraries

Mitigation Measure I.5-1: The Applicants for residential uses shall pay a fair-share contribution for the improvement of library facilities that are required to off-set impacts of the Project, subject to approval of the County of Los Angeles Public Library.

g. Water Supply

- **Mitigation Measure J.1-1:** The Building Department and the Planning Division shall review building plans to ensure that water-<u>reducing measures are utilized</u>, as required by Title 20 and Title 24 of the California Administrative Code. These measures include, but are not limited to, water conserving dishwashers, low-volume toilet tanks, and flow control devices for faucets.
- **Mitigation Measure J.1-2:** The Project shall comply with the City's landscape ordinance, "A Water Efficient Landscape Ordinance," as required by the State Water Conservation Landscape Act.

- **Mitigation Measure J.1-3:** The Applicant shall provide reclaimed water for the Project's non-potable water needs, if feasible.
- **Mitigation Measure J.1-4:** Landscaping of the <u>Project site Property</u> shall utilize xeriscape (low-maintenance, drought-resistant) plantings.
- **Mitigation Measure J.1-5:** Automatic irrigation systems shall be set to <u>iensure</u> irrigation during early morning or evening hours to minimize water loss due to evaporation. Sprinklers must be reset to water less in cooler months and during rainfall season so that water is not wasted on excessive landscape irrigation.
- **Mitigation Measure J.1-6:** The Project shall be designed to recycle all water used in cooling systems to the maximum extent possible.
- **Mitigation Measure J.1-7:** To the maximum extent feasible, reclaimed water shall be used during the grading and construction phase of the Project for the following activities: (1) dust control, (2) soil compaction, and (3) concrete mixing.
- **Mitigation Measure J.1-8:** Water lines and hydrants shall be sized and located so as to meet the fire flow requirements established by the Los Angeles County Fire Department.

3. SEIR ORGANIZATION

This Draft EIR is organized into the following nine chapters:

- Chapter I, Summary. This chapter describes the purpose of the SEIR, SEIR focus and effects found not to be significant, SEIR organization, Project background, areas of controversy and issues to be resolved, public review process, discretionary actions, and a summary of environmental impacts and mitigation measures.
- Chapter II, Modified Project Description. This chapter presents the location, characteristics, and objectives of the proposed modified Project.
- Chapter III, General Description of the Environmental Setting. This chapter contains a description of the existing setting and a list of known related projects in the Project area that are anticipated for completion by 2023, the expected time for completion and occupancy of the proposed Project.
- Chapter IV, Environmental Impact Analysis. This chapter contains the environmental setting, Project impacts, mitigation measures, cumulative impacts, and conclusions regarding the level of impact significance after mitigation for each of the environmental issues addressed in this SEIR.
- Chapter V, Alternatives. This chapter provides analyses of each of the alternatives
 to the proposed modified Project, and the alternatives considered but rejected from
 further analysis.
- Chapter VI, Effects Found Not to Be Significant. This chapter describes any potential environmental effects that were determined not to be significant during the approved Project's initial project scoping or were sufficiently mitigated in the FEIR

and, therefore, were not discussed in detail in the SEIR. A number of impact areas required to be analyzed under CEQA were determined not to be potentially significant for the approved Project's Initial Study during the proposed modified Project's public scoping period; therefore, these environmental issue areas have not been analyzed in the SEIR and have received no further consideration.

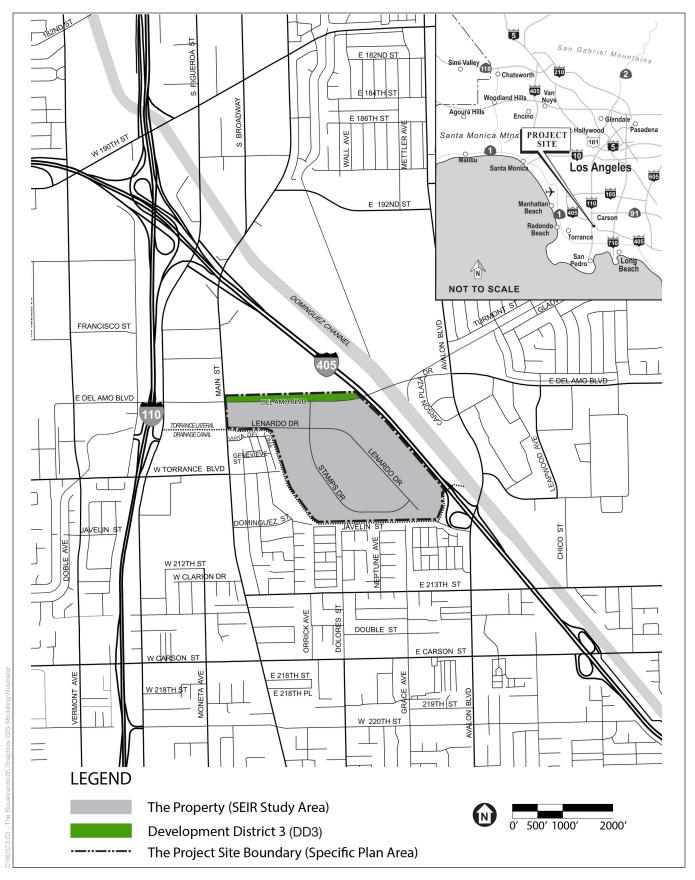
- Chapter VII, Other Environmental Considerations. This chapter presents an analysis of the significant irreversible changes in the environment that would result from the proposed modified Project, an analysis of the proposed modified Project's potential for causing growth-inducing impacts, and an analysis of potential secondary impacts (i.e., impacts that would result from implementation of the Project's off-site mitigation measures).
- Chapter VIII, References. This chapter lists all of the references and sources used in the preparation of this SEIR.
- Chapter IX, List of Preparers. This chapter lists the persons, agencies, and organizations that were consulted or contributed to the preparation of this SEIR.

4. PROPOSED MODIFIED PROJECT

a. Project Location

The Project site is located in the City of Carson, approximately 17 miles south of downtown Los Angeles and approximately 6.5 miles east of the Pacific Ocean. The Project site is in the South Bay area of Los Angeles County. It is comprised of approximately 168 acres located southwest of the San Diego Freeway (the I-405 Freeway) at and north of the Avalon Boulevard interchange. **Figure I-1, Regional Location**, depicts the Project site in a regional context, and **Figure I-2, Local Vicinity**, shows the Project site, including the Property, in a local context. The Property is the site of a former Class II landfill, currently undergoing remediation, capping, and operation and maintenance of the former landfill as further described in the FEIR and in Section II.I.1, Background and Context for the Proposed Modified Project. The Property currently includes groundwater and landfill gas treatment facilities, construction trailers and equipment in the northwest portion, subsurface utilities, and soil and material stockpiles and construction materials stored in various locations.

The I-405 Freeway, Harbor Freeway (I-110), Artesia Freeway (SR-91), and Long Beach Freeway (I-710) provide regional access to the Project site. The I-405 Freeway is located adjacent to the site's eastern boundary, the I-110 Freeway is located directly west of the Project site, and the SR-91 Freeway is located approximately 2.5 miles north of the Project site. The I-710 Freeway, which is located on Carson's eastern boundary, links the City with the Long Beach and Harbor areas. Locally, access to the Project site is available via Main Street (a north/south thoroughfare on the western side of the Project site), Avalon Boulevard (an exit from the I-405 Freeway and a major north/south arterial, with a proposed direct link into the Project site), and Del Amo Boulevard, which forms the Property's northern boundary and the southerly boundary of DD3.

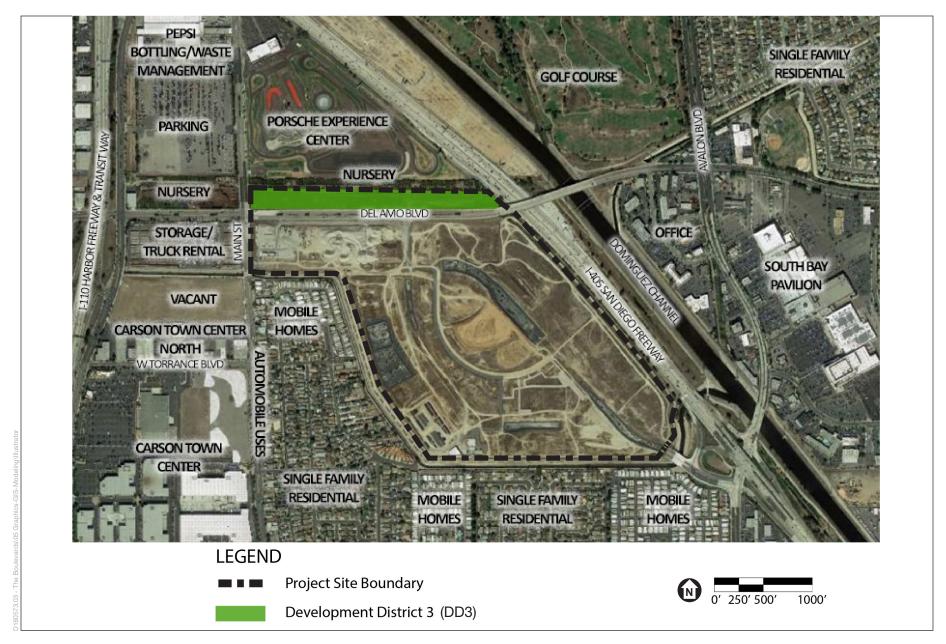


SOURCE: ESA, 2016

The District at South Bay

Figure I-1
Regional Location





SOURCE: RE | Solutions The District at South Bay





On a local scale, the Project site is surrounded by multiple uses. East of I-405, land uses include neighborhood and regional retail, most notably the South Bay Pavilion at Carson. To the north and east of the Project site are the Porsche Experience Center and the Victoria Golf Course, respectively. Residential areas, consisting of one-story and two-story detached residences and mobile homes, are located to the south and west. The residences are separated from the Project site by the Torrance Lateral Flood Control Channel (Torrance Lateral), a concrete-lined drainage channel which parallels the southern and western border of the Project site. To the west of the Project site, extending away from the Project site on Torrance and Del Amo Boulevards, are commercial and light industrial uses. Further north on the west side of Main Street are light industrial uses, with the StubHub Center and California State University, Dominguez Hills, located northeast of the project. DD3, which forms a portion of the Project site, is located to the north of Del Amo Boulevard, north of the Property.

b. Project Characteristics

The proposed modified Project would retain the wide range of land uses adopted by the City under the approved Specific Plan, including some or all of the following uses: neighborhood commercial, regional commercial (including outlets),³ commercial recreation/entertainment, restaurant, hotel, and residential. The proposed changes to the approved Project would modify or otherwise reduce the approved Project, which consisted of 1,995,125 sq.ft. of commercial uses on the Project site⁴ and no more than 1,550 residential units. In comparison, the proposed modified Project would consist of development of the Property with a total of 1,250 residential units and 1,834,833 sq.ft. of commercial uses⁵ including approximately 711,500 sq.ft.⁶ of regional commercial uses, including outlet and restaurant uses on Planning Area (PA) 2, and 890,000 sq.ft. of regional retail center, neighborhood-serving commercial, restaurant, and

³ This SEIR assumes outlet and restaurant uses for PA 2; however, the SPA allows other regional commercial uses on that planning area.

⁴ The total amount of commercial floor area for the approved Project includes 200,000 sq.ft. for the development of 300 rooms in a hotel.

The total amount of commercial floor area for the proposed modified Project includes 233,333 sq.ft. for the development of 350 rooms in two hotels.

⁶ Unless otherwise referenced, all square footage referenced in the SEIR is calculated using gross building area (GBA) set forth in The District at South Bay Specific Plan, as follows:

[&]quot;Unless otherwise specified in this Specific Plan, square footage shall be calculated using Gross Building Area (GBA). GBA shall include the sum of the horizontal areas of all floors within a building measured from the exterior faces of exterior walls or from the centerline of party walls separating two (2) buildings. The floor area of any ancillary areas within a building with headroom of more than six and one-half (6-1/2) feet shall be included. Ancillary areas within a building with six and one-half (6-1/2) feet of headroom or less, as well as the area of courtyards, areas open to the sky, exterior walkways, exterior landscape areas, covered canopies, trellis structures, and architectural overhangs shall be excluded. For the purpose of computing GBA and required parking area, floor area devoted to parking and maneuvering shall not be included."

commercial recreation/entertainment uses on PA 3 of the SPA, as well as 350 rooms total in two hotels. Although the proposed modified Project contains 50 additional hotel rooms as compared with the approved Project, this represents only an increase of 33,333 sq.ft. of development, and there is a decrease in the other types of commercial uses on the Property, resulting in an overall decrease in commercial square footage in the proposed modified Project as compared with the approved Project. The total number of residential units proposed for the Project site has not changed from that analyzed in the FEIR. The SPA proposes 1,250 units on the Property to take into account the 300 residential units on DD3 (comprising the remainder of the 1,550 units permitted under the existing Boulevard at South Bay Specific Plan for the Project site) that have received City approvals. As development on DD3 is not being changed by the proposed modified Project, it does not need to be further assessed in this SEIR. However, because its development is not yet completed, it is treated as a related project and analyzed as part of the cumulative impact analysis in this SEIR.

5. BACKGROUND AND CONTEXT FOR THE PROPOSED MODIFIED PROJECT

In 2006, in accordance with CEQA, the City of Carson Redevelopment Agency (RDA), as lead agency, certified a project-level FEIR for the Carson Marketplace Project (SCH No. 2005051059) (2006 Final EIR) in connection with development of the Project site.

As a result of contamination on and adjacent to the landfill, the Property had been listed as a hazardous substances site by the California Department of Toxic Substances Control (DTSC) in the 1980s and a remedial action order was issued for the Property in 1988 requiring implementation of remedial activities. A remedial action plan (RAP) was approved for the Property in 1995, which was modified by an Explanation of Significant Differences (ESD) in 2009, each of which is incorporated into this document.

In 2006, the Project site was owned by Carson Marketplace LLC, a private developer, which proposed a development plan for the Project site that included a 1,995,125-square-foot (sq.ft.) mixed-use commercial project (including retail, 300 hotel rooms, and entertainment uses) and 1,550 residential units. In 2006, the City of Carson (City) adopted the Carson Marketplace Specific Plan to implement that project (referred to herein as the approved Project).

In 2009, an Addendum to the 2006 FEIR was prepared and subsequently adopted to discuss changes in the remediation activities at the Property (hereinafter the term "FEIR" represents the 2006 FEIR and the Addendum, and the term "approved" in connection with the

⁷ The SPA includes changes to implementation procedures that would apply to future entitlements, if any, requested for DD3. However, at this time, no further entitlements are anticipated to be required for this development (DD3) and the changes in implementation procedures would not have a physical effect on the environment.

FEIR refers to certification of the 2006 Final EIR and the adoption of the 2009 Addendum).⁸ In addition, in 2011, the City of Carson (City), relying upon the FEIR, amended the Carson Marketplace Specific Plan and, as part of that amendment, renamed the Specific Plan as The Boulevards at South Bay Specific Plan. During its period of ownership, Carson Marketplace LLC began to implement certain remedial actions to enable development of the approved mixed-use development project.

With the state-wide dissolution of redevelopment agencies in 2011, the City formed the Carson Successor Agency to maintain bonds issued by the RDA on the Property, although the land was still owned by a private development corporation. In an effort to win the bid for a new NFL stadium in 2015, the City, the City of Carson Housing Authority, and two community facilities districts formed the Carson Reclamation Authority (CRA), a California joint powers authority, for the purpose of acquiring, remediating, and selling the Property. The Property was conveyed to the CRA in 2015. DD3 has been sold to an unrelated owner and is not part of the proposed modified Project, as defined below.

The CRA currently owns and intends to master develop the Property, including by seeking appropriate entitlements for the Property, completing the remedial actions in order to achieve the DTSC certification of the former landfill, constructing on-site and off-site infrastructure, preparing the Property for conveyance, and then selling the Property for development purposes, as appropriate. As further described below, CRA has submitted an application to the City for a Specific Plan Amendment to The Boulevards at South Bay Specific Plan (proposed to be renamed "The District at South Bay Specific Plan," hereinafter called the Specific Plan Amendment [SPA]) to permit the uses on the Property described in this SEIR.

Cam-Carson LLC, a private developer, is seeking to develop a regional commercial use, including outlets and restaurant uses, on a portion of the Property referred to below as PA 2 and has submitted an application to the City for site plan and design review, including a comprehensive sign program, and for a development agreement in connection with that request. Other developers may submit applications at later dates in connection with development of the Property.

The background and context for the proposed modified Project remains unchanged from the FEIR (see FEIR [DEIR pp. 71–72]). For ease of reference, an overview of the FEIR's discussion is set forth as follows:

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As indicated in the Addendum, the Addendum was prepared solely to address one component of the remediation process. The Addendum states: "Since the final EIR was prepared and certified ... the SCAQMD, for reasons that have nothing to do with the Approved Project, [had] temporarily suspended the issuance of permits for flare systems. In light of this temporary circumstance, the Applicant is proposing an alternate method to the handling of landfill gas emissions. With the exception of this change, the Modified Project is identical to the Approved Project." Addendum p. 1.

a. Former On-Site Landfill Operations

The Property was used as a Class II landfill, which consisted of five waste cells (Cells) separated by haul roads, under an Industrial Waste Disposal Permit issued to Cal Compact, Inc. by the County of Los Angeles. Landfilling began in 1959, shortly after the banning of incinerators in Los Angeles County in 1957. Landfilling occurred from April 1959 to December 1964 with an approximate closing date of February 1965. During the life of the landfill, approximately 6.2 million cubic yards (cy) of solid municipal waste and a total of approximately 7.8 million cy of waste were disposed of on the site. Waste received included organic wastes, such as solvents, oils, and sludges, as well as heavy metals, paint sludges, and inorganic salts.

Hazardous substances associated with the landfill, primarily consisting of volatile organic compounds (VOCs), heavy metals, and petroleum hydrocarbons, have been detected in subsurface soil and groundwater on the Property. As a result of the contamination on and adjacent to the landfill, the Property is listed by DTSC as a hazardous substances release site. On March 18, 1988, Remedial Action Order No. HSA87/88-040 was issued for the Property requiring the implementation of remedial activities.

DTSC divided its remediation into two operable units. The operable units are established to prioritize the remedial response to the areas of known impacts (Upper OU) versus areas of potential impacts (Lower OU). The Upper Operable Unit (Upper OU) consists of the site soils, the waste zone above and within the Bellflower Aquitard, and the Bellflower Aquitard down to, but not including, the Gage Aquifer. The Lower Operable Unit (Lower OU) is composed of the Gage, Lynwood, and Silverado Aquifers, and all other areas impacted by the geographic extent of any hazardous substances that may have migrated or may migrate from the aforementioned areas or from the Upper OU.

Investigations of the Upper OU documented the presence of landfill gases (methane and carbon dioxide), VOCs and metals in the landfill's soil and groundwater. A RAP was prepared and approved by DTSC for the Upper OU in 1995 (Upper OU RAP). The Upper OU RAP requires the installation, operation, and maintenance of (1) a landfill cap designed to encapsulate the waste and create a barrier between future improvements and buried waste, (2) an active gas collection and treatment system designed to remove landfill gases from under the landfill cap, and (3) a groundwater collection and treatment system designed to contain the groundwater plume and treat the extracted groundwater prior to discharge. The 1995 Upper OU RAP was modified by DTSC in 2009 through an ESD, which allows the use of a geosynthetic membrane material as a component of the landfill cap, instead of the low-permeability clay specified in the Upper OU RAP.

A separate RAP was prepared to address the Lower OU. The RAP for the Lower OU was approved by DTSC on January 24, 2005 (Lower OU RAP).

Implementation of the Upper OU RAP is required to make the site safe for the proposed modified Project. Implementation of the Lower OU RAP would be protective of groundwater resources, but is not required to make the Property safe for the proposed modified Project. The two RAPs are discussed further in the discussion of Project Characteristics below.

b. Overview of Updated Project Characteristics

The background and context for the proposed modified Project remains largely unchanged from the FEIR. For full details, see the FEIR (DEIR pp. 73–99). In essence, the FEIR assessed the maximum development allowed for the Project site under The Carson Marketplace Specific Plan and the amendment thereto in the Boulevards at South Bay Specific Plan, thereby providing flexibility regarding the precise number, size, shape, and locations of the buildings consistent with development occurring under the development standards and regulations originally set forth in the Carson Marketplace Specific Plan. The proposed modified Project assesses the maximum land use densities proposed under the SPA, as further described below.

In summary, while the proposed modified Project contains many similarities to the approved Project, modifications include (1) minor relocation of internal circulation access points including a westward shift of the intersection of Del Amo Boulevard and Street B resulting in a shift of Street B to the west; (2) reduction in overall commercial square footage, but with an increase of 50 hotel rooms permitted and an increase in floor-area ratio (FAR) from 0.33 FAR to 0.5 FAR for commercial uses to be consistent with the Land Use Element of the General Plan; (3) changes to certain allowed uses within the land use categories, including to allow outlets in PA 2, to allow retail stand-alone stores of greater than 50,000 sq.ft. in PA 1 with an administrative permit and CEQA review as applicable), and other modifications to the permitted uses chart; (4) updates to lighting and signage; (5) removal of affordable housing requirements; (6) modifications to boundaries between uses on the Property to conform to the remediation program (cell) boundaries; (7) phased occupancy of cells on the Property; (8) changes to development standards, design guidelines, and design standards to reflect the proposed outlets, which utilizes podium construction over parking; (9) reduction in total parking requirements to 4 parking spaces per 1,000 sq.ft. of commercial development; (10) the potential, with a General Plan amendment, to increase the density of residential units on PA 1 from 60 to 80 dwelling units per acre (du/ac); and (11) other modifications, such as clarification and streamlining of the administrative review processes.

Specifically, the proposed modified Project, including the SPA, results in a reduction in the maximum overall development on the Property as compared with the FEIR. In addition, the proposed modified Project removes the Equivalency Program under the SPA.

The proposed modified Project still includes the phased remediation of the Property and the subsequent development of urban uses, although development is now proposed to be carried out by more than one developer and to take place in phases.

c. Urban Land Use Development

The approved Project created three development districts, Development District 1 (DD1) comprised of approximately 31 acres of land south of Del Amo Boulevard, Development District 2 (DD2) comprised of 126 acres south of DD1, and DD3. As discussed above, DD3 is entitled for construction of 300 residential units and is addressed as a related project under this SEIR. DD1 and DD2, comprising the remaining development districts on the Property, have been modified in the SPA into three "planning areas" to better differentiate between the various types of development proposed for the Property.

PA 1 would include Mixed-Use Marketplace (MU-M)9 land uses, although under the proposed modified Project, development of commercial uses on PA 1 would be permitted with an administrative permit (which permit was not required under the approved Project), with CEQA review as applicable. As PA 1 is anticipated to be developed with residential uses, only residential uses are analyzed under this SEIR for PA 1. PA 2 and PA 3 would be designated with Commercial Marketplace (CM)¹⁰ land uses formerly associated with DD2. PA 2, comprising the area west of the I-405 Freeway, totals 46 acres and includes portions of former DD1 and DD2. PA 2 is permitted to be developed with regional commercial uses, which include, among other uses, outlets and up to 15,000 sq.ft. of restaurant uses. In addition, with an administrative permit (which permit was not required under the approved Project), with CEQA review as applicable, portions of PA 2 may be developed with residential uses. PA 3, at 96 acres comprising the largest planning area, is proposed for regional commercial, general commercial, and entertainment uses and retains most of the land use characteristics associated with DD3; no residential uses are permitted in this location. The SPA permits transfer of residential units among from PA 1 to PA 2 and DD3, and transfer of commercial square footage among from PA 2 or PA 3 to PA 1 with the administrative permits noted above and with CEQA review as applicable. However, this SEIR analyzes the proposed modified Project, as it represents the likely development scenario, and it is not anticipated that changes in the configuration of residential and commercial uses on the Property would have any additional impact as compared with the proposed modified Project discussed herein.

The "Mixed-Use Marketplace" land use category provides opportunities for the vertical or horizontal integration of housing with commercial services. MU-M does not, however, require a mix of uses and development can consist entirely of either residential or commercial uses.

The "Commercial Marketplace" land use category includes commercial uses intended to serve a broad population base and offer a wide range of services to both the community and the region. Typical uses in this category include regional commercial uses such as outlets, major department stores and promotional retail-type stores, grocery stores and smaller neighborhood commercial retail and services uses. Additional uses include commercial recreation and entertainment uses such as movie theaters and arcades, hotels, restaurants, and highway-oriented retail and service uses. Residential uses in portions of PA 2 are permitted with the approval of an administrative permit, with CEQA review as applicable. Commercial Marketplace is intended to provide the City's primary regional shopping center.

The proposed modified Project would include up to 1,250 residential units, up to two hotels, with one proposed to contain 200 rooms and the other proposed to contain 150 rooms, and, inclusive of the hotels, a total of 1,834,833 sq.ft. of Commercial Marketplace uses. Commercial development would be limited to a maximum site-wide floor-area ratio (FAR) of 0.5 (as compared with a FAR of 0.33 under the approved Project) and would be further limited by the overall maximum gross buildable area (GBA) allowed on the Property under the SPA. Although a number of regional commercial uses are permitted in PA 2, this analysis evaluates outlet regional commercial development for that planning area. As indicated above, no changes are made to the entitlement envelope or land use program for DD3.

The details of the proposed project are described in further detail in Chapter II, Modified Project Description.

d. Discretionary Actions Requested and Permits Required

Implementation of the proposed modified Project would require, but would not necessarily be limited to, the same permits and approvals identified in the FEIR (see FEIR [DEIR pp. 100–101]). However, there are some modifications proposed. A list of permits anticipated for the proposed modified Project includes the approvals noted below. However, this SEIR may be utilized by the City and any other governmental entities, as responsible agencies, for approvals needed in connection with the proposed modified Project, whether or not such agencies or specific approvals are listed below.

• <u>Carson Redevelopment Agency:</u> With the dissolution of redevelopment agencies throughout the State, no further approvals will be required from the former Carson Redevelopment Agency to implement the project with the proposed modifications.

• Carson Reclamation Authority (CRA):

- Conveyance Agreement and related Agreements
- Improvement or other bonds

• <u>Vertical and/or horizontal subdivision approval (as owner of property), if</u> required for conveyance of the property City of Carson

Tax Sharing Agreement

• City of Carson

- Adoption of Specific Plan Amendment
- Development Agreement
- Site Plan and Design Review
- Street Vacation
- Conditional Use Permits
- Specific Plan Modifications

- Administrative Permits
- Tax Sharing Agreement
- Construction-related encroachment permits
- Certificate(s) of Compliance, Subdivision Map(s), Parcel Map(s), Lot Line Adjustment(s), Lot Merger(s), and/or Tract Map(s)
- Master Signage Plan and Sign Permits
- Modification of Existing Mello-Roos District
- All other similar discretionary approvals

<u>California Environmental Protection Agency (CalEPA), Department of Toxic</u> Substances Control

Approval of cell-specific HHRAs and mitigation measures that would permit, subject to City approvals, phased occupancy in conjunction with the proposed modified Project.

6. AREAS OF CONTROVERSY/ISSUES TO BE RESOLVED

Potential areas of controversy and issues to be resolved by the City include issues known to be of concern to the community and issues raised in the response to the Project's NOP. Issues known to be of concern to the community include noise and vibration impacts, airborne debris and any other negative public impacts. Additional issues raised in response to the NOP include impacts on public services, in particular sheriff and fire service impacts.

7. PUBLIC REVIEW PROCESS

As previously discussed, the City of Carson circulated an NOP for the proposed modified Project on August 1, 2017. During the following 30-day comment period, two letters were received; two additional letters were received after the close of the 30-day comment period. Also, a public scoping meeting was held on August 23, 2017. The NOP and letters received during the NOP comment period are included in Appendix A of this SEIR.

The Draft SEIR will be circulated for a 45-day review period, as required under CEQA.¹¹ Following the public review period, written responses will be prepared on all comments received, and these comments and responses will be incorporated into the Final SEIR. No final actions (e.g., approval or denial) will be taken on the proposed modified Project until the Final SEIR has been reviewed, certified as complete, and considered by the appropriate decision-makers. Dates of public hearings will be published and officially noticed in accordance with all legal requirements.

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¹¹ Public Resources Code Section 21091.

8. SUMMARY OF ALTERNATIVES

a. Alternative 1A, No Project - No Development

The No Project – No Development Alternative (Alternative 1A) assumes that the proposed modified Project would not be developed and that the Property would remain as it is in existing conditions. Since the FEIR, the Property has undergone, and continues to undergo, remediation, capping, and maintenance of the former landfill, consistent with the FEIR. Complete remediation of the existing brownfield portion, including the capping of existing waste materials at the former landfill site, would occur under Alternative 1A. However, although some pressure for, and interest in, reuse of the site exists, no project would be approved and developed on the Property in the foreseeable future under Alternative 1A. The 300 units entitled for construction on DD3 would be developed. The evaluation of Alternative 1A addresses the requirements of CEQA Guidelines Section 15126.6(3)(1).

b. Alternative 1B, No Project – Development under Approved Project

The No Project – Development under Approved Project Alternative (Alternative 1B) assumes that the approved Project analyzed in the FEIR would be developed on the 168-acre Project site. Maximum development on the Project site, as analyzed in the FEIR, would consist of a total of 1,995,125 square feet (sq.ft.) of commercial uses and 1,550 residential units. The 157 acres of the Project site, which is a former landfill site (and referred to as the Property in the proposed modified Project), would continue to undergo remediation, capping, and maintenance and operation consistent with implementation of the Remedial Action Plan (RAP) and the FEIR.

c. Alternative 2, Reduced Modified Project

The Reduced Modified Project Alternative (Alternative 2) assumes that the scale of the proposed modified Project would be reduced through a 25 percent reduction in all proposed land uses (i.e., residential units and commercial floor area). The proportionate mix of commercial and residential uses would be the same as under the proposed modified Project; however, maximum development would consist of 938 residential units and commercial floor area would consist of 1,376,125 sq.ft. The reduction in development under Alternative 2 could be achieved through fewer structures (smaller building footprint) or reduced building heights. The former landfill site would continue to undergo remediation, capping, and maintenance consistent with the FEIR.

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¹² Similar to the proposed modified Project, the Reduced Modified Project Alternative does not include the 300 units in DD3.

d. Environmentally Superior Alternative

An EIR must identify the environmentally superior alternative. Alternative 1A, No Project – No Development, would be environmentally superior to the proposed modified Project based on the minimization or avoidance of physical environmental impacts; however, Alternative 1A does not meet the majority of the Project objectives. In addition, CEQA Guidelines (Section 15126.6(c)) require that, if the environmentally superior alternative is the No Project Alternative – No Development, the EIR shall also identify an environmentally superior alternative among the other alternatives.

Alternative 2, Reduced Modified Project Alternative, is the environmentally superior alternative as Alternative 2 would slightly reduce environmental effects compared to the proposed modified Project. However, Alternative 2 would not allow the City to achieve the most productive reuse of a large brownfield site by approving a project capable of generating the revenue necessary to pay for and effectuate remediation of the environmental conditions on the Project site. In addition, Alternative 2 would not meet the objective to maximize work opportunities and shopping and entertainment opportunities to the same extent as the proposed modified Project. Further, since Alternative 2 would reduce all uses by 25 percent, it would not provide the same level of pedestrian traffic or vibrancy as the proposed modified Project.

9. SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

9.1 Land Use and Planning

a. Environmental Impacts

The proposed modified Project would result in the conversion of vacant lands to developed uses designated as Mixed-Use Residential. The proposed modified Project would provide a large amount of in-fill development within an existing urban/built environment. The development would be implemented via the District at South Bay Specific Plan (the SPA), which amends earlier versions of different Specific Plans that were developed for the site. The SPA would regulate the amount and types of development, the size and arrangement of buildings, on-site circulation and open space, as well as the general appearance of on-site development. The Land Use analysis evaluated the potential impact of the changes considered by the proposed modified Project as compared to the approved Project. The SPA and the development that would occur under the proposed modified Project was analyzed for the following three issues:

(a) compatibility with land use plans, policies, and regulations, (b) existing land use patterns, and (c) sustainability of existing retail uses.

(1) Project Compatibility with Land Use Plans, Policies, and Regulations

The FEIR determined that the approved Project would be compatible with the City's General Plan, as well as the Redevelopment Plan for the Project area. While the City's General Plan has not been comprehensively updated since the certification of the FEIR in 2006, the City has adopted amendments to the Land Use Element and has updated the Housing Element and Economic Development Element since 2006. Overall, the goals and policies of the General Plan have not substantially changed and remain relevant to the proposed modified Project. The following policies of the Land Use Element were modified with the adoption of Resolution No. 06-018, which included the General Plan Amendment for the approved Project (modifications are underlined):

- Amendment to the Mixed-Use category (Land Use Element p. LU-13):
 - "The residential densities will also vary, but are expected to be in the Medium to High Density range, but may not exceed 60 du/ac for the Carson Marketplace Specific Plan and 35 du/ac for all remaining mixed use project.
 - The Carson Marketplace Specific Plan site is designated MU-R for a combination of residential, general commercial, and regional commercial uses. No business park/limited industrial would be allowed.
- Amendment to the Implementing Measures for Mixed Use Developments (Land Use Element p. LU-30):
 - LU-IM-8.1: The area formerly occupied by Cal Compact along the 405
 Freeway; uses to be permitted include a mix of <u>High Density Residential</u>, <u>General Commercial</u>, and Regional Commercial.

Resolution No. 06-018 was adopted for the approved Project and provided consistency between the approved Project and the Land Use Element of the City's General Plan. Since the proposed modified Project proposes the same type of land uses, with a slightly reduced commercial square footage, on the same Project site and maintains the same land use designation as the approved Project, the proposed modified Project would also be consistent with the Land Use Element of the City's General Plan.

The proposed modified Project would also be consistent with SCAG's Regional Comprehensive Plan and Guide (RCPG) and Air Quality Management Plan. Thus, impacts regarding compatibility with land use plans, policies and regulations would be similar to those identified in the FEIR (less than significant).

(2) Impacts on Existing Land Use Patterns

The proposed modified Project, similar to the approved Project, would be an in-fill development located within an existing urban setting, and would provide a continuation of existing development patterns within the northwestern portion of Carson. The proposed modified

Project would be consistent with the existing land use designation established for the Project site by the General Plan. Therefore, similar to the approved Project, the proposed modified Project is consistent with the City's vision for the site, the uses surrounding the site and thus, the proposed modified Project wouldn't physically divide an established community. No new impact would occur and impacts associated with the proposed modified Project would be similar to those identified in the FEIR (less than significant).

(3) Impacts on the Sustainability of Existing Uses

For the regional commercial impact analysis, the updated Retail Impact Assessment (RIA) projected the level of vacancies to increase from 5.0 percent in existing conditions to 9.3 percent over the 2016–2025 short-term period which is below the 10 percent threshold associated with urban decay. For the 2016–2040 long-term period, the vacancy level is projected to decline to 6.0 percent as growth continues into the future. The long-term vacancy level would be sufficiently near the existing level of 5.0 percent, and as such is not considered to cause a loss of retail sales nor increase vacancies to the point of inducing urban decay. Impacts on the physical environment from induced vacancies or effects on sales with the introduction of regional commercial uses under the proposed modified Project would be less than significant.

For the local-serving commercial impact analysis, the updated RIA projected the level of vacancy to increase from 4.5 percent in existing conditions to 11.2 percent over the 2016–2025 short-term period. The projected increase in vacancies exceeds the 10 percent threshold, where some surrounding local-serving uses could experience loss in sales, which could potentially lead to closures and ultimately to urban decay. However, the duration of these effects would depend on the rate of growth in the local household demand. Over the 2016–2040 long-term period, the vacancy level is anticipated to decline to a very low level of 0.6 percent as household growth continues into the future. Therefore, while the introduction of local-serving commercial uses with implementation of the proposed modified Project would increase the vacancy level to 11.2 percent, these effects are anticipated to be temporary and would be substantially reduced over the long term. Impacts on the physical environment from induced vacancies or effects on sales with the introduction of local-serving commercial uses under the proposed modified Project would be less than significant.

b. Mitigation Measures

As no new significant land use impacts would occur with the proposed modified Project, no mitigation measures would be necessary.

c. Cumulative Impacts

As described above, the proposed modified Project would be compatible with all applicable land use policies, plans, and regulations. Therefore, the proposed modified Project

would not contribute to a cumulative effect of multiple projects having adverse effects on the environment due to their incompatibility with regulatory requirements related to land use. No new cumulative impacts related to compatibility with land use plans, policies, and regulations would occur and impacts would be similar to those identified in the FEIR (less than significant).

d. Level of Significance after Mitigation

Proposed modified Project development would result in less than significant land use impacts.

Comparison to FEIR Findings: No New Significant Impact. No New Mitigation Measure(s) Identified or Required.

9.2 Visual Resources

a. Environmental Impacts

The proposed modified Project would still allow the conversion of a long-standing area of vacant land to be developed with residential and commercial land uses. In so-doing, it would change the appearance of the Project site, would add new building mass that would alter existing view conditions, cause off-site shading, and alter the night-time appearance of the site with artificial lighting. Each of these potential impacts is addressed separately in the analysis of the proposed modified Project's impacts on visual quality.

(1) Aesthetic Character of the Area

As with the analysis in the FEIR, this SEIR evaluated the impact of the proposed modified Project on aesthetics by evaluating five issues: (1) whether proposed development would substantially affect a valued aesthetic resource; (2) whether the visual character of the proposed development would substantially contrast with the visual character of surrounding development; (3) whether the Project would adversely affect existing retail activities so as to cause increased vacancies, with adverse effects on aesthetic character at off-site locations; (4) whether proposed development would cause greater effects than anticipated in existing regulations; and (5) whether the Project's construction activities would cause substantial changes to the environment of a nature different than those identified for the proposed modified Project.

Valued Resource—Because the Project site is still currently undeveloped, implementation of the proposed modified Project is also anticipated to result in significant and unavoidable impacts related to the conversion of the appearance of the Project site.

Contrast—Like the approved Project assessed in the FEIR and consistent with the proposed modified Project, potentially significant impacts on aesthetic character were identified for development that might vary from the Conceptual Plan. While in the proposed modified Project the theater wouldn't move to the southwest corner, other buildings could potentially have

greater heights, resulting in a substantial contrast with the existing off-site residential development. In addition, consistent with the approved Project and proposed modified Project, if signage along the eastern/I-405 Project edge were provided in a manner that is not consistent with that shown in the Conceptual Plan, the overall thematic scheme that minimizes contrast within the Project site may not occur. However, with the application of the substantially similar mitigation measures as required for the approved Project, both of these potential impacts are reduced to less than significant levels. As such, the proposed modified Project would not result any new significant impacts as compared to the approved Project.

Existing Retail—Both the approved Project and proposed modified Project would not involve direct changes to the aesthetic character of any off-site locations. Similar to the approved Project (see FEIR [DEIR pp. 200–201]), the proposed modified Project poses a potential to affect existing retail businesses in the City, particularly the area in proximity to the Project site, with a resulting increase in retail vacancies within existing off-site retail areas at off-site locations. Among these continue to be the boarding up of buildings and lack of maintenance, which can cause degradation of the visual appearance of the area affected.

However, such occurrences would continue to be limited and short-term duration. In order to determine whether such affects could result with the implementation of the proposed modified Project, an updated study was undertaken to identify the proposed modified Project's effects on the sustainability of other economic areas as compare to the approved Project (see SEIR Appendix B). This study is discussed more fully in Section IV.A, Land Use and Planning. In summary, the report also concluded that during the short term (the first five years following completion of the proposed modified Project), an impact on vacancy and sales per square foot would be likely to continue to occur, most likely in smaller, older retail centers. However, like the approved Project, growth in retail demand that is forecasted to occur over the next 15 years is sufficient to support existing retail development as well as the proposed modified Project. As a result, the long-term adverse impact on existing retail businesses is also not anticipated. Thus, the addition of the proposed modified Project's new retail activities would also not likely cause any widespread, prolonged urban decay.

Existing Regulations—Similar to the approved Project, the greatest impacts that could occur from the proposed modified Project development under the limitations established in the SPA have been addressed in the analysis in the remainder of this section of the EIR. As indicated, development pursuant to the SPA would not have a significant impact on the visual quality of the environment, except for two situations (potentially tall buildings, and signs along the I-405 Freeway), which can be mitigated. Since the proposed modified Project, with the implementation of the proposed mitigation measures below, like the approved Project would not result in significant impacts and for the reasons stated in Section IV.A, the proposed modified Project would continue to be compatible with existing zoning protections for the visual quality of

the environment. As such, the proposed modified Project would not result any new significant impacts as compared to the approved Project.

Construction—The FEIR details how the approved Project would cause changes in the aesthetic conditions of the Project site during the time of construction (see FEIR [DEIR p. 205]). This analysis remains fully applicable to the proposed modified Project, except that the Project site already has existing construction buildings and equipment on site due to active remediation activities as anticipated by the FEIR. During the proposed modified Project development, the Property would continue to appear like a typical construction site, similar to existing conditions. As with the approved Project, as buildings arise on the Project site, the loss of undeveloped area and a feeling of spaciousness would continue to be incrementally altered. At some point during construction, enough of the new buildings would be on site to cause the significant impact identified above regarding the loss of a valued visual resource.

(2) Views

As discussed in the FEIR (see FEIR [DEIR p. 208]), the Project site is not considered a view resource, as it is still in a degraded state, and does not include qualifying unique or natural qualities. The Project vicinity still does not contain notable features that would typically fall under the heading of view resource, e.g., unique geologic features, natural areas, etc. Views of the two notable features that might catch the eye of travelers through the area, the Wingfoot Two a rigid frame blimp replacement site located on the north side of the I-405 Freeway, and the large fiberglass statue of a man on the south side of the I-405 Freeway would not be lost due to development of the proposed modified Project. Views over the Project site are limited due to intervening development, the flat terrain in the areas surrounding the Project site, and that the Project site sits atop a berm that slopes down to surrounding areas. Therefore, similar to the approved Project, the proposed modified Project would not substantially diminish any such views, and impacts on views of unique, valued scenic resources would be less than significant. As such, the proposed modified Project would not result any new significant impacts as compared to the approved Project.

(3) Shade and Shadow

The FEIR included a shading analysis of the approved Project (see FEIR [DEIR pp. 208–213]). According to the FEIR, the maximum off-site shading that could occur on sun-sensitive uses is limited. The greatest shading on nearby residential development would occur during winter mornings. Impacts on shading from the approved Project were found to be less than significant. While the proposed modified Project would not change the heights of buildings as compared to the approved Project, a new mitigation measure is proposed for the proposed modified Project to conduct a shade analysis to establish setbacks to ensure impacts would remain less than significant.

(4) Artificial Lighting

The approved Project and the proposed modified Project are located within an urban area, amidst existing roadways (including the I-405 Freeway) with numerous sources of nighttime illumination. No substantive changes in the surrounding overall urban glow of the Project area have occurred since the approved Project was assessed. Like the approved Project (see FEIR [DEIR p. 213]), the proposed modified Project would add new lighting to the Project area, causing increases to the lighting levels of the existing setting. Because proposed modified Project lighting would include design features included in the SPA and would be in compliance with CALGreen lighting standards that limit off-site light spill by controlling light intensity and by shielding of light sources, the proposed modified Project's ambient lighting would continue to blend with surrounding areas and would not create substantial contrast with overall urban lighting conditions.

Due to advances in technology that include LED signs and displays, the proposed modified Project could include larger and brighter signage along the I-405 Freeway as compared to the approved Project. The proposed modified Project's lighting and signage would be required to comply with all CALGreen site lighting and Caltrans glare standards. Thus, in order to determine whether the proposed modified Project would comply with these State lighting standards and the implementation of the proposed modified Project would not affect nearby sensitive receptors and passersby, a lighting analysis was undertaken to identify and quantify the proposed modified Project's specific light effects as compared to current state regulatory requirements. Such an analysis was not performed for the approved Project (see Appendix C, District at South Bay Lighting Study, of the SEIR). The lighting study also provides guidance to limit light spills off the Project site and prevent glare in residential areas, as well as prevent glare from bright lights or signs in residential areas, as well as glare experienced by drivers.

This study is discussed more fully in Section IV.B, Visual Resources. In summary, the report concluded that the lighting and sign display is different under the proposed modified Project with respect to, among other things, sign type, use of digital display, number of signs, sign dimensions, location of signs, and features. In addition, the proposed modified Project differs with respect to lighting, and it features lit wall and building signage that would vary in location, size, and intensity from that analyzed in the FEIR. Similar to the FEIR, a mitigation measure would be required to ensure that the presentation of signs along the I-405 Freeway is in compliance with the conceptual sign requirements set forth in the SPA, to avoid a significant impact.

As the proposed modified Project's lighting would continue not to substantially alter the character of off-site areas surrounding the Project site and would also not interfere with off-site activities, the impacts of proposed modified Project lighting would remain less than significant. The FEIR did impose a mitigation measure for the approved Project to limit any potential off-site effects on residential development adjacent to the Project site. The proposed modified Project

would continue to be subject to this mitigation measure, and like the approved Project, with implementation of the mitigation set forth in the FEIR, would result in a less than significant Project impact. As such, the proposed modified Project would not result any new significant impacts as compared to the approved Project.

b. Mitigation Measures

Consistent with the FEIR, the above analysis identified a significant impact regarding the loss of a valued aesthetic resource (i.e., the spaciousness that is provided by the undeveloped Project site). The loss of spaciousness occurs as a result of placing development at the Project's location rather than as a result of the particular type, size, or location of development. Any notable development on the Project site would change its currently undeveloped character. Therefore, as was the case for the approved Project, this significant impact cannot be mitigated, and there is no change under the proposed modified Project compared to the approved Project as to this impact.

The proposed modified Project would result in an additional significant impact as compared to the approved Project regarding shade and shadows, but with implementation of mitigation as amended, this impact would remain less than significant. The mitigation measures that were identified in the FEIR would continue to apply, as amended, as would the additional mitigation measure, as follows:

- **Mitigation Measure B-1:** The minimum setback for hotel and theater uses <u>buildings</u> greater than 52 feet in height along the Torrance Lateral, adjacent to residential uses, shall be 250 feet.
- **Mitigation Measure B-2:** The distribution, placement, and orientation of signs along the I-405 Freeway shall be in substantial compliance with the signage concepts presented in the Conceptual Plan and in compliance with the sign standards in the SPA.
- Mitigation Measure B-3a: The line of sight between lighted signs on the Project site and existing residential development along the Torrance Lateral, opposite to the Project site shall be minimized. If any portion of the illuminated surface of the sign is visible from a residential use within 1,000 feet of said sign at night, then the proposed modified Project sign luminance shall be reduced to less than 300 cd/m² at night.
- Mitigation Measure B-3b: If any portion of the illuminated surface of the sign is visible from a residential use within 1,000 feet of said sign, sign area and/or sign luminance shall be limited so that the light trespass illuminance is less than 0.74 foot-candle at said residential property line.

The SPA continues to include a mechanism for site plan review of all development to ensure that it does in fact meet the requirements of the SPA. As was done in the FEIR, many of SPA features were relied upon in the above analysis, resulting in the following mitigation measure:

- **Mitigation Measure B-4:** All Project development shall undergo site plan review by the Planning Manager to <u>asensure</u> that the following design measures have been implemented:
 - Landscaping. All Landscaping shall be consistent with a plant palaette of native trees, shrubs, and groundcovers that shall add uniformity to the Project site Property. Plants shall be selected to support and complement the themes of the various Project components. Specially themed landscaping treatments shall occur at key locations (e.g., freeway edge, channel slope, and lifestyle and entertainment area). Of more detailed note: (1) landscaping themes on Del Amo Boulevard and Main Street shall be coordinated with the landscaping of the Carson Street Conceptual Visualization and the Home Depot Center; (21) continuous shrub and ground cover plantings shall be provided in the medians and edges of internal streets with vertical landscape and/or hardscape elements at a minimum of on average every 50 feet along the edges; (32) 5% landscape coverage shall be provided in parking lots, including landscape adjacent to edges of parking fields; and (43) 50% landscape coverage shall be provided on the sides of parking structures visible to residences, not inclusive of commercial over podium.
 - Buildings. Buildings shall include the following design features: varied and articulated building façades-featuring the use of colorful stucco, with a variety of architectural accent materials for exterior treatment at visually accessible locations.
 - Accessory <u>fF</u>acilities and Walls. Wall facades shall be varied and articulated.
 Accessory facilities such as trash bins, storage areas, etc., shall be covered and screened as set forth in the SPA.
 - Lighting. Lighting shall be limited in intensity, light control methods, and pole heights, so as to be directed on site, and not interfere with off-site activities.

(See FEIR [DEIR pp. 214–215].) When the proposed revisions to the Project are compared to the approved Project analyzed under the FEIR, there are no new significant impacts or changes with the retention of the existing mitigation measures, as amended, in place and the addition of the mitigation measure as noted. As such, no additional mitigation measures would be required.

c. Cumulative Impacts

Since the FEIR, the cumulative projects list has changed due to new development in the surrounding area. The nearest cumulative projects are the proposed 300-unit development in Development District 3 (DD3) and a multi-family residential project located near the intersection of Main Street and West Clarion Drive, approximately 0.35 mile southwest of the Project site. The approved Project will be buffered from the Property and the new development by Del Amo Boulevard, but will have views of the new development, signage and parking fields. These views would be consistent with those that would have been expected from the residences if the

approved Project had been approved. The Main Street project would be buffered from the Project site by the existing residential neighborhood southwest of the Project site. Furthermore, all related projects in the City of Carson would continue to be subject to numerous provisions of the Carson Municipal Code, which includes development standards, procedures for Site Plan and Design Review, and, for some sites, design review under the Design Overlay zoning designation. Therefore, other projects in the City of Carson would be expected to also minimize and mitigate adverse visual impacts. Should other projects result in significant impacts due to unusual circumstances, those occurrences would be isolated and at some distance from the proposed modified Project. The impacts of the related projects would be less than significant. As such, the proposed modified Project together with all related projects would not result in any new significant cumulative impacts as compared to the approved Project.

d. Level of Significance after Mitigation

In summary, the proposed modified Project would not result in any new significant impacts as compared to the approved Project with the mitigation imposed. As compared to the approved Project, the proposed modified Project changes will not require major revisions to the FEIR because of the involvement of new significant impacts that were not previously evaluated. Specifically, with regard to visual resources (1) no substantial changes are proposed in the proposed modified Project that would require major revisions to the FEIR; (2) no substantial changes arise in the circumstances of the proposed modified Project's undertaking, requiring major revisions to the FEIR; and (3) no new information appears that was not known or available at the time the FEIR was certified. No substantial changes are proposed with regarding to Project design features, construction, or operations.

Like the approved Project, the proposed modified Project would still result in the conversion of the undeveloped vacant site to a developed use, causing a loss of spaciousness that contributes to the aesthetic quality of the Project site and its surroundings. This impact remains a significant impact that is inherent in the development of the site, and thus cannot be mitigated or avoided.

Comparison to FEIR Findings: No New Significant Impact. Previous Mitigation Applies as Modified Herein. New Mitigation Measure(s) Identified and Applied.

9.3 Traffic, Circulation, and Parking

a. Environmental Impacts

(1) Construction Impacts

Proposed modified Project construction would generate traffic from construction worker travel, as well as the arrival and departure of trucks delivering construction materials to the site. The majority of the trips by construction workers would occur during hours that would avoid the A.M. and P.M. peak traffic periods. As such, impacts attributable to construction worker travel

would be less than significant. Haul truck trips would be reduced under the proposed RAP design since the need for the hauling of 2,000,000 cubic yards of clay, requiring approximately 150 truck trips per 10-hour day over a 1.5-year period would be reduced. Under the proposed RAP refinements, the proposed modified Project is forecasted to generate one to six truck trips per day, depending on the construction phase. Haul truck traffic on local streets would be limited due to the proximity of the Project site to the I-405 Freeway, and with the implementation of a Cityapproved Truck Haul Route program, which would prohibit trucks traffic on local residential streets, haul truck activity would have a less than significant traffic impact. Lane and sidewalk closures and utility line construction may affect emergency vehicle access, travel time, and pedestrian access. However, traffic management procedures would be implemented to assist in the movement of traffic that could interfere with emergency vehicles. Furthermore, proposed modified Project construction activities would not impede access to nearby businesses or residential uses. As a result, construction traffic impacts for these issues would be less than significant. However, pedestrian access would be impeded if closure of both sidewalks on the north and south sides of Del Amo Boulevard were to occur concurrently. This would constitute a significant impact.

(2) Operational Impacts

(a) Study Intersections

Based on the impact thresholds for each of the three jurisdictions in the study area, the proposed modified Project would result in significant traffic impacts at the following ten intersections:

- 3. Main Street & I-405 southbound on-ramp (P.M. peak hour)
- 5. Vermont Avenue & Del Amo Boulevard (A.M. and P.M. peak hours)
- 7. Figueroa Street & Del Amo Boulevard (A.M. and P.M. peak hours)
- 8. Main Street & Del Amo Boulevard (P.M. peak hour)
- 10. Avalon Boulevard & Del Amo Boulevard (A.M. and P.M. peak hours)
- 12. Figueroa Street & I-110 northbound ramps (A.M. and P.M. peak hours)
- 20. Main Street & 213th Street (P.M. peak hour)
- 22. Vermont Avenue & Carson Street (A.M. and P.M. peak hours)
- 23. Figueroa Street & Carson Street (A.M. and P.M. peak hours)
- 25. Avalon Boulevard & Carson Street (P.M. peak hour)

Some of the Existing plus Project significant impacts identified for study area intersections are located on the edge of the study area. A brief discussion of these significant edge impacts, and the manner in which Project traffic is expected affect upstream and downstream intersections, is provided in Appendix D. No further significant impacts are

expected to occur at any intersections located just outside the study area as a result of the proposed modified Project.

Using the criteria for determination of significant impacts, the proposed modified Project would result in significant impacts at ten intersections under Future Year (2023) plus Project conditions:

- 3. Main Street & I-405 southbound on-ramp (P.M. peak hour)
- 5. Vermont Avenue & Del Amo Boulevard (A.M. and P.M. peak hours)
- 7. Figueroa Street & Del Amo Boulevard (A.M. and P.M. peak hours)
- 8. Main Street & Del Amo Boulevard (P.M. peak hour)
- 10. Avalon Boulevard & Del Amo Boulevard (A.M. and P.M. peak hours)
- 12. Figueroa Street & I-110 northbound ramps (A.M. and P.M. peak hours)
- 15. Figueroa Street & Torrance Boulevard (P.M. peak hour)
- 20. Main Street & 213th Street (P.M. peak hour)
- 22. Vermont Avenue & Carson Street (A.M. and P.M. peak hours)
- 25. Avalon Boulevard & Carson Street (A.M. and P.M. peak hours)

The proposed modified Project would result in one fewer significant impact and six additional significant and unavoidable impacts compared to the approved Project. The difference in number, degree, and location of significant impacts identified for the approved Project compared to the analysis for the proposed modified Project, is a result of changes in background traffic conditions, related project traffic patterns, roadway and freeway capacity changes, as well as differences in analysis methodology. The difference in the number of significant and unavoidable impacts is a result of differences in analysis methodology and changes in City of Carson policy and design standards.

The proposed modified Project has the same number of significant impacts and one fewer significant and unavoidable impact compared to the approved Project when analyzed using the same 2017 methodology. The difference in number, degree, and location of significant impacts identified between the proposed modified Project and the approved Project analyzed with the 2017 state-of-practice methodology is a result of differences in the Project Description.

(b) Access

An LOS analysis was conducted to evaluate the ability of the proposed modified Project's access plan to accommodate the anticipated traffic levels at the site access points. The proposed modified Project would include three signalized access locations and one unsignalized driveway. The signalized site access locations were already analyzed as study intersections using the ICU methodology. The stop-controlled access driveway was analyzed using the 2010 HCM

methodology. The analysis concluded that the driveways are projected to operate at an acceptable LOS (LOS D or better) under Existing (2017) plus Project and Future (2023) plus Project conditions, with the exception of the residential driveway, which is projected to operate at LOS E during the P.M. peak hour under both Project scenarios. These findings are consistent with the access impact findings described in the FEIR (see FEIR [DEIR pp. 251–252]).

(c) Public Transportation

The proposed modified Project would utilize up to 11 percent of available transit capacity during the peak hours using the CMP assumption of transit trips equating to 3.5 percent of all trips generated. At this level of transit capacity utilization, the proposed modified Project is anticipated to result in a significant CMP transit impact. However, the impact would be less severe than the impact described for the approved Project in the FEIR, which reported a utilization of up to 25 percent of available transit capacity. At this level of absorption of transit system capacity, it is concluded that Project-related impacts to the regional transit system would be potentially significant.

(d) Parking

Unlike the FEIR, parking impacts of the proposed modified Project are not evaluated in this SEIR. CEQA Guidelines Appendix G no longer includes parking impacts. However, information regarding parking supply and demand are provided for informational-purposes only.

b. Mitigation Measures

(1) Construction

Mitigation Measure C-1: The Project shall submit aA Construction Traffic Management Plan or Worksite Traffic Control Plan (WTCP) to shall be developed by the contractor and approved by the City of Carson and appropriate police and fire services prior to the start of any to alleviate construction work phase period impacts, which includes Project scheduling and the location of any roadway closures, traffic detours, haul routes, protective devices, and warning signs, for the purpose of minimizing pedestrian and vehicular impediment and interference of emergency vehicles from Project construction activities. may include but is not limited to the following measures:

- In the unlikely case that on-site truck staging areas are insufficient, provide off-site truck staging in a legal approved area (per the local jurisdiction's municipal code) furnished by the construction truck contractor. Anticipated truck access to the Project site will be off Street B and Street A.
- Schedule deliveries and pick-ups of construction materials during non-peak travel periods to the extent possible and coordinate to reduce the potential of trucks waiting to load or unload for protracted periods.

- As a vehicular travel lane, parking lane, bicycle lane, and/or sidewalk closures are anticipated, worksite traffic control plan(s), approved by the City of Carson, should be implemented to route vehicular traffic, bicyclists, and pedestrians around any such closures.
- Establish requirements for loading/unloading and storage of materials on the
 Project site, where parking spaces would be encumbered, length of time traffic
 travel lanes can be encumbered, sidewalk closings or pedestrian diversions to
 ensure the safety of the pedestrian and access to local businesses and
 residences.
- Ensure that access will remain unobstructed for land uses in proximity to the Project site during project construction.
- Coordinate with the City and emergency service providers to ensure adequate access is maintained to the Project site and neighboring businesses and residences.
- Mitigation Measure C-2: During construction, at least one sidewalk on either the north or south side of Del Amo Boulevard shall remain open and accessible to pedestrian traffic.

(2) Operation

- (a) Intersection Mitigation Measures:
- Mitigation Measure C-2.1: Main Street and I-405 Southbound On-Ramp (Intersection No. 3). A significant impact would occur at this intersection during the P.M. peak hour under the existing year and future year analysis. The Applicant shall pay a fair-share contribution for the following intersection striping improvement:
 - Conversion of the eastbound left-turn lane to a through/left-turn lane is proposed.
- Mitigation Measure C-3: Vermont Avenue and Del Amo Boulevard (Intersection No. 5). A significant impact would occur at this intersection during the A.M. and P.M. peak hours under the existing year and future year analysis. The Applicant shall pay a fair-share contribution for the following intersection striping and geometric improvements:
 - A second left turn lane shall be added to westbound Del Amo Boulevard. The westbound approach shall be improved to include two left-turn lanes, a through lane, and a right-turn lane. The improvement is feasible within the existing right-of-way.
 - This mitigation measure shall be implemented at the point of development in which the Project generates 51 to 60 percent of its total trips, in accordance with Draft EIR Table 24.
 - Addition of a second westbound left-turn lane; and

 Conversion of the northbound through/right-turn lane to a second northbound through and a dedicated right-turn lane. This would require the removal of approximately eight parking spaces.

Mitigation Measure C-4: Hamilton Avenue & Del Amo Boulevard (Intersection No. 6):

- The Applicant shall install a traffic signal at this location.
- A right-turn lane shall be added to northbound Hamilton Avenue. The northbound approach shall be improved to include a left-turn lane, two through lanes, and a right-turn lane. This improvement is feasible within the existing right-of-way.
- This mitigation measure shall be implemented at the point of development in which the Project generates 1 to 10 percent of its total trips, in accordance with Draft EIR Table 24.
- Mitigation Measure C-5: Figueroa Street & and Del Amo Boulevard (Intersection No. 7). A significant impact would occur at this intersection during the a.m. and p.m. peak hours under the existing year and future year analysis. The Applicant shall pay a fair-share contribution for the following intersection striping and geometric improvements:
 - A right-turn lane shall be added to southbound Figueroa Street. The southbound approach shall be improved to include one left-turn lane, two through lanes, and a right-turn lane. This improvement is feasible within the existing right of way
 - A second westbound left turn lane shall be added to westbound Del Amo Boulevard. The westbound approach shall be improved to include two left turn lanes, two through lanes, and a right turn lane. This improvement is feasible within the existing right of way.
 - An eastbound through lane and a right-turn lane shall be added to eastbound
 Del Amo Boulevard. The eastbound approach shall be improved to include
 one left-turn lane, three through lanes, and a right-turn lane. This
 improvement is feasible within the existing right-of-way.
 - This mitigation measure shall be implemented at the point of development in which the Project generates 1 to 10 percent of its total trips, in accordance with Draft EIR Table 24.
 - Addition of a second westbound left-turn lane;
 - Conversion of the westbound right-turn lane to a through/right-turn lane;
 - Addition of a second southbound left-turn lane;
 - Conversion of the southbound through and southbound right-turn lane to a through/right-turn lane;
 - Conversion of the eastbound right-turn lane to a through/right-turn lane; and

- Addition of a northbound right-turn-only lane.
- Mitigation Measure C-6: Main Street and Del Amo Boulevard (Intersection No. 8). A significant impact would occur at this intersection during the P.M. peak hour under the existing year and future year analysis. The Applicant shall pay a fair-share contribution for the following intersection striping and geometric improvements:
 - Land shall be dedicated, as required, to add a second left turn lane and a right-turn lane to southbound Main Street. The southbound approach shall be improved to provide two left turn lanes, two through lanes and a right turn lane.
 - A second left-turn lane shall be added to westbound Del Amo Boulevard. The
 westbound approach shall be improved to provide two left-turn lanes, two
 through lanes and an optional through and a right-turn lane.
 - Land shall be dedicated, as required, to add a second left turn lane and a right-turn lane to northbound Main Street. The northbound approach shall be improved to provide two left-turn lanes, two through lanes, and a right-turn lane.
 - A second left-turn lane shall be added to eastbound Del Amo Boulevard. The eastbound approach shall be improved to provide two left-turn lanes, two through lanes, and an optional through and a right-turn lane.
 - This mitigation measure shall be implemented at the point of development in which the Project generates 51 to 60 percent of its total trips, in accordance with Draft EIR Table 24.
 - Addition of a second westbound left-turn lane;
 - Addition of a second southbound dedicated through lane;
 - Conversion of the eastbound through/right-turn lane to a through lane and a right-turn lane; and
 - Conversion of the northbound through/right-turn lane to a through lane and a right-turn lane.
- Mitigation Measure C-6.1: Avalon Boulevard and Del Amo Boulevard (Intersection No. 10). A significant impact would occur at this intersection during the a.m. and p.m. peak hours under the existing year and future year analysis. The Applicant shall pay a fair-share contribution for the following intersection striping and geometric improvements:
 - Conversion of the southbound through/right-turn lane to a through lane and a right-turn lane; and
 - Addition of a second northbound left-turn lane.

- Mitigation Measure C-7: Hamilton Avenue & I-110 Southbound Ramps (Intersection No. 11):
 - The Applicant shall install a traffic signal at this location.
 - The southbound approach shall be re-striped to provide for one left-turn lane and a shared left-turn/through lane. The improvement is feasible within the existing right of way.
 - This mitigation measure shall be implemented at the point of development in which the Project generates 21 to 30 percent of its total trips, in accordance with Draft EIR Table 24.
- Mitigation Measure C-8: Figueroa Street & and I-110 Northbound Ramps (Intersection No. 12). A significant impact would occur at this intersection during the A.M. and p.m. peak hours under the existing year and future year analysis. The Applicant shall pay a fair-share contribution for the following intersection striping and geometric improvements:
 - A second right-turn lane shall be added to the southbound approach. The southbound approach shall be improved to provide two through lanes and two right turn lanes.
 - A right turn lane shall be added to the eastbound approach. The eastbound approach shall be improved to provide two left-turn lanes and a right-turn lane. The improvements are feasible within the existing right-of-way.
 - This mitigation measure shall be implemented at the point of development in which the Project generates 1 to 10 percent of its total trips, in accordance with Draft EIR Table 24.
 - Addition of a southbound through/right-turn lane;
 - Addition of a third southbound receiving lane; and
 - Conversion of the eastbound left/right-turn lane to a dedicated left-turn lane and a dedicated right-turn lane.
- Mitigation Measure C-9: Figueroa Street & and Torrance Boulevard (Intersection No. 15). A significant impact would occur at this intersection during the P.M. peak hour under the future year analysis only. The Applicant shall pay a fair-share contribution for the following intersection striping and geometric improvements:
 - A second southbound left-turn lane shall be added to southbound Figueroa Street. The southbound approach shall be improved to include two left-turn lanes, two through lanes, and a right-turn lane. This improvement is feasible within the existing right-of-way.
 - This mitigation measure shall be implemented at the point of development in which the Project generates 71 to 80 percent of its total trips, in accordance with Draft EIR Table 24.

Conversion of the northbound through/right-turn lane to a through lane and a right-turn lane.

Mitigation Measure C-10: Main Street & Torrance Boulevard (Intersection No. 16):

- The eastbound approach shall be re-striped to provide one left-turn lane and a shared through/right-turn lane.
- This mitigation measure shall be implemented at the point of development in which the Project generates 81 to 90 percent of its total trips, in accordance with Draft EIR Table 24.
- Mitigation Measure C-10.1: Main Street and 213th Street (Intersection No. 20). A significant impact would occur at this intersection during the P.M. peak hour under the existing year and future year analysis. The Applicant shall pay a fair-share contribution for the following intersection striping and geometric improvements:
 - Conversion of the westbound left/right-turn lane to a left-turn lane and a right-turn lane.
- Mitigation Measure C-11: Vermont Avenue & and Carson Street (Intersection No. 22).

 A significant impact would occur at this intersection during the A.M. and P.M.

 peak hours under the existing year and future year analysis. The Applicant shall

 pay a fair-share contribution for the following intersection striping and geometric improvements:
 - The westbound right-turn lane shall be re-striped to provide a shared through/right turn lane. The westbound approach shall be improved to provide one left turn lane, two through lanes, and a shared through/right turn lane.
 - The eastbound right-turn lane shall be re-striped to provide a shared through/right-turn lane. The eastbound approach shall be improved to provide one left-turn lane, two through lanes, and a shared through/right-turn lane.
 - This mitigation measure shall be implemented at the point of development in which the Project generates 31 to 40 percent of its total trips, in accordance with Draft EIR Table 24.
 - Conversion of the westbound right-turn lane to a through/right-turn lane; and
 - Conversion of the eastbound right-turn lane to a through/right-turn lane.
 - A right-turn lane shall be added to the southbound approach. The southbound approach shall be improved to provide two left-turn lanes, two through lanes, and a right-turn lane.
 - This mitigation measure shall be implemented at the point of development in which the Project generates 71 to 80 percent of its total trips, in accordance

Mitigation Measure C-12: Figueroa Street and Carson Street (Intersection No. 23):

- A right turn lane shall be added to the southbound approach. The southbound approach shall be improved to provide two left turn lanes, two through lanes, and a right-turn lane.
- This mitigation measure shall be implemented at the point of development in which the Project generates 71 to 80 percent of its total trips, in accordance with Draft EIR Table 24.

Mitigation Measure C-13: Main Street & Carson Street (Intersection No. 24):

- A second left-turn lane shall be added to the westbound approach. The
 westbound approach shall be improved to provide two left-turn lanes, two
 through lanes, and a shared through/right turn lane
- A second left turn lane shall be added to the eastbound approach. The eastbound approach shall be improved to provide two left turn lanes, two through lanes, and a shared through/right-turn lane.
- This mitigation measure shall be implemented at the point of development in which the Project generates 61 to 70 percent of its total trips, in accordance with Draft EIR Table 24.
- Mitigation Measure C-14: Avalon Boulevard & Carson Street (Intersection No. 25).

 A significant impact would occur at this intersection during the P.M. peak hour under the existing year analysis, and during the A.M. and P.M. peak hours under the future year analysis. The Applicant shall pay a fair-share contribution for the following intersection striping improvements:

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 - A right turn lane shall be added to the southbound approach. The southbound approach shall be improved to include one left-turn lane, three through lanes, and a right-turn lane.

Any future street widening improvements for the intersection of Avalon Boulevard and Carson Street are not feasible within the existing right of way and would require acquisition or dedication of right of way from adjacent parcels. The adjacent land uses include the Carson City Hall on the northeast corner of the intersection and commercial uses on the remaining three corners of the intersection. The necessary width can be obtained adjacent to City Hall on the north side of Carson Street through reduction of a portion of the existing landscaped area, allowing construction of the right turn lane on the westbound Carson Street approach. Information from the City of Carson indicates that the parcels on the southeast and northwest corners may redevelop, at which point it may be possible to obtain the necessary right of way on the east side of Avalon Boulevard south of Carson Street and on the west side of Avalon Boulevard north of Carson Street, allowing construction of the right turn lanes on the northbound and southbound Avalon Boulevard approaches. If the proposed right turn lanes were provided on these three approaches but not on the eastbound Carson Street approach, it is estimated that the projected afternoon peak hour V/C would be reduced from 0.973 to 0.901. Although this would partially alleviate the Project impact, it would not fully mitigate the impact to a less than significant level.

- A right turn lane shall be added to the westbound approach. The westbound approach shall be improved to provide two left turn lanes, two through lanes, and a right turn lane.
- A right-turn lane shall be added to the northbound approach. The northbound approach shall be improved to provide one left-turn lane, three through lanes, and a right-turn lane
- A right turn lane shall be added to the eastbound approach. The eastbound approach shall be improved to provide two left turn lanes, two through lanes, and a right-turn lane
- This mitigation measure shall be implemented at the point of development in which the Project generates 21 to 30 percent of its total trips, in accordance with Draft EIR Table 24.
- Convert the southbound through/right-turn lane to a dedicated right-turn lane;
 and
- Convert the northbound through/right-turn lane to a dedicated right-turn lane.

Mitigation Measure C-15: No Certificate of Occupancy shall be issued for commercial development in District 2, or for commercial development in Districts 1 and 3 that is greater than the amount of commercial development shown in the Applicant's Conceptual Plan (i.e., 150,000 square feet and 50,000 square feet, respectively), prior to the completion of the I-405 ramp improvements at Avalon Boulevard.

(b) I-405 and I-110 Freeways

No feasible mitigation measures are available to the Applicant to mitigate the Project's significant impacts on the I-110 and I-405 freeways.

(c) Site Access Mitigation Measures:

Site access impacts were determined to be insignificant as long as the main site access intersections are configured as described in DEIR Section IV.C.3.c(1), Project Design Features. No mitigation measures are required.

(d) Public Transportation

Mitigation Measure C-16: In coordination with the City of Carson Circuit, Metro, Torrance Transit-Authority, and the Metropolitan Transit Authority (Metro), LADOT, the Applicant shall-provide:

- Request an extension of existing public bus routes into the Project site, which will increase transit capacity by adding service to the area;
- Request that additional <u>buses be deployed on extended routes to increase</u>
 frequency and capacity on key routes serving the Project site; and

Provide transit stops, potentially including benches and shelters, in and adjacent to the Project site, which will improve the quality and increase the network density of transit service.

Mitigation Measure C-17: The Applicant shall provide a fair share contribution for funding of the Carson North-South Shuttle operations.

c. Cumulative Impacts

(1) Construction Impacts

The majority of the related projects' construction workers are anticipated to arrive and depart the individual construction sites during off-peak hours. Excavation and grading phases for the related projects would generate the highest number of haul truck trips. The City's established review process would balance haul routes to minimize the impacts of cumulative hauling on any particular roadway. Although related projects may cause lane closures or detours, no related projects are sufficiently close to the Project site to create a cumulative access impact on the street segments near the Project site. Therefore, construction activities would have a less than significant cumulative effect relative to worker and haul truck traffic as well as emergency access.

(2) Operation Impacts

(a) Intersection Service Levels

Eleven of the 27 intersections analyzed for impacts are projected to operate at a poor LOS of LOS E or F during one or both of the analyzed peak hours under Future Year (2023) plus Project conditions. It is anticipated that related projects contributing to cumulative growth would be required on an individual basis to mitigate potentially significant traffic impacts to the extent possible. However, since no guarantee exists that mitigation measures would be implemented with the identified related projects, in conjunction with the significant proposed modified Project impact after mitigation, it is concluded that the cumulative traffic impact on intersection operations would be significant and unavoidable.

The proposed modified Project has the same number of significant intersection impacts and one fewer significant and unavoidable intersection impact compared to the approved Project when analyzed using the same 2017 methodology. The difference in number, degree, and location of significant impacts identified between the proposed modified Project and the approved Project analyzed with the 2017 state-of-practice methodology is a result of differences in the Project Description. Further, as noted above, the total trip generation contribution of related projects to the study area roadway network would be less than the related project trip generation identified for the approved Project. Therefore, the proposed modified Project together with all related projects would not result in any new significant cumulative intersection LOS impacts as compared to the approved Project.

(b) Freeway Service Levels

Cumulative impacts would occur on three segments of the I-110 Freeway, four segments of the I-405 Freeway, and one segment of the I-710 Freeway. In addition, a cumulative impact would also occur on the analyzed CMP-monitored freeway segment of the I-405 Freeway south of the I-110 Freeway. Like the approved Project, no feasible mitigation measures are available to mitigate the potentially significant impacts on these freeway segments to less than significant levels. Therefore, cumulative impacts on freeway service levels would also be significant and unavoidable for the approved Project. As such, the proposed modified Project together with all related projects would not result in any new significant cumulative impacts regarding freeway service levels as compared to the approved Project.

(c) Access

No related projects are adjacent to the Project site or share adjacent access points. Therefore, no significant cumulative impacts relative to access would occur.

(d) Public Transit

Like the approved Project, a significant cumulative impact relative to public transit services would also occur for the proposed modified Project, and the impacts would be substantially the same. As such, the proposed modified Project together with all related projects would not result in any new significant cumulative impacts for public transit as compared to the approved Project.

d. Level of Significance after Mitigation

(1) Construction

With the implementation of mitigation measures, no significant, unavoidable construction impacts would occur.

(2) Operation

(a) Intersection Service Levels

The proposed modified Project impacts will remain significant and unavoidable after mitigation measures are applied as to seven intersections. The proposed modified Project would result six additional significant and unavoidable impacts compared to the approved Project. The difference in number, degree, and location of significant impacts identified for the approved Project compared to the analysis for the proposed modified Project, is a result of changes in background traffic conditions, related Project traffic patterns, roadway and freeway capacity changes, as well as differences in analysis methodology. The difference in the number of significant and unavoidable impacts is a result of differences in analysis methodology and

changes in City policy and design standards. The proposed modified Project has one fewer significant and unavoidable impact compared to the approved Project when analyzed using the same 2017 methodology. As such, the proposed modified Project would result in fewer significant and unavoidable intersection impacts as compared to the approved Project.

(b) Freeway Service Levels

The proposed modified Project's significant impact on three segments of the I-110 Freeway, four segments of the I-405 Freeway and one segment of the I-710 Freeway cannot be reduced to less than significant levels as no feasible mitigation measures are available. Therefore, the proposed modified Project's cumulative impact on freeway service levels would be significant and unavoidable. The approved Project's impacts were also significant and unavoidable, impacts of the proposed modified Project would be similar to those of the approved Project assessed in the FEIR, and no new or worsening impacts would occur in comparison with the approved Project.

(3) Public Transportation

Regional transit impacts for the proposed modified Project would be mitigated to a less than significant level with implementation of Mitigation Measure C-16. In comparison, the impact of the approved Project would be significant an unavoidable. As such, the proposed modified Project would not result any new significant impacts as compared to the approved Project.

Comparison to FEIR Findings: New Significant Unavoidable Impact. Previous Mitigation Applies as Modified Herein. New Mitigation Measure(s) Identified; Inapplicable Mitigation Removed. Mitigation Previously Applied Determined to Be Infeasible.

9.5 Geology and Soils

a. Environmental Impacts

Site preparation would require mass grading, additional deep dynamic compaction (DDC), backfill, capping and pile driving. Site preparation would be coordinated with remediation procedures approved by the DTSC. As stated in the FEIR, with the enforcement of current City Building Code requirements, the exposure of people or other structures to settlement or other geologic hazards caused by construction or occupation of the Project site would be less than significant. The proposed modified Project would not result in any new significant geologic impacts as compared to the approved Project.

b. Mitigation Measures

The proposed modified Project would not result in a significant geology and soils impact. However, the following mitigation measures are recommended to ensure compliance with City and State regulations (with minor updates from FEIR to reflect newer regulations).

- **Mitigation Measure E-1:** In accordance with City of Carson Municipal Code, the Applicant shall comply with site-specific recommendations set forth in engineering geology and geotechnical reports prepared to the satisfaction of the City of Carson Building Official, as follows:
 - The engineering geology report shall be prepared and signed by a California Certified Engineering Geologist and the geotechnical report shall be prepared and signed by a California Registered Civil Engineer experienced in the area of geotechnical engineering. Geology and geotechnical reports shall include site-specific studies and analyses for all potential geologic and/or geotechnical hazards. Geotechnical reports shall address the design of pilings, foundations, walls below grade, retaining walls, shoring, subgrade preparation for floor slab support, paving, earthwork methodologies, and dewatering, where applicable.
 - Geology and geotechnical reports may be prepared separately or together.
 - Where the studies indicate, compensating siting and design features shall be required.
 - Laboratory testing of soils shall demonstrate the suitability of underlying native soils to support driven piles to the satisfaction of the City of Carson Building Official.
- Mitigation Measure E-2: Due to the classification of portions of the Project site

 Property as a liquefaction zone, the Applicant shall demonstrate that liquefaction either (a) poses a sufficiently low hazard to satisfy the defined acceptable risk criteria, in accordance with CDMG-CGS Special Bulletin 117A, or

 (b) implements suitable mitigation measures to effectively reduce the hazard to acceptable levels (CCR Title 14, Section 3721). The analysis of liquefaction risk shall be prepared by a registered civil engineer and shall be submitted to the satisfaction of the City Building Official.
- **Mitigation Measure E-3:** Any roads realigned from the existing configuration, or otherwise, located in areas underlain by waste soils, shall comply with site-specific recommendations as set forth in engineering, geology, and geotechnical reports prepared to the satisfaction of the City of Carson building officials.

c. Cumulative Impacts

Due to the high seismic activity common to the Southern California region, the potential for ground shaking and other geological hazards would be similar throughout the area that includes the identified related projects. Building permits for the related projects would involve a site-specific evaluation of slope stability, ground rupture, liquefaction, and ground movement for each of the related projects. With the implementation of City Code regulations, cumulative impacts related to geologic risk would be less than significant. The proposed modified Project together with all related projects would not result in any new significant cumulative impacts as compared to the approved Project.

d. Level of Significance after Mitigation

The proposed modified Project would not exceed the thresholds of significance relative to City and State regulations, or expose persons to geologic hazards, impacts would be similar to those of the approved Project assessed in the FEIR (less than significant), and no new or worsening impacts would occur in comparison with the approved Project.

Comparison to FEIR Findings: No New Significant Impact. Previous Mitigation Applies as Modified Herein. No New Mitigation Measure(s) Identified or Required.

9.7 Air Quality

a. Environmental Impacts

The air quality analysis evaluates air emissions attributable to the proposed modified Project's construction and post-construction (e.g., operational) activities for criteria air pollutants, air toxics, and odors. In addition, the proposed modified Project's compatibility with applicable air quality policies as set forth in the City of Carson General Plan and regional plans prepared by SCAG and the SCAQMD are also assessed.

Construction of the proposed modified Project would generate fugitive dust and combustion emissions from the use of heavy-duty construction equipment on-site and from construction worker trips as well as from delivery and haul truck travel to and from the Project site. Construction activities is anticipated to occur over 32 months beginning as early as late 2017 which is a reduction over the construction period considered in the FEIR. Construction emissions anticipated from the proposed modified Project would result in lower emissions than were anticipated in the FEIR. Due to the change in regulatory requirements regarding construction fleet efficiencies as well as architectural coating ROC content between the original 2005 analysis and this analysis, the emissions from the proposed modified Project are substantially less than those originally modeled.

Therefore, the proposed modified Project would not result in any new significant impact as compared to the approved Project with respect to regional ROC, NOx, CO, SOx, and PM₁₀ emissions. Emissions of NOx, SOx, and PM₁₀ from the proposed modified Project would result in less than significant impacts whereas the FEIR reported significant and unavoidable impacts for NOx and PM₁₀ even with mitigation. Emissions of PM_{2.5}, which was not previously analyzed and has been identified as a pollutant of concern since certification of the FEIR, would not exceed the SCAQMD daily threshold. Impacts related to PM_{2.5} emissions would be less than significant.

With regard to localized construction emissions, the proposed modified Project would not result in any new significant impact as compared to the approved Project with respect to NO_X , CO, or PM_{10} , and like the approved Project, localized emissions would not exceed SCAQMD thresholds. Localized emissions of $PM_{2.5}$, which was not previously analyzed and has been

identified as a pollutant of concern since certification of the FEIR, would not exceed the SCAQMD localized threshold. Impacts related to PM_{2.5} emissions would be less than significant.

The certified FEIR calculated regional operational emissions generated by the consumption of electricity and natural gas, area sources, and mobile sources at build out of the Project. According to the calculations, the approved Project was anticipated to exceed regional SCAQMD thresholds for ROC, CO, NOx, and PM₁₀ and significant impacts were identified, as shown in the FEIR (see FEIR [DEIR Table 39 on p. 390]).

Operational emissions of the proposed modified Project are anticipated to begin as early as 2020. The maximum daily operational emissions anticipated from the proposed modified Project would result in potentially significant regional impacts for ROC, NO_X, CO, PM₁₀, and PM_{2.5}. The addition of the PM_{2.5} threshold occurred since certification of the FEIR. While the proposed modified Project would result in exceedances of the SCAQMD's regulatory thresholds, it would result in less daily emissions than anticipated under the FEIR. The stationary source emissions included in the FEIR analysis account for natural gas consumption and electricity generation. The CalEEMod model, used for analyzing the proposed modified Project's emissions, accounts for this as energy consumption. Stationary sources analyzed for the proposed modified Project refer only to the emissions from the operation of the on-site permitted equipment.

The proposed modified Project would not result in any new significant impact with respect to regional emissions of ROC, NO_X, CO, and PM₁₀. Emissions of PM_{2.5} are in excess of current SCAQMD thresholds and would result in a significant impact arising from a newly assessed regulatory requirement. Therefore, PM_{2.5} impacts for the proposed modified Project are substantially the same as for the approved Project if PM_{2.5} had been regulated in 2006. However, even with implementation of feasible mitigation, a new significant and unavoidable impact related to regional PM_{2.5} emissions would occur.

With respect to localized operational emissions, the proposed modified Project would not result in any new significant impact with respect to localized emissions of NO_x or CO. Localized emissions of PM₁₀ and PM_{2.5} would exceed SCAQMD localized operational thresholds. However, with implementation of mitigation, localized emissions of PM₁₀ and PM_{2.5} would be less than significant.

With regard to human health risks, the proposed modified Project would not exceed numeric indicators and impacts would be less than significant.

The combined mitigated construction and operational emissions for the proposed modified Project would exceed the SCAQMD's significant thresholds for ROC, NO_X, CO, PM₁₀, and PM_{2.5}.

b. Mitigation Measures

The following mitigation measures are (1) intended to implement requirements of SCAQMD Rule 403 (Fugitive Dust) and (2) set forth a program of air pollution control strategies designed to reduce the proposed modified Project's air quality impacts to the extent feasible.

- **Mitigation Measure G-1:** General contractors shall implement a fugitive dust control program pursuant to the provisions of SCAQMD Rule 403.6. 14
- **Mitigation Measure G-2:** All construction equipment shall be properly tuned and maintained in accordance with manufacturer's specifications.
- **Mitigation Measure G-3:** General contractors shall maintain and operate construction equipment so as to minimize exhaust emissions. During construction, trucks and vehicles in loading and unloading queues would turn their engines off, when not in use, to reduce vehicle emissions. Construction emissions should be phased and scheduled to avoid emissions peaks and discontinued during second-stage smog alerts.
- **Mitigation Measure G-4:** Electricity from power poles rather than temporary diesel- or gasoline-powered generators shall be used to the extent feasible.
- **Mitigation Measure G-5:** All construction vehicles shall be prohibited from idling in excess of five minutes, both on- and off-site Property.
- **Mitigation Measure G-6:** Project heavy-duty construction equipment shall use alternative clean fuels, such as low-sulfur diesel-with sulfur content of 15 ppm by weight or less or compressed natural gas with oxidation catalysts or particulate traps, to the extent feasible.
- Mitigation Measure G-7: The Applicant shall utilize coatings and solvents that are less than required by consistent with applicable SCAQMD rules and regulations, and encourage water based coatings or other low emitting alternatives, restrict the number of gallons of coatings used per day, or where feasible, paint contractors should use hand applications instead of spray guns.
- **Mitigation Measure G-8:** The Applicant shall comply with SCAQMD Rule 402 to reduce potential nuisance impacts due to odors from construction activities.
- **Mitigation Measure G-9:** All construction vehicle tires shall be washed at the time these vehicles exit the <u>project site Property</u>, or use vehicle tracking pad per approved <u>SWPPP</u>.
- **Mitigation Measure G-10:** All fill material carried by haul trucks shall be covered by a tarp or other means.

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¹⁴ SCAQMD Rule 403 requirements are detailed in Appendix G.

- **Mitigation Measure G-11:** Any intensive dust-<u>-generating activity such as grinding concrete for existing roads <u>must shall</u> be controlled to the greatest extent feasible.</u>
- Mitigation Measure G-12: The Applicant shall provide documentation to the City indicating both on- and off-siteProperty air-borne risks associated with Remedial Action Plan construction have been evaluated to the satisfaction of the DTSC, and at a minimum, perimeter air monitoring will shall be completed for dust, particulates, and constituents determined to be Constituents of Concern (COCs).
- **Mitigation Measure G-13:** All point source facilities shall obtain all required permits from the SCAQMD. The issuance of these permits by the SCAQMD shall require the operators of these facilities to implement Best Available Control Technology and other required measures that reduce emissions of criteria air pollutants.
- **Mitigation Measure G-14:** Land uses on the <u>Project site Property</u> shall be limited to those that do not emit high levels of potentially toxic contaminants or odors.
- Mitigation Measure G-15: All residential and non-residential buildings shall meet exceed the 2016 California Title 24 Energy Efficiency standards for water heating, space heating, and cooling, to the extent feasible by a minimum of 5 percent or achieve equivalent energy efficiency savings by other means.
- **Mitigation Measure G-16:** All fixtures used for lighting of exterior common areas shall be regulated by automatic devices to turn off lights when they are not needed, but a minimum level of lighting should be provided for safety.
- Mitigation Measure G-17: Building materials, architectural coatings and cleaning solvents shall comply with all applicable SCAQMD rules and regulations. The use of low-VOC cleaning products shall be required in all hotels. The Project shall incorporate the use of low-VOC architectural coating for repainting and maintenance/touch-up of the non-residential buildings and residential buildings for all common/non-living space/outdoor areas.
- **Mitigation Measure G-18:** The Applicant shall, to the extent feasible, schedule deliveries during off-peak traffic periods to encourage the reduction of trips during the most congested periods.
- **Mitigation Measure G-19:** The Applicant shall coordinate with the MTA and the City of Carson and Los Angeles Department of Transportation to provide information with regard to local bus and rail services.
- **Mitigation Measure G-20:** During site plan review, consideration shall be given regarding the provision of safe and convenient access to bus stops and public transportation facilities.
- **Mitigation Measure G-21:** The Applicant shall pay a fair—share contribution for a low—emission shuttle service between the <u>project site Property</u> and other major activity centers within the <u>project vicinity</u> (i.e., the Metro Rail Blue Line station at Del

- Amo Boulevard and Santa Fe <u>Avenue</u> and the Carson Transfer Station at the South Bay Pavilion).
- **Mitigation Measure G-22:** The Applicant shall provide bicycle racks located at convenient locations throughout—Carson Marketplace The District at South Bay.
- **Mitigation Measure G-23:** The Applicant shall provide bicycle paths along the main routes through<u>out</u>-Carson Marketplace The District at South Bay consistent with the Specific Plan.
- **Mitigation Measure G-24:** The Applicant shall provide convenient pedestrian access throughout—Carson Marketplace—The District at South Bay.
- Mitigation Measure G-25: The Project shall include air filtration systems for residential dwelling units designed to have a minimum efficiency reporting value (MERV) of 12 as indicated by the American Society of Heating Refrigerating and Air Conditioning Engineers (ASHRAE) Standard 52.2. The air handling systems shall be maintained on a regular basis per manufacturer's recommendations by a qualified technician employed or contracted by the Applicant or successor. Operation and maintenance of the system shall ensure that it performs above the minimum reporting value.
- Mitigation Measure G-26: Project construction shall be phased to extend the architectural coating phase to the greatest extent feasible to meet construction schedule. Further, architectural coating shall be required to meet the lowest VOC content available for the type of coating being applied.
- <u>Mitigation Measure G-27:</u> The on-Property residential units shall not contain any hearths, either wood burning, natural gas, or propane.
- <u>Mitigation Measure G-28:</u> The Project shall incorporate outdoor electrical outlets such that 10 percent of outdoor landscaping equipment can be electrically powered.
- Mitigation Measure G-29: The Project shall designate at least 8 percent of all commercial parking spaces for priority parking for carpool/vanpool and/or clean air vehicles and comply with California Green Building Standards Code (CALGreen).

c. Cumulative Impacts

With respect to the proposed modified Project's construction-period air quality emissions and cumulative Basin-wide conditions, the SCAQMD has developed strategies to reduce criteria pollutant emissions outlined in the AQMP pursuant to federal Clean Air Act mandates. As such, the proposed modified Project would comply with SCAQMD Rule 403 requirements, and implement all feasible mitigation measures. In addition, the proposed modified Project would comply with adopted AQMP emissions control measures. Per SCAQMD rules and mandates as well as the CEQA requirement that significant impacts be mitigated to the extent feasible, these same requirements (i.e., Rule 403 compliance, the implementation of all feasible mitigation

measures, and compliance with adopted AQMP emissions control measures) would also be imposed on construction projects Basin-wide, which would include each of the related projects. However, since construction ROC emissions would be significant on its own, as was the approved Project, emissions of ROC due to construction of the proposed modified Project in combination with any of the related projects would also be significant with incorporation of mitigation.

Like the approved Project, the proposed modified Project may emit odors during construction activities at each related project would include the use of architectural coatings and solvents. SCAQMD Rule 1113 limits the amount of volatile organic compounds from architectural coatings and solvents. Via mandatory compliance with SCAQMD rules, it is anticipated that construction activities or materials used in the construction of the related projects would not create objectionable odors. Thus, odor impacts from the related projects are anticipated to be less than significant unto themselves, as well as cumulatively in conjunction with the proposed modified Project.

The analysis of cumulative impacts during the operational phase focuses on determining whether the proposed modified Project is consistent with forecasted future regional growth. Therefore, if all cumulative projects are individually consistent with the growth assumptions upon which the SCAQMD's AQMP is based, then future development would not impede the attainment of ambient air quality standards and a significant cumulative air quality impact would not occur. The proposed modified Project would be consistent with the assumptions and forecasts in the most recent AQMP, however, the proposed modified Project would contribute to a significant cumulative regional air quality impact as the Basin is non-attainment for ozone and PM₁₀ and PM_{2.5}, and the proposed modified Project would exceed the SCAQMD daily significance thresholds for ROC and NOx emissions (i.e., ozone precursors), CO, PM₁₀, and PM_{2.5}. Therefore, the proposed modified Project, like the approved Project, would result in a cumulatively significant impact with regards to ROC, NOx, CO, SOx, and PM₁₀. The proposed modified Project would result in a new, not previously analyzed, cumulative impact with regard to PM_{2.5}.

With respect to TACs, specifically health risk, the proposed modified Project would emit TACs through the construction and operation of the proposed project. With implementation of the construction PDF requiring Tier 4 emissions ratings for construction equipment, risk would be reduced to less than significant levels. Therefore, the proposed modified Project would not result in any new significant impacts as compared to the approved Project.

With implementation of the proposed modified Project, neither the Project's land use nor any of the related projects land uses have a high potential to generate odor impacts. Furthermore, any related project that may have a potential to generate objectionable odors would be required by SCAQMD Rule 402 (Nuisance) to implement Best Available Control Technology to limit

potential objectionable odor impacts to a less than significant level. Thus, potential odor impacts from related projects are anticipated to be less than significant unto themselves, as well as cumulatively, in conjunction with the proposed modified Project.

d. Level of Significance after Mitigation

(1) Construction

Regional construction activities would still exceed the SCAQMD daily emission thresholds for regional ROC after implementation of all feasible mitigation measures and, as such, the Project would have a significant and unavoidable impact on regional air quality. With regard to localized emissions, construction activities would not exceed the SCAQMD daily emission thresholds. Therefore, construction of the proposed modified Project would have a less than significant impact with regard to localized emissions.

(2) Operation

Regional operational emissions, after the implementation of all feasible mitigation measures, would still exceed the SCAQMD daily emission thresholds and, as such, operation of the proposed modified Project would have a significant and unavoidable impact on regional air quality. With regard to localized emissions, proposed modified Project operations would not exceed the SCAQMD daily emission thresholds with mitigation incorporated. Via compliance with industry standard odor control practices, SCAQMD Rule 402 (Nuisance), and SCAQMD Best Available Control Technology Guidelines, potential impacts that could result from any potential odor source would be less than significant. With regard to human health risks, the proposed modified Project would not exceed numeric indicators and impacts would be less than significant.

(2) Concurrent Construction and Operation Impacts

Worst-case regional emissions during concurrent construction and operational activities on the Property would still exceed the SCAQMD daily emission thresholds, and as such, would have a significant and unavoidable impact on regional air quality.

Comparison to FEIR Findings: New Significant Impact Due to Changes in Regulatory Requirements. Previous Mitigation Applies as Modified Herein. New Mitigation Measure(s) Identified; Inapplicable Mitigation Removed.

9.8 Noise

a. Environmental Impacts

(1) Construction Impacts

Similar to the FEIR, construction activities would include site preparation, on-site remediation, and site construction. Compared to the FEIR construction schedule (see FEIR [DEIR p. 99]) of approximately four years, construction activities for the proposed modified Project are proposed to occur over 32 months with overlapping phases. Given the reduction in over 160,000 sq.ft. of commercial uses as compared to the approved Project, overall total construction for the proposed modified Project should likewise be reduced in comparison. As discussed in the FEIR, development of the former landfill site would require Deep Dynamic Compaction (DDC)¹⁵ activities, some of which have already been completed at the site. As such, site preparation would involve mass grading, DDC, fill and cap installation, grading and the construction of building pads as described in the FEIR (see FEIR [DEIR pp. 434–435]).

The proposed modified Project is subject to mitigation implemented by the FEIR. Part 3 of Mitigation Measure H-1 requires that temporary sound barriers be used, as needed, whenever construction activities occur within 150 feet of residential property. This measure has been modified to require that all active construction work areas be enclosed by a continuous eightfoot-tall sound barrier that achieves a noise reduction of 20 dBA or achieve sound level reductions of at least 20 dBA, or more to reach 65 dBA at the boundary of occupied residential uses, by other noise-reducing measures. Should a temporary sound barrier be installed, the barrier shall be located at the grade upon which the noise-generating equipment are operated in order to block the line-of-sight of the construction activity at surrounding sensitive receptors. With implementation of modified FEIR mitigation, noise impacts associated with DDC activities would be less than significant for receptors R1, R3, and R4 with the use of one DDC rig. Therefore, the proposed modified Project would not result in any new significant impacts as compared to the approved Project related to increase in ambient noise with the use of one DDC rig. With the use of three DDC rigs, the proposed modified Project would, like the approved Project, result in a significant increase in ambient noise at R3. Additionally, construction-only noise levels would not exceed 70 dBA at the approved multiple-family residential use (R1) within DD3 or 65 dBA at Receptors R3 and R4 with the use of one to three DDC rigs. Therefore, the proposed modified Project would not result in any greater impact related to DDC noise as

Deep dynamic compaction is a site preparation method used for compacting and strengthening loose or soft soils to support buildings, roadways, and other heavy construction. The method involves the systematic and repetitive dropping of heavy weights in a pattern designed to remedy poor soil conditions at a proposed building site. Because the energy imparted is considerable, compaction can be achieved at substantial depths below the ground surface.

compared to the approved Project for Receptors R3 and R4 and would not result in a new impact related to R1.

Pursuant to Mitigation Measure H-1 Part 2 implemented by the FEIR, pile drivers used within 1,500 feet of sensitive receptors shall be equipped with noise control techniques that have a minimum quieting factor of 10 dBA. This measure has been modified to allow other noise-reducing techniques to achieve a minimum reduction of 10 dBA at the noise source. Further, modified Part 3 of Mitigation Measure H-1 would achieve a noise reduction of 20 dBA. Like the approved Project, impacts related to increases in ambient noise would be significant even with implementation of mitigation for R3 and R4. As such, the proposed modified Project would not result in any new significant impact for pile driving at R3 and R4 as compared to the approved Project. With implementation of modified mitigation, impacts would be reduced to less than significant levels at R1. With regard to construction noise only, without consideration of ambient noise, pile driving activities would not exceed 70 dBA at R1 or 65 dBA at R3 and R4. Therefore, the proposed modified Project would not result in any greater impact related to DDC noise as compared to the approved Project for Receptors R3 and R4 and would not result in a new impact related to R1.

With implementation of Mitigation Measure H-1, including the modifications to Part 1, Part 2, and Part 3, construction noise levels associated with pile driving alone and concurrent pile driving/DDC activities would not result in increases in ambient noise of 5 dBA or more at R1, but would result in increases of up to 10.2 dBA Leq and 7.1 dBA Leq at R3 and R4, respectively. Like the approved Project, impacts related to pile driving noise would be significant and unavoidable, and no new impact would occur. Additionally, construction-only noise levels associated with pile driving and concurrent pile driving/DDC activities would not exceed 65 dBA at R3 and R4 would not exceed 70 dBA at R1. Therefore, with respect to maximum construction noise levels, pile driving alone and concurrent pile driving/DDC would be less than significant with respect to R3 and R4 and a significant new impact would not occur at R1.

The proposed modified Project would not result in any new significant on-site construction noise impacts as compared to the approved Project with respect to Receptors R3 and R4. With implementation of modified mitigation, construction activity would not exceed ambient noise levels at R1 by more than 5 dBA and would not exceed the allowed 70 dBA for multiple-family residences. Therefore, the proposed modified Project would not result in any new significant on-Property construction noise impacts as compared to the approved Project.

(2) Operational Noise

The proposed modified Project's operational noise analysis addresses potential noise impacts to neighboring noise-sensitive receiver locations related to the long-term operations of the proposed modified Project compared to the FEIR. Specific noise sources addressed in the

analysis included roadway noise, mechanical equipment/point sources (i.e., loading dock and trash pick-up areas), and parking facilities.

Relative to increase in traffic noise, the greatest proposed modified Project-related traffic noise increase is anticipated to occur along the segments of Del Amo Boulevard, between Stamps Drive and Figueroa Street (1.9 to 2.2 dBA increase in CNEL under existing conditions and 1.9 to 2.0 dBA increase in CNEL under future conditions). Noise level increases above ambient for the proposed modified Project would be less than the 5 dBA and 3 dBA significance thresholds. Thus, the proposed modified Project would not result in any new significant impacts for off-Property roadway noise as compared to the approved Project. No mitigation is required.

Relative to the existing noise environment, on-Property activity associated with the proposed modified Project is estimated to increase the ambient noise level by 0.1 dBA at R1, 2.5 dBA at R3, and 1.4 dBA at R4, which are less than the significance threshold of a 5 dBA increase. Composite on-site noise level increases at all other receptor locations are expected to be less than significant as well, given their distance from the Project site and the presence of intervening structures. As such, the composite noise level impact on the nearest sensitive receptors due to the proposed modified Project's future operations would be less than significant, and no mitigation would be required.

b. Mitigation Measures

(1) Construction

Mitigation Measure H-1: Prior to the issuance of any grading, excavation, haul route, foundation, or building permits, the Applicant shall provide proof satisfactory to the Building and Safety and Planning Divisions of the Community Development Services Department that all construction documents require contractors to comply with City of Carson Municipal Code Sections 4101(i) and (j), which requires all construction and demolition activities, including pile driving, to occur between 7:00 A.Ma.m. and 8:00 P.Mp.m. Monday through Saturday Friday and that a noise management plan for compliance and verification has been prepared by a monitor retained by the Applicant. At a minimum, the plan shall include the following requirements:

1. Noise-generating equipment operated at the <u>Project site Property</u> shall be equipped with effective noise control devices achieve a minimum noise level reduction of 10 dBA lower than the reference noise levels used in this analysis, as listed below, to be verified by submittal of manufacturer specifications, evidence of retrofit (i.e., mufflers, intake silencers, lagging, and/or engine enclosures), or monitoring data. All equipment shall be properly maintained to <u>asensure</u> that no additional noise, due to worn or improperly maintained parts, would be generated.

Equipment Type	Reference Noise Level at 50 Feet (dBA L _{max})	Mitigated Noise Level at 50 Feet (dBA L _{max})
<u>Welder</u>	<u>74</u>	<u>64</u>
<u>Forklift</u>	<u>75</u>	<u>65</u>
Tractor Trailer	<u>76</u>	<u>66</u>
<u>Paver</u>	<u>77</u>	<u>67</u>
Air Compressor	<u>78</u>	<u>68</u>
<u>Loader</u> <u>Concrete Mixer Trucks</u>	<u>79</u>	<u>69</u>
Water Trucks Rollers Trencher	<u>80</u>	<u>70</u>
Excavators Cranes	<u>81</u>	<u>71</u>
<u>Dozer</u>	<u>82</u>	<u>72</u>
<u>Compactor</u>	<u>83</u>	<u>73</u>
<u>Scraper</u>	<u>84</u>	<u>74</u>
<u>Grader</u>	<u>85</u>	<u>75</u>
Concrete Saw Pavement Scarifier	<u>90</u>	<u>80</u>

- 2. Pile drivers used within 1,500 feet of sensitive receptors shall be equipped with noise control techniques (e.g., use of noise attenuation shields or shrouds) having a minimum quieting factor of 10 dBA, or equivalent measures shall be used to result in a minimum reduction of 10 dBA at the source.
- 3. Effective continuous temporary sound barriers (at least 8-foot-tall as measured from the grade upon which the noise-producing equipment are operating) equipped with noise blankets rated to achieve sound level reductions of at least 20 dBA shall be used and relocated, as needed, whenever enclose the active construction-activities occur within 150 feet of residential property, work area to block line-of-site between the construction equipment and the occupied noise-sensitive receptors (i.e., residential uses located on the west and south of the Project site). In the alternative, equivalent measures may be used that will achieve sound level reductions of at least 20 dBA, or such lesser fraction thereof required to reach 65 dBA, at the boundary of occupied residential uses.
- 4. Loading and staging areas must be located on site and away from the most noise-sensitive uses surrounding the site as determined by the of-Building and Safety and Planning Divisions of the Community Development Services Department.

- 5. An approved haul route authorization that avoids noise-sensitive land uses to the maximum extent feasible.
- 6. A construction relations officer shall be designated to serve as a liaison with residents, and a contact telephone number shall be provided to residents.
- **Mitigation Measure H-2:** The Applicant, prior to initiating <u>additional DDC or pile driving-activities</u> on a site-wide basis, shall conduct a <u>DDC pPilot pProgram</u> (Pilot Program). The Pilot Program shall be implemented via the following guidelines:
 - Prior to the initiation of the Pilot Program, the Applicant shall locate vibration monitors at the following locations: (1) along the Project's fenceline opposite the off-site residential uses located to the north (if Development District 3 [DD3] is under vertical construction or constructed at the time DDC activities are initiated), south, and southwest of the Project site Property (i.e., within the Project site Property), and (2) along the far side of the Torrance Lateral Channel and along the north side of Del Amo Boulevard (if DD3 is under vertical construction or constructed at the time DDC activities are initiated) in line with the monitors placed within the Project site Property itself.
 - Continuous monitoring shall be conducted on an ongoing basis during the Pilot Program. All vibration levels measured by the monitors shall be logged with documentation of the measurements provided to the City.
 - Initial DDC drops shall be limited in weight, height, and/or location dictated by calculations which that demonstrate that the potential vibration levels are below the 0.02 inches per second (in/s) PPV threshold limit at the residential side of the Torrance Lateral Channel or the 2.0 in/s PPV threshold limit at DD3 (if DD3 is under vertical construction or constructed at the time DDC activities are initiated).
 - Increases in DDC weight, height, and/or location shall incur-occur in small increments, with continuous monitoring to asensure compliance with the 0.02 inches per/second PPV (residential side of Torrance Lateral Channel) and 2.0 in/s PPV (if DD3 is under vertical construction or constructed at the time DDC activities are initiated) threshold limits.
 - If vibration levels at any time during the Pilot Program exceed the 0.02 inches per_/second PPV (residential side of Torrance Lateral Channel) or 2.0 in/s PPV (if DD3 is under vertical construction or constructed at the time DDC activities are initiated) threshold levels, DDC or pile driving activity shall immediately stop, until new drop parameters are established that would reduce the vibration levels to less than the 0.02 inches per_/second PPV or 2.0 in/s PPV threshold levels.
- Mitigation Measure H-3: The monitors located on the far side of the Torrance Lateral Channel as part of the Pilot Program shall remain in place throughout the DDC and pile driving phase of Project construction. Continuous vibration monitoring shall be conducted on an ongoing basis during DDC and pile driving activities.

All vibration levels measured by the monitors shall be logged with documentation of the measurements provided to the City. If DDC and/or pile driving vibration levels at any time exceed the 0.02 inches per second (in/s) PPV (at the residential side of Torrance Lateral Channel) or 2.0 in/s PPV (at Development District 3 [DD3] if DD3 is under vertical construction or constructed at the time DDC activities are initiated) threshold levels, DDC and/or pile driving activity shall immediately stop, until new drop parameters modified construction methods are established that would reduce the vibration levels to less than the 0.02 inches per second PPV applicable threshold levels, as defined above.

- Mitigation Measure H-4: A construction and construction-related monitor satisfactory to the Department of Community Development Services General Manager Director (or his/her designee) shall be retained by the Applicant to document compliance with the mitigation measures. Said Monitor's qualifications, identification, address, and telephone number shall be listed in the contracts and shall be placed in the pertinent files of the Department of Community Development Services-Department. The Monitor will be required to monitor all construction and construction-related activities on the site-Property on a periodic basis; keep all written records, which shall be open for public inspection; and to file monthly reports with the City and appropriate permit granting authorities. In addition:
 - 1. Information shall be provided on a regular weekly basis regarding construction activities and their duration. A Construction Relations Officer shall be established and funded by the Applicant, and approved by the Department of Community Development Services General Manager Director (or his/her designee), to act as a liaison with neighbors and residents concerning on-site construction activity. As part of this mitigation measure, the Applicant shall establish a 24-hour telephone construction hotline, which will be staffed between the hours of 8:00 A.Ma.m. and 5:00 P.Mp.m. on a daily Monday through Saturday basis throughout the Project's entire construction period for the purposes of answering questions and resolving disputes with adjacent property owners. The hotline number shall be posted on site the Property.
 - 2. The Applicant shall require in all construction and construction-related contracts and subcontracts, provisions requiring compliance with special environmental conditions included in all relevant entitlement approval actions of the City of Carson. Such provisions shall also include retention of the power to effect prompt corrective action by the aApplicant, its representative, or prime contractor, subcontractor, or operator to correct noticed noncompliance.
 - 3. During construction, loading and staging areas must be located on_site and away from the most occupied noise-sensitive uses surrounding the site Property as determined by the Planning Manager.

- Mitigation Measure H-5: All <u>commercial</u> parking lots <u>near residential areas</u> shall be located a minimum of 150 feet from an off-site residential <u>structure</u> use <u>located to the south and west (across the Torrance Lateral Channel)</u> unless a minimum <u>eight 8-foot-high</u> wall is provided along the property boundary to limit noise levels associated with parking lot activities.
- Mitigation Measure H-6: All parking structures near residential areas shall be located a minimum of 150 feet from an off-site residential structure use located to the south and west (across the Torrance Lateral Channel) unless the exterior wall of the parking structure that faces the off-site residential use is a solid wall or provides acoustical louvers (or equivalent noise reduction measures).
- **Mitigation Measure H-7:** During operation of a building (following construction), truck deliveriesy within 250 feet of an off-siteProperty residential use shall not occur between 10:00 P.Mp.m. and 7:00 A.Ma.m.
- Mitigation Measure H-8: For the residential uses immediately south and north of Del Amo Boulevard, within Development Districts 1 and 3, all exterior walls and floor ceiling assemblies (unless within a unit) shall be constructed with double paned glass or an equivalent and in a manner to provide an airborne sound insulation system achieving a Sound Transmission Class of 50 (45 if field tested) as defined in the UBC Standard No. 35-1, 1982 edition. Sign-off by the Department of Development Services General Manager, or his/her designee, is required prior to the issuance of the first building permit. The Applicant, as an alternative, may retain an engineer registered in the State of California with expertise in acoustical engineering, who would submit a signed report for an alternative means of sound insulation satisfactory to the City of Carson which achieves a maximum interior noise of CNEL 45 (residential standard).
- Mitigation Measure H-9: The balconies of the first row of residential units facing Del Amo Boulevard or I-405 Freeway, should any such balconies be constructed, shall have a solid fence/wall with an appropriate height to reduce the noise received from traffic traveled on the adjacent Boulevard.
- Mitigation Measure H-10: If any noise intensive uses (i.e., outdoor theater, passenger station (bus station, rail station, taxi stand), small recycling facility, or commercial uses (outdoor activities, amplified music, outdoor patios, etc)) are proposed within 300 feet of an on-site or off-site residential use, then as part of the site plan review process, a community noise study shall be completed and the study shall demonstrate that the use would not exceed the City of Carson Municipal Code noise standards and/or the standards established in this EIR. 16

¹⁶ Mitigation Measures H-8, H-9, and H-10 would not apply to on-Property residential uses in light of CBIA v. BAAQMD. New construction off Property would be required to comply with CEQA to assess environmental impacts associated with proposed modified Project activities. As such, these mitigation measures are no longer relevant and do not address an impact as required under CEQA.

c. Cumulative Impacts

(1) Construction

Of the 27 related projects that have been identified within the proposed modified Project's study area, there are a number of projects that have not already been built or are currently under construction. Additionally, it is possible that the recently approved residential use within DD3 undergoes construction concurrent with the proposed modified Project. However, DD3 is surrounded by a plant nursery, Porsche experience track, and the I-405 Freeway and as such there are no noise-sensitive land uses located adjacent to DD3 that could be affected by concurrent construction of DD3 and the proposed modified Project. Additionally, noise impact of construction activities for the proposed modified Project and each related project (that has not already been built) would also still be short-term, limited to the duration of construction and would be localized. In addition, it is anticipated that each of the related projects would have to comply with the local noise ordinance, as well as mitigation measures that may be prescribed pursuant to CEQA provisions that require significant impacts to be reduced to the extent feasible, as was also anticipated for the approved Project. However, since noise impacts due to construction of the proposed modified Project would be significant on its own, as was the approved Project, noise impacts due to construction of the proposed modified Project in combination with any of the related projects would also be significant without mitigation.

(2) Operation

Each of the 27 related projects that have been identified within the general project vicinity would generate stationary-source and mobile-source noise due to ongoing day-to-day operations. The related projects are of a residential, retail, commercial, office buildings, or institutional nature and these uses are not typically associated with excessive exterior noise generation. However, each project would produce traffic volumes that are capable of generating a roadway noise impact. As discussed previously, traffic volumes from the proposed modified Project and the 27 related projects, combined with ambient traffic growth, were analyzed. Cumulative traffic volumes would result in a maximum increase of 2.3 dBA CNEL along Del Amo Boulevard, between South Main Street and Figueroa Street. As this noise level increase would be below the 5 dBA CNEL significance threshold for "normally acceptable" land uses, roadway noise impacts due to cumulative traffic volumes would be less than significant along segments of Del Amo Boulevard. Furthermore, impacts from Project-related traffic noise along all other local roadway segments with sensitive receptors would be lower than the significance threshold of 3 dBA CNEL for sensitive receptors exposed to or within "normally unacceptable" or "clearly unacceptable" categories and, thus, remain less than significant.

Due to Carson Municipal Code provisions that limit noise from stationary sources such as roof-top mechanical equipment and emergency generators, noise levels would still be less than significant at the property line for each related project. For this reason, on-site noise produced by

any related project would not be additive to Project-related noise levels. As such, stationary-source noise impacts attributable to cumulative development would remain less than significant for the proposed modified Project.

d. Level of Significance after Mitigation

In summary, the proposed modified Project would not result in any new significant impacts as compared to the approved Project assessed in the FEIR with the addition of the construction mitigation as set forth above. As compared to the approved Project, the proposed modified Project changes will not require major revisions to the FEIR because of the involvement of new significant impacts that were not previously evaluated. Specifically, with regard to noise, (1) no substantial changes are proposed in the proposed modified Project that would require major revisions to the FEIR, and (2) no substantial changes arise in the circumstances of the proposed modified Project's undertaking, requiring major revisions to the FEIR.

Comparison to FEIR Findings: No New Significant Impact or Changes. Previous Mitigation Applies as Modified Herein. No New Mitigation Measure(s) Identified or Required; Inapplicable Mitigation Removed.

9.15 Wastewater

a. Environmental Impacts

Construction for the proposed modified Project would be similar to that described in the FEIR. As previously discussed, the proposed modified Project modifications would reduce the overall commercial square footage by 110,292 sq.ft. and construction would remain substantially the same as that studied for the approved Project in the FEIR.

As anticipated in the FEIR, a negligible amount of wastewater would still be generated by construction personnel during construction of the proposed modified Project. Wastewater generation from construction activities is still not anticipated to cause a measurable increase in wastewater flows at a time when a sewer's capacity is already constrained or that would cause a sewer's capacity to become constrained. Additionally, construction is still not anticipated to generate wastewater flows that would substantially or incrementally exceed the future scheduled capacity of any treatment plant by generating flows greater than those anticipated. Thus, the proposed modified Project would not result in any significant impacts as compared to the approved Project, and impacts during construction would remain less than significant.

Operation of the proposed modified Project would be similar to that described in the FEIR. The projected daily and annual wastewater generation for the FEIR was 721,113 gallons per day (gpd) and 263.3 million gallons per year. As discussed above, the proposed modified Project would revise the approved Project to include an additional 50 hotel rooms, but would reduce the overall scope and square footage of the approved Project by approximately 110,292

sq.ft. The proposed modified Project is anticipated to generate 645,348 gpd of wastewater. With the addition of the 300 units on DD3 (considered solely in order to provide a direct comparison with the analysis in the FEIR) the total usage is 692,158 gpd, which is a reduction of 28,955 gpd compared to the 721,113 gpd of wastewater the FEIR determined would be generated for the approved Project. On an annual basis, the proposed modified Project would generate 235.56 million gallons per year, and with the 300 units on DD3, solely for purposes of comparison, 252.6 million gallons per year, which results in a reduction of 12.35 million gallons per year of wastewater discharge compared to the 235.56 million gallons per year of wastewater the FEIR determined would be generated for the approved Project.

Therefore, like the approved Project, the proposed modified Project would reduce overall wastewater flows and is not anticipated to cause a measurable increase in a sewer's capacity, nor would it cause a sewer's capacity to become constrained. As previously described, the proposed modified Project would not substantially or incrementally exceed the future scheduled capacity of any treatment facility as the capacity at the JWPCP has increased since the FEIR was prepared and the proposed modified Project requires less capacity than did the approved Project. Therefore, no significant impacts in relation to regional treatment capacity would occur. As such, when the proposed modifications to the Project are compared to the approved Project, there are no new significant impacts or changes with the retention of the existing mitigation measures in place.

b. Mitigation Measures

Although development of the proposed modified Project is not anticipated to produce significant impacts to sanitary sewers, the following measures would ensure that the increase in sewage generation attributable to the proposed modified Project would result in a less than significant impact.

- **Mitigation Measure J.2-1:** All required sewer improvements shall be designed and constructed according to the standards of the City of Carson and County of Los Angeles.
- **Mitigation Measure J.2-2:** Fee payment is required prior to the issuance of a permit to connect to district sewer facilities.
- Mitigation Measure J.2-3: The Building and Safety and Planning Divisions of the <u>Community</u> Development Services-Department shall review building plans to ensure that water-<u>reducing</u> measures are utilized, as required by Title 24 of the California Administrative Code. These measures include, but are not limited to, water-<u>conserving</u> dishwashers, low-volume toilet tanks, and flow-<u>control</u> devices for faucets.

Mitigation Measure J.2-4: When available, tThe proposed modified pProject shall include a dual plumbing system designed to utilize use reclaimed water for non-potable uses the irrigation system and for other appropriate purposes such as during construction.

c. Cumulative Impacts

Wastewater generated by the 27 related projects in conjunction with the proposed modified Project is estimated to be 1,066,912gpd of wastewater. The additional waste flow would constitute 0.8 percent of the JWPCP's remaining 120 mgd capacity and, as such, would not exceed existing capacity. As with the proposed modified Project, the capacity of downstream mains would be determined through the review of connection permits, prior to approval of related projects' building plans. Required connection fees would provide for needed incremental expansion of sewer lines. As such, cumulative impacts would remain less than significant and the proposed modified Project together with all related projects would not result in any new significant cumulative impacts as compared to the approved Project.

d. Level of Significance after Mitigation

With the implementation of the recommended mitigation measures, any local deficiencies in sewer lines would be identified and remedied. No unavoidable significant impacts on wastewater conveyances or the capacity of the Joint Water Pollution Control Plant would occur.

Comparison to FEIR Findings: No New Significant Impact. Previous Mitigation Applies as Modified Herein. No New Mitigation Measure(s) Identified or Required.

9.16 Solid Waste

a. Environmental Impacts

Construction and demolition debris would be generated during the construction of the proposed modified Project. With the implementation of the City's Construction and Demolition Debris Recycling Program, the actual amount of construction debris disposed of at a landfill would be approximately 1,581 tons. However, as proposed modified Project construction debris would represent approximately 0.004 percent of remaining inert landfill capacity, impacts attributable to the proposed modified Project's construction debris are concluded to be less than significant. Municipal solid waste generated by the residential and commercial uses proposed under the proposed modified Project would be similar to that described in the FEIR and require the disposal of approximately 10,064 tons of solid waste per year. Through a combination of compliance with state requirements regarding recycling, the limited proportion of Countywide solid waste generation attributable to the proposed modified Project, available capacity within the El Sobrante Landfill and H.M. Holloway Landfill, and the ongoing legally required solid waste planning programs, it is concluded that proposed modified Project operations would have a

less than significant impact with regard to landfill disposal capacity. As the proposed modified Project would comply with City-required recycling programs, the proposed modified Project operations would be consistent with the applicable provisions of the SRRE. As such, a less than significant impact would result.

b. Mitigation Measures

- **Mitigation Measure J.3-1:** All structures constructed or uses established within any part of the proposed-Project site shall be designed to be permanently equipped with clearly marked, durable, source—sorted recycling bins at all times to facilitate the separation and deposit of recyclable materials.
- **Mitigation Measure J.3-2:** Primary collection bins shall be designed to facilitate mechanized collection of such recyclable wastes for transport to on- or off-site recycling facilities.
- Mitigation Measure J.3-3: The Applicant shall coordinate with the City of Carson to continuously maintain in good order for the convenience of patrons, employees, and residents clearly marked, durable, and separate recycling bins on the same lot, or parcel to facilitate the deposit of recyclable or commingled waste metal, cardboard, paper, glass, and plastic therein; maintain accessibility to such bins at all times, for collection of such wastes for transport to on- or off-site recycling plants; and require waste haulers to utilize local or regional material recovery facilities as feasible and appropriate.
- **Mitigation Measure J.3-4:** Any existing on-site roads that are torn up shall be ground on site and recycled into the new road base.
- **Mitigation Measure J.3-5:** Compaction facilities for non-recyclable materials shall be provided in every occupied building greater than 20,000 square feetsq.ft. in size to reduce both the total volume of solid waste produced and the number of trips required for collection, to the extent feasible.
- **Mitigation Measure J.3-6:** All construction debris shall be recycled in a practical, available, accessible manner, to the extent feasible, during the construction phase.

c. Cumulative Impacts

Development of the identified related projects would generate solid waste during construction. As with the proposed modified Project, debris generated by the related projects would be required to be recycled pursuant to the State requirement to divert 65 percent of construction and demolition debris. As described above, Azusa Land Reclamation has capacity estimated at 57.56 million tons, or 46.05 million cubic yards. Given the remaining permitted capacity and the average disposal rate of 846 tpd in 2015, this landfill has capacity for approximately 189 years. Therefore, given sufficient capacity, cumulative impacts regarding construction debris are concluded to be less than significant.

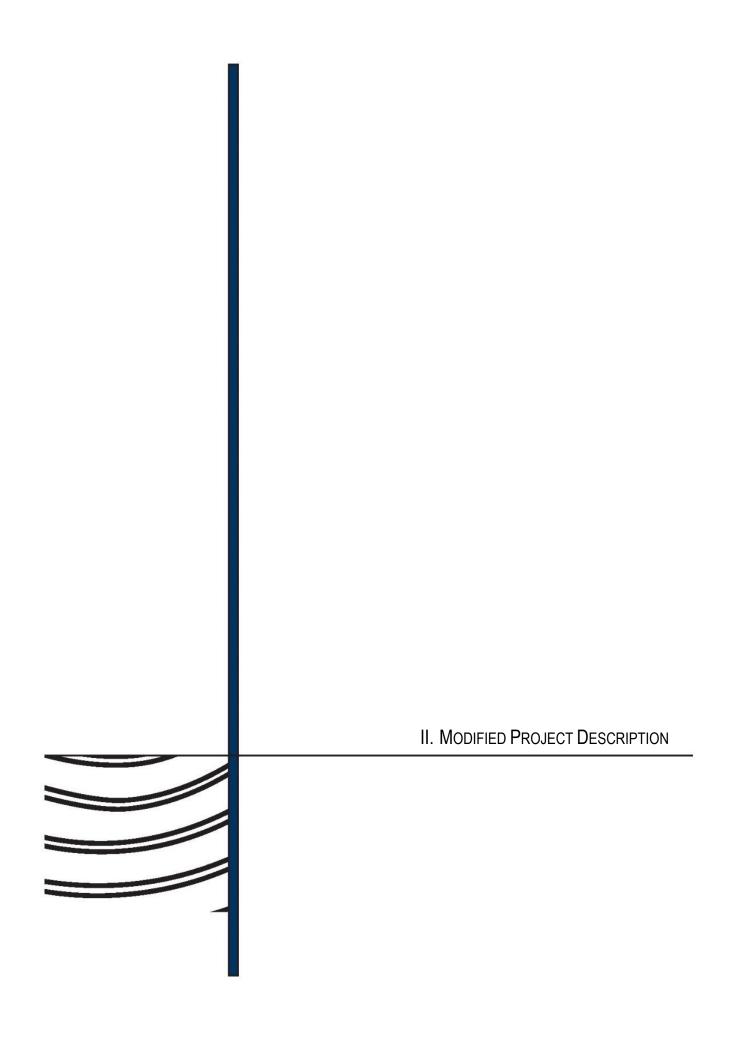
During operations, cumulative solid waste disposal for the related projects is forecasted to be approximately 3,659.79 tons on an annual basis. It is anticipated that the proposed modified Project and other related projects would not conflict with solid waste policies and objectives in the City's SRRE or Construction and Demolition Debris Recycling Program. Impacts to solid waste policies and objectives intended to help achieve the requirements of AB 939 from implementation of the proposed modified Project and related projects would not be cumulatively significant. Cumulative annual solid waste generation represents 0.15 percent of the total solid waste generated in Los Angeles County in 2003. Based on this small percentage as well as the City's recycling programs and ongoing planning efforts at a Countywide level assuring 15 years of landfill capacity on an ongoing basis, cumulative impacts on municipal landfill capacity are concluded to be less than significant.

d. Level of Significance after Mitigation

Impacts associated with the proposed modified Project's solid waste generation are concluded to be less than significant. Furthermore, the County via its established planning programs, has concluded that landfill disposal capacity would be available for the next 15 years, and in the long term. The proposed modified Project would not conflict with the solid waste policies and objectives in the SRRE or the City's Construction and Demolition Debris Recycling Program and impacts relative to adopted solid waste diversion programs and policies would be less than significant.

Comparison to FEIR Findings: No New Significant Impact. Previous Mitigation Applies as Modified Herein. No New Mitigation Measure(s) Identified or Required.

I. Summary	
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II. MODIFIED PROJECT DESCRIPTION

A. INTRODUCTION

This Supplemental Environmental Impact Report (SEIR) supplements the Final EIR (FEIR) (as defined below) prepared for the Project that was previously approved with respect to the Specific Plan for a 168-acre parcel of land, located southwest of the Interstate 405 (I-405) Freeway (the San Diego Freeway) and north of the Avalon Boulevard interchange in the City of Carson (Project site), for a commercial and residential mixed-use Project. The Project site includes 157 acres of land located south of Del Amo Boulevard (the 157-acre portion of the Project site is referred to herein as the Property) that operated as a Class II landfill from 1959 until 1965, and 11 acres of land north of Del Amo Boulevard (Development District 3 [DD3]) that did not have landfill uses. This SEIR is a project level environmental impact analysis prepared pursuant to the California Environmental Quality Act (CEQA).

B. BACKGROUND

In 2006, in accordance with CEQA, the City of Carson Redevelopment Agency (RDA), as lead agency, certified a project-level FEIR for the Carson Marketplace Project (SCH No. 2005051059) (2006 Final EIR) in connection with development of the Project site.

As a result of contamination on and adjacent to the landfill, the Property had been listed as a hazardous substances site by the California Department of Toxic Substances Control (DTSC) in the 1980s and a remedial action order was issued for the Property in 1988 requiring implementation of remedial activities. A remedial action plan (RAP) was approved for the Property in 1995, which was modified by an Explanation of Significant Differences (ESD) in 2009, each of which is incorporated into this document.

In 2006, the Project site was owned by Carson Marketplace LLC, a private developer, which proposed a development plan for the Project site that included a 1,995,125-square-foot (sq.ft.) mixed-use commercial project (including retail, 300 hotel rooms, and entertainment uses) and 1,550 residential units. In 2006, the City of Carson (City) adopted the Carson Marketplace Specific Plan to implement that project (referred to herein as the approved Project).

In 2009, an Addendum to the 2006 FEIR was prepared and subsequently adopted to discuss changes in the remediation activities at the Property (hereinafter the term "FEIR" represents the 2006 FEIR and the Addendum, and the term "approved" in connection with the

FEIR refers to certification of the 2006 Final EIR and the adoption of the 2009 Addendum). In addition, in 2011, the City, relying upon the FEIR, amended the Carson Marketplace Specific Plan and, as part of that amendment, renamed the Specific Plan as The Boulevards at South Bay Specific Plan. During its period of ownership, Carson Marketplace LLC began to implement certain remedial actions to enable development of the approved mixed-use development project.

With the state-wide dissolution of redevelopment agencies in 2011, the City formed the Carson Successor Agency to maintain bonds issued by the RDA on the Property, although the land was still owned by a private development corporation. In an effort to win the bid for a new NFL stadium in 2015, the City, the City of Carson Housing Authority, and two community facilities districts formed the Carson Reclamation Authority (CRA), a California joint powers authority, for the purpose of acquiring, remediating, and selling the Property. The Property was conveyed to the CRA in 2015. DD3 has been sold to an unrelated owner and is not part of the proposed modified Project, as defined below.

The CRA currently owns and intends to master develop the Property, including by seeking appropriate entitlements for the Property, completing the remedial actions in order to achieve the DTSC certification of the former landfill, constructing on-site and off-site infrastructure, preparing the Property for conveyance, and then selling the Property for development purposes, as appropriate. As further described below, CRA has submitted an application to the City for a Specific Plan Amendment to The Boulevards at South Bay Specific Plan (proposed to be renamed "The District at South Bay Specific Plan," hereinafter called the Specific Plan Amendment [SPA]) to permit the uses on the Property described in this SEIR.²

Cam-Carson LLC, a private developer, is seeking to develop a regional commercial use, including outlets and restaurant uses, on a portion of the Property referred to below as Planning Area 2 (PA 2) and has submitted an application to the City for site plan and design review, including a comprehensive sign program, and for a development agreement in connection with that request. Other developers may submit applications at later dates in connection with development of the Property.

As indicated in the Addendum, the Addendum was prepared solely to address one component of the remediation process. The Addendum states: "Since the final EIR was prepared and certified ... the SCAQMD, for reasons that have nothing to do with the Approved Project, [had] temporarily suspended the issuance of permits for flare systems. In light of this temporary circumstance, the Applicant is proposing an alternate method to the handling of landfill gas emissions. With the exception of this change, the Modified Project is identical to the Approved Project." Addendum p. 1.

² Although the CRA submitted the SPA as an applicant, references in this SEIR to "Applicant" in mitigation measures or other locations are intended to refer to the developer or person seeking to develop any portion of the Property unless otherwise noted.

C. PROPOSED MODIFIED PROJECT

As a result of the entitlement submittals described above, the City will be considering the SPA and related entitlements to permit development of a modified development plan, reflecting development proposals received by the CRA from Cam-Carson LLC and other private development firms, each proposing commercial development projects on the Property.³ These requested entitlements, if approved, would not change the overall intent or land uses described in the approved Specific Plan, but do reflect changes to the retail marketplace since the adoption of the approved Project and, consistent with the change from a single developer to a multiple-developer development process, would allow development and occupancy of various on-site uses in phases.

This SEIR was prepared as a supplement to the previously approved FEIR in order to evaluate the changes to the approved Project proposed by the modified development plan, SPA, and related entitlements (the foregoing collectively referred to herein as the proposed modified Project) and to determine whether substantial changes in circumstances surrounding the Property and the approved Project (if any), and new information of substantial importance (if any), require further analysis under CEQA.

Under the SPA, the proposed modified Project would retain the wide range of land uses adopted by the City under the approved Specific Plan, including some or all of the following uses: neighborhood commercial, regional commercial (including outlets),⁴ commercial recreation/entertainment, restaurant, hotel, and residential. Specifically, the proposed changes to the approved Project would modify or otherwise reduce the approved Project, which consisted of 1,995,125 sq.ft. of commercial uses on the Project site⁵ and no more than 1,550 residential units. In comparison, the proposed modified Project would consist of development of the Property with a total of 1,250 residential units and 1,834,833 sq.ft. of commercial uses⁶ including

³ The Specific Plan is proposed to be renamed from The Boulevards at South Bay Specific Plan to The District at South Bay Specific Plan to reflect the revised marketing name to be used for the Property. Nonetheless, this is not a new Specific Plan, but rather an amendment to the approved Specific Plan, and the scope of the modifications is limited as described below.

⁴ This SEIR assumes outlet and restaurant uses for PA 2; however, the SPA allows other regional commercial uses on that planning area.

The total amount of commercial floor area for the approved Project includes 200,000 sq.ft. for the development of 300 rooms in a hotel.

The total amount of commercial floor area for the proposed modified Project includes 233,333 sq.ft. for the development of 350 rooms in two hotels.

approximately 711,500 sq.ft. of regional commercial uses, including outlet and restaurant uses on PA 2, and 890,000 sq.ft. of regional retail center, neighborhood-serving commercial, restaurant, and commercial recreation/entertainment uses on PA 3 of the SPA, as well as 350 rooms total in two hotels. Although the proposed modified Project contains 50 additional hotel rooms as compared with the approved Project, this represents only an increase of 33,333 sq.ft. of development, and there is a decrease in the other types of commercial uses on the Property, resulting in an overall decrease of 160,292 sq.ft. of commercial square footage in the proposed modified Project as compared with the approved Project. The total number of residential units proposed for the Project site has not changed from that analyzed in the FEIR. The SPA proposes 1,250 units on the Property to take into account the 300 residential units on DD3 (comprising the remainder of the 1,550 units permitted under the existing Boulevard at South Bay Specific Plan for the Project site) that have received City approvals. As development on DD3 is not being changed by the proposed modified Project, it does not need to be further assessed in this SEIR. However, because its development is not yet completed, it is treated as a related project and analyzed as part of the cumulative impact analysis in this SEIR.

Similar to the approved Project assessed by the FEIR, the proposed modified Project is defined by a series of development standards that would regulate the amount and types of development, the size and arrangement of buildings, on-site circulation, and open space, as well as the general appearance of the development occurring on the Property. These standards would continue to be implemented through the SPA upon adoption by the Carson City Council.

D. LEAD AGENCY

Because the consideration of the SPA will be the first action considered with respect to the disposition of the Property by the CRA, the City shall serve as the lead agency in connection with its consideration of the entitlement applications described above. The CRA, as a responsible

⁷ Unless otherwise referenced, all square footage referenced in the SEIR is calculated using gross building area (GBA) set forth in The District at South Bay Specific Plan, as follows:

[&]quot;Unless otherwise specified in this Specific Plan, square footage shall be calculated using Gross Building Area (GBA). GBA shall include the sum of the horizontal areas of all floors within a building measured from the exterior faces of exterior walls or from the centerline of party walls separating two (2) buildings. The floor area of any ancillary areas within a building with headroom of more than six and one-half (6-1/2) feet shall be included. Ancillary areas within a building with six and one-half (6-1/2) feet of headroom or less, as well as the area of courtyards, areas open to the sky, exterior walkways, exterior landscape areas, covered canopies, trellis structures, and architectural overhangs shall be excluded. For the purpose of computing GBA and required parking area, floor area devoted to parking and maneuvering shall not be included."

⁸ The SPA includes changes to implementation procedures that would apply to future entitlements, if any, requested for DD3. However, at this time, no further entitlements are anticipated to be required for this development (DD3) and the changes in implementation procedures would not have a physical effect on the environment.

agency, will utilize this SEIR in connection with changes to the grading program, if any, required to implement the revised development plan, construction, and sale of the Property to various development entities. DTSC, as a CEQA-responsible agency, is designated as the lead administrating agency.

E. CONTENTS OF MODIFIED PROJECT DESCRIPTION

The remainder of this Modified Project Description includes six sections that describe the features of the proposed modified Project and compare it to the approved Project in more detail. They are as follows:

- Section II.F, Existing Project Assessment and Proposed Modifications—Describes the background and impact of the approved Project under the FEIR, and the requirements of CEQA for making changes to a project after an EIR has been certified.
- **Section II.G, Project Location**—Describes the location of the Project site in a regional and local context (no changes from the FEIR);
- **Section II.H, Project Objectives**—Identifies the objectives to be achieved through Project implementation (substantially unchanged, but with revisions to update the factual setting);
- **Section II.I, Project Characteristics**—Describes the characteristics of the proposed modified Project, including the proposed modified Project's proposed land uses and development standards (some modifications from the FEIR);
- Section II.J, Project Construction and Schedule—Describes the sequencing of onsite construction and the anticipated time frame for the development as a whole (some updates to the FEIR); and
- Section II.K, Use of the EIR, Responsible Agencies, and Discretionary Actions—Describes the use of this SEIR, as well as the list of currently known responsible agencies and discretionary actions required to implement the proposed modified Project and the sale of the Property by the CRA (some updates to the FEIR).

F. EXISTING PROJECT ASSESSMENT AND PROPOSED MODIFICATIONS

The approved Project has already been environmentally assessed under the FEIR. The City, acting as lead agency, has determined that the FEIR retains significant informational value for purposes of analyzing the proposed modified Project. The purpose of this supplemental analysis is to assess the proposed modifications and updates to the approved Project to determine if they involve new significant impacts that were not previously evaluated in the FEIR. In doing so, the focus will be on evaluating the differences between the approved Project and the proposed modified Project using the standard set forth below. Where the need for additional evaluation is found, this SEIR provides additional evaluation of the impacts of the proposed modified Project and compares those results to the impacts of the approved Project.

1. Standard for Reviewing Changes to a Previously Assessed Project

Once an EIR has been certified or a negative declaration or addendum adopted for a project, a public agency's discretion to require further environmental review is narrowly confined. When a new application is submitted for a previously approved project, the lead agency must determine the extent to which further environmental review, if any, may be required under CEQA's subsequent review standards. In making this decision, the questions before the lead agency are whether the CEQA document prepared for the initial approval retains some informational value and whether the proposed project changes will require major revisions to the CEQA document because of the involvement of new significant impacts that were not previously evaluated.

If the agency finds the existing CEQA document retains some informational value, its consideration of the new application is subject to the subsequent review standards in Public Resources Code (PRC) Section 21166. Once a proper EIR has been prepared, no subsequent or supplemental EIR is required unless (1) substantial changes are proposed in the project, requiring major revisions in the EIR; (2) substantial changes arise in the circumstances of the project's undertaking, requiring major revisions in the EIR; or (3) new information of substantial importance appears that was not known or available at the time the EIR was certified. (PRC Section 21166; see also CEQA Guidelines Section 15162). PRC Section 21166 will come into play because in-depth review has already occurred, and the time for challenging the sufficiency of the FEIR has long since expired, and the question is whether circumstances have changed enough to justify repeating a substantial portion of the process. In addition to the subsequent or supplemental EIR process, the CEQA Guidelines provide for an addendum to an EIR. An addendum to a previously certified EIR may be prepared if some changes or additions are necessary but none of the conditions described in calling for preparation of a supplemental or subsequent EIR have occurred (CEQA Guidelines Section 15164).

CEQA and the CEQA Guidelines do not mandate a procedure that agencies must follow to make a determination of whether a subsequent or supplemental EIR is required. When there is a prior EIR, further CEQA review will generally be limited to new or substantially more severe impacts, compared to what was evaluated in the prior CEQA document. In doing this review, the lead agency need not recertify the previous EIR. Additionally, this review does not require preparation of an initial study. Instead, the determination is made in light of the whole record, including the previously certified EIR. Finally, a previous EIR, negative declaration or addendum is conclusively presumed to be valid if it has not been set aside by a court.

2. Approved Project Previously Assessed under the FEIR

As indicated above, RDA⁹ previously prepared and certified the FEIR pursuant to CEQA to evaluate the impacts of a project that would be constructed in the City of Carson on the Project site (the approved Project). The approved Project provided a mixed-use development with the same categories of uses for the proposed modified Project: regional commercial, commercial recreation/entertainment, office, neighborhood commercial, restaurant, hotel, and residential.

The FEIR is a Project EIR as defined by CEQA Guidelines Section 15161 and, as such, serves as the informational document for the general public and the Project decision makers. The FEIR was and is intended to assist governmental agencies in making decisions with regard to the Carson Marketplace Project, subsequently the Boulevards at South Bay Project, and now renamed the "The District at South Bay" Project and to cover all State, regional, and local governmental discretionary approvals that may be required to construct or implement development on the Project site.

3. The FEIR Contains Substantial Informational Value for the Proposed Modifications to the Project

The FEIR contains substantial informational value for consideration of the proposed modifications to the Project. Additionally, as noted throughout this SEIR, the approved Project and the proposed modified Project are substantively the same, retain similar characteristics, and generally contain minimal differences. The FEIR has already fully evaluated the environmental impacts determined to be potentially significant and has assessed the manner in which the approved Project's significant effects can be reduced or avoided through the implementation of mitigation measures. Impacts that could not mitigated to a level below significance were considered significant and unavoidable adverse impacts, for which a statement of overriding consideration was adopted pursuant to CEQA Guidelines Section 15093. In accordance with CEQA Guidelines Section 15130, the FEIR also included an examination of the cumulative development in the vicinity of the Project site. Cumulative development included all anticipated future projects that, in conjunction with the approved Project, could have resulted in a cumulative impact. In addition, the FEIR evaluated the extent to which environmental effects could be reduced or avoided through the implementation of feasible alternatives to the approved Project. Furthermore, the FEIR was approved, and mitigation measures to address the approved Project's significant impacts were adopted, as set forth in detail in the FEIR and the record of approval for the approved Project. Additional references and details regarding the FEIR can be found throughout this SEIR, including this Modified Project Description. The purpose of this

Although the Carson Redevelopment Agency (RDA) (whose governing board was the City Council of the City of Carson) was originally the lead agency in 2006, the subsequent dissolution of all RDAs under State law in 2011 has now resulted in the City of Carson being the lead agency for the purposes of CEQA.

subsequent analysis in this SEIR is to assess the proposed modifications and updates to the approved Project to determine if they involve new significant impacts that were not previously evaluated in the FEIR and to disclose and evaluate any such significant impacts.

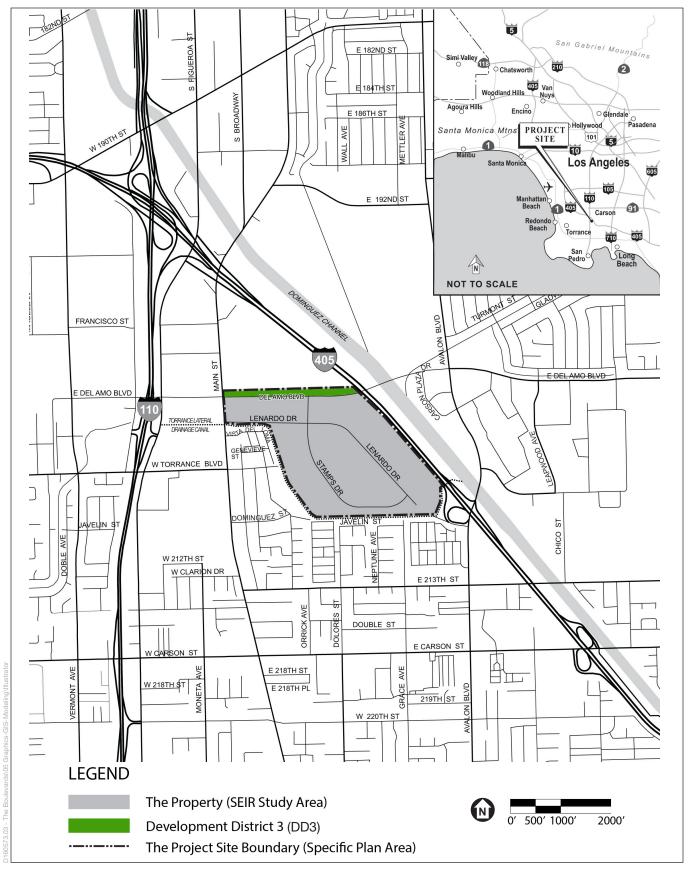
G. PROJECT LOCATION

The proposed modifications do not change the location of the approved Project; the only change to the Project location is that the proposed modified Project does not involve physical changes to DD3, and accordingly, the size of the study area is reduced from 168 acres (Project site) to 157 acres (Property). As previously noted, the 300-unit residential development is entitled for construction on DD3 and is treated as a related project in this SEIR. Reference to the Project Description in the FEIR is made for the full details (see FEIR [DEIR pp. 67 et seq.]). For ease of reference, an overview of the FEIR's Project location description, updated for the proposed modified Project, is summarized as follows:

The Project site is located in the City of Carson, approximately 17 miles south of downtown Los Angeles and approximately 6.5 miles east of the Pacific Ocean. The Project site is in the South Bay area of Los Angeles County. It is comprised of approximately 168 acres located southwest of the I-405 Freeway at and north of the Avalon Boulevard interchange.

Figure II-1, Regional Location, depicts the Project site in a regional context, and Figure II-2, Local Vicinity, shows the Project site, including the Property, in a local context. The Property is the site of a former Class II landfill, currently undergoing remediation, capping, and operation and maintenance of the former landfill as further described in the FEIR and in Section II.I.1, Background and Context for the Proposed Modified Project, beginning on p. II-13. The Property currently includes groundwater and landfill gas treatment facilities, construction trailers and equipment in the northwest portion, subsurface utilities, and soil and material stockpiles and construction materials stored in various locations.

The I-405 Freeway, Harbor Freeway (I-110 Freeway), Artesia Freeway (SR-91 Freeway), and Long Beach Freeway (I-710 Freeway) provide regional access to the Project site. The I-405 Freeway is located adjacent to the site's eastern boundary, the I-110 Freeway is located directly west of the Project site, and the SR-91 Freeway is located approximately 2.5 miles north of the Project site. The I-710 Freeway, which is located on Carson's eastern boundary, links the City with the Long Beach and Harbor areas. Locally, access to the Project site is available via Main Street (a north/south thoroughfare on the western side of the Project site), Avalon Boulevard (an exit from the I-405 Freeway and a major north/south arterial, with a proposed direct link into the Project site), and Del Amo Boulevard, which forms the Property's northern boundary and the southerly boundary of DD3.

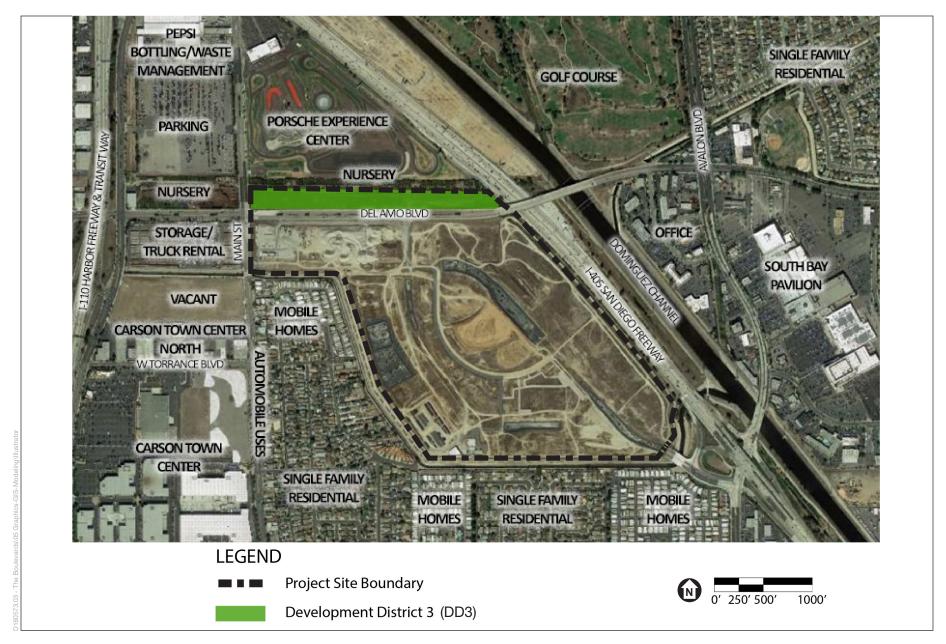


SOURCE: ESA, 2016

The District at South Bay

Figure II-1
Regional Location





SOURCE: RE | Solutions The District at South Bay





On a local scale, the Project site is surrounded by multiple uses. East of I-405, land uses include neighborhood and regional retail, most notably the South Bay Pavilion at Carson. To the north and east of the Project site are the Porsche Experience Center and the Victoria Golf Course, respectively. Residential areas, consisting of one-story and two-story detached residences and mobile homes, are located to the south and west. The residences are separated from the Project site by the Torrance Lateral Flood Control Channel (Torrance Lateral), a concrete-lined drainage channel which parallels the southern and western border of the Project site. To the west of the Project site, extending away from the Project site on Torrance and Del Amo Boulevards, are commercial and light industrial uses. Further north on the west side of Main Street are light industrial uses, with the StubHub Center and California State University, Dominguez Hills, located northeast of the project. DD3, which forms a portion of the Project site, is located to the north of Del Amo Boulevard, north of the Property.

H. PROJECT OBJECTIVES

Consistent with CEQA Guidelines Section 15124(b), the FEIR contains a statement of objectives for the approved Project in its Project Description (see FEIR [DEIR pp. 70–71]). Although minor changes to the Project objectives are set forth below, the Project Objectives for the proposed modified Project are essentially identical to the approved Project objectives, as summarized in **Table II-1**, **Comparison of Objectives**.

Table II-1
Comparison of Objectives

Approved Project	Proposed Modified Project	Comparison
Achieve productive reuse of a large brownfield site by approving a project capable of generating the revenue necessary to pay for and effectuate remediation of the environmental conditions on the project site.	Achieve productive reuse of a large brownfield site by approving a project capable of generating the revenue necessary to pay for and effectuate remediation of the environmental conditions on the project site.	No change
Promote the economic well-being of the Redevelopment Project Area by encouraging the diversification and development of its economic base, and assist in creating both short and long term employment opportunities for the residents of the Redevelopment Project Area and the City.	Promote the economic well-being of the City by encouraging the diversification and development of its economic base, and assist in creating both short and long term employment opportunities for the residents of the City.	Update. Removes references to now-defunct Redevelopment Agencies
Maximize shopping and entertainment opportunities to serve the population and maintain a sustainable balance of residential and non-residential uses by approving a mixed-use project that includes entertainment, retail shopping, restaurants, and residential units.	Maximize shopping and entertainment opportunities to serve the population and maintain a sustainable balance of uses by approving a mixed-use project that allows entertainment, retail shopping, restaurants, and residential uses.	Some modification

Table II-1 Comparison of Objectives

Approved Project	Proposed Modified Project	Comparison
Provide a diversity of both short term and long term employment opportunities for local residents by approving a project that will generate substantial construction work opportunities and long-term jobs in the commercial and hospitality industries.	Provide a diversity of both short term and long term employment opportunities for local residents by approving a project that will generate substantial construction work opportunities and long-term jobs in the commercial and hospitality industries.	No change
Improve the housing stock, including affordable housing, by approving a project that includes a substantial residential component with rental and for-sale units.	Improve the housing stock by approving a project that includes a substantial residential component.	Update. Removes differentiation between housing type, rental, and for-sale residential units
Provide a signature/gateway project that contributes to the creation of a vibrant urban core for the City, taking advantage of the site's proximity to the San Diego Freeway.	Provide a signature/gateway project that contributes to the creation of a vibrant urban core for the City, taking advantage of the site's proximity to the San Diego Freeway.	No change
Stimulate private sector investment in the project site by implementing a project that is fiscally sound and capable of financing the construction and maintenance of necessary infrastructure improvements.	Stimulate private sector investment in the project site by implementing a project that is fiscally sound and capable of financing the construction and maintenance of necessary infrastructure improvements.	No change
Develop the project site in a manner that enhances the attractiveness of the City's freeway corridor and the major arterials that adjoin the project site.	Develop the project site in a manner that enhances the attractiveness of the City's freeway corridor and the major arterials that adjoin the project site.	No change
Increase revenues to the City by approving a project that provides for a variety of commercial and retail activities with the potential to generate substantial sales and property tax revenue.	Increase revenues to the City by approving a project that provides for a variety of commercial and retail activities with the potential to generate substantial sales and property tax revenue.	No change
Promote the economic well-being of the project site by approving a project that is attractive to consumers and residents and that would ensure long-term success of the development.	Promote the economic well-being of the project site by approving a project that is attractive to consumers and residents and that would ensure long-term success of the development.	No change
Provide hotel rooms to meet an identified market need, and in so doing serve nearby businesses, community activities, and proposed on-site uses.	Provide hotel rooms to meet an identified market need, and in so doing serve nearby businesses, community activities, and proposed on-site uses.	No change
Consistent with other objectives, provide a project design that interfaces with surrounding uses in a manner that provides for a transition between the project and adjacent areas.	Consistent with other objectives, provide a project design that interfaces with surrounding uses in a manner that provides for a transition between the project and adjacent areas.	No change

I. PROJECT CHARACTERISTICS

1. Background and Context for the Proposed Modified Project

The background and context for the proposed modified Project remains unchanged from the FEIR (see FEIR [DEIR pp. 71–72]). For ease of reference, an overview of the FEIR's discussion is set forth as follows:

a. Former On-Site Landfill Operations

The Property was used as a Class II landfill, which consisted of five waste cells (Cells) (refer to Figure IV.E-1, Deep Dynamic Compaction Area) separated by haul roads, under an Industrial Waste Disposal Permit issued to Cal Compact, Inc. by the County of Los Angeles. Landfilling began in 1959, shortly after the banning of incinerators in Los Angeles County in 1957. Landfilling occurred from April 1959 to December 1964 with an approximate closing date of February 1965. During the life of the landfill, approximately 6.2 million cubic yards (cy) of solid municipal waste and a total of approximately 7.8 million cy of waste were disposed of on the site. Waste received included organic wastes, such as solvents, oils, and sludges, as well as heavy metals, paint sludges, and inorganic salts.

Hazardous substances associated with the landfill, primarily consisting of volatile organic compounds (VOCs), heavy metals, and petroleum hydrocarbons, have been detected in subsurface soil and groundwater on the Property. As a result of the contamination on and adjacent to the landfill, the Property is listed by DTSC as a hazardous substances release site. On March 18, 1988, Remedial Action Order No. HSA87/88-040 was issued for the Property requiring the implementation of remedial activities.

DTSC divided its remediation into two operable units.¹⁰ The operable units are established to prioritize the remedial response to the areas of known impacts (Upper OU) versus areas of potential impacts (Lower OU). The Upper Operable Unit (Upper OU) consists of the site soils, the waste zone above and within the Bellflower Aquitard, and the Bellflower Aquitard down to, but not including, the Gage Aquifer. The Lower Operable Unit (Lower OU) is composed of the Gage, Lynwood, and Silverado Aquifers, and all other areas impacted by the

¹⁰ Federal regulations at 40 CFR 300.5 define an operable unit as "... a discrete action that comprises an incremental step toward comprehensively addressing site problems. This discrete portion of a remedial response manages migration, or eliminates or mitigates a release, threat of release, or pathway of exposure. The cleanup of the site can be divided into a number of operable units, depending on the complexity of the problems associated with the site. Operable units may address geographical portions of a site, specific site problems, or initial phases of an action, or may consist of any set of actions performed over time or any actions that are concurrent but located in different parts of a site."

geographic extent of any hazardous substances that may have migrated or may migrate from the aforementioned areas or from the Upper OU.

Investigations of the Upper OU documented the presence of landfill gases (methane and carbon dioxide), VOCs and metals in the landfill's soil and groundwater. A RAP was prepared and approved by DTSC for the Upper OU in 1995 (Upper OU RAP). The Upper OU RAP requires the installation, operation, and maintenance of (1) a landfill cap designed to encapsulate the waste and create a barrier between future improvements and buried waste, (2) an active gas collection and treatment system designed to remove landfill gases from under the landfill cap, and (3) a groundwater collection and treatment system designed to contain the groundwater plume and treat the extracted groundwater prior to discharge. The 1995 Upper OU RAP was modified by DTSC in 2009 through an ESD, which allows the use of a geosynthetic membrane material as a component of the landfill cap, instead of the low-permeability clay specified in the Upper OU RAP.

A separate RAP was prepared to address the Lower OU. The RAP for the Lower OU was approved by DTSC on January 24, 2005 (Lower OU RAP).

Implementation of the Upper OU RAP is required to make the Property safe for the proposed modified Project. Implementation of the Lower OU RAP would be protective of groundwater resources, but is not required to make the Property safe for the proposed modified Project. The two RAPs are discussed further in the discussion of Project Characteristics below.¹¹

2. Overview of Updated Project Characteristics

The background and context for the proposed modified Project remains largely unchanged from the FEIR. For full details, see the FEIR (DEIR pp. 73–99). In essence, the FEIR assessed the maximum development allowed for the Project site under The Carson Marketplace Specific Plan and the amendment thereto in the Boulevards at South Bay Specific Plan, thereby providing flexibility regarding the precise number, size, shape and locations of the buildings consistent with development occurring under the development standards and regulations originally set forth in the Carson Marketplace Specific Plan. This SEIR assesses the land use densities for the proposed modified Project under the SPA as further described below.

In summary, while the proposed modified Project contains many similarities to the approved Project, modifications include (1) minor relocation of internal circulation access points including a westward shift of the intersection of Del Amo Boulevard and Street B resulting in a shift of Street B to the west; (2) reduction in overall commercial square footage, but with an

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The RAP for the Upper OU was approved by DTSC in 1995 (modified in 2009) and the RAP for the Lower OU was approved by DTSC in 2005. DTSC conducted appropriate CEQA analyses for the RAPs. Therefore, as also concluded in the FEIR, the implementation of the RAPs does not require further review under CEQA and, as such, would not constitute new or worsening impacts and do not require analysis in this SEIR.

increase of 50 hotel rooms permitted and an increase in floor-area ratio (FAR) from 0.33 FAR to 0.5 FAR for commercial uses to be consistent with the Land Use Element of the General Plan; (3) changes to certain allowed uses within the land use categories, including to allow outlets in PA 2, to allow retail stand-alone stores of greater than 50,000 sq.ft. in PA 1 with an administrative permit and CEQA review as applicable), and other modifications to the permitted uses chart; (4) updates to lighting and signage; (5) removal of affordable housing requirements; (6) modifications to boundaries between uses on the Property to conform to the remediation program (cell) boundaries; (7) phased occupancy of cells on the Property; (8) changes to development standards, design guidelines, and design standards to reflect the proposed outlets, which utilizes podium construction over parking; (9) reduction in total parking requirements to 4 parking spaces per 1,000 sq.ft. of commercial development; (10) the potential, with a General Plan amendment, to increase the density of residential units on PA 1 from 60 to 80 dwelling units per acre (du/ac); and (11) other modifications, such as clarification and streamlining of the administrative review processes.

Specifically, the proposed modified Project, including the SPA, results in a reduction in the maximum overall development on the Property as compared with the FEIR. In addition, the proposed modified Project removes the Equivalency Program under the SPA. **Table II-2**, **Comparison of Project Land Use Program**, compares the approved Project scope with the proposed modified Project land use program to identify the modifications. **Figure II-3**, **Conceptual Project Components—Approved Project**, shows the conceptual project components for the approved Project as assessed in the FEIR, and **Figure II-4**, **Conceptual Project Components—Proposed Modified Project**, contains the conceptual proposed project components for the proposed modified Project.

The proposed modified Project still includes the phased remediation of the Property and the subsequent development of urban uses, although development is now proposed to be carried out by more than one developer and to take place in phases. A description of the proposed modifications and an overview of the remediation program for the Property is provided below under separate subheadings.

a. Urban Land Use Development

The approved Project created three development districts as shown on **Figure II-5**, **Development Districts—Approved Project**: Development District 1 (DD1) comprised of approximately 31 acres of land south of Del Amo Boulevard, Development District 2 (DD2) comprised of 126 acres south of DD1, and DD3. As discussed above, DD3 is entitled for construction of 300 residential units and is addressed as a related project under this SEIR. DD1 and DD2, comprising the remaining development districts on the Property, have been modified in the SPA into three "planning areas" to better differentiate between the various types of development proposed for the Property.

Table II-2

Comparison of Project Land Use Program

Land Uses	Approved Project (168 Acres)	Proposed Modified Project (157 Acres) ^a
Residential		
Rental	400 units	1,250 units (could be either rental or ownership units)
Ownership	1,150 units	See above
Commercial Marketplace (CM)	1,745,125 sq.ft.	1,601,500 sq.ft.
Hotels	300 rooms	350 rooms (in two hotels)
Total Residential	1,550 units	1,250 units ^a
Total Commercial (including hotel) ^d	1,995,125 sq.ft. ^b	1,834,833 sq.ft.°

NOTES:

Table II-3, Proposed Land Use Summary: Planning Areas 1, 2, and 3, summarizes the land uses and square footages for the proposed modified Project. Planning Area (PA) 1 would include MU-M¹² land uses, although under the proposed modified Project, development of commercial uses on PA 1 would be permitted with an administrative permit (which permit was not required under the approved Project), with CEQA review as applicable. As PA 1 is anticipated to be developed with residential uses, only residential uses are analyzed under this SEIR for PA 1. PA 2 and PA 3 would be designated with Commercial Marketplace (CM)¹³ land uses formerly associated with DD2. PA 2, comprising the area west of the I-405 Freeway, totals 46 acres and includes portions

^a The proposed modified Project does not include DD3, where 300 rental residential units are entitled for construction. Including these units, the maximum residential unit count is 1,550, equal to the approved Project.

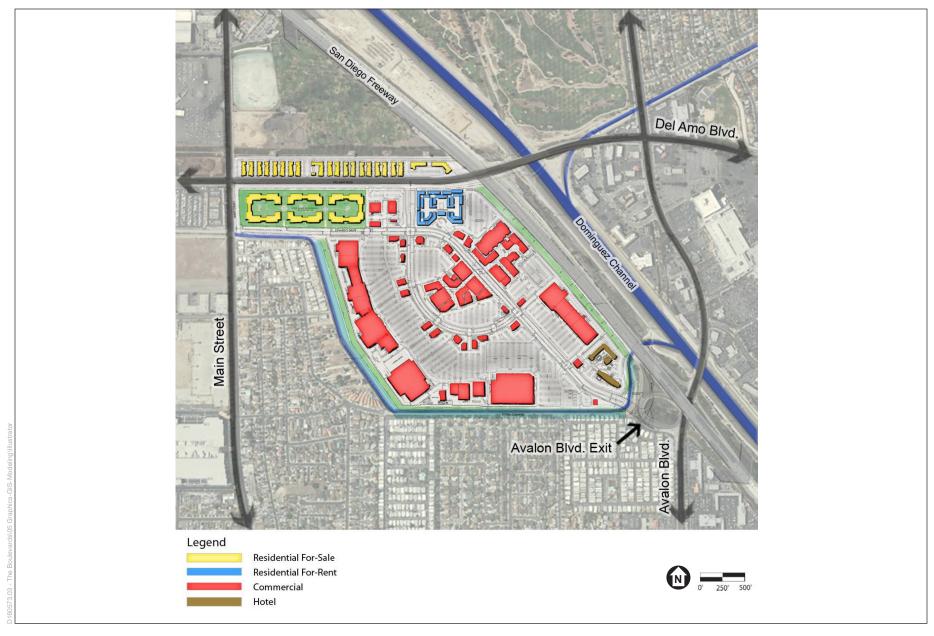
b Assumes a total of 200,000 sq.ft. of hotel floor area.

^c Assumes a total of 233,333 sq.ft. of hotel floor area.

d Total commercial square footage is reduced by 160,292 sq.ft. with the proposed modified Project.

The "Mixed-Use Marketplace" land use category provides opportunities for the vertical or horizontal integration of housing with commercial services. MU-M does not, however, require a mix of uses and development can consist entirely of either residential or commercial uses.

The "Commercial Marketplace" land use category includes commercial uses intended to serve a broad population base and offer a wide range of services to both the community and the region. Typical uses in this category include regional commercial uses such as outlets, major department stores and promotional retail-type stores, grocery stores and smaller neighborhood commercial retail and services uses. Additional uses include commercial recreation and entertainment uses such as movie theaters and arcades, hotels, restaurants, and highway-oriented retail and service uses. Residential uses in portions of PA 2 are permitted with the approval of an administrative permit, with CEQA review as applicable. Commercial Marketplace is intended to provide the City's primary regional shopping center.

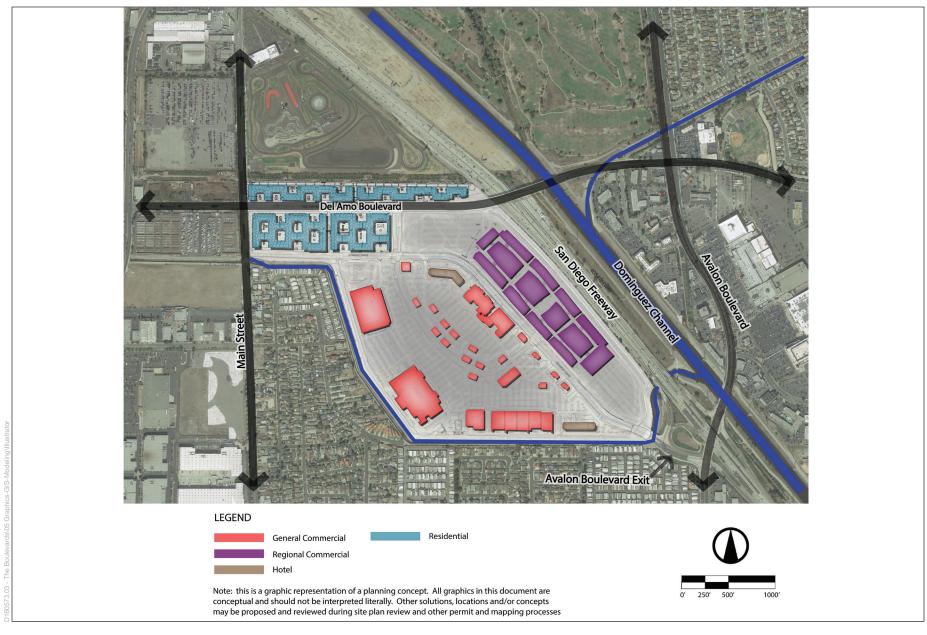


SOURCE: RE | Solutions

The District at South Bay

Figure II-3
Conceptual Project Components—Approved Project

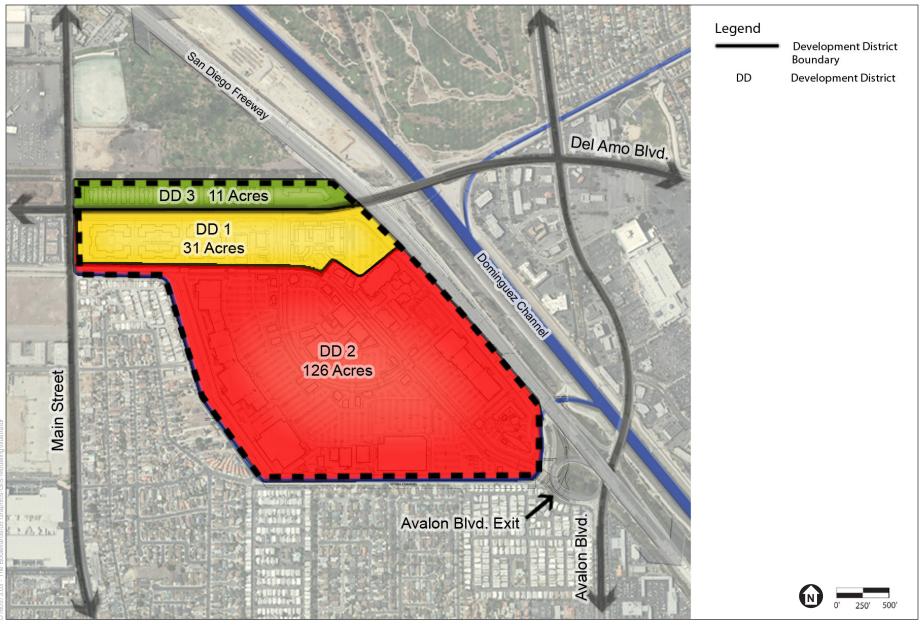




SOURCE: RE | Solutions The District at South Bay

Figure II-4
Conceptual Project Components – Proposed Modified Project





SOURCE: RE | Solutions

The District at South Bay

Figure II-5
Development Districts—Approved Project



Table II-3
Proposed Land Use Summary: Planning Areas 1, 2, and 3

Land Uses		Specific Plan Land Use Category	Units or Square Footage
PLANNING AREA 1 (15 ACRES)			
Residential		MU-M	1,250 units ^a
	Subtotal		1,250 units
PLANNING AREA 2 (46 ACRES)			
Regional Commercial ^b		CM	696,500 sq.ft.
Regional Commercial/Restaurant ^b		CM	15,000 sq.ft.
	Subtotal		711,500 sq.ft.
PLANNING AREA 3 (96 ACRES)			
Regional Retail Center		CM	585,000 sq.ft.
Neighborhood-Serving Commercial		CM	90,000 sq.ft.
Restaurant		CM	85,000 sq.ft.
Commercial Recreation/Entertainment		CM	130,000 sq.ft.
Hotel		CM	233,333 sq.ft. (350 rooms)
	Subtotal		1,123,333 sq.ft.
	Total	1,834,833	sq.ft.°/1,250 units ^d

^a In PA 1, residential uses at 60 du/ac are permitted by right. The remaining units (up to 1,250 residential units) can be constructed in PA 1 with a General Plan amendment to increase the maximum permitted dwelling unit density or can be transferred to and constructed in specific areas of PA 2 (which has CM zoning) with an administrative permit, with CEQA review as applicable.

of former DD1 and DD2. PA 2 is permitted to be developed with regional commercial uses, which include, among other uses, outlets and up to 15,000 sq.ft. of restaurant uses. In addition, with an administrative permit (which permit was not required under the approved Project), with CEQA review as applicable, portions of PA 2 may be developed with residential uses. PA 3, at 96 acres comprising the largest planning area, is proposed for regional commercial, general commercial, and entertainment uses and retains most of the land use characteristics associated with DD2; no

A variety of regional commercial uses is permitted in the CM land use designation, including outlet and restaurant uses. The 15,000 sq.ft. allocated for "restaurant" uses in PA 2 are intended to address full-service-restaurant uses in PA 2, if any. All other non-restaurant food service uses, including, without limitation, VIP lounges, food halls, kiosks, and similar food or beverage serving uses, are included in the GBA square footage for regional commercial established above for PA 2.

^c Assumes a total of 233,333 sq.ft. of hotel floor area.

The proposed modified Project does not include DD3, where 300 rental residential units are currently entitled for construction. Including these units, the maximum residential unit count is 1,550, equal to the approved Project.

residential uses are permitted in this location. The SPA permits transfer of residential units among PA 1 and PA 2 and transfer of commercial square footage among the planning areas with the administrative permits noted above and with CEQA review as applicable. However, this SEIR analyzes the Conceptual Project Components in Figure II-4 as it represents the likely development scenario, and it is not anticipated that changes in the configuration of residential and commercial uses on the Property would have any additional impact as compared with the proposed modified Project discussed herein.

As indicated in Table II-3, the proposed modified Project would include up to 1,250 residential units, up to two hotels, with one proposed to contain 200 rooms and the other proposed to contain 150 rooms, and, inclusive of the hotels, a total of 1,834,833 sq.ft. of CM uses. 14 Commercial development would be limited to a maximum site-wide floor-area ratio (FAR) of 0.5 (as compared with a FAR of 0.33 under the approved Project) to be consistent with the Land Use Element of the General Plan, and would be further limited by the overall maximum gross building area (GBA) allowed on the Property under the SPA. Although a number of regional commercial uses are permitted in PA 2, this analysis evaluates outlet regional commercial development for that planning area. As indicated above, the entitlement and land use program for DD3 continues to permit 300 dwelling units to be constructed, consistent with DD3's existing entitlement.

Consistent with the City of Carson General Plan designation for the site of Mixed Use — Residential, the SPA provides a maximum residential dwelling unit density for all development districts of 60 du/ac. The SPA, as with the approved Specific Plan, authorizes 1,550 residential units at densities of up to 60 du/ac, including the 300 units entitled for construction on DD3. However, as the acreage of PA 1 is decreased as compared with the prior DD1, inclusion of the same number of units in PA 1 as in the prior DD1 area would require an increase in density to 80 du/ac. Therefore, the SPA offers two ways to achieve the remaining 1,250 units on the Property. First, by allowing residential uses to be transferred to a portion of PA 2 with an administrative permit, with CEQA review as applicable, spreading the units on the Property to retain the 60 du/ac density limit. This would effectively retain the units in the location envisioned in Figure II-3 by placing housing on the northerly at-grade parking area on PA 2 depicted in Figure II-4. Second, by permitting greater density in PA 1 only (up to 80 du/ac), which would be permitted only upon adoption of a General Plan amendment authorizing the increased density in PA 1. In the SPA, density and floor area limitations are calculated separately for each planning area and construction of residential units on any planning area would not diminish commercial

¹⁴ In the FEIR, hotel rooms were analyzed interchangeably as 300 hotel rooms or 200,000 sq.ft. of commercial use. In this SEIR, this distinction is made more explicit. In order to provide the more conservative analysis, in each analytic section below, the hotel use is analyzed as 350 hotel rooms where the impacts of hotel rooms would be greater than the impact of general commercial uses, and is analyzed as 233,333 sq.ft. of commercial use where hotel use would have lesser or equivalent impacts as general commercial uses.

square footage allocated to such planning area, and construction of commercial uses on any planning area would not diminish permitted residential unit counts in any planning area. In order to analyze the scenario likely to have the most impacts, this SEIR will analyze the maximum future residential allowed density of 80 du/ac and 1,250 units on PA 1.

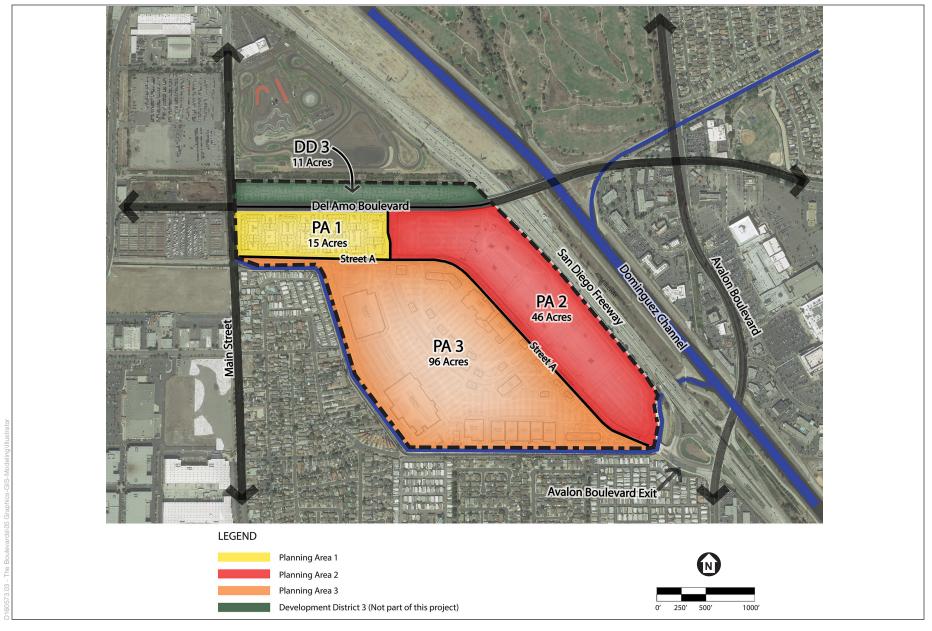
While the precise number, size, shape, and location of buildings have not been determined, a site plan that has been developed and included in the SPA for illustrative purposes only, Figure II-4 illustrates the general nature of the development, and provide an indication of the type of development that would result under SPA regulations. **Figure II-6, Planning Areas—Proposed Modified Project**, illustrates the three planning areas proposed under the SPA, while **Figure II-7, Specific Plan Amendment Land Use Plan—Proposed Modified Project**, identifies the land use categories for each of the planning areas.

The three planning areas are described in greater detail as follows:

- Planning Area 1 (PA 1) is approximately 15 acres north of Street A (previously named Lenardo Drive¹⁵) and abuts the eastern edge of Main Street, and the southern edge of Del Amo Boulevard. PA 1 is designated as MU-M and may contain residential uses or, with an administrative permit, with CEQA review as applicable, commercial uses. The residential and commercial uses may be either vertically or horizontally integrated but the MU-M designation does not require a mix of uses as PA 1 could be developed entirely with residential or commercial uses. Therefore, this planning area could be developed as commercial, residential, or mixed use. The SPA authorizes residential uses to a maximum density of 60 du/ac by right. In order to analyze the most conservative intense development on site, this SEIR analyzes an increase the residential density from 60 du/ac to a maximum of 80 du/ac, or 1,250 residential units, which would be allowed only upon approval by the City of a General Plan amendment.
- Planning Area 2 (PA 2) comprises approximately 46 acres with its primary frontage running along the I-405 Freeway. Adjacent to PA 2 are PA 1 to the west, the I-405 Freeway to the east, and PA 3 to the southwest. PA 2 is designated for CM, which is an overall land use designation under the approved Project and the SPA permitting any combination of commercial uses, including, without limitation, regional commercial (which may include outlets), neighborhood commercial, restaurant, or entertainment and hospitality uses. In addition, portions of PA 2 could also accommodate certain residential uses up to a maximum of 60 du/ac with the issuance of an administrative permit, with CEQA review as applicable, by the City and transfer of units from PA 1 (refer to Figure II-8, Potential Residential Locations).

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¹⁵ In order to facilitate reference to original street name terminology used in the FEIR, Street A (currently named Stadium Way) may be referenced as "Lenardo Dr.," and Street B (currently named Stamps Drive) may be referenced as "Stamps Dr." Any such references to "Lenardo Dr." and "Stamps Dr." shall be deemed to refer to "Street A" and "Street B," respectively.

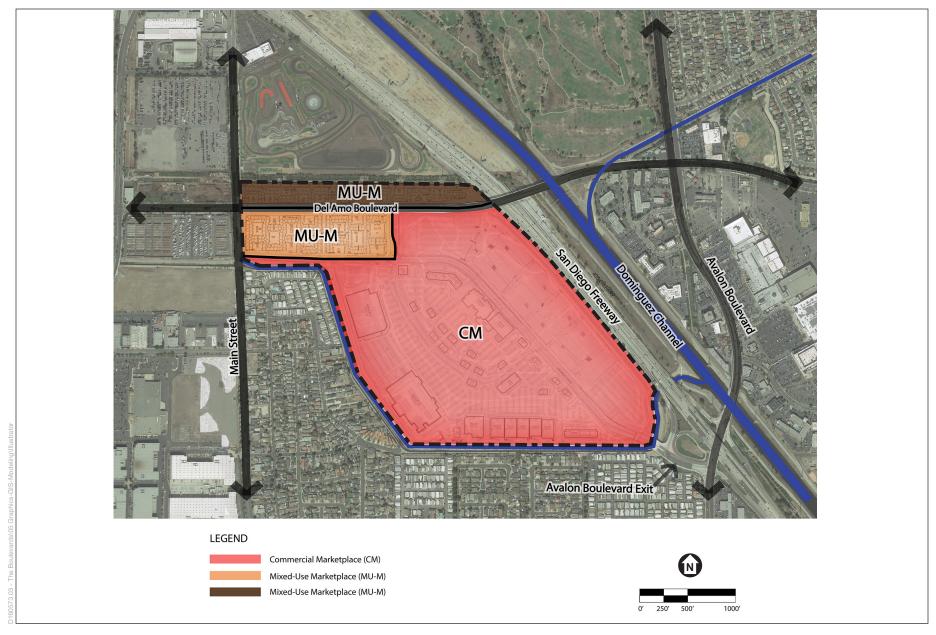


SOURCE: RE | Solutions

The District at South Bay

Figure II-6
Planning Areas—Proposed Modified Project



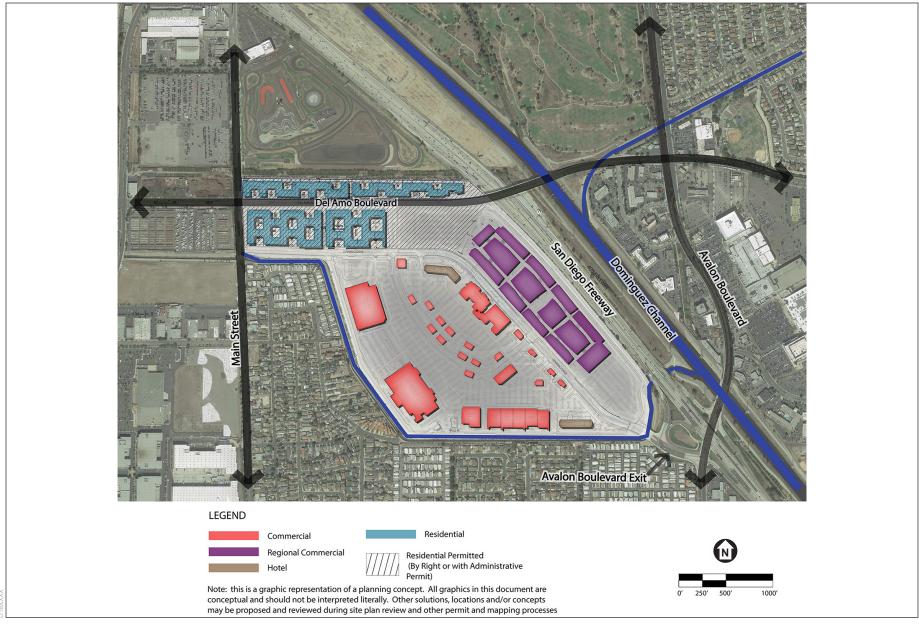


SOURCE: RE | Solutions

The District at South Bay

Figure II-7 Specific Plan Amendment Land Use Plan – Proposed Modified Project





SOURCE: ESA, 2016

City of Sacramento Downtown Specific Plan EIR

Figure II-8 Potential Residential Locations



• Planning Area 3 (PA 3) is comprised of approximately 96 acres, which is bounded by the SPA Street A (Lenardo Drive) to the north and east and the Torrance Lateral Channel to the south and west. Similar to PA 2, PA 3 is also designated as CM use, and is intended for regional commercial, large-format retail, neighborhood-scale retail, restaurant, entertainment, and hospitality uses. Residential development is not permitted in PA 3.

The development in each planning area would occur under the development standards and regulations set forth in the SPA. These regulations identify permitted uses and development and design standards, which are discussed further below. These regulations, in combination with the development limits, would define the extent and nature of future on-site development. In the SPA, density and floor area limitations established pursuant to the SPA would be calculated separately for each planning area and construction of residential units on any planning area would not diminish commercial square footage allocated to such planning area, and construction of commercial uses would not diminish permitted residential unit counts.

b. Land Use Categories in the SPA

(1) Mixed-Use Marketplace (MU-M)

The MU-M land use category allows for residential uses and, with an administrative permit, and applicable CEQA review, provides opportunities for the vertical or horizontal integration of housing with commercial services. However, development within the MU-M category does not require a mix of uses and development can consist entirely of either residential or, with an administrative permit, and applicable CEQA review, commercial uses. This category applies to all of PA 1. In the MU-M category, the approved Specific Plan prohibited standalone stores of greater than 50,000 sq.ft. This limitation has been removed in the SPA with respect to PA 1 only.

The densities and intensities of uses would vary within this land use category and would ultimately be based on the actual uses proposed. Commercial is not to exceed 0.5 FAR, or residential not to exceed 60 du/ac, unless there is an approved General Plan amendment. However, a vertical mix of uses is allowed.

(2) Commercial Marketplace (CM)

The CM land use is intended to serve a broad population base and offer a wide range of services to both the community and the region. Typical uses in this category include regional commercial uses such as outlets, major department stores and promotional retail-type stores, and smaller neighborhood commercial uses, grocery stores and banks. Additional uses include commercial recreation and entertainment uses such as movie theaters and arcades, hotels,

¹⁶ This land use category also applies to DD3.

restaurants and highway-oriented and smaller neighborhood retail and service uses. Residential uses are permitted in portions of PA 2 with the approval of an administrative permit, with CEQA review as applicable. The densities and intensities will vary within this land use designation based on proposed uses. This land use designation may contain any combination of commercial uses, including, without limitation, regional commercial (which may include outlets), neighborhood commercial, restaurant, or entertainment and hospitality uses, and in portions of PA 2, with issuance of an administrative permit, certain residential uses. The overall maximum FAR allowed for commercial uses established pursuant to this land use category shall be 0.5 to be consistent with the Land Use Element of the General Plan. Residential densities of up to 60 du/ac are permitted for residential uses in that portion of PA 2 where residential use is shown on Figure II-8. Except as otherwise noted, the uses permitted in this land use category are allowed in all planning areas with a CM designation. The density and floor area limitations established pursuant to this land use category shall be calculated separately for each planning area.

c. Circulation and Parking

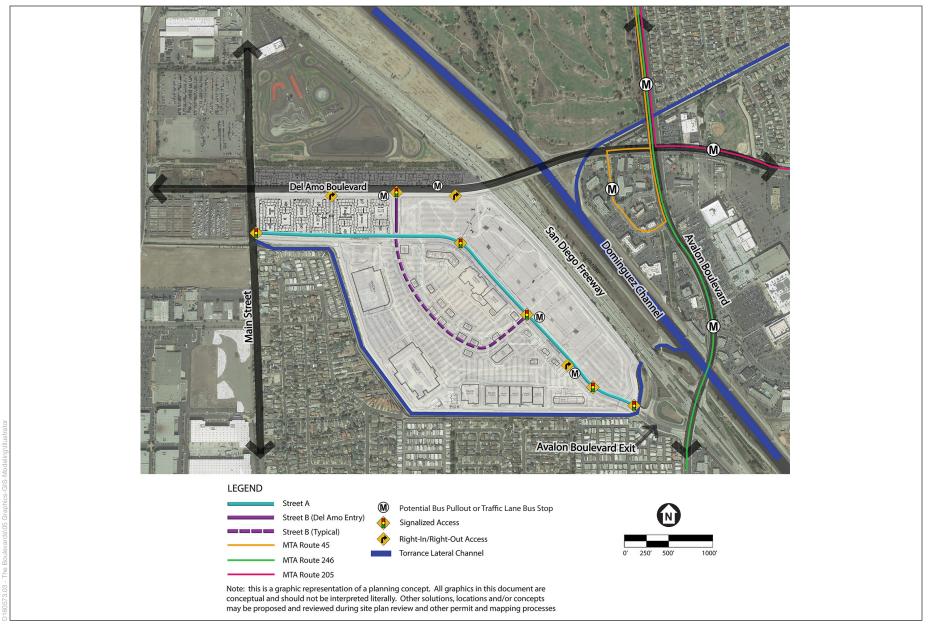
(1) On-Site Vehicular Circulation

Figure II-9, Vehicular Circulation Concept, illustrates the proposed modified Project's access points and internal circulation plan for motor vehicles. The existing roadways will be vacated as necessary and replaced by two primary routes, referred to as Street A and Street B. Street A (previously known as Lenardo Drive or Corridor Road, and currently known as Stadium Way) connects the Main Street entry with the Avalon Boulevard/I-405 entry. Street B (currently known as Stamps Drive) begins at Del Amo Boulevard and ends at Street A in a semicircular manner. Street A will retain its alignment and will extend to connect to Avalon Boulevard. The alignment of the proposed Street B requires modification of the existing Stamps Drive.

The proposed modified Project can be accessed at five points. Internal roadways will be comprised of a combination of both publicly and privately owned and maintained streets (see Figure II-9). Street A and portions of Street B will be publicly dedicated as necessary.

The three main access points for the Property would be located at the intersection of Del Amo Boulevard and Street B, and the intersection of Main Street and Street A, and the Avalon Boulevard exit from the I-405 Freeway. Two additional right-in/right-out entries would be located on Del Amo Boulevard.

It should be noted, while a conceptual circulation configuration has been provided in the SPA, the internal circulation system is subject to approval by the Planning Manager and City Engineer, and will be finalized with the approval of development plans.



SOURCE: RE | Solutions The District at South Bay

Figure II-9 Vehicular Circulation Concept



(1) On-Site Pedestrian and Bicycle Circulation

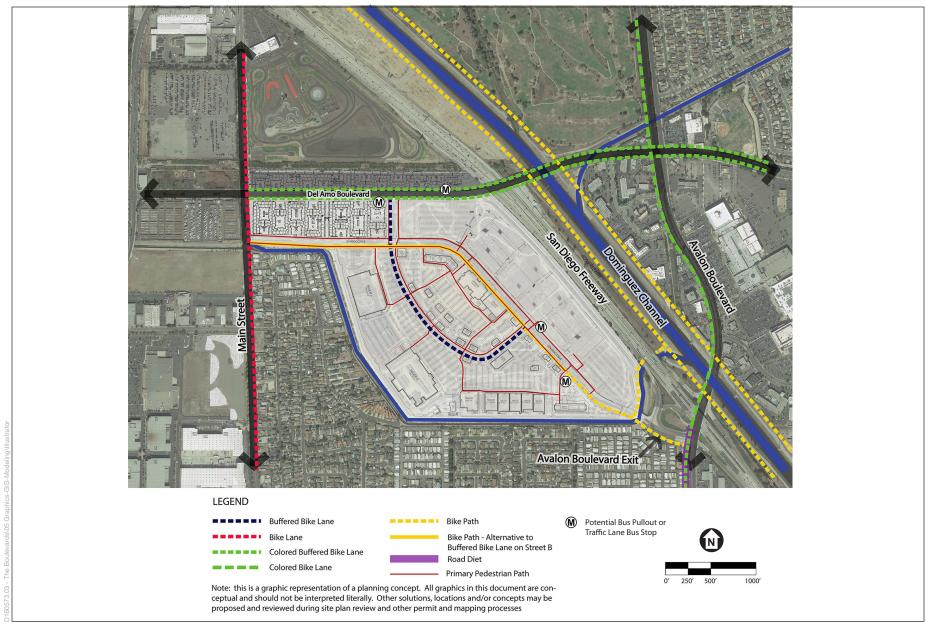
Figure II-10, Non-Vehicular Circulation Plan, illustrates the proposed modified Project's internal pedestrian and bicycle circulation plan. External bicycle access will be primarily from an unbuffered bicycle lane along Main Street and a buffered and painted bike lane on Del Amo Boulevard, while external pedestrian access will come from sidewalks on those same streets. Internally, bicycle circulation is provided along Street B in the form of a buffered bike lane. At the southerly crossing of Street B with Street A, the bike lane is proposed to become a multi-purpose trail heading southerly on Street A. As an alternative to the scenario shown in Figure II-10, the buffered bike lane along Street B may be substituted with the extension of the multi-purpose path along the westerly/southerly side of Street A to Main Street. Pedestrian circulation will be provided throughout the Property via sidewalks and pathways as deemed necessary by the Planning Manager. An at-grade pedestrian crossing must be constructed across Street A to maximize pedestrian access between PA 2 and PA 3.

The SPA aims to provide maximum connectivity for pedestrians and bicyclists between the diverse uses within the Specific Plan area. Multi-purpose paths (pedestrian and bicycle traffic) are proposed from Avalon Boulevard into the proposed modified Project's southeastern entrance. At the Del Amo Boulevard entrance, the bike lanes will be painted buffered lanes. At the Avalon Boulevard entrance, the multi-purpose path will run alongside the roadway and will be divided for safety. Multi-purpose paths provide for concurrent, side-by-side use by both bicyclists and pedestrians.

(2) Parking

The various uses, such as residential, commercial, restaurant, entertainment and hotel, would be required to meet the parking standards specified in the Development Standards section of the SPA. The number of parking spaces required to be provided would vary depending on the number of units proposed and square footage of particular non-residential uses. The parking will be provided through a combination of surface parking, podium parking, and parking structures.

As described in the Development Standards section of the SPA, shared parking is permitted to help maximize the efficiency of parking lots. Shared parking is permitted subject to the completion of a parking study and approval by the Planning Manager. For instance, shared parking would be ideal in a situation with offices adjacent to restaurants, since parking could be used by the offices during the day and by restaurants during the evening.



SOURCE: RE | Solutions The District at South Bay

Figure II-10
Non-Vehicular Circulation Plan



d. Site Remediation

As described in detail in the FEIR, the proposed modified Project would still include the remediation of the former landfill on the Property in compliance with the Upper OU RAP (see FEIR [DEIR pp. 97–99]).

As indicated in the FEIR, DTSC divided the landfill site into two operable units. The Upper OU consists of site soils, the waste zone above and within the Bellflower Aquitard, and the Bellflower Aquitard down to—but not including—the Gage Aquifer. The Lower OU is composed of the Gage, Lynwood, and Silverado Aquifers, and all other areas impacted by the geographic extent of any hazardous substances that may have migrated or may migrate from the aforementioned areas or from the Upper OU.

In 2009, the DTSC approved an ESD that modified the design of the engineered landfill cap, allowing the use of a linear low-density polyethylene (LLDPE) membrane instead of clay as the main component of the cap. In keeping with the 2009 ESD, the Applicant proposes to use an LLDPE membrane rather than clay as a component of the landfill cap.

The FEIR analyzed construction and operation of a Landfill Gas Collection and Control System (GCCS) that has been partially installed. Under the proposed modified Project, similar to the system described in the Upper OU RAP, the GCCS would be improved by adding both horizontal and vertical wells within the Property, and not just around the perimeter of the landfill. Since the preparation of the FEIR, a portion of the anticipated GCCS wells has been installed on the Property, and the facility necessary to treat the gas has been constructed. The remaining vertical and horizontal gas extraction wells would continue to be installed as part of the landfill remediation under the proposed modified Project. The GCCS system was designed to collect landfill gas (LFG) from the waste zone and condensate and deliver them to the Landfill Operations Center, which includes facilities for both LFG and groundwater treatment. The LFG may be treated by combustion ("flaring") or by carbon absorption; the condensate is routed to the groundwater treatment facility (described below).

The LFG treatment facility includes two blowers and two combustion flares, as well as three granulated activated carbon (GAC) vessels with two separate associated blowers. The GAC system is suited for when extracted LFG is of low volume or low quality, which is typical of older, inactive landfills such as this. The multiple treatment units provide redundancy to ensure continued system operation in the event of routine maintenance or failure of one of the units. The primary method of treatment of LFG since the system became operational in 2014 has been flaring. The relatively low levels of methane in the LFG stream, however, have required that the LFG be augmented with natural gas to achieve efficient combustion. The GCCS operator performed a system evaluation in early 2017 and recommended that, due to decreasing volumes

of collected gas, the GAC system be used to treat LFG on an interim basis. Accordingly, the GAC system has been in use from mid-May through mid-July of 2017.¹⁷ As the remaining portions of the GCCS are installed and the volume of collected LFG increases, the combustion flares would continue to be the primary treatment method. As the volume of LFG decreases on the Property over time, the use of the flare system would be discontinued, and LFG treatment would transition exclusively to the GAC system, per SCAQMD approval.

Consistent with the FEIR, the Groundwater Extraction and Treatment System (GETS) contemplated in the RAP has been installed and has been operating on the site since May 27, 2014. The GETS consists of a network of 29 groundwater extraction wells around the Property, which are pumped to collect and control groundwater in and beneath the waste zone. The collected water is pumped to the groundwater treatment facility (generally co-located at the Landfill Operations Center with the LFG treatment system), where it is treated by particulate filtration, air stripping, and carbon filtration. The groundwater treatment system also accepts and treats condensate from the GCCS. The system performance is evaluated periodically, and adjustments to its operational parameters may be made; however, no significant modifications to the GETS are anticipated.

As discussed in further detail in the FEIR, any changes in the design of the remediation would only be allowed if DTSC determines that the proposed design accomplishes the same performance objectives as the previously approved design and is protective of human health and the environment. The approved Project anticipated that the remedial work and subsequent construction on each of the planning areas would be completed in a phased manner, but that occupancy of any one area would not occur until all remedial work was completed and a sitewide human health risk assessment (HHRA) was performed. However, the proposed modified Project seeks to allow phased occupancy, meaning one or two planning areas could be open to commercial uses while the remaining area(s) are undergoing concurrent remedial and construction activities. No residential occupancy would be allowed until all areas of the landfill are capped and all necessary remedial actions completed for the entire Property. Although exposure of residents, employees, and visitors in the vicinity of the Project site was analyzed in the FEIR, the exposure of such individuals while on the Property to potentially hazardous substances and emissions from landfill remedial activities was not explicitly evaluated in the FEIR or approved because phased occupancy was not anticipated. Thus, the proposed modified Project would implement the phased occupancy plan consistent with DTSC implementation of the RAP and any other DTSC required approvals. In this regard, case law has determined that agencies generally subject to CEQA are not required to analyze the impact of existing environmental conditions on a project's future users or residents.

¹⁷ E-mail correspondence with Ray Huff, Vice President, SCS Engineers, August 21, 2017.

J. PROJECT CONSTRUCTION AND SCHEDULE

Construction and occupancy of the approved Project was originally anticipated to be completed by the end of 2010. This was an estimated time for completion, and the FEIR contemplated that the schedule could be revised (see FEIR [DEIR p. 100]). Given the subsequent economic realities of the Great Recession starting in 2008, including its detrimental impact on housing and commercial values, as well as the elimination of redevelopment agencies as funding sources in 2011, the approved Project was not completed as originally estimated.

For purposes of this SEIR, construction and occupancy of the proposed modified Project is anticipated to be completed by October 2023, although it may be completed sooner. The proposed modified Project construction activities remain identical to those set forth in the FEIR, namely site preparation, implementation of the Upper OU RAP, off-site improvements, and site construction. While several construction activities are identified, it is anticipated that there would be some overlapping of activities in order to integrate remediation systems with development of the Property, as was also anticipated in the FEIR.

The same process as assessed in the FEIR will be used, except with updated dates. Site preparation, including mass grading, DDC, and the construction of building pads, is anticipated to begin as early as February 2018. Implementation of the Upper OU RAP, placement of piles and structural slabs, and installation of utilities, roads, and parking lots, is also anticipated to begin in February 2018. Vertical construction is anticipated to begin in 2019. Construction of off-site improvements would begin approximately in October 2018 and end in approximately January 2020.

K. USE OF THE EIR, RESPONSIBLE AGENCIES, AND DISCRETIONARY ACTIONS

This SEIR serves as a supplement to the FEIR consistent with the requirements of PRC Section 21166. The use of the FEIR, as clarified by this SEIR, would remain consistent with that originally outlined by the FEIR.

Implementation of the proposed modified Project would require, but would not necessarily be limited to, the same permits and approvals identified in the FEIR (see FEIR [DEIR pp. 100–101]). However, there are some modifications proposed. A list of permits anticipated for the proposed modified Project includes the approvals noted below. However, this SEIR may be utilized by the City and any other governmental entities, as responsible agencies,

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¹⁸ In order to provide a conservative analysis, air quality and noise have assumed a 32-month construction schedule without phasing, while the traffic analysis has assumed completion and opening of the proposed modified Project in 2023.

for approvals needed in connection with the proposed modified Project, whether or not such agencies or specific approvals are listed below.

• <u>Carson Redevelopment Agency:</u> With the dissolution of redevelopment agencies throughout the State, no further approvals will be required from the former Carson Redevelopment Agency to implement the project with the proposed modifications.

• Carson Reclamation Authority (CRA)

- Conveyance Agreement and related Agreements
- Improvement or other bonds

• <u>Vertical and/or horizontal subdivision approval (as owner of property), if</u> required for conveyance of the property City of Carson

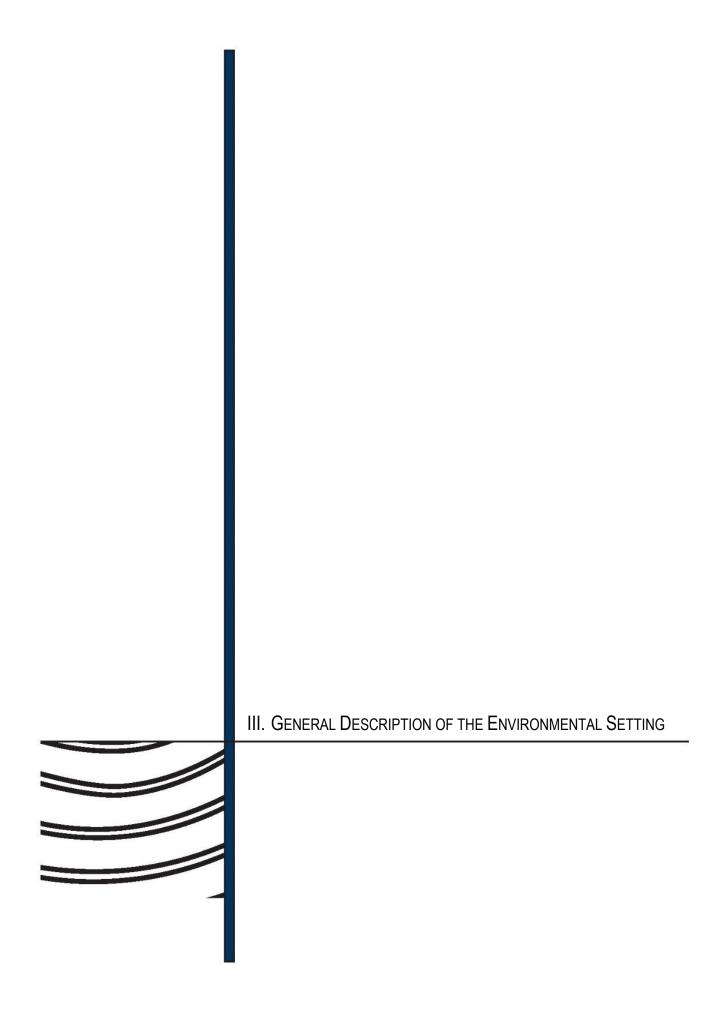
Tax Sharing Agreement

• City of Carson

- Adoption of Specific Plan Amendment
- Development Agreement
- Site Plan and Design Review
- Street Vacation
- Conditional Use Permits
- Specific Plan Modifications
- Administrative Permits
- Tax Sharing Agreement
- Construction-related encroachment permits
- Certificate(s) of Compliance, Subdivision Map(s), Parcel Map(s), Lot Line Adjustment(s), Lot Merger(s), and/or Tract Map(s)
- Master Signage Plan and Sign Permits
- Modification of Existing Mello-Roos District
- All other similar discretionary approvals

• <u>California Environmental Protection Agency (CalEPA), Department of Toxic Substances Control</u>

Approval of cell-specific HHRAs and mitigation measures that would permit, subject to City approvals, phased occupancy in conjunction with the proposed modified Project.



III. GENERAL DESCRIPTION OF THE ENVIRONMENTAL SETTING A. OVERVIEW OF ENVIRONMENTAL SETTING

In accordance with CEQA requirements, Chapter III, General Description of the Environmental Setting, of this SEIR describes the environmental setting at the time of issuance of the Notice of Preparation (NOP) (August 1, 2017) for the proposed modified Project in order to describe the environment in which the proposed modified Project would be developed. Unless otherwise indicated, the existing environmental setting at the time of NOP issuance is the baseline against which the proposed modified Project is compared for purposes of this environmental analysis. As the proposed modified Project will be developed on the 157-acre former landfill portion of the Project site (which 157-acre portion is referred to as the "Property"), this description of the existing setting focuses on the Property. More detailed descriptions of the existing setting are described in the various sections of Chapter IV, Environmental Impact Analysis, of this SEIR.

1. LAND USE

The environmental setting related to land uses remains substantially the same as is described in the FEIR (see FEIR [DEIR p. 102–103]). With respect to on-site uses, there has been a minor change in that remediation activities were commenced on the Property, and various improvements, including portions of the landfill cap and the landfill gas collection and control system, including wells, have been installed, as further described in Section III.A.4, Hazards and Hazardous Materials.

With respect to off-site uses, there has been a minor change in that the Dominguez Hills Golf Course to the north of the Project site, which has been developed into the Porsche Experience Center. For ease of reference, the discussion in the FEIR has been repeated below, with minor updates to refresh the current land use setting and with a focus on the Property.

As noted in the FEIR, the Property was operated as a Class II Landfill until closed in 1965. At the time landfill operations were ceased, the landfill was covered with a final layer of soil, fenced, and closed to public access. The site is primarily vacant with the exception of the remediation related improvements further described below.

The 11-acre portion of the Project site north of Del Amo Boulevard (Development District 3 [DD3]) is a typical urban vacant lot that is undeveloped and fallow. The heavily

Although currently undeveloped and fallow at the time of the issuance of the Notice of Preparation for this SEIR, a 300-unit residential development has received City approvals on DD3.

urbanized area surrounding the Project site includes residential neighborhoods, commercial corridors, commercial centers, light and heavy industrial uses, recreational uses, schools and public service facilities. These varied uses are integrated into the City's urban fabric while also occurring in large single use areas as well as mixes of uses within a smaller area.

The land uses north of DD3 consist of a commercial landscape nursery located within an otherwise undeveloped open space utility easement and the Porsche Experience Center (formerly the Dominquez Hills Golf Course). North of the Porsche Experience Center are light industrial uses, including a Waste Management recycling facility, located between Main Street and the Interstate 405 (I-405) Freeway (the San Diego Freeway). All of these uses are isolated from uses further to the north by the I-405 Freeway, a large swath of open space and the Dominguez Hills Channel. Uses northeast of the freeway corridor include a blimp port site and the Victoria Golf Course and Park. Main Street, located west of the Property, is developed with light industrial uses (e.g., mini-storage), and other heavy industrial and commercial/service uses. These uses extend westerly to Figueroa Street and the adjacent I-110 Freeway (the Harbor Freeway), which establishes a boundary between uses farther to the west. Notable uses that vary from the general light-industrial character of the area include a church and the Carson Town Center (retail/shopping center) located on Torrance Boulevard, approximately 0.4 mile west of the Property. There are also several large tracts of vacant land within this area. Well south of the Property, Main Street transitions to residential and commercial uses.

The concrete-lined Torrance Lateral Drainage Channel borders the Property's south side and the majority of its west side. Detached residences and mobile homes are located across the drainage channel to the south and west of the Property. Residential neighborhoods extend south to Carson Street, which serves as a distinct corridor with commercial and service uses (e.g., a school and library). A neighborhood park is located among the residential uses in this area, approximately 0.33 mile south of the Property. Uses extending south of the Property on Avalon Boulevard, include several car dealerships. The eastern edge of the Property adjoins the I-405 Freeway (including the I-405/Avalon Boulevard interchange) and the Dominguez Channel, a large flood control facility east of the freeway. Land uses east of the Dominguez Channel include commercial/retail and office uses and the South Bay Pavilion, a regional commercial center whose major tenants include, among others, JC Penney, IKEA, and Target. Other more outlying uses include housing developments, and industrial/oil facilities. California State University at Dominguez Hills, inclusive of the StubHub Center, an 85-acre, multi-sport and athletic training facility, is located approximately 1 mile northeast of the Property.

2. VISUAL RESOURCES

The environmental setting related to visual resources remains substantially the same as is described in the FEIR (see FEIR [DEIR p. 102–104]). Minor changes include a different type of blimp being housed at the former Goodyear Blimp port, and a large fiberglass statute of a man

who is now holding a flag (instead of a golf club) at the Porsche Experience Center. For ease of reference, the discussion in the FEIR has been repeated below with minor updates to refresh the current visual resource setting and with a focus on the Property.

a. Aesthetic Character

As noted in the FEIR, the Property is fenced, vacant, and covered by predominantly bare soil that becomes green with non-native grasses following winter rains and turns brown by summer. Existing land uses in the vicinity of the Property (e.g., residential neighborhoods, commercial, light and heavy industrial uses, recreational uses, schools and service facilities) are generally low-rise and, intermixed among the I-405 and I-110 freeways so as to blend into an overall pattern of a developed, urban/suburban environment. Although the Property does not contain unique, natural resources, the large expanse of undeveloped land adds to the City's urban environment in a manner that contributes to the quality of its aesthetic setting. The Property also allows exposure to large visual expanses and a feeling of spaciousness, thereby providing a visual break from surrounding development.

b. View Resources

As also noted in the FEIR, and as remains the case, the Property vicinity does not contain notable features that would typically be considered a view resource, e.g., unique geologic features and natural areas, etc. The Property lies in a large basin with little change in elevation that might provide scenic quality (e.g., hillside areas). The nearest notable geologic feature, the Palos Verdes Peninsula, is located approximately 5 miles southwest of the Property. More distant features that define the basin are located at some distance (i.e., Santa Monica and San Gabriel Mountains). The features of the Property's visual setting that might shape an appreciation of its visual character are limited to typical urban elements, and are subject to personal interpretation. A notable man-made feature that fits these criteria is located along the I-405 Freeway. Specifically, the port for the Goodyear Blimp, which is now "Wingfoot Two" a rigid frame blimp replacement, continues to be located east of the Project site, on the north side of the I-405 Freeway in the vicinity of the Property. The blimp site has visual value due to its expanse of open space and, when the blimp is in port, its familiarity as a cultural symbol. One minor change in current conditions as compared to those assessed in the FEIR is related to the large fiberglass statue of a man located on the south side of the I-405 Freeway. In the previous FEIR, this statue held a golf club advertising the Dominguez Hills Golf Course. Currently, the fiberglass statue is in the same location; however, it holds a motorsport flag advertising the Porsche Experience Center. While the advertisement has changed, the statue remains similar to the previous FEIR and continues to remain a notable example of roadside architecture.

As further described in the FEIR, views of the Property from locations accessible to the public (i.e., public views) remain available from the I-405 Freeway, Del Amo Boulevard, and Main Street. However, none of these roadways is designated as a scenic highway. Since the

I-405 Freeway is at a lower elevation along the Property, views of the current ground-level of the Property are not available; however, if the Property were developed with higher structures, these would be visible due to the proximity of the freeway. The only notable views of the Property from private locations are associated with the nursery and Porsche Experience Center north of the Property, and residential units located opposite to the southern and southwestern edges of the Property. Near views from these locations are dominated by a bermed slope along the edge of the Property. Distant views over the Property may be available from the upper stories of two-story residences. Distant views of the Property are generally limited, due to the flat terrain in the surrounding area and the prevalence of existing development although a few tall office buildings or distant locations within the Palos Verdes Peninsula may view the Property as a relatively small, open space feature within an established urban environment.

c. Shade/Shadow

As described in the FEIR, the Property is currently vacant and produces no shade/shadow effects. The only light/shade sensitive uses adjacent to the Property that could potentially be affected by shading remain the approximately 100 residential units that border the Property boundary along the southern and southwestern edges, across from the Torrance Lateral.

d. Artificial Light

As also described in the FEIR, the Property is currently vacant and generates no artificial light with the exception of lighting associated with the on-site remediation activities, as further described in Section III.A.4, Hazards and Hazardous Materials. The Property lies within a larger urban setting with varied lighting levels, typical of the multiple uses in the area; commercial, light-industrial and residential uses, in particular. Street lighting, as well as brighter freeway lighting, also contributes to the overall lighting levels on the Property. The larger area has a soft glow that is typical of urban/suburban areas.

3. TRANSPORTATION/CIRCULATION

a. Traffic and Circulation

In general, there are no substantive changes to the regional roadway network as described in the FEIR. The I-405 and I-110 freeways still provide the primary regional access to the Property. The existing street system serving the Property still includes Avalon Boulevard, Main Street, Vermont Avenue, Hamilton Avenue, and Figueroa Street in the north/south direction and Del Amo Boulevard, Carson Street, Torrance Boulevard, and 213th Street in the east/west direction (see FEIR Section III.A.3.a [DEIR pp. 104–105]) for additional information).

Carson Street is currently undergoing the construction of the Carson Street Mixed-Use District Master Plan, which stretches from the I-110 Freeway to the I-405 Freeway. The construction includes a number of streetscape improvements, pedestrian enhancements, and

bicycle improvements. The following study intersections are affected during construction of the Carson Street Mixed-Use District Master Plan:

- 23. Figueroa Street & Carson Street
- 24. Main Street & Carson Street
- 25. Avalon Boulevard & Carson Street
- 26. I-405 southbound ramps & Carson Street

The changes to these intersections were not anticipated or under construction during the preparation of the FEIR. This work is anticipated to be completed in 2017.

As at the time of FEIR preparation, there are still no existing hazardous design features, such as sharp curves or dangerous intersections, on-site or within the vicinity of the Property. The City continues to have an adopted emergency response plan/emergency plan, which includes roadways and access features for roadways around the Property in order to meet the requirements of the Los Angeles County Fire Department.

b. Access

In general, there are no substantive changes to the Property access for the proposed modified Project from that described in the FEIR for the approved Project. The Property contains two existing paved streets, Lenardo Drive (referred to in this SEIR as Street A) and Stamps Drive (referred to in this SEIR as Street B). Street A (existing Lenardo Drive) intersects with Main Street, and Street B (existing Stamps Drive) intersects with Del Amo Boulevard. In the south portion of the Property, Street A (existing Lenardo Drive) currently dead ends within the Property, short of the I-405/Avalon Boulevard southbound off ramp (see FEIR Section III.A.3.a [DEIR p. 105]) for additional information).

c. Public Transportation

The Property is served by a moderate level of public transit. The Property is located directly adjacent to the Carson Circuit North South Shuttle Line on Main Street. Three local Los Angeles County Metro (Routes 205, 246/45, 550), the Metro Silver Line, four Torrance Transit (1, 3, R3, 4), eight Carson Circuit (A, B, C, D, E, G, S), and one Commuter Express (Route 448) bus routes provide service within approximately 0.5 mile of the Project site. Additional transit detail is provided in Appendix D, Transportation Impact Analysis. The Property is now served with more public transit operators and routes as compared to that assessed in the FEIR for the approved Project, which originally anticipated seven Carson Circuit routes and four Metro routes (see FEIR Section III.A.3.c [DEIR pp. 105, 226–227]) for additional information).

d. Parking

As noted in the FEIR, no parking is needed or provided within the Property since there are no existing uses. Street parking is generally available along local and major streets in the area.

4. HAZARDS AND HAZARDOUS MATERIALS

As explained more fully in the FEIR (see FEIR [DEIR p. 106]), PA 1 and PA 2 were historically used as a Class II landfill from 1959 to 1965. During the life of the landfill, approximately 6 million cubic yards (cy) of solid municipal waste and 2.6 million barrels of industrial liquid waste were received at the landfill. As a result of contamination on and adjacent to the landfill, the Property is listed by the State of California Department of Toxic Substances Control (DTSC) as a hazardous substances site. In 1988, DTSC issued Remedial Action Order No. HSA87/88-040 requiring the investigation of contamination at the landfill site and preparation of remedial action plans.

DTSC divided the remediation into two operable units. Investigations of the Upper Operable Unit (OU) documented the presence of landfill gases (methane and carbon dioxide [CO₂]) as well as volatile organic compounds (VOCs) and metals in the landfill's soil and groundwater. A Remedial Action Plan (RAP) was prepared and approved by DTSC for the Upper OU in 1995. The RAP was modified in an Explanation of Significant Differences (ESD) issued by DTSC on July 31, 2009. With the ESD, DTSC approved a modification of the landfill cap material from clay to a geosynthetic linear low density polyethylene (LLDPE) membrane. The modification applied to the entire Property other than the approximately 9 acres of perimeter slopes, where the clay cap remained the selected remedy.

A RAP for the Lower OU was prepared to address the potential impact of groundwater contamination in the Upper OU on the Lower OU. The RAP for the Lower OU was approved by DTSC in 2005. No changes have been made to the Lower OU RAP since it was approved.

As anticipated in the FEIR, a portion of the work required under the Upper OU RAP has been completed. A site-wide Groundwater Extraction and Treatment System (GETS) was installed in 2014. The Remedial Action Completion Report for the GETS was accepted by DTSC on June 27, 2016. In 2015, a portion of the geomembrane landfill cap was installed in Cells 3 and 4. In addition, the clay cap was installed between 2009 and 2011 on the perimeter slopes around a majority of the Property, including: along the northeast property boundary, fronting the I 405 Freeway from Del Amo to Street A (existing Lenardo Drive); in the southeast corner of the Property; and on the west and south perimeter of the Property, along the Torrance Lateral from Street A (existing Lenardo Drive) just east of Main Street, to the southeast corner of the Property.

In addition to the GETS and capped areas, portions of the landfill gas collection and control system (GCCS) have been installed. The GCCS consists of the landfill gas (LFG)

collection system, and the LFG control and treatment system. The LFG collection system consists of vertical extraction wells, horizontal extraction wells (installed but not currently operational), headers and well head vaults, piping, and condensate sumps. Approximately half of the necessary landfill gas collection wells have been installed.

The LFG control and treatment system consists of LFG blowers to provide vacuum to the LFG collection system, two flare units to provide destructive combustion of LFG, and tanks providing an optional treatment method using granular activated carbon/potassium permanganate (GAC/KMN). There is also a power generator and a centralized control/alarm system. All of the landfill gas and groundwater treatment equipment is located at the Operations Center (OC) in the southwest corner of the Property.

The FEIR contains a discussion of the environmental setting for hazards and hazardous materials that remains fully relevant for DD3 (see FEIR Section III.A.4 [DEIR p. 106] for additional information). The Property remains located within an urbanized area and there are no adjacent wildland areas. Based on the California Department of Forestry and Fire Protection (CAL FIRE) Fire Hazard Severity Zones Map for Los Angeles County, the City of Carson is categorized as Non-VHFHSZ or an area outside of the Very High Fire Hazard Severity Zones (adopted November 7, 2007, by CAL FIRE).

The closest airport to the Property is still the Compton Airport, which is located approximately 3.25 miles to the north. The Property remains located approximately 0.5 mile south of the port for the Goodyear Blimp, which is now Wingfoot Two, a rigid frame blimp replacement.

5. GEOLOGY/SOILS

a. Soils and Geology Profile

In general, there are no substantive changes to the underlying geology of the Property as described in the FEIR (see FEIR [DEIR pp. 315–317]). However, as anticipated by the FEIR, there have been some changes to the surface deposits and underlying thicknesses of the waste materials due to the implementation of deep dynamic compaction (DDC) that occurred on approximately 68 acres of the Property in 2008 and 2009 to consolidate loosely packed soil and landfill waste.

As a result of the DDC, this area of the Property is less susceptible to subsidence or settlement than it had been prior to the DDC operations. As noted in the FEIR, depressions caused by the DDC were filled with soil to create a surface upon which the landfill cap was constructed (see FEIR [DEIR pp. 281, 327]).

b. Earthquake Faults and Surface Rupture

There have been no substantive changes to the identification or designation of active faults in the immediate vicinity of the Property since preparation of the FEIR (see FEIR [DEIR pp. 317–319]). The Property remains outside of any established Alquist-Priolo Earthquake Fault Zone for fault rupture hazards. No active or potentially active faults are known to pass directly under the Property, and the potential for ground rupture is low.

c. Potential Ground Shaking

As described more fully in the FEIR and herein, the Property is located in the Southern California region, an area of high seismic activity. Although the characterization of the Southern California region as an area of high seismic activity has not changed since the preparation of the FEIR, updated methodologies have further refined the probability of a substantial seismic event occurring in the Southern California region and have determined it is higher than previously anticipated. As stated in the FEIR, the Property remains in an area that is susceptible and likely to experience a substantial seismic event(s).

d. Liquefaction

As described more fully in the FEIR (see FEIR [DEIR p. 107]), the Property is largely located within an area designated by the City of Carson General Plan Safety Element and the State of California Seismic Hazard Maps as a CGS Liquefaction Hazard Zone. Liquefaction potential is greatest where the groundwater level is shallow, and loose, fine sand occurs within a depth of about 50 feet or less. However, as stated in the FEIR, based on prior geotechnical evaluations, the potential for liquefaction would be low for the Property.

e. Subsidence

As also described more fully in the FEIR (see FEIR [DEIR p. 107]), subsidence may occur at the Property. However, as noted above and as anticipated by the FEIR, the DDC activities at the Property were conducted to densify the upper portion of the landfill waste and provide a more stable base foundation layer for the landfill cap and any subsequent improvements. While additional DDC may be necessary to achieve the design requirements, the DDC activities that have occurred since preparation of the FEIR have improved the geotechnical characteristics of the underlying materials and reduced the potential for subsidence.

f. Slope Stability/Landslides

There have been no substantial changes at the Property with regard to slope stability or landslides since the preparation of the FEIR. Although stockpiles of fill soils exist on the Property, due to the relative absence of steep slopes on the Property and in the surrounding area, landslide or slope instability remains limited to any unprotected slopes among the variety of flood control

channels that intersect the area. The Torrance Lateral Flood Control Channel, adjacent to the west and south boundaries of the Property, is still concrete-lined and, thus, would not be subject to erosion or slope instability. The potential for landslides or slope instability is considered low.

6. SURFACE WATER

a. Water Quality

There have been no substantial changes with regard to drainage as discussed in the FEIR (see FEIR [DEIR p. 108]). Monitoring of stormwater runoff has continued under the existing SWPPP in accordance with the NPDES permit, and due to the current detention basin on site, there have been no samples collected because all runoff has been detained on site. As anticipated by the FEIR, due to stockpiled fill soils and areas of thin vegetation, the potential for sediments in stormwater runoff remains.

b. Drainage

There also been no substantial changes with regard to drainage on the Property since preparation of the FEIR (see FEIR [DEIR pp. 108–109]). While DDC activities and some earthwork, etc., have occurred as anticipated by the FEIR, most drainage still flows toward the existing streets as noted in the FEIR. The Property is still located in an urban area which features designed drainage systems that connect the City's urban stormwater drainage infrastructure. Along the western and southern edge of the Property is the Torrance Lateral Drainage Channel that leads to the Dominguez Channel. Stormwater runoff from the Property continues to occur as sheetflow across the Property which flows toward the existing storm drain system in Del Amo Boulevard, Main Street, Street A (existing Lenardo Drive), and Street B (existing Stamps Drive).

c. Flooding and Inundation

The Property is still not designated as being located within a 100-year flood plain as mapped on federal Flood Hazard Boundary or Flood Insurance Rate Maps or any other flood hazard delineation map. Since the preparation of the FEIR, no dam or levee has been constructed close to the Property.

The Property remains located in an urbanized area with relatively flat topography approximately 6.5 miles east of the Pacific Ocean. In addition, the Property is still not located within close proximity to an enclosed body of water. The Property does not have a history of and has low potential for exposure to flooding, tsunami, seiche or mudflows.

7. AIR QUALITY

The South Coast Air Quality Management District (SCAQMD) maintains a network of air quality monitoring stations located throughout the Air Basin to measure ambient pollutant

concentrations. The monitoring station most representative of the Property is the South Los Angeles County Coastal Monitoring Station 033 in the City of Long Beach. Criteria pollutants monitored at this station include ozone, nitrogen dioxide (NO₂), sulfur dioxide (SO₂), carbon monoxide (CO), and respirable particulate matter (PM₁₀). The South Los Angeles County Coastal Monitoring Station 072 in north Long Beach collects data for fine particulate matter (PM_{2.5}) and South Los Angeles County Coastal Monitoring Station 077 in south Long Beach collects data for lead. During the 2014–2016 reporting period, ozone (O₃) exceeded the California and National standards for one day. During the 2011–2016 reporting period, the California PM₁₀ standard was exceeded between zero and eight times annually, with the highest number of exceedances in 2016. PM_{2.5} exceeded the National standard between zero and four times annually, with the highest number of exceedances in 2012. Neither the California nor the national CO, NO₂, or SO₂ standards were exceeded during the 2011–2014 reporting period. The Basin is currently in compliance with California and national standards for lead (Pb).

In relation to carcinogenic risk, SCAQMD studies have determined that the average carcinogenic risk in the Los Angeles Basin is approximately 1,138 in 1 million. Approximately 68 percent of all carcinogenic risk is attributed to diesel particulate emissions, approximately 22 percent of risk is attributed to other toxics associated with mobile sources (vehicles, aircraft, and ships), and approximately 10 percent of all risk is attributed to stationary sources (industries and businesses, such as dry cleaners and chrome plating operations). The risk from air toxics is generally lower near the coastline and increases inland, with higher risks concentrated near large diesel sources (e.g., freeways, airports, and ports). The City of Carson is generally located in a risk area of 500 to 1,200 in 1 million.

As discussed in the FEIR, land uses in the vicinity of the Property that are sensitive to poor air quality include detached residences and mobile homes that remain located to the south and west of the Property, the nearest of which is located approximately 150 feet from the Property boundary. Schools, libraries, religious institutions, hospitals and nursing homes are also sensitive to poor air quality. The nearest school is still the Carson Street Elementary School, located approximately 0.5 mile to the south. Although housing is planned on DD3, construction in that location has not commenced as of the issuance of the NOP and no other sensitive uses not discussed in the FEIR are located in close proximity to the Property. Regardless, DD3 is being treated as a sensitive receptor for the purposes of assessing noise.

8. NOISE

The environmental setting related to noise remains substantially the same as is described in the FEIR (see FEIR [DEIR p. 110]), with updates to measured ambient noise levels as well as existing traffic noise levels. Measured ambient noise levels show that existing (2017) ambient noise is lower at the residential uses opposite the Torrance Lateral Channel than in 2005. For ease

of reference, the discussion in the FEIR has been repeated below, with updates as appropriate to refresh the current environmental setting for noise and with a focus on the Property.

The City of Carson identifies residences, public and private school classrooms, libraries, hospitals and elderly care facilities as noise sensitive receptors. The nearest sensitive residential receptors that may be affected by the proposed modified Project remain the one- and two-story detached residences and mobile homes that are located across the Torrance Lateral drainage channel to the south and west of the Property. The predominant noise source within the Property remains roadway noise from the I-405 Freeway, and local roadways such as Main Street, which are located east and west of the Property, respectively. Measured ambient noise levels at four locations on the Property perimeter have community noise equivalent level (CNEL) values ranging between 57.7 A-weighted decibels (dBA) and 81.8 dBA. CNEL level at the location near the neighboring mobile home park to the southeast is 57.7 dBA. The noise level does not exceed the City of Carson's exterior noise standard limits for sensitive receptors and is considered "normally unacceptable" based on the City's community noise/land use compatibility criteria.

In addition to measured noise levels, existing noise levels were forecasted according to existing surface street traffic. Forecasted levels ranged from a CNEL of 57.3 dBA (along Torrance Boulevard east of South Main Street) to 69.9 dBA (along Avalon Boulevard between Del Amo Boulevard and I-405 ramps) at 50 feet from the roadway right-of-way. The roadway traffic noise levels continue to indicate that all land uses located near the Property, with the exception of residences south of Torrance Boulevard, are currently exposed to community noise levels above 65 CNEL. A CNEL of approximately 73.7 dBA occurs at the edge of Del Amo Boulevard along the northern boundary of the Property and along Avalon Boulevard adjacent to the existing mobile homes. Although noise levels are lower at areas farther from the roadways, this CNEL is considered "normally unacceptable." Existing noise levels exceed the City of Carson's exterior noise standard limits for sensitive receptors and are still considered "conditionally acceptable" based on the City's community noise/land use compatibility criteria. Although housing is planned on DD3, construction in that location has not commenced as of the issuance of the NOP and no other sensitive uses not discussed in the FEIR are located in close proximity to the Property. Regardless, DD3 is being treated as a sensitive receptor for the purposes of assessing noise.

9. PUBLIC SERVICES

a. Fire Protection

The environmental setting related to fire protection remains substantially the same as is described in the FEIR (see FEIR [DEIR p. 111]). Fire protection service will continue to be provided to the Property by the Los Angeles County Fire Department (LACoFD), which was contemplated by the FEIR. According to the 2012-2013 Los Angeles County Civil Grand Jury–

Los Angeles Fire Department Response Lag Time Report, the average fire response time for the LACoFD was 6:05 minutes, which is an increase from the average fire response time of 5:00 minutes reported in the FEIR (Los Angeles County 2013). However, the LACoFD response's times are similar to the average response time reported for fire departments throughout the county (Los Angeles County 2013). No new fire stations have been constructed in the vicinity of the Property since the FEIR was approved.

b. Police Protection

The environmental setting related to police protection remains substantially the same as is described in the FEIR (see FEIR [DEIR p. 111]). The Property remains located within the jurisdiction of the Los Angeles County Sheriff's Department (Sheriff's Department), and the proposed modified Project will continue to be served by the Carson Sheriff Station located at 21356 South Avalon. The Carson Station, located in southwest Los Angeles County, provides police services for the unincorporated County areas of Gardena, Torrance, and Rancho Dominguez and the contract City of Carson. The Station's jurisdiction also includes California State University, Dominguez Hills and UCLA/Harbor General Hospital (LASD 2017). No new Sheriff's stations or substations have been constructed in the vicinity of the Property since the FEIR was approved.

c. Schools

The environmental setting related to schools remains substantially the same as is described in the FEIR (see FEIR [DEIR pp. 111–112]). As with the approved Project, the proposed modified Project would generate students that would be within the boundaries of the Carson Street Elementary School, Stephen M. White Middle School, and Carson High School. No new schools have been constructed in the vicinity of the Property since the FEIR was approved.

d. Parks and Recreation

The environmental setting related to parks and recreation also remains substantially the same as is described in the FEIR (see FEIR [DEIR p. 112]). There are 16 public parks, one county park, and one public golf course totaling 315 acres in the City of Carson. The City's 2010 Census population was 91,714 people, as compared to 89,730 residents reported in the 2000 Census. As a result of the increase in population, the current park ratio in the City is 3.4 acres per 1,000 residents, which is a reduction from 3.5 acres per 1,000 residents reported in the FEIR. Park and recreational space owned and operated by the City is provided at a rate of 1.68 acres per 1,000 residents, reduced from 1.72 acres per 1,000 residents. Public schools with onsite recreational facilities total 546.1 acres, 349.2 acres of which are within the California State University Dominguez Hills campus. In addition, the City has a Joint Use Agreement with LAUSD for the use of playfields, tennis courts, and other recreational facilities during off-school hours at Carson High School and Caroldale Elementary School. Open space areas in the City of

Carson include public parks, public golf course, the blimp port, drainage courses, and utility and transmission corridors, and the City considered closed landfills (such as the Property) which have not been fully remediated as temporary open space areas.

There are 11 parks that are located in proximity to the Property and, thus, would potentially be used by residents of the proposed modified Project: (1) Anderson Park; (2) Calas Park; (3) Carson Community Center; (4) Carson Park and Pool; (5) Del Amo Park; (6) Hemingway Park; (7) Mills Park; (8) Scott Park; (9) Veterans Park and Sports Complex; (10) Victoria Golf Course; and (11) Victoria Park.

e. Library Services

The environmental setting related to libraries remains substantially the same as is described in the FEIR (see FEIR [DEIR p. 112]). The proposed modified Project is within the service area of the Carson Regional Library (Carson Library), whose size, location, staffing and collection remain substantially unchanged from that discussed in the FEIR. No new libraries have been constructed in the vicinity of the Property since the FEIR was approved.

10. UTILITIES/SERVICE SYSTEMS

a. Water Services Water Supply

The environmental setting related to water supply remains substantially the same as is described in the FEIR (see FEIR [DEIR p. 113]). Potable water and recycled water is supplied by California Water Services Company's (Cal Water). Cal Water's primary sources of water remain groundwater pumping, imported water acquired from the Metropolitan Water District of Southern California through the West Basin Municipal Water District (WBMWD), desalted brackish water and recycled water provided by the WBMWD. Cal Water's water supply has a high reliance on the continued availability of imported water, and Cal Water has made efforts to enhance and develop facilities that shift reliance toward use of local supplies. The West Basin is reducing its reliance on imported water, focusing on brackish ground water and recycled water to make its water supply more dependable as it is less reliant on imported water. The Water Supply Assessment prepared for the approved Project determined that Cal Water had adequate capacity to provide for projected demand for the Dominguez District, including the approved Project, through Year 2025 under normal conditions. The supply capacity for the Dominguez District in 2005 consisted of 15.0 million gallons per day (mgd) of total annual adjudicated groundwater rights, 103.7 mgd of contracted for imported water and 3.08 mgd of recycled water for a total of 121.78 mgd of water supply. Maximum daily water demand for the Dominguez District for 2025 is projected to be 73.57 mgd. The 2015 UWMP accounted for the land use types of the approved Project and has indicated that the Dominguez District has an adequate projected water supply to cover the projected water demand until 2040.

(1) Water Infrastructure

The environmental setting related to water infrastructure also remains substantially the same as is described in the FEIR (see FEIR [DEIR p. 113]).

b. Wastewater Services

(1) Wastewater Treatment

As identified within the FEIR, the Joint Water Pollution Control Plant (JWPCP), located at 24501 South Figueroa Street in Carson, treats wastewater from the area and is available to treat wastewater from the Property. The JWPCP currently occupies approximately 420 acres to the east of the I-110 Freeway. The JWPCP is one of the largest wastewater treatment plants in the world and is the largest of the LACSD's wastewater treatment plants. The facility provides both primary and secondary treatment for approximately 260 mgd of wastewater and has a total permitted capacity of 400 mgd. This is a slight increase in capacity and larger decrease in actual processing flow when compared to the 2006 design capacity of 385 mgd and average daily processing of 324.9 mgd of wastewater.

(2) Wastewater Infrastructure

The FEIR addressed general diameters and locations of trunk lines, as well as the existing district trunk sewers serving the Project site, and remains fully relevant. There is an existing local system of sewer lines located within the Project site that was installed in the mid-1980s. This system includes lines ranging from 8 inches to 18 inches in size that may be used, if appropriate, for the proposed modified Project. The internal collection system would connect to the 42-inch trunk sewer in Main Street known as the Main Street Relief Sewer. The wastewater would then be conveyed to the JWPCP for treatment.

c. Solid Waste

As identified within the FEIR and consistent with the existing setting, solid waste generated by the City of Carson is collected by two private waste haulers: Waste Management and EDCO LLC.

As identified within the FEIR and consistent with the existing setting, solid waste generated by the City of Carson is collected by two private waste haulers: Waste Management and EDCO LLC. Waste Management collects residential and commercial waste and EDCO collects commercial waste. Based on CalRecycle data, the City of Carson disposed of 185,359.71 tons of solid waste and transformed 542 tons of solid waste in 2016.²

² CalRecycle, Disposal Reporting System, Jurisdiction by Facility, Disposal during 2016 for Carson.

As identified within the FEIR, the solid waste collected by Waste Management is transported to the company's transfer station at 321 West Francisco Street in Carson, where it is sorted. That facility currently has a permitted capacity of 5,300 tpd (see Section IV.J.3, Solid Waste, Section 2.b, of the FEIR for a full discussion on solid waste collection).

As discussed in the FEIR, municipal solid waste is generally disposed of at landfill facilities for non-hazardous, household waste (Class III landfills). The City of Carson does not own or operate any landfills. As anticipated by the FEIR, the Bradley Landfill has reached capacity and is no longer available to receive solid waste from the approved Project. Instead, the City now uses the H.M. Holloway Landfill, a former surface mining facility. Approximately 55 percent or 102,152 tons of the solid waste generated in the City were taken to the El Sobrante Landfill located in Riverside County and 26 percent or 47,635 tons were taken to H.M. Holloway Landfill in Kern County. The remaining 35,573 tons were taken to multiple landfills dispersed throughout the region including Antelope Valley Public Landfill, Sunshine Canyon Landfill, and Frank R. Bowerman Sanitary Landfill. As of the end of 2015, the El Sobrante Landfill had a remaining capacity of 105 million tons with a remaining life of 62 years. As of September 23, 2016, the H.M. Holloway Landfill had a remaining capacity of 7,522,934 cubic yards. Based on this remaining capacity and a maximum permitted throughput of 2,000 tpd, the landfill has an expected closure date of December 1, 2030.

11. AGRICULTURE AND FORESTRY RESOURCES

The Property is a former landfill located within a heavily developed area of the City of Carson and has not previously supported agricultural uses. No agricultural uses or related operations are present on the Property and the Property is still not shown on maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency. In addition, the Property continues not to be zoned for agricultural uses nor is the Property under a Williamson Act contract.

With regard to forest land, there are still no parcels designated as forest land or timberland within the Property.

12. BIOLOGICAL RESOURCES

The Property remains located in an urbanized setting and uses surrounding the Property include the I-405 Freeway and Del Amo Boulevard, beyond which is a future residential site (DD3), a nursery and the Porsche Driving Experience, residential development, light industrial uses, and vacant/underdeveloped lots. The Property consists of a former landfill site that is currently undergoing remediation activities as anticipated by the FEIR. The Property has been completely disturbed and no vegetation or habitat is present to support candidate, sensitive, or special-status species.

The Property is still not in or adjacent to any riparian area and is still not identified in the City of Carson General Plan as a natural, conservation or open space resource. The Property still does not contain natural hydrologic features or federally protected wetlands as defined by Clean Water Act Section 404.

The Property is a former landfill that is currently undergoing remediation as anticipated by the FEIR. The Property still does not function as a wildlife corridor and no bodies or courses of water exist to provide habitat for fish. The Property still does not contain any notable natural features or protected biological resources.

13. CULTURAL RESOURCES

The FEIR concluded that the Property does not contain any extant buildings, structures, objects, sites or districts with any historical associations or significance necessary for California Register eligibility. The Property still does not contain such extant buildings, structures, objects, sites or districts.

The FEIR also found that as the Property previously was a landfill site, there is no potential for the Property to yield archaeological or paleontological resources. There have been no substantial changes in circumstances that would affect the environmental setting for archaeological or paleontological resources. Likewise, the FEIR's conclusion that there is no potential to encounter buried human remains due to the location of a former landfill thereon remains unchanged.

14. MINERAL RESOURCES

The only major known mineral resource in the City of Carson is oil. The City is located within the expansive Dominguez and Wilmington Oil Fields, which extend through several cities in the South Bay region of the Los Angeles Basin. There is no drilling activity within the Property or in the immediate vicinity, and former wells on the site could not be located as described in the 2009 Addendum.

III. GENERAL DESCRIPTION OF THE ENVIRONMENTAL SETTING B. CUMULATIVE DEVELOPMENT LIST

The California Environmental Quality Act (CEQA) requires that the analysis of potential project impacts include cumulative impacts. CEQA defines cumulative impacts as "two or more individual effects which, when considered together are considerable or which compound or increase other environmental impacts." The analysis of cumulative impacts need not be as in-depth as what is performed relative to the proposed modified Project, but instead is to "be guided by the standards of practicality and reasonableness."

Cumulative impacts are anticipated impacts of the proposed modified Project along with reasonably foreseeable growth. Reasonably foreseeable growth may be based on either:³

- A list of past, present, and reasonably anticipated future projects producing related or cumulative impacts; or
- A summary of projections contained in an adopted general plan or related planning document designed to evaluate regional or area-wide conditions.

Build out and occupancy of the Project is forecasted to occur by the end of 2023. Accordingly, this Supplemental EIR considers the effects of other proposed development projects that may be constructed between 2017 and 2023. This analysis has utilized a listing of all anticipated related projects based on information that was provided by the City of Carson. **Table III.B-1, Cumulative Projects**, presents a listing of the related projects in the Project area. There are 27 related projects in the vicinity of the Project site, with a range of uses including, but not limited to, residential, commercial and industrial uses. The study area generally incorporates the area in which the Project may contribute to a cumulative impact. The locations of the related projects are shown in **Figure III.B-1, Cumulative Project Locations**, on p. III.B-3. The analysis of potential cumulative impacts is addressed in the analysis of each environmental issue included in Chapter IV, Environmental Impact Analysis, of this SEIR.

¹ State CEQA Guidelines, 14 California Code of Regulations, Sections 15355 et seq.

² Ibid., Section 15355.

³ *Ibid., Section 15130(b)(1).*

Table III.B-1
Cumulative Projects

No.	Project Location	Description	Amount of Development
1	21801 Vera Street	Single Family Residential	18 du
2	21721 Moneta Avenue	Multi-Family Residential	13 du
3	21521 South Avalon Boulevard	Multi-Family Residential Commercial	357 du 30,700 sq.ft.
4	1802 East Carson Street	Coffee Shop w/ Drive-Through	1,500 sq.ft.
5	1281 East University Drive	Commercial	47, 000 sq.ft.
6	16100 South Avalon Boulevard	Warehouse	44,000 sq.ft.
7	2254 East 223rd Street	Warehouse	120, 500 sq.ft.
8	200 E. Alondra Boulevard	Warehouse Office	137,000 sq.ft. 10,000 sq.ft.
9	21900 South Wilmington	Warehouse	400,000 sq.ft.
10	21205 South Main Street	Multi-Family Residential	46 du
11	600 West Carson	Multi-Family Residential	51 du
12	17706 South Main Street	Warehouse Office	94,731 sq.ft. 15,000 sq.ft.
13	2666 E Dominguez Street	Single-Family Residential	3 du
14	140 West 223rd Street	Multi-Family Residential	2 du
15	123 East 223rd Street	Multi-Family Residential	10 du
16	21000 South Normandie Avenue ^a	Multi-Family Residential	113 du
17	19210 South Vermont Avenue	Office	61,500 sq.ft.
18	1302 West 177th Street ^a	Multi-Family Residential Community Center	131 du 3,500 sq.ft.
19	21138 South Western Avenue ^a	Gas Station	12 fuel pumps (1,694 sq.ft.)
20	1054 West 204th Street ^{b, c}	Park	8.5 acres
21	22410 South Vermont Avenue ^c	Apartments	41 du
22	20416 Kenwood Avenue ^c	Single-Family Residential	2 du
23	20814 Normandie Avenue ^c	Single-Family Residential	63 du
24	19606 Normandie Avenue ^c	Warehouses	13,400 sq.ft.
25	22003 Meyler Street ^c	Single-Family Residential	1 du
26	939 West 223rd Street ^c	Warehouses	5,820 sq.ft.
27	Carson Marketplace Apartments ^d	Multi-Family Residential	300 du

NOTES

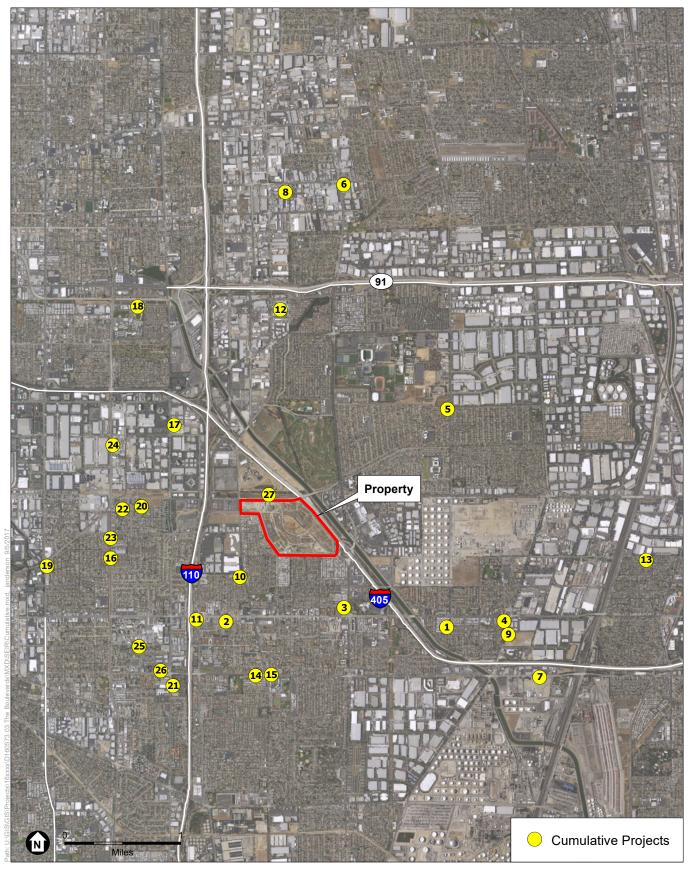
 $du = dwelling \ unit; \ sq.ft. = square feet$

^a Related projects provided by LADOT on June 27, 2017.

^b Trip generation estimates for parks based on information provided by the "Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region," April 2002.

^c Related projects provided by LA County on July 11, 2017.

^d Development on the 11-acre portion of Project site north of Del Amo Boulevard., also referred to as DD3.

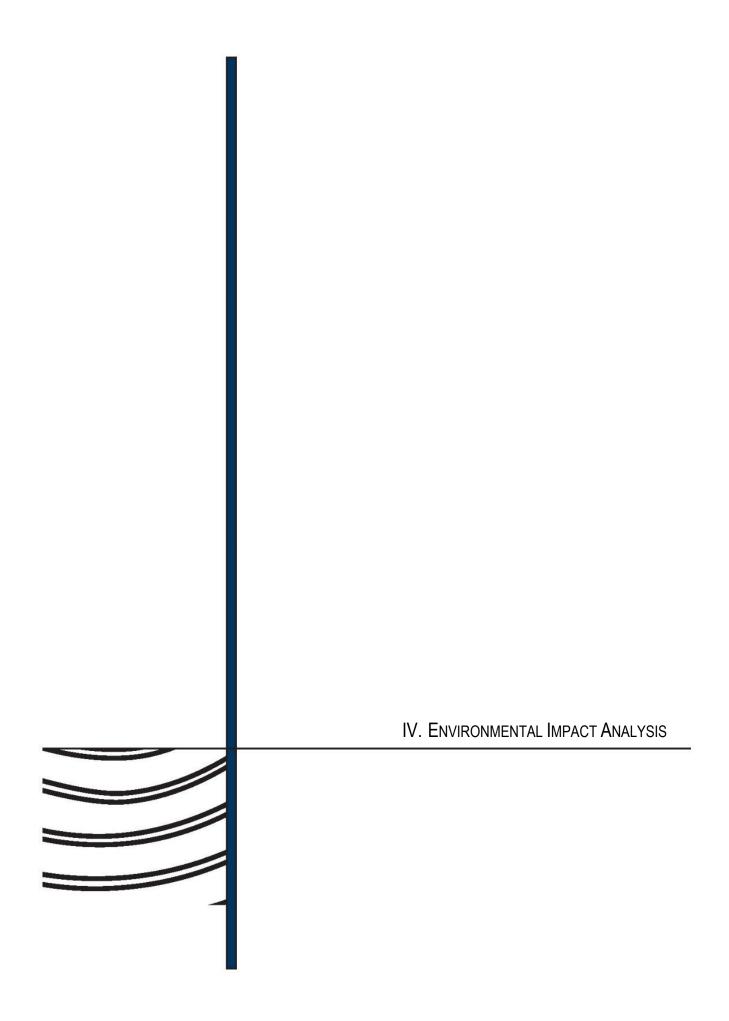


SOURCE: ESRI The District at South Bay

Figure III.B-1
Cumulative Project Locations



III.B. Cumulative Development List					
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Droft Supplemental Environmental I		The District at South Ray Specific Plan Project			



IV. ENVIRONMENTAL IMPACT ANALYSIS A. LAND USE AND PLANNING

1. INTRODUCTION

This section addresses the potential impacts of the proposed modified Project relative to land use and planning compared to the approved Project assessed by the FEIR, and supplements Section IV.A, Land Use and Planning, of the FEIR where there are changes to the regulatory setting. In all other respects, the FEIR analysis remains applicable to the proposed modified Project. Like the FEIR, this SEIR analyzes whether the proposed modified Project would result in any new impacts, or increases in the severity of impacts previously disclosed in the FEIR with respect to (a) compatibility with existing land use plans, policies, and regulations; (b) existing land use patterns; and (c) sustainability of existing retail uses with implementation of the proposed modified Project, as further described below. It also compares these impacts to those identified in the previous FEIR. Specifically, this section addresses the changes in land uses considered by the proposed modified Project compared to the approved Project assessed by the FEIR, including evaluating the changes proposed to the approved Specific Plan. This section analyzes the potential land uses in relationship to applicable land use regulations, as well as the type and patterns of land uses in the surrounding area. Further, this section evaluates the potential for the proposed modified Project to affect the economic longevity of surrounding retail commercial uses based on the updated Retail Impact Study prepared by Stanley R. Hoffman Associates (2017). In doing so, this supplemental analysis compares the proposed modified Project to the approved Project to determine if the proposed changes will require major revisions to the FEIR because of the involvement of any new significant impacts as a result of changes to the approved Project, changes in circumstances, or new information that was not previously evaluated. Specific environmental effects on surrounding neighborhoods are addressed in other sections of the SEIR, such as Visual Resources (Section IV.B), Traffic and Circulation (Section IV.C), Air Quality (Section IV.G), and Noise (Section IV.H).

The analysis concludes that, with respect to compatibility with land use plan, policies, and regulations and existing land use patterns, the proposed modified Project would result in similar types of land use and planning impacts compared to the approved Project, and with respect to sustainability of existing uses, would result in short-term land use impacts to existing neighborhood commercial uses, whereas the FEIR identified a short-term land use impact with respect to existing regional commercial uses that are no longer present in the proposed modified Project. As with the approved Project, there are no significant land use Project impacts with respect to the proposed modified Project. Further, in regard to land use and planning, there are no changes in circumstances arising since the preparation of the FEIR or new information not known at the time the FEIR was prepared requiring further analysis under CEQA.

2. ENVIRONMENTAL SETTING

a. Relevant Land Use Plans and Policies

(1) General Plan of the City of Carson

As discussed more fully in the FEIR (see FEIR [DEIR pp. 124–125]), the City comprehensively updated its General Plan in 2004. The 2004 General Plan remains applicable to the proposed modified Project, and although it has been amended from time to time, the 2004 General Plan remains the City's operative general plan. Certain General Plan elements have been amended since the approval of the FEIR. Specifically, the Housing Element was updated in 2014 and the Economic Development Element was updated in 2013. The relevant portions of those General Plan elements that directly address the growth and land issues (Land Use, Housing, Economic Development, and Open Space and Conservation Elements) are discussed below as a supplement to the analysis of the FEIR.

(a) Land Use Element

As explained in greater detail in the FEIR (see FEIR [DEIR pp. 125–127]), the Land Use Element functions as a guide to City staff, the general public, and decision-makers as to the ultimate pattern of development for the City. The Land Use Element includes a General Plan Land Use Map that designates all of the parcels in the City with planned land uses. The Land Use Element has not undergone a comprehensive update since certification of the FEIR, and remains substantially the same. While there was an amendment to the Land Use Element as part of the approval of the approved Project, this was fully assessed and anticipated by the FEIR as noted immediately below. The regulatory environment discussed in the FEIR for the City of Carson General Plan related to the Land Use Element remains fully relevant.

In 2004, the Land Use Element designated the Project site as Mixed Use – Business Park (MU-BP), which permits a mixture of commercial and business park/limited industrial uses in the same building, on the same parcel, or within the same area. Residential uses were not permitted by the MU-BP land use designation. As anticipated by the FEIR, in February 2006, the City Council approved and adopted Resolution No. 06-018, which approved General Plan Amendment (No. 13-05) as part of the approvals for the approved Project. The approved General Plan Amendment amended the designated land uses for the Project site to Mixed Use – Residential and amended the Land Use Elements Goals, Policies, and Implementation Measures as described in Exhibit B of the General Plan Amendment (No. 13-05). The Mixed Use – Residential land use designation allows for horizontal or vertical retail, commercial, office, and

¹ The City is currently in the multi-year process of preparing a comprehensive update to the 2004 General Plan. As the comprehensive update has neither been completed, nor adopted, by the City, this SEIR continues to rely on the adopted 2004 General Plan.

residential mixed uses, but does not require uses to be mixed. In addition, the General Plan Amendment (No. 13-05) also increased the allowable maximum residential density from 33 dwelling units per acre (du/ac) to 60 du/ac for the Project site, as was also anticipated by the FEIR. In 2011, the Specific Plan for the approved Project was amended (resulting in The Boulevards at South Bay Specific Plan [which as part of the proposed modified Project is proposed to be further amended and as so amended is proposed to be renamed "The District at South Bay Specific Plan," hereinafter called the Specific Plan Amendment (SPA)]), but there was no corresponding amendment to the General Plan. As such, the land use designation for the Project site, including the Property, is still Mixed Use – Residential, and remains consistent with that anticipated by the FEIR. **Figure IV.A-1, Existing Land Use Designations**, shows the existing land use designation for the Project site based on the amended Land Use Map.

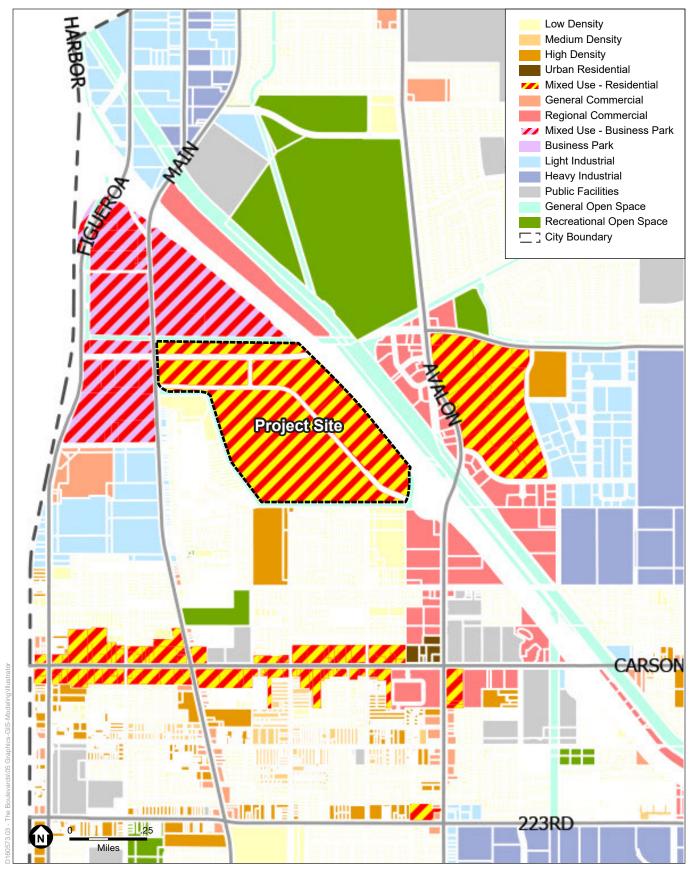
(b) Housing Element

Consistent with State law, the Housing Element was most recently updated in 2014 and continues to provide for the City's housing needs and strategies through 2021. The Regional Housing Needs Assessment (RHNA) identified a need for 1,698 additional housing units for the City that would be required between 2014 and 2021, of which 447 units would be for very low income households, 263 units would be for low income households, 280 units would be for moderate income households and the remaining 708 units would be for above moderate income households. It also projected a future population of 106,000 residents in 2035, which is a projected population increase of approximately 16 percent from 2010. The Housing Element references the approved Project as including development potential on the Project site for up to 1,550 dwelling units with an effective density of between 35 and 60 du/ac, which number is net new units derived after accounting for the application of the development standards and design guidelines of the approved Specific Plan.² The proposed modified Project's consistency with the Housing Element is provided below under Section IV.A.3.c, Analysis of Project Impacts, p. IV.A-11.

(c) Economic Development Element

As noted in the FEIR, the Economic Development Element is an optional element that the City chose to include in the 2004 General Plan. The Economic Development Element was most recently updated in 2013 and includes goals and objectives that address a variety of economic issues that are being addressed by the City. The proposed modified Project's consistency with the Economic Development Element is provided below under Section IV.A.3.c, Analysis of Project Impacts, p. IV.A-11.

² City of Carson Housing Element, page 73.



SOURCE: City of Carson

The District at South Bay

Figure IV.A-1 Existing Land Use Designations



(a) Open Space and Conservation Element

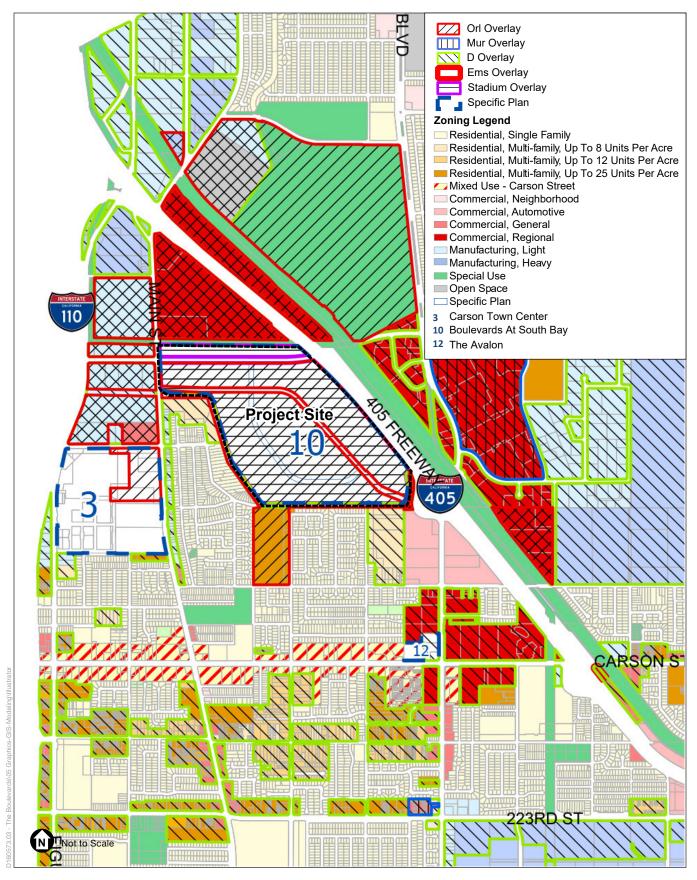
The intent of the Open Space and Conservation Element of the General Plan is to recognize and conserve open space resources within the City. Government Code Section 65302(e) defines open space for the purpose of outdoor recreation as "areas of outstanding scenic, historic and cultural value; areas particularly suited for park and recreation purposes ... and areas which serve as links between major recreation and open space reservations, including utility easements ... trails, and scenic highway corridors." Open space in the City is comprised of Recreational Open Space and General Open Space. Park area and the Victoria Public Golf Course are considered Recreational Open Space areas. Utility transmission corridors, drainage and flood control facilities, and the Blimp Port comprise the City's General Plan Open Space. The Open Space and Conservation Element does not specify a standard for the provision of open space separate from that set forth in the Parks and Recreation Element (see checklist Item a.iv in Section VI.M, Public Services, in Chapter VI, Effects Found Not to Be Significant).

(2) Carson Zoning Ordinance

The City of Carson implements its General Plan through specific plans and zoning. The Zoning Ordinance establishes the regulations for each zoning classification that limit the types of development allowed, and establish design regulations addressing such topics as permitted densities, maximum building heights, setbacks, etc. As was anticipated by the FEIR, as part of the approved Project, the Project site's zoning designation was amended to a Specific Plan designation. The zoning map for the City indicates that the current zoning designation for the Project site is SP-10. **Figure IV.A-2, Existing Zoning Designation**, shows the existing zoning designation for the Project site.

(3) Specific Plan

The Carson Marketplace Specific Plan was adopted for the Project site in 2006. In 2011, this approved Specific Plan was amended and renamed The Boulevards at South Bay Specific Plan. Consistent with the FEIR analysis, the approved Specific Plan established two allowable uses for the Project site: Commercial Marketplace (CM) and Mixed-Use Marketplace (MU-M). The CM land use category provided regional shopping center and other commercial uses intended to serve a broad population base and offer a wide range of services to both the community and the region. Typical uses in this land use category included larger regional commercial uses such as major department stores and promotional retail-type stores, and neighborhood commercial uses such as grocery stores and banks. Additional uses included commercial recreation and entertainment uses such as movie theaters and arcades, hotels, restaurants, and highway-oriented and smaller neighborhood retail and service uses. The "Mixed-Use Marketplace" land use category in the approved Specific Plan allowed the vertical or horizontal integration of housing with smaller commercial services, but allowed a mix of uses



SOURCE: City of Carson

The District at South Bay





or entirely residential or commercial uses. This land use category permitted all uses allowed in the CM category described above, with the exception of stand-alone stores greater than 50,000 square feet (sq.ft.). As noted elsewhere in this SEIR, the approved Specific Plan divided the Project site into three development districts, and designated two of those districts comprising approximately 42 acres of the Project site (including Development District 3 [DD3]) with the MU-M category, while the remaining 126 acres were designated for CM uses.

The approved Specific Plan authorized development of the approved Project, which was comprised of 1,550 residential units (1,150 for-sale units and 400 rental residential units) and 1,995,125 sq.ft. of commercial floor area (including 200,000 sq.ft. for a 300-room hotel) and authorized a range of other uses to the extent consistent with the Equivalency Program attached to and forming part of that approved Specific Plan, which allowed various commercial uses to be developed on the Project site. Figure II-5, Development Districts—Approved Project, shows the existing land use designations for the Project site under the approved Specific Plan.

(4) Carson Redevelopment Plan

In June, 2011 the Governor signed into law Assembly Bill x1 26 (AB x1 26), titled the "Redevelopment Dissolution Act," which provided for the immediate suspension of redevelopment agency activities, followed by the dissolution of all redevelopment agencies. However, the "Redevelopment Dissolution Act" did not dissolve redevelopment project areas or redevelopment plans. As redevelopment plans in the City do not regulate land uses, they do not apply to the proposed modified Project, and are not considered further in this analysis.³

(5) Southern California Association of Governments

As discussed in the FEIR (see FEIR [DEIR p. 131]), the Project site is located within the planning area of the Southern California Association of Governments (SCAG). SCAG's mandated responsibilities include developing plans and policies with respect to the region's population growth, transportation programs, air quality, housing, and economic development. Specifically, SCAG is responsible for preparing the Regional Comprehensive Plan (RCP), the Regional Transportation Plan and Sustainable Communities Strategy (RTP/SCS), and the RHNA, in coordination with other State and local agencies, and regularly updating them as required by law. In this regard, the following SCAG plans have been updated since the approval of the approved Project.

-

In compliance with AB x1 26, the goals and objectives of the Carson Redevelopment Plan, which were analyzed in the FEIR, do not apply to the proposed modified Project and have been excluded from further analysis within this SEIR.

(a) Final 2008 Regional Comprehensive Plan

The most recent update to the RCP was in 2008 as SCAG has focused its long-term planning efforts into the RTP/SCS. Since the 2016–2040 RTP/SCS has superseded the Regional Comprehensive Plan, the proposed modified Project will be evaluated with the RTP/SCS to ensure consistency with SCAG's more recent projections.

(b) Regional Housing Needs Assessment

The RHNA is a key tool for SCAG and its member governments to plan for growth in the region. The RHNA quantifies the need for housing within each jurisdiction. The RHNA, since becoming effective in 2007, is in its fifth cycle, which projects housing needs between 2014 and 2021, as outlined in the 5th Cycle Regional Housing Needs Assessment Final Allocation Plan. Communities then plan, consider, and decide how they will address this need through the process of completing the Housing Elements of their General Plans. The City of Carson was assigned a RHNA of 1,698 homes for the 2014–2021 planning period (447 very low–income households, 263 low-income households, 280 moderate-income households, and 708 above moderate-income households) (SCAG 2012).

(c) 2016–2040 Regional Transportation Plan/ Sustainable Communities Strategy

In April of 2016, SCAG adopted the 2016–2040 RTP/SCS. The RTP/SCS is a long-range visioning plan that balances future mobility and housing needs with economic, environmental, and public health goals. The RTP/SCS was prepared through a collaborative, continuous, and comprehensive process with input from local governments, county transportation commissions, tribal governments, non-profit organizations, and business and local stakeholders. The 2016 RTP/SCS closely integrates land use and transportation with the goal that the region can grow smartly and sustainably. Since the RTP/SCS is SCAG's primary long-range planning document, this analysis will evaluate the proposed modified Project's consistency with this SCAG document under Section IV.A.3.c, Analysis of Project Impacts, p. IV.A-11.

(6) Los Angeles County Congestion Management Program

As discussed in the FEIR (see FEIR [DEIR p. 132]), the Congestion Management Program (CMP) is a state-mandated program enacted by the State Legislature to address the increasing concern that urban congestion is affecting the economic vitality of the State and diminishing the quality of life in some communities. The 2010 CMP is the eighth CMP adopted for Los Angeles County since the requirement became effective with the approval of Proposition 111 in 1990. The CMP program is intended to address the impact of local growth on the regional transportation system. The Los Angeles County Metropolitan Transportation Authority (Metro), the local CMP agency, has established a countywide approach to implement the statutory requirements of the CMP in their governing 2010 CMP for Los Angeles County. An evaluation of consistency with the 2010 CMP can be found in Section IV.C, Traffic and Circulation, of this SEIR.

(7) South Coast Air Quality Management District Air Quality Management Plan

As was also discussed in the FEIR (see FEIR [DEIR p. 132]), the South Coast Air Quality Management District (SCAQMD) and SCAG are responsible for preparing the air quality management plan (AQMP), which addresses federal and state Clean Air Act (CAA) requirements in the Los Angeles County area. The 2016 AQMP was adopted by the SCAQMD on March 3, 2017, and by CARB on March 23, 2017. The 2016 AQMP will focus on available, proven, and cost effective alternatives to traditional strategies. In particular, focus will be on reducing mobile source emissions as they are the principal contributors to the current pollution levels within the SCAG. Further, the 2016 AQMP promotes encouraging the accelerated transition of vehicles, buildings, and industrial facilities to cleaner technologies. While the 2016 AQMP was adopted by the SCAQMD and CARB, it has not been yet received USEPA approval for inclusion in the State Implementation Plan and was not in effect at the time of the issuance of the Notice of Preparation for the proposed modified Project. Therefore, the 2012 AQMP remains the applicable AQMP. Consistency with the SCAQMD's 2012 AQMP is evaluated in Section IV.G, Air Quality, of this SEIR.

b. Existing Land Uses

(1) Project Site Land Uses

The FEIR characterized the Property as being predominantly bare soil that becomes green with nonnative grasses following winter rains and turns brown by summer (see FEIR [DEIR pp. 175–176]). Since the FEIR, the Property has undergone, and continues to undergo, remediation, capping, and operation and maintenance of the former landfill, consistent with the FEIR. The Property currently includes groundwater and landfill gas treatment facilities, construction trailers and equipment in the northwest portion, subsurface utilities, and soil and material stockpiles and construction materials stored in various locations.

As discussed above in Carson General Plan – Land Use Element and Zoning Ordinance, the Project site is currently designated as Mixed Use – Residential and zoned as SP-10. Refer above to Sections 2.a.1.a, Carson General Plan – Land Use Element, and 2.a.2, Carson Zoning Ordinance, for the full discussion on the Property's land use and zoning designations.

(2) Surrounding Area Land Uses

As described in the FEIR (see FEIR pp. 120–124), the Project site is located within a heavily urbanized and developed area within the City of Carson. Surrounding land uses in the vicinity of the Project site include residential neighborhoods, strip commercial corridors, centralized commercial centers, light and heavy industrial uses, and recreational uses, as well as schools, golf courses, and service facilities. These varied uses are dispersed in a patchwork arrangement, with many large single-use areas, and many instances where there are mixes of uses within a smaller area.

The Project site is surrounded by multiple uses. East of the Interstate 405 (I-405) Freeway (the San Diego Freeway), land uses include neighborhood and regional retail, most notably the South Bay Pavilion at Carson. To the north and east of the Project site are the Dominguez Golf and Practice Center and the Victoria Golf Course, respectively. Residential areas, consisting of one-story and two-story detached residences and mobile homes, are located to the south and west. The residences are separated from the Project site by the Torrance Lateral Flood Control Channel (Torrance Lateral), a concrete-lined drainage channel that parallels the southern and western borders of the Project site. To the west of the Project site, extending away from the Project site on Torrance and Del Amo Boulevards, are commercial and light industrial uses. Further north on the west side of Main Street are light industrial uses, with the StubHub Center and California State University, Dominguez Hills located northeast of the project. DD3, which forms a portion of the Project site, is located to the north of Del Amo Boulevard, north of the Property. While the Dominguez Hills Golf Course is now the Porsche Experience Center to the north; overall this is a minor change in the surrounding land use, which has remained stable since the approved Project was approved.

3. PROJECT IMPACTS

a. Methodology

As discussed in greater detail in Chapter II of this SEIR, the purpose of this SEIR is to evaluate the changes considered by the proposed modified Project to the previously approved Project, and to determine whether changes in circumstances surrounding the Project site and the approved Project (if any), and new information (if any), require further analysis under CEQA. Specifically, this section will comparatively analyze the approved Project with the proposed modified Project to determine if (1) substantial changes are proposed in the proposed modified Project that would require major revisions to the FEIR; (2) substantial changes arise in the circumstances of the proposed modified Project's undertaking, requiring major revisions to the FEIR; or (3) new information of substantial importance appears that was not known or available at the time the FEIR was certified. In doing so, the methodology for analyzing impacts regarding land use and planning has been carried forward from the FEIR, and has been updated to reflect the Project site's existing condition as well as to include any new or updated land use and planning plans, programs, or regulations, which have been adopted since the certification of the FEIR.

b. Thresholds of Significance

Thresholds of significance utilized by the City with respect to land use and planning have not changed from those used in the FEIR, and this SEIR therefore utilizes the same thresholds of significance. As set forth in the FEIR, the proposed modified Project would be considered to have a significant land use impact if:

- The proposed modified Project would not be compatible with the existing land use plans, policies or regulations intended to prevent an impact to the environment.⁴
- The proposed modified Project would result in the division, disruption or isolation of an existing established community or neighborhood.
- The proposed modified Project would adversely affect the viability of retail uses within the market area that the proposed modified Project is intended to serve such that the existing retail uses could fall into long-term physical disrepair unable to recover with forecasted increases in economic demand in the future.

c. Analysis of Project Impacts

(1) Characteristics of the Proposed Modified Project as Compared with the Approved Project

Chapter II of this SEIR provides a detailed discussion of the proposed modified Project and compares it to the approved Project. As further described therein, the SPA does not significantly alter the land uses or character of development of the Property and under the SPA the result is a similar mix of residential, commercial, hotel, and entertainment uses as the approved Project. The maximum development limitations, use locations and design standards and guidelines that would be implemented through the SPA are also substantially similar to those imposed by the approved Specific Plan. The following is an overview of the refinements proposed by the proposed modified Project specifically related to land use:

• The total amount of development on the Project site under the SPA would be constrained by the following maximum development limits: a maximum of 1,550 residential units (including the 300 residential units currently entitled to be constructed on DD3 that are not part of the proposed modified Project) and a total of 1,834,833 sq.ft. of commercial uses,⁵ which include 711,500 sq.ft. of regional commercial (including outlets), 890,000 sq.ft. of general commercial and entertainment uses, and 233,333 sq.ft. of hotel floor area, consisting of a total of 350 rooms within two hotels. In addition, commercial FAR is increased from 0.33 to 0.50, to be consistent with the General Plan Land Use Element, although this will not allow

Consistent with the thresholds used by the FEIR, it is important to note that an inconsistency with an individual land use policy or regulation does not, unto itself, necessarily indicate a significant impact to the environment. This criterion of significance is focused on whether a project is generally compatible with and does not frustrate attainment of adopted land use policies. Impacts on the environment pursuant to CEQA ordinarily focus on changes in the physical environment. A plan or policy inconsistency is considered significant if it would directly or indirectly lead to a physical impact on the environment.

This commercial square footage total is currently within PA 2 and PA 3. Unlike the approved Project, the SPA would allow commercial uses in the planning area subject to MU-M land use designation category (PA 1) only with approval by the City of an administrative permit and CEQA review, as applicable. However, this square footage could be transferred onto PA 1 in the future, with contributing property owner's approval, administrative permits, and CEQA review if applicable

overall commercial square footage to exceed the maximum allowable square footage specified above. As noted in Chapter II, the proposed modified Project permits the same overall number of residential units (although without distinction between rental and ownership units contained in the approved Specific Plan) and 160,292 sq.ft. less of overall commercial floor area, but allows, within that overall floor area, for 50 additional hotel rooms in two (rather than one) hotel buildings.⁶

- As shown in Chapter II, Figure II-5, Development Districts—Approved Project, one of the three Development District designations (DD3) has been retained in the SPA. However, as part of the proposed modified Project, DD1 and DD2 have been reconfigured into three planning areas to permit further refinement of design standards and guidelines. Within these planning areas, the proposed land use concept (i.e., residential with neighborhood commercial, regional commercial, recreation/entertainment, restaurants, and hotels) remains substantially similar to the uses for the approved Project, although the boundaries for the CM and MU-M land use designations within the planning areas have been modified as shown on Figure II-6, Planning Areas—Proposed Modified Project.
- Although a mix of uses is still permitted throughout the Project site, under the proposed modified Project, there is a maximum amount of commercial development permitted on PA 2 and PA 3. PA 1 is limited to residential uses unless further discretionary action and approval by the City is granted. Similarly, residential uses on portions of PA 2 are only permitted with discretionary action and approval by the City. In addition, the equivalency program elements of the approved Specific Plan have been removed.
- As with the approved Specific Plan, the conceptual land use plan in the SPA (see Figure II-4, Conceptual Project Components—Proposed Modified Project, presented in Chapter II) is conceptual, and the SPA allows flexibility for alternative development scenarios consistent with the development standards and guidelines in the SPA.
- As with the approved Specific Plan, the SPA authorizes residential densities of up to 60 du/ac in PA 1 and DD3. However, the SPA allows residential units to be placed in portions of PA 2 with an administrative permit approved by the City and allows the City to consider density of between 60 du/ac and 80 du/ac on PA 1, but only upon adoption of a General Plan amendment authorizing the increased density and with CEQA review as applicable.
- As with the approved Specific Plan, the SPA authorizes a CM land use designation on PA 2 and PA 3. As noted below, portions of PA 2 that were previously part of DD1 have, as a result, been given a new land use category under the SPA.

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The density and floor area limitations established pursuant to the SPA would be calculated separately for each planning area and construction of residential units on any planning area would not reduce commercial density square footage allocated to such planning area and construction of commercial uses would not reduce permitted residential density or unit count.

- As with the approved Specific Plan, the SPA also authorizes commercial development on DD3 and PA 1.⁷ However, the SPA only allows commercial development under the MU-M land use designation within PA 1 with the transfer of commercial square footage from PA 2 or PA 3 and contains the additional requirement of an administrative permit, with CEQA review as applicable.
- Under the approved Specific Plan, stand-alone commercial uses with an area greater than 50,000 sq.ft. were not permitted under the MU-M land use designation, but this restriction has been removed from the SPA.
- As further discussed in Section IV.B, Visual Resources, of this SEIR, signage and lighting standards are changed in the SPA and the number and size of signage along the I-405 Freeway has been changed by, among other things, increasing the number of large digital pylon signs from two to four, including double-faced LED digital display on two such signs, and additional Project identification signage, and by removing the more cluttered series of ten monument signs along the frontage of the highway. Under the SPA, additional signage has been provided within the interior of the Property as well. Signage and lighting utilizes more recently available technology to minimize impacts of on-site light and glare and, as with the approved Specific Plan, standards have been developed to minimize impacts to sensitive neighboring uses. Regulation of signage through a comprehensive sign program approved by the City continues to be a requirement under the SPA.
- Under the approved Specific Plan, the area now designated as PA 2 was primarily within DD2 (CM category), but also included a portion of DD1 (MU-M category) where stand-alone (podium) residential or commercial or mixed-use development could take place. Under the SPA, PA 2 continues to allow regional commercial uses, which now expressly includes outlets; however, residential use remains permitted in those areas of PA 2 that were formerly subject to the MU-M land use designation with tranfer of residential units from PA 1 and with an administrative permit and CEQA review, as applicable, as noted above. In addition, development in this planning area may take place in a configuration that allows development on a podium above a single level of parking, and to accommodate this use, allowable heights of buildings in this planning area must be equal to or less than 85 feet for commercial and less than 75 feet for residential. Development design guidelines for elevated commercial podium development have been incorporated into the SPA.
- Under the SPA, PA 3 would remain substantially similar in use to the uses under the approved Specific Plan, with adjustment to the overall amount of commercial development. The SPA would continue to allow regional commercial uses, general retail uses, consisting of major retail stores and smaller neighborhood stores,

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As noted above, DD3 has already received entitlement approvals for 300 units of residential, which includes no commercial development. As such, DD3 is not provided with an allocation of commercial square footage under this SPA. Although commercial uses would typically be permitted on DD3 under the MU-M land use category, in order to obtain an allocation of commercial square footage, a Specific Plan amendment and CEQA analysis as appropriate would be required.

entertainment, and restaurant uses. Instead of one hotel containing 300 rooms, the SPA contemplates two hotels containing 350 rooms.

(2) Modified Project Compatibility with Land Use Plans, Policies, and Regulations

(a) City of Carson

(i) Land Use Plans and Policies

The FEIR determined that the approved Project would be compatible with the existing land use plans, policies or regulations intended to prevent an impact to the environment, and impacts related to City policies would be less than significant (see FEIR [DEIR p. 136]).

As noted above, while the City's General Plan has not been comprehensively updated since the certification of the FEIR, the City has adopted amendments to the Land Use Element and has updated the Housing Element and Economic Development Element since 2006 as would be relevant to the proposed modified Project. As noted below, the consistency changes are provided. Both the Housing Element and Economic Development Element of the General Plan have been updated since certification of the FEIR, some policies have been removed and new policies have been included in this land use analysis, as applicable. Overall, the majority of the goals and policies of the Land Use Element included in this analysis have not substantially changed from those evaluated within the FEIR as they remain relevant to the proposed modified Project. However, due to the modifications of the proposed modified Project, additional land use policies, which were not applicable to the approved Project, have been included within this analysis.

Further, the FEIR included a consistency analysis of the approved Project with the previous Land Use Element, adopted in 1982, due to a (then) pending lawsuit challenging the adoption of the General Plan update in 2004. Subsequently, the 2004 Land Use Element was approved after the certification of the FEIR and before preparation of this SEIR. Therefore, the 2004 Land Use Element is the formally adopted Land Use Element for the City of Carson. Therefore, a consistency analysis of the proposed modified Project with the 1982 Land Use Element is not required in this SEIR and the associated goals, objectives, and policies have been removed from the previous FEIR land use consistency analysis.

Lastly, with the enactment of AB x1 26 (the "Redevelopment Dissolution Act") in 2011, the goals and objectives of the Carson Redevelopment Plan, which were analyzed in the FEIR, do not apply to the proposed modified Project and have been excluded from further analysis within this SEIR.

Since the approval of the approved Project, the City has included projected population growth and development capacity associated with the approved Project in updated City plans and documents, including the Housing and Economic Development Elements, as noted above. Further, like the approved Project, the proposed modified Project continues to help to achieve

several goals and objectives of the General Plan, such as developing a productive reuse of a brownfield site that is compatible with surrounding uses and provides new residential, retail, entertainment, and employment opportunities. The proposed modified Project also still aids the General Plan goal of an expanded commercial base, including encouraging specialty retail development. Further, the City's Housing Element identified a need for 1,698 additional housing units between 2014 and 2021 and identified the Project site as one of several locations in which housing was anticipated to be developed. The proposed modified Project would help the City fulfill its housing need as the proposed modified Project together with development of DD3 could develop up to 1,550 new residential units, which, if fully developed, comprises approximately 91 percent of the City's projected housing need.

Table IV.A-1, Proposed Modified Project Consistency with City of Carson General

Plan, provides consistency analysis between the proposed modified Project and applicable General Plan goals, policies, and objectives. While the majority of the General Plan policies provided in Table IV.A-1 were discussed in the land use and planning and visual resources sections of the FEIR, there are some policies that were applicable to the approved Project but are not applicable to the proposed modified Project and that have been removed, and land use policies that were not applicable to the approved Project but are applicable to the proposed modified Project have been included in this analysis. Specifically, the difference between the FEIR land use analysis and the proposed modified Project's land use analysis is as follows:

- The FEIR land use analysis include policies that pertained to Redevelopment Agencies and Plans (Land Use Policies LU-4.1, LU-5.1, and LU-6.4; Housing Policy H-3.1; and Carson Redevelopment Plan Goals 1 through 14 and Objectives 6 and 7) (see FEIR [DEIR pp. 145–147]). In compliance with AB x1 26, the goals and objectives of the Carson Redevelopment Plan, and redevelopment agencies overall, do not apply to the proposed modified Project and have been excluded from further analysis within this SEIR.
- The FEIR land use analysis included goals and policies listed under General, Residential Land Use, and Commercial Land Use sections of the 1982 Land Use Element (see FEIR [DEIR pp. 140–141]) due to a (then) pending lawsuit challenging the adoption of the General Plan update in 2004, which challenged the 2004 Land Use Element and which was not resolved until it was approved after the certification of the FEIR. However, the 2004 Land Use Element is currently the formally adopted Land Use Element for the City of Carson. Therefore, those goals and policies of the 1982 Land Use Element have been removed from the land use analysis for the proposed modified Project.
- The FEIR discussed the approved Project's consistency with General Plan goals and policies related to visual resources within Section IV.B, Visual Resources, of the FEIR (see FEIR [DEIR pp. 202–204]). The policies included were Land Use Policies LU-12.3, LU-12.5, LU-13.1, LU-13.3, LU-13.4, LU-13.5, LU-13.7, LU-14.1, LU-14.2, and LU-14.4 and Open Space and Conservation Policies OS-1.2 and OS-1.3. Due to the changes and/or modifications of the proposed modified Project,

- the consistency analysis of these policies has been moved to this section (Section IV.A, Land Use and Planning) of this SEIR.
- The FEIR land use analysis did not provide a consistency analysis of the approved Project with Land Use Goal LU-1. The proposed modified Project would provide for a productive reuse of the Property, which is a contaminated, former landfill/ brownfield site, through implementation of the RAP. Therefore, Land Use Goal LU-1 has been incorporated into the land use analysis for the proposed modified Project.
- As stated above, both the Housing Element and Economic Development Element of the General Plan have been updated since certification of the FEIR resulting in changes in certain General Plan policies since the approval of the FEIR. As a result, policies that are no longer applicable have been removed and new policies have been included in this land use analysis. Specifically, Housing Element Policies H-3.1 and H-6.8, which were included in the consistency analysis in the FEIR, have been removed from this land use analysis, and new Housing Element Policies H-2.2, H-2.7, H-3.7 and Economic Development Policies ED-2.7 and ED-8.1 have been included in the land use analysis for the proposed modified Project.
- Differences between the approved Project and the proposed modified Project are
 noted and taken into account where applicable to the General Plan consistency
 analysis. As noted elsewhere, DD3 has been entitled for construction with 300
 housing units and, therefore, is not addressed in the consistency analysis provided
 below, except to the extent that it contributes to the development of a mixed-use
 commercial and residential environment on the Project site.

As shown in Table IV.A-1, as with the approved Project, the proposed modified Project would be consistent with the City's General Plan and would not result in new significant impacts. The proposed modified Project's impacts related to compatibility with land use plans would be similar to those identified in the FEIR (less than significant). As such, the proposed modified Project would not result in any new significant impacts as compared to the approved Project.

Table IV.A-1
Proposed Modified Project Consistency with City of Carson General Plan

Re	leva	ınt	Po	olicy

Analysis of Project Consistency

LAND USE ELEMENT (2004)

- Goal LU-1 Productive reuse of "brownfield" site.
- LU-5.2 Implement and expand strategies to market, attract, and/or retain retail commercial areas and encourage businesses to participate.

- LU-5.3 Identify unique economic opportunities, such as niche markets, that will allow the City to capitalize on its location, its cultural diversity, and the tourism industry in the region.
- LU 6.2 Achieve a sustainable land use balance through provision of incentives for desired uses; coordination of land use and circulation patterns; and promotion of a variety of housing types and affordability.

The proposed modified Project would put to productive use a contaminated, former landfill/brownfield site, via site remediation through implementation of the RAP.

The proposed modified Project would establish the Project site as a signature project along the I-405 Freeway, well located with regard to other freeways. The proposed modified Project would offer high visibility in a new, planned development. It would include entertainment uses to attract visitors and meet the needs of local population. Within specific retail sectors, development on the Property is not anticipated to result in short- or long-term impacts to the regional commercial sector but is projected to have a short-term negative effect on the local-serving commercial sector. However, it is forecasted that these short-term effects would be substantially reduced in the long term as projected household growth continues into the future.

The proposed modified Project would provide a regional facility in a mixed-use development, visibly noticeable along a major freeway corridor. The large scale of the proposed modified Project and the proposed mix of visitor and local serving uses would create an opportunity to support a large range of uses, including specialized markets.

The proposed modified Project would construct an internal circulation system on the Property that would be linked with the regional network and linked to the Avalon Boulevard interchange. The proposed modified Project's mitigation measures would include improvements to reduce impacts on the local road network within the City's jurisdiction where feasible, and where consistent with other General Plan policies. The proposed modified Project, in combination with the 300 residential units entitled for construction on DD3, would add up to 1,550 new housing units, thus adding to the range and mix of housing available in the City of Carson. Retail uses would serve both local (City residents) and regional populations. Within specific retail sectors, development on the Property is not anticipated to result in short- or long-term impacts to the regional commercial sector but is projected to have a short-term negative effect on the local-serving commercial sector. However, it is forecasted that these short-term effects would be substantially reduced in the long term as household growth continues into the future.

Table IV.A-1
Proposed Modified Project Consistency with City of Carson General Plan

	Relevant Policy	Analysis of Project Consistency
LU-6.3	Consider establishing minimum land use density requirements in certain areas such as mixed-use zones to provide more efficient, consistent, and compatible development patterns while also promoting greater potential for pedestrian and transit oriented development.	The proposed modified Project would be implemented under the SPA which allows for mixed-use development in an efficient manner. Density and height limits would allow for mid-rise residential development including densities up to 60 du/ac. The proposed modified Project includes provision for pedestrian and bicycle transit and can be linked to nearby public transit routes.
LU-6.6	Attract land uses that generate revenue to the City of Carson, while maintaining a balance of other community needs such as housing, open space, and public facilities.	The proposed modified Project would include up to approximately 1,834,333 sq.ft. of commercial use that would be generating revenue to the City. The proposed modified Project, in combination with the 300 units entitled for construction on DD3, could add up to 1,550 housing units if fully developed, intermixed with plazas and open space.
LU-7.2	Locate truck intensive uses in areas where the location and circulation pattern will provide minimal impacts on residential and commercial uses.	Commercial loading areas would be screened where appropriate and truck loading activities would be set back from residential uses to minimize impacts on residential uses. Loading areas are located in areas on the Project site that would minimize conflicts with commercial uses.
LU-7.3	Promote the use of buffers between more intensive industrial uses and residential uses.	The proposed modified Project would include no industrial uses. New residential development would not be located adjacent to intensive industrial uses.
LU-8.1	Amend the Zoning Ordinance to provide for those Mixed Use areas identified on the General Plan Land Use Plan.	The land use for the Project site is Mixed-Use Residential. Since the approval of the approved Specific Plan in 2006, the zoning for this site has been consistent with the Mixed-Use land use designation. ⁸
LU-8.3	Locate higher density residential uses in proximity to commercial centers in order to encourage pedestrian traffic and provide a consumer base for commercial uses.	The proposed modified Project includes the potential for high density residential development within a mixed-use project containing up to 1,834,833 sq.ft. of commercial activity. The SPA includes a pedestrian circulation system that connects the various components of the Project site.
LU-11.1	Target potential sites or areas for the development of signature projects.	Project implementation would create a signature project at a location that has been identified as being conducive to such a project, due to the Project site's location along the I-405 Freeway, visual accessibility from the I-405 Freeway and its location within the central area of Carson.

As part of the 2006 amendment to the General Plan (No. 13-05), LU-IM-8.1 was revised to state: "The area formerly occupied by Cal Compact, along the 405 Freeway; uses to be permitted include a mix of High Density Residential, General Commercial, and Regional Commercial."

Table IV.A-1

Proposed Modified Project Consistency with City of Carson General Plan

	Relevant Policy	Analysis of Project Consistency
LU-11.2	Encourage development of desired uses such as quality retail, restaurant uses, and entertainment in targeted areas.	The proposed modified Project would include up to 1,834,833 sq.ft. of commercial space on the Property. Based on the current Conceptual Project Components Plan, up to 711,500 sq.ft. of luxury outlet retail uses, 100,000 sq.ft. is designated for restaurants, and 130,000 sq.ft. is designated for commercial recreation/entertainment. The SPA would encourage the development of these use within a concentrated area within the City.
LU-12.3	Review landscape plans for new development to ensure that landscaping relates well to the proposed land use, the scale of structures, and the surrounding area.	The SPA establishes landscaping concepts for the various areas of the Project site and identifies a palette of permitted plans. The SPA requires site plan and design review for compliance with the SPA to ensure that the proposed landscape plan is consistent with the General Plan objectives and the more-specific requirements of the SPA.
LU-12.5	Improve City appearance by requiring landscaping to screen, buffer and unify new and existing development. Mandate continued upkeep of landscaped areas.	The SPA requires that landscaping within the Property should be consistent in design and cohesive among planning areas. The SPA incorporates landscape requirements to buffer commercial uses from existing residential uses to the south and west of the Project site and requires development setbacks to establish additional buffers. Developers shall be responsible for maintaining landscaped areas within the Property.
LU-13.1	Promote a rhythmic and ceremonial streetscape along the City's arterial roadways, continuing the use of landscaped medians.	The Project continues to promote maintenance of landscaped medians throughout the City. In addition, landscaping is required by the SPA along internal public streets, and the SPA identifies landscaping concepts for each of the roadways.
LU-13.3	Continue and, when possible, accelerate the undergrounding of utility lines throughout the City.	Per Section 5.3.4 of the SPA, utility lines would be placed underground whenever feasible.
LU-13.4	Encourage architectural variation of building and parking setbacks along the streetscape to create visual interest, avoid monotony and enhance the identity of individual areas.	Once adopted, the Property would be subject to the Design Guidelines in Section 7 of the SPA, which cover site and landscape design standards, as well as architectural standards for each planning area. Other improvements, such as dedicated public plazas and public art, are required in the Entertainment Area and enhance the quality of the pedestrian environment.
LU-13.5	Continue to require landscaping treatment along any part of a building site which is visible from City streets.	Del Amo Boulevard and Main Street are designated as landscape theme areas in the SPA. Landscaping would also be provided along the internal streetscapes, including along Street A and public portions of Street B, which would be designated as a public street.

Table IV.A-1

Proposed Modified Project Consistency with City of Carson General Plan

Relevant Policy		Analysis of Project Consistency
LU-13.7	Ensure proper maintenance of parkways along arterial streets and landscaping of private property visible from the public right-of way.	The City would be responsible for maintaining parkways along arterial streets, and the developer(s) would be responsible for installing and maintaining landscape in privately owned areas visible from public right-of-way.
LU 14.1	Work with Caltrans to provide and maintain an attractive freeway environment in Carson, including access ramps.	The SPA provides landscape and signage guidelines for the Property and includes a Freeway Edge theme area facing the I-405 Freeway to ensure consistency of signage and plantings in this area. The City would continue to be responsible for the landscape and maintenance of the slope, and would coordinate with Caltrans to ensure acceptable design.
LU-14.2	Require new commercial or industrial development adjacent to and visible from freeways and freeway ramps to incorporate full architectural and landscape treatment of the building on the freeway side.	Landscape standards in the SPA and landscape, site design, and architectural guidelines in SPA Section 7 provide standards for building treatment for development and landscaping on the Property. Buildings would provide a signature entry into the City of Carson. Additionally, final architectural designs are subject to administrative review and approval by the City prior to issuance of building permits.
LU-14.4	Provide entry markers with landscaping on the major arterials.	Project entries from arterials roads are designated within the SPA as "Entries" landscape theme areas, and would be subject to enhanced landscaping standards.
LU-15.1	Encourage the location of housing, jobs, shopping, services and other activities within easy walking distance of each other.	The proposed modified Project, in combination with the 300 residential units entitled for construction on DD3, includes mixed uses with up to 1,550 residential units and up to 1,834,833 sq.ft. of commercial use within the Property. The conceptual site design within the SPA includes a pedestrian circulation system that connects the various components of the Property, thereby facilitating the type of pedestrian activity targeted by this policy.
LU-15.2	Maintain a diversity of housing types to enable citizens from a wide range of economic levels and age groups to live in Carson.	The proposed modified Project, in combination with the 300 residential units entitled for construction on DD3, could construct up to 1,550 units in total if fully built, which would contribute to the range of housing opportunities within the City of Carson.
LU-15.3	Ensure that community transportation facilities are connected to a larger transit network.	The proposed modified Project's internal circulation system would provide access to Main Street and Avalon Boulevard via Del Amo Boulevard, with accessibility to the I-405 Freeway via the ramp constructed at Avalon Boulevard. In addition, new bus stops may be located on Street A and/or Del Amo Boulevard.

Table IV.A-1

Proposed Modified Project Consistency with City of Carson General Plan

	Relevant Policy	Analysis of Project Consistency
LU-15.4	Develop a center focus within the community that combines commercial, civic, cultural and recreational uses.	The Project site is located within the central part of the City. The proposed modified Project's development with a variety of commercial and entertainment venues would contribute development at a location amidst the Carson Civic Center, the StubHub Center, California State University at Dominguez Hills, the South Bay Pavilion, and the Victoria Golf Course and Park, thus adding to the centrality of such community uses.
LU-15.5	Ensure that the design of public spaces encourages the attention and presence of people at all hours of the day and night.	The proposed modified Project is anticipated to offer entertainment and dining as well as shopping opportunities. These activities would continue into the evening hours. The SPA includes standards for public art and landscaping to enhance the public spaces.
LU-15.6	Ensure development of pedestrian oriented improvements which provide better connections between and within all developments while reducing dependence on vehicle travel.	The proposed modified Project includes an internal system of pedestrian sidewalks and pathways that would interconnect all portions of the Property.
CITY OF C	CARSON GENERAL PLAN, HOUS	ING ELEMENT (2014-2021)—POLICIES
H-1.3	Promote economic well being of the City by encouraging the development and diversification of its economic base.	The proposed modified Project would include up to 1,834,833 sq.ft. of commercial uses. Commercial uses are anticipated to include a broad array of uses; e.g., regional commercial, including outlet uses, neighborhood commercial, restaurants, commercial recreation/entertainment, and hotel uses. Within specific retail sectors, development on the Property is not anticipated to result in short- or long-term impacts to the regional commercial sector but is projected to have a short-term negative effect on the local-serving commercial sector. However, it is forecasted that these short-term effects would be substantially reduced in the long term as household growth continues into the future.
H-1.5	Establish and maintain development standards that support housing development while protecting the quality of life.	The proposed modified Project, in combination with the 300 residential units entitled for construction on DD3, would provide up to 1,550 housing units. These housing units would be developed subject to development and design guidelines established in the SPA, addressing such items as but not limited to site planning, building massing, color and materials, and building detailing.
H-2.2	Assure residential safety and security	Residential, mixed-use, and commercial development would be subject to the lighting standards set forth in SPA Section 6.7, which provide minimum nighttime standards to ensure safety. In addition, a Community Safety Center would be provided for the proposed modified Project for use by the Property's private security force and the Los Angeles County Sheriff's Department.

Table IV.A-1
Proposed Modified Project Consistency with City of Carson General Plan

	Relevant Policy	Analysis of Project Consistency	
H-2.7	Require excellence in the design of housing through the use of materials and colors, building treatments, landscaping, open space, parking, environmentally sensitive and sustainable building design.	Residential and residential mixed-use buildings would be required to comply with the site design, landscape, and architectural standards established in SPA Section 6.4 and Section 7. The architectural intent of the proposed modified Project is to create a development that serves as a signature gateway into the City of Carson, and provides significant aesthetic improvement over the existing landfill.	
H-3.1	Facilitate and encourage diversity in types, prices, ownership, and size of single-family homes, apartments, townhomes, mixeduse housing, transit-oriented development, and live-work housing.	The proposed housing units (up to 1,550 units in total with the 300 units entitled for construction on DD3) would add multi-family residential units of varying sizes, which would increase the variety of housing opportunities within the City. In addition, the proposed modified Project allows for residential development in close proximity to commercial development, and live-work housing is permitted in portions of the Project site.	
H-3.2	Work to expand the resource of developable land by making underutilized land available for development.	The proposed modified Project would put to productive use a contaminated, former landfill/brownfield site, via site remediation through implementation of the RAP.	
H-3.6	Promote the development of multifamily housing.	The SPA designates approximately 15 acres in PA 1 and PA 2 permitting multi-family residential units at densities of up to 60 du/ac (or on PA 1, at greater density, up to 80 du/ac with a General Plan amendment).	
H-3.7	Encourage residential development along transit corridors and in close proximity to employment, transportation and activity centers.	The proposed modified Project. in combination with the 300 residential units entitled for construction on DD3, provides for up to 1,550 residential units in mixed-use buildings or in close proximity to a major commercial center. Additionally, the proposed modified Project is in close proximity to several other major commercial centers, as well as the StubHub Center.	
CITY OF	CITY OF CARSON GENERAL PLAN, ECONOMIC DEVELOPMENT ELEMENT (2013)—POLICIES		
ED-1.2	Encourage the development of quality housing.	The proposed modified Project, in combination with the 300 residential units entitled for construction on DD3, would include up to 1,550 new housing units. These units would be required to meet SPA standards for building design, landscaping, and other development standards, including security requirements, minimum open space standards and development of recreational opportunities for residents, and interior noise level restrictions that would encourage development of quality housing.	

Table IV.A-1

Proposed Modified Project Consistency with City of Carson General Plan

Relevant Policy		Analysis of Project Consistency
ED-1.4	Strengthen the physical image of Carson through visual enhancement along freeway corridors, major traffic routes, and areas adjoining residential neighborhoods. To this end: • Aggressively pursue code enforcement activities; • Develop good design standards; and • Establish a City identity.	The proposed modified Project has been designed to take advantage of its location adjacent to the I-405 Freeway. The proposed modified Project would (1) present a substantial new development along the freeway edge that would attract public attention; (2) provide identification of the proposed modified Project's visitor-oriented commercial recreation/entertainment activities through building placement and/or signage; (3) include, through SPA requirements, a set of sign and landscape standards and guidelines that would integrate the proposed modified Project's proposed signage program with the overall aesthetic concept for the proposed modified Project; and (4) include, through the SPA, provisions for landscaping/aesthetic treatment along the proposed modified Project's freeway edge.
ED-1.6	Provide appropriate infrastructure to support economic development.	The proposed modified Project would include an internal infrastructure system that is designed to meet all onsite uses and would not have significant impacts on existing services.
ED-2.7	Identify unique economic opportunities, such as niche markets, that will allow the city to capitalize on the city's location in Southern California, the community's cultural diversity, and the tourism industry in the region.	The proposed modified Project would provide a regional facility in a mixed-use development, visibly noticeable along a major freeway corridor. The large scale of the proposed modified Project and the proposed mix of visitor and local serving uses would create an opportunity to support a large range of uses, including specialized markets, and the outlet uses would provide a new tourist destination in the City.
ED-2.8 (formerly and in FEIR, ED-3.6)	Capitalize on potential physical and market linkages among land uses.	The proposed modified Project is a mixed-use project that, together with the 300 units on DD3, would include up to 1,550 units. These uses would provide an estimated 4,550 new residents that would support the proposed modified Project's commercial components. The population growth generated proposed modified Project would also support other commercial enterprises in the vicinity of the Property, and the commercial component would serve populations in surrounding neighborhoods.
ED-3.3 (formerly and in FEIR, ED-4.3)	Support public/private efforts and link infrastructure and service costs with development projects.	The proposed modified Project is a remediation and infrastructure project financed through a combination of public and private funds, and a series of private development projects financed by applicants and developed upon land currently owned by the Carson Planning Reclamation Authority. The project includes public financing mechanisms that could include, but are not limited to, community facilities districts and state and federal funding that may become available.

Table IV.A-1

Proposed Modified Project Consistency with City of Carson General Plan

	Relevant Policy	Analysis of Project Consistency
ED-3.4 (formerly and in FEIR, ED-4.4)	Encourage development opportunities that increase economic gains to the City.	The proposed modified Project would include up to 1,834,833 sq.ft. of space for commercial development. Commercial activities would include a broad array of uses; e.g., regional commercial, neighborhood commercial, restaurants, commercial recreation/entertainment, and hotel uses that would generate additional tax revenues for the City.
		Within specific retail sectors, development on the Property is not anticipated to result in short- or long-term impacts to the regional commercial sector but is projected to have a short-term negative effect on the local-serving commercial sector. However, it is forecasted that these short-term effects would be substantially reduced in the long term as household growth continues into the future.
ED-6.1 (formerly and in FEIR, ED-7.1)	Encourage the diversification of land uses, while not alienating existing businesses or industries requiring space in Carson.	The proposed modified Project would increase the diversification of land uses by (1) adding substantial amounts of new commercial and residential development; (2) including commercial activities that do not presently occur, or are non-present in the City; e.g., outlet and certain types of commercial recreation/entertainment; (3) including housing that varies in density and relationship to commercial activity from the existing prevalent housing. The City has large amounts of industrial land available, including sites in the vicinity of the proposed modified Project, most of it located in districts better suited for industrial activity than the proposed modified Project. Within specific retail sectors, development on the Property is not anticipated to result in short- or long-term impacts to the regional commercial sector but is projected to have a short-term negative effect on the local-serving commercial sector. However, it is forecasted that these short-term effects would be substantially reduced in the long term as household growth continues into the future.
ED-6.2 (formerly and in the FEIR, ED-7.2)	Improve the actual and perceived image of the City through improved design standards, amenities, security, continuing public improvements and positive advertising campaigns.	Development on the Property would occur pursuant to various design and development standards established in the SPA to ensure harmonious relationships between uses; e.g., standards regarding site planning, building massing, color and materials, building detailing, etc. These standards are more detailed than those currently included within the City Zoning Ordinance.
ED-8.1	Identify target or niche industries or companies suitable for Carson looking for large areas of space, diversifying the economic base.	The SPA allows for the possibility of outlet uses, which would serve as a regional draw to Carson, as well as attracting a significant tourist clientele. The outlets, proposed for PA 2, would occupy approximately 46 acres of land.

Table IV.A-1

Proposed Modified Project Consistency with City of Carson General Plan

Relevant Policy		Analysis of Project Consistency
ED-9.2	Encourage development of desired uses such as quality retail, restaurant uses, and entertainment in target areas	The proposed modified Project's proposed commercial uses include regional commercial, neighborhood commercial, restaurants, commercial recreation/entertainment, and hotel uses, all organized in a visitor-oriented district. The proposed modified Project is of sufficient size to offer a range of such uses and support the anticipated inclusion of quality retail and restaurant uses. The proposed modified Project is located within the City at a highly visible location, one targeted for such development in existing plans.
ED-10.1 (formerly and in FEIR, ED-11.1)	Encourage the revitalization and cleanup of underutilized and contaminated land.	The proposed modified Project would put to productive use a contaminated, former landfill/brownfield site, via site remediation through implementation of the RAP.
ED-10.2 (formerly and in FEIR, ED-11.2)	Maintain proper infrastructure levels and flexible financing options to encourage remediation and revitalization of brownfields.	The proposed modified Project is a remediation and infrastructure project financed through a combination of public and private funds, and a series of private development projects financed by applicants and developed upon land currently owned by the Carson Planning Reclamation Authority. The project includes public financing mechanisms that could include, but are not limited to, community facilities districts and state and federal funding that may become available.
ED-10.3 (formerly and in FEIR, ED-11.3)	Understand and promote available land inventory and initiate strategies to develop balanced land use planning.	The proposed modified Project would put to productive use a contaminated, former landfill/brownfield site, via site remediation though implementation of the RAP. It would increase the amounts of housing and commercial activity within the City. Further, it would implement a mixed-use development with a mix/balance of uses that could serve as a model for mixed-use development.
ED-10.4 (formerly and in FEIR, ED-11.4)	Encourage development of compatible uses and phase out non-conforming uses.	The SPA authorizes development of a vertically or horizontally integrated mixed-use project and encourages interaction among these uses to promote a lively community center. The SPA also recognizes the security and privacy needs of residents and contains standards and guidelines to shield on-site residential uses from the noise and activity likely to take place at the Property's commercial sites. The proposed modified Project's commercial activity would avoid conflict with residential development to the south and southwest of the Project site due to vertical and horizontal distance, an intervening landscaped slope and design features for that development.

Table IV.A-1
Proposed Modified Project Consistency with City of Carson General Plan

	Relevant Policy	Analysis of Project Consistency	
OPEN SP	OPEN SPACE AND CONSERVATION ELEMENT		
OS-1.2	Maintain existing landscaping along the City's major streets and expand the landscaping program along other arterial streets throughout the community.	Del Amo Boulevard and Main Street are designated as one of the landscape theme areas in the SPA. Project entries from arterials roads are designated within the SPA as "Entries" landscape theme areas and would be subject to enhanced landscaping standards. Landscape would also be required along the internal streetscapes, including along Street A and public portions of Street B, which would be designated as a public street.	
OS-1.3	Require that adequate, usable and permanent private open space is provided in residential developments.	Open space is required for residential development in Section 5.2 of the SPA. Additional requirements for private open space on the Property are detailed in SPA Table 6.2-1, General Development Standards.	
OS-4.3	Facilitate physical collection of recyclable waste.	Per SPA Section 5.3.4, the proposed modified Project is required to provide recycling services for construction debris, and general recycling for residential and commercial uses should be continued after construction ends. A comprehensive recycling plan should be submitted with site plan and design submittals to the City.	

SOURCE: RE Solutions, 2017.

(ii) Land Use Plan Designations

The FEIR determined that the approved Project would be compatible with the Land Use map designations on the 2004 General Plan, and would be supportive of the accompanying policies and regulations that support the existing plan map designations, making the approved Project compatible with the existing land use plans, policies or regulations intended to prevent an impact to the environment such that impacts related to City policies would be less than significant (see FEIR [DEIR p. 150]).

Like the approved Project, the proposed modified Project would maintain the existing land use designation of Mixed Use –Residential, and is not proposing any change in use or designation. The Mixed Use – Residential land use designation allows for a maximum of 60 du/ac, which is consistent with the SPA. As was anticipated within former DD1 of the approved Project, residential units are permitted within PA 1 and portions of PA 2, with a maximum of 1,250 units permitted within the planning areas.

However, residential use is not currently proposed in PA 2 under the proposed modified Project. In order to provide for the same number of residential units authorized for the approved Project, the SPA would permit residential densities in excess of 60 du/ac to a maximum of 80 du/ac to allow for 1,250 dwelling units in PA 1. This would require a General Plan amendment to increase density. If more units are proposed in PA 1 than permitted by the 60 du/ac limit, a General Plan amendment would be required, and the SPA authorizes up to 80 du/ac in PA 1 a General Plan amendment. This SEIR analyzed the maximum density allowable in order to evaluate the potential for environmental impacts associated with the maximum development permitted by the SPA and to allow this SEIR to be utilized in connection with any future General Plan amendment that might be requested for this purpose.

In summary, with development of housing at a density of no more than 60 du/ac, the proposed modified Project would be consistent with the existing land use designation of Mixed-Use Residential and other policies and objectives established for the Property by the General Plan. Therefore, development of the proposed modified Project would be consistent with the General Plan and no new impacts would occur. Development up to 80 du/ac is authorized only if the City concurrently adopts a General Plan amendment to allow such increase. This SEIR has been prepared in a manner that would allow its use for evaluation of the impacts of that General Plan amendment and density increase. With adoption of that General Plan amendment, development of the proposed modified Project would be consistent with the General Plan and no new impacts would occur. Therefore, as with the approved Project, the proposed modified Project would be compatible with the existing General Plan plans, policies, and regulations of the City including those related to land use, economic development, and housing, and impacts related to consistency with the General Plan would be similar to those identified in the FEIR (less than significant).

(iii) Zoning Regulations

In accordance with State law, a specific plan may be utilized for the systematic implementation of a City's general plan. As anticipated by the FEIR, consistent with State law, a zoning designation of SP-10 was adopted for the Project site. Like the approved Project, the proposed modified Project will still retain the Specific Plan zoning designation and the use of a specific plan to provide a set of land use and zoning regulations for the Property. Those regulations would continue to govern the development of the Property as further described in Chapter II, and no amendment to the City's zoning ordinance is being proposed. As such, the proposed modified Project would remain in compliance with the City's zoning ordinance. Therefore, as with the approved Project, the proposed modified Project would be compatible with the existing zoning regulations of the City and impacts related to consistency with the

Note that residential units from PA 1 can be transferred to PA 2 with administrative permit, at a maximum density of 60 du/ac.

City's zoning would be similar to those identified in the FEIR (less that significant). As such, the proposed modified Project would not result in any new significant impacts as compared to the approved Project.

(b) SCAG Regional Transportation Plan/Sustainable Communities

The FEIR included a consistency analysis of the approved Project and SCAG's Regional Comprehensive Plan and Guide (RCPG) and concluded that the approved Project would be compatible with the existing land use plans, policies or regulations intended to prevent an impact to the environment, and impacts related to SCAG policies would be less than significant (see FEIR [DEIR p. 162]).

Since the approval of the Project, anticipated growth from the approved Project has been incorporated into subsequent SCAG RTP/SCS growth projections. As noted in Chapter II, the proposed modified Project (together with development on DD3) retains the same number of residential dwelling units proposed for the Property as compared to the approved Project, and proposes a reduction in commercial square footage as also compared to the approved Project. Because the growth anticipated by the approved Project has already been incorporated in the SCAG RTP/SCS growth projections, and since the proposed modified Project would have equal to or fewer growth impacts than the approved Project, then the proposed modified Project would also be consistent with the SCAG RTP/SCS growth projections. No new impacts related to consistency with SCAG policies and projections would occur and impacts would be similar to those identified in the FEIR (less than significant). As such, the proposed modified Project would not result in any new significant impacts as compared to the approved Project.

(c) Los Angeles County Congestion Management Plan (CMP)

The FEIR evaluated the approved Project's consistency with the 2004 CMP within Section IV.C, Traffic, Circulation, and Parking, of the FEIR (see FEIR [DEIR pp. 217–268]). Like the FEIR, this SEIR also evaluates traffic impacts associated with the proposed modified Project relative to the 2010 CMP in Section IV.C, Traffic and Circulation, of this SEIR.

(d) South Coast Air Quality Management District Air Quality Management Plan

The FEIR evaluated the approved Project's consistency with the 2003 Air Quality Management Plan (AQMP) within Section IV.G, Air Quality, of the FEIR (see FEIR [DEIR pp. 402–405]). Similar to the FEIR, air quality impacts associated with the proposed modified Project relative to the AQMP are also evaluated within Section IV.G, Air Quality, of this SEIR. As described in Section IV.G, the growth anticipated from the approved Project has been incorporated into subsequent SCAG RTP/SCS growth projections, including the 2016–2040 RTP/SCS described above. Thus, the proposed modified Project's growth would be consistent with the growth forecasts incorporated in the RTP/SCS and would be consistent with SCAG's

RTP/SCS goals. As a result, the proposed modified Project would be consistent with the growth projections for the period between 2020 and 2040 for the City as a whole. The proposed modified Project would therefore also be consistent with the growth projections as contained in the City's General Plan, and ultimately consistent with the growth projections in the AQMP, since the AQMP is based on RTP/SCS growth forecasts. Therefore, the proposed modified Project would be consistent with the policies and goals of the AQMP, and no new impacts relative to AQMP land use policies and regulations would occur. As such, the proposed modified Project would not result in any new significant impacts as compared to the approved Project.

(3) Impacts on Existing Land Use Patterns

As identified in the FEIR (see FEIR [DEIR pp. 163–165]), the approved Project would be an infill development located within an existing urban setting, and would provide a continuation of existing development patterns within the northwestern portion of Carson. Furthermore, the approved Project would not disrupt important linkages between existing districts surrounding the Project site, since the surrounding uses vary and are located within distinct areas and would not introduce uses that would alter the urban character of the existing land uses surrounding the Project site. Thus, the FEIR determined that the approved Project would not physically divide an established community.

The land uses in the vicinity of the Property remain substantially the same as described and depicted in the FEIR (see FEIR [DEIR p. 163]). As described in the FEIR, surrounding land uses consist of residential uses to the south and west (and further west and north, light-industrial and commercial uses); to the north, a nursery and the former Dominguez Hills Golf Course (now the Porsche Experience Center) and to the east, regional commercial, commercial, office uses, single-family homes and a golf course across the I-405 Freeway that borders the Project site on the east. With the exception of the change of the Dominguez Golf Course to the Porsche Experience Center north of DD3, which is a change from a more to less sensitive land use, none of these land uses have substantially changed since certification of the Final EIR.

Similar to the approved Project, the proposed modified Project would include commercial uses, hotels, and residential development in the same general locations (i.e., on the Property) as analyzed in the FEIR. In addition, the proposed modified Project proposes a similar type and layout of land uses compared to the approved Project. As noted in the FEIR, the Property lies within a distinct area, separate from the residential development to the south and west with an open space buffer formed by the Torrance Lateral and the adjacent landscaped slope. To the north, Del Amo Boulevard separates the Property from the proposed multifamily residential development on DD3. As noted in the FEIR, the northwest boundary of the Project site faces Main Street, which currently demarcates a boundary between light industrial uses to the west and non-industrial uses to the east. The Property would still maintain a mixed-use residential and commercial uses along that edge of the Property. Finally, to the east, the Property fronts on the I-

405 Freeway. Further, the proposed modified Project would also be considered infill development within an existing urban environment. Therefore, similar to the approved Project, the proposed modified Project is consistent with the City's vision for the Property and the uses surrounding the Property and thus, the proposed modified Project would not physically divide an established community and would not interfere with the activities at adjacent off-site locations. No new impact would occur and impacts associated with the proposed modified Project would be similar to those identified in the FEIR (less than significant). As such, the proposed modified Project would not result in any new significant impacts as compared to the approved Project.

(4) Impacts on the Sustainability of Existing Uses

A Retail Impact Study (RIS) was prepared by Stanley R. Hoffman Associates for the approved Project in 2005 and has been updated for the proposed modified Project in 2017. The updated Urban Decay Retail Market Impact Analysis (RIA) prepared for the proposed modified Project is included in Appendix B, Urban Decay Retail Market Impact Analysis, of this SEIR. The purpose of the RIA is to provide an economic analysis, in accordance with the CEQA, to determine a project's potential to create urban decay through project implementation. A project's economic effects on trade area competitors are not an environmental impact under CEQA unless they can be traced to direct physical changes in the market area (i.e., physical deterioration of existing retail centers/facilities). As CEQA Guidelines Section 15131(b) explains: "Economic or social effects of a project shall not be treated as significant effects on the environment. An EIR may trace a chain of cause and effect from a proposed decision on a project through anticipated economic or social changes resulting from the project to physical changes caused in turn by the economic or social changes. The intermediate economic or social changes need not be analyzed in any detail greater than necessary to trace the chain of cause and effect. The focus of the analysis shall be on the physical changes."

Urban decay is generally defined as substantial physical deterioration, due to store closures and long-term vacancies in existing shopping centers, that impairs the health, safety, and welfare of the surrounding community. Physical deterioration includes, but is not limited to, abandoned buildings and commercial sites in disrepair, boarded doors and windows, long-term unauthorized use of properties and parking lots, extensive graffiti on structures, dumping of waste, or overturned dumpsters on properties, dead trees and landscaping, extensive litter, uncontrolled plant overgrowth, and homeless encampments. CEQA does not trigger an automatic presumption that urban decay would occur as a result of other business closures. However, store closures can lead to conditions of urban decay.

The basis of a retail market impact analysis is determining what amount of regional and local serving retail is supportable under existing and future residential, employment and visitor growth conditions, and whether the new retail development would adversely impact competitive stores and lead to a substantial increase in retail vacancies or loss in profits, which thus causes a

domino effect of store closures and long-term vacancies in existing shopping centers. In order to assess the potential for urban decay, the accepted industry vacancy threshold of 10 percent or greater was used to indicate the stability of the surrounding retail market.

The FEIR evaluated the approved Project's potential to cause adverse economic effects in the surrounding market area, which could lead to secondary environmental impacts, such as urban decay in the area surrounding the Project site (see FEIR [DEIR pp. 165–166]). Based on the RIS prepared for the approved Project (refer to Appendix J of the FEIR), the FEIR determined development of the approved Project would have a short-term negative effect upon existing retail uses, most likely in smaller, older retail centers, within the market area served by the approved Project. However, this impact would be alleviated in the mid-term (i.e., by 2025) as the local market grows and matures and the new retail activities would not likely cause any widespread, prolonged urban decay. Impacts on the physical environment from the approved Project induced vacancies or effects on sales would be less than significant.

Similar to the approved Project, the proposed modified Project would introduce additional commercial square footage into the existing retail market surrounding the Project area. The updated RIA assessed whether the regional commercial, outlets, hotel, restaurant and neighborhood serving commercial uses introduced by the proposed modified Project would result in increased vacancies and loss in retail sales in the surrounding market and ultimately cause physical degradation through urban decay. Similar to the RIS, the updated RIA defined a 5.0-mile radius for the primary trade area for regional retail and a 2.5-mile radius for the local serving trade area. Additionally, a significant visitor component from tourists outside the primary 5.0-mile radius for regional retail was included to capture the expected patronage of shoppers from Pacific Rim countries at the proposed premium outlets. Additionally, since the proposed modified Project is anticipated to be completed in 2023, the updated RIA analyzed two growth periods to capture both short- and long-term impacts. The two growth periods are (1) 2016–2025 and (2) 2016–2040, which are based on SCAG's 2016–2040 RTP forecasts. Further, these forecasts are supplemented with identified proposed and planned projects in the market area based on a survey of jurisdictions within the defined trade areas.

The results of the updated RIA have been summarized below; for the detailed discussion refer to Appendix B, Urban Decay Retail Market Impact Analysis, of this SEIR. For the regional commercial impact analysis, the updated RIA projected the level of vacancies to increase from 5.0 percent in existing conditions to 9.3 percent over the 2016–2025 short-term period. While this increase in the level of vacancy may cause some retailers to experience loss in retail sales, the projected increase is still below the 10 percent threshold indicating these short-term impacts would most likely not lead to urban decay. For the 2016–2040 long-term period, the vacancy level is projected to decline to 6.0 percent as growth continues into the future. The long-term vacancy level would be sufficiently near the existing level of 5.0 percent, and as such is not considered to cause a loss of retail sales nor increase vacancies to the point of inducing urban

decay. Therefore, while the introduction of regional commercial uses with implementation of the proposed modified Project would result in a short-term increase in retail loss and increased vacancies, these effects are not considered significant, especially as long-term effects would decline back near existing conditions. Impacts on the physical environment from induced vacancies or effects on sales with the introduction of regional commercial uses under the proposed modified Project would be less than significant.

For the local-serving commercial impact analysis, the updated RIA projected the level of vacancy to increase from 4.5 percent in existing conditions to 11.2 percent over the 2016–2025 short-term period. The projected increase in vacancies exceeds the 10 percent threshold, where some surrounding local-serving uses could experience loss in sales, which could potentially lead to closures and ultimately to urban decay. However, the duration of these effects would depend on the rate of growth in the local household demand. Over the 2016–2040 long-term period, the vacancy level is anticipated to decline to a very low level of 0.6 percent as household growth continues into the future. The long-term vacancy level would be very low and as such is not considered to cause a loss of retail sales nor increase vacancies to the point of inducing urban decay. Therefore, while the introduction of local-serving commercial uses with implementation of the proposed modified Project would increase the vacancy level to 11.2 percent, this projected increase is slightly over the 10 percent threshold, where these effects are anticipated to cause a temporary spike in the market and would be substantially reduced over the long term. Impacts on the physical environment from induced vacancies or effects on sales with the introduction of local-serving commercial uses under the proposed modified Project would be less than significant.

4. MITIGATION MEASURES

The FEIR did not identify mitigation measures for Land Use impacts required for the approved Project, because there were no significant impacts identified as a result of approved Project implementation. Since impacts related to land use and planning associated with the proposed modified Project would be substantially similar to those stated in the FEIR, no new mitigation measures are required.

5. CUMULATIVE IMPACTS

a. Compatibility with Land Use Plans, Policies and Regulations

The potential for cumulative impacts occurs when the impacts of a proposed project in combination with the impacts of cumulative projects yield impacts that are greater than the impacts that would occur separately. Similar to the proposed modified Project, the identified cumulative projects within the City of Carson are subject to compliance with City regulations and subject to review by the City for compliance with the General Plan and its zoning regulations. It is reasonable to assume that future projects approved in the surrounding area

would have been found, as part of their respective approval processes, to be in compliance with local and regional planning goals and policies. If a cumulative project were found to be in conflict with applicable land use plans, policies and regulations, it is reasonable to assume that its approval would involve findings that the related development did not have adverse land use impacts or that mitigation measures were incorporated into the development to reduce potential land use impacts to less than significant levels.

As described above, the proposed modified Project would be compatible with all applicable land use policies, plans, and regulations. Therefore, the proposed modified Project would not contribute to a cumulative effect of multiple projects having adverse effects on the environment due to their incompatibility with regulatory requirements related to land use. No new cumulative impacts related to compatibility with land use plans, policies, and regulations would occur and impacts would be similar to those identified in the FEIR (less than significant). As such, the proposed modified Project would not result in any new significant cumulative impacts as compared to the approved Project

b. Impacts on the Existing Land Use Pattern

A list of cumulative projects is provided in Section III.B, Cumulative Development, within Table III.B-1, Cumulative Projects, with their locations identified on Figure III.B-1, Cumulative Project Locations. The list includes a total of 27 cumulative projects. These projects are diverse, varying in function, size, and location. As such, they would provide urban in-fill within the local area of each project, but would not comprise a major change in the land use patterns within the City or region.

Similar to the proposed modified Project, the cumulative projects would be developed within areas of the City and region meant for residential, mixed-use, and commercial uses as designated in the applicable General Plans and Zoning Ordinances. The City and region are urban and developed, and cumulative projects would be built on already developed parcels or as infill developments, where the underlying land uses are already connected with surrounding land uses. Further, with the exception of DD3, which is located north of Del Amo Boulevard (which was conceived as part of and is governed by the same Specific Plan as the proposed modified Project), the closest cumulative Project is located approximately 1 mile southwest of the Property, while the majority are located further than 1 mile away from the Property. Therefore, development of the proposed modified Project in conjunction with the surrounding cumulative projects would not physically divide the surrounding communities. No new cumulative impact associated with the physical division of an established community would occur and impacts would be similar to those identified in the FEIR (less than significant) (see FEIR [DEIR p. 167]). As such, the proposed modified Project would not result in any new cumulatively considerable significant impacts as compared to the approved Project.

c. Impacts on the Sustainability of Existing Uses

The analysis of the proposed modified Project's impacts on the sustainability of existing uses is based on a methodology that incorporates anticipated growth, inclusive of surrounding related projects. Such growth is combined with that of the proposed modified Project in estimating the amount of future retail services. Therefore, the impacts that have been conservatively attributed to the proposed modified Project are, in fact, cumulative impacts. As indicated above, implementation of the proposed modified Project is not anticipated to result in short- or long-term impacts to the regional commercial sector but is projected to have a short-term negative effect on the local-serving commercial sector. However, it is forecasted that these short-term effects would be substantially reduced in the long term as household growth continues into the future. Therefore, the proposed modified Project would not result in urban decay of the surrounding retail market, and no new cumulative impacts would occur. Cumulative impacts would be similar to the those identified in the FEIR (less than significant) (see FEIR [DEIR p. 168]).

6. LEVEL OF SIGNIFICANCE AFTER MITIGATION

In summary, the proposed modified Project would not result in any new significant impacts as compared to the approved Project assessed in the FEIR. As compared to the approved Project, the proposed modified Project changes will not require major revisions to the FEIR because of the involvement of new significant impacts that were not previously evaluated. Specifically, with regard to land use and planning (1) no substantial changes are proposed in the land uses allowed on the Property under the proposed modified Project, which would require major revisions to the FEIR; (2) no substantial changes arise in the circumstances of the proposed modified Project's undertaking, requiring major revisions to the FEIR; and (3) no new information of substantial importance appears that was not known or available at the time the FEIR was certified. The proposed modified Project would remain in compliance and consistent with City and State land use plans, policies or regulations intended to prevent an impact to the environment. The proposed modified Project would also not result in the division, disruption or isolation of an existing established community or neighborhood. As compared to the approved Project, the proposed modified Project would also not substantially adversely affect the viability of retail uses within the market area such that the existing retail uses could fall into long-term physical disrepair unable to recover with forecasted increases in economic demand in the future. Since the proposed modified Project would not exceed the thresholds of significance, and since no new impacts would occur with the proposed modified Project, impacts associated with land use and planning would be similar to those of the approved Project assessed in the FEIR (less than significant), and no new or worsening impacts would occur in comparison with the approved Project.

Comparison to FEIR Findings: No New Significant Impact. No New Mitigation Measure(s) Identified or Required.

IV. ENVIRONMENTAL IMPACT ANALYSIS B. VISUAL RESOURCES

1. INTRODUCTION

This section addresses the potential impacts of the proposed modified Project relative to visual resources compared to the approved Project assessed by the FEIR, and supplements Section IV.B, Visual Resources, of the FEIR where there are changes to the regulatory setting. In all other respects, the FEIR analysis remains applicable to the proposed modified Project. This supplemental analysis compares the proposed modified Project to the approved Project to determine if the proposed changes will require major revisions to the FEIR because of the involvement of any new significant impacts as a result of changes to the project, changes in circumstances or new information of substantial importance that was not previously evaluated. To determine whether the proposed modified Project would result in any new impacts, or increases in the severity of impacts previously disclosed in the FEIR, this analysis considers the impacts that would result from construction and operation activities that would take place within the Property under current environmental and regulatory circumstances, and compares these impacts to those identified in the FEIR.

The following analysis describes the regulatory setting, and visual environment of the Property (which remains largely as was described in the FEIR). The evaluation of visual resources on the Property is largely based on the viewpoints used from the FEIR. Changes to the proposed lighting and signage has been evaluated for the proposed new lighting and signage program in the Specific Plan Amendment (SPA).

The analysis concludes that the proposed modified Project would result in similar types of visual and aesthetic impacts compared to the approved Project, and like the approved Project, with the application of the mitigation set forth in the FEIR would not result in any additional significant project impact. This analysis further concludes that, as affects visual resources, there are no changes in circumstances arising since the preparation of the FEIR or new information not known at the time the FEIR was prepared that would require further analysis under CEQA. All previously adopted mitigation measures as updated remain applicable and continue to be applied to the proposed modified Project. Like the approved Project, the proposed modified Project would still result in the conversion of the undeveloped vacant site to a developed use, causing a loss of spaciousness that contributes to the aesthetic quality of the Property and its surroundings. Consistent with the FEIR and for the reasons specified therein, this SEIR concludes that this impact remains a significant impact that is inherent in the development of the Property, and thus cannot be mitigated or avoided. As with the approved Project, with the updated mitigation measures specified below, the proposed modified Project has reduced all other impacts to less

than significant, and has substantially the same impacts as the approved Project. No new impact, as compared to the approved Project, is identified.

2. ENVIRONMENTAL SETTING

a. Policy and Regulatory Environment

(1) City of Carson

(a) General Plan of the City of Carson

As identified within the FEIR (see FEIR [DEIR p. 179]), the Carson General Plan includes numerous guidelines pertaining to the design of the physical environment. Such Guidelines are included in the 2004 General Plan within the Land Use and Open Space and Conservation Elements. The Carson General Plan's guidelines related to visual resources have not changed since the FEIR, and the FEIR analysis remains fully relevant. See further discussion regarding consistency with land use and the City's General Plan in Section IV.A, Land Use and Planning.

(b) City of Carson, California, Municipal Code

Light Trespass illuminance limits are generally guided by the local Municipal Code or State of California building or energy codes. The City's Municipal Code does not include specific limits to light trespass illuminance. The City of Carson adopts the California Building Code and the California Energy Code.

(2) State of California

(a) California Code of Regulations, Title 24

Title 24 of the California Code of Regulations (CCR), also known as the California Building Standards Code, consists of regulations to control building standards throughout the State. The following components of Title 24 include standards related to lighting:

The California Building Code (Title 24, Part 1) and California Electrical Code (Title 24, Part 3) stipulate minimum light intensities for safety and security at pedestrian pathways, circulation ways, and paths of egress. All exterior lighting will comply with the requirements of the California Building Code and California Electrical Code.

The California Energy Code (CEC) (Title 24, Part 6) stipulates allowances for lighting power and provides lighting control requirements for various lighting systems (in Appendix C, District at South Bay Lighting Study, of this SEIR, see Appendix D, CALGreen 2016 Building Energy Efficiency Standards, at pages 40 and 41), with the aim of reducing energy consumption through efficient and effective use of lighting equipment.

The California Green Building Standards Code, which is Part 11 of Title 24, is commonly referred to as the CALGreen Code. Paragraph 5.1106.8, Light pollution reduction, requires that all non-residential outdoor lighting must comply with the following:

- The minimum requirements in the CEC for Lighting Zones 1–4 as defined in Chapter 10 of the California Administrative Code as noted above; and
- Backlight, Uplight and Glare (BUG) ratings as defined in the Illuminating Engineering Society of North America's Technical Memorandum on Luminaire Classification Systems for Outdoor Luminaires identified as IESNA TM-15-07 Addendum A; and
- Allowable BUG ratings not exceeding those shown in Table A5.106.8 in Section 5.106.8 of the CALGreen Code (excerpt included in Lighting Study Appendix E, Table A5.106.8 in Section 5.106.8 of the CALGreen Code); or
- Comply with a local ordinance lawfully enacted pursuant to Section 101.7, whichever is more stringent.

(b) Caltrans

As discussed in the FEIR and consistent with the proposed modified Project, construction would not include roadway improvements that are under the jurisdiction of Caltrans (see FEIR [DEIR pp. 180–181]). However, the Property faces the Interstate 405 (I-405) Freeway (the San Diego Freeway), which is a Caltrans facility, and the internal Project roadways would link to a new Freeway ramp improvement at Avalon Boulevard that was not present at the time the FEIR was approved. As with the approved Project, the proposed modified Project would also be expected to consider Caltrans Guidelines at locations where it would have aesthetic impacts on a Caltrans facility and effects on driver safety. The Highway Design Manual continued to provide guidelines for Caltrans projects and generally addresses landscaping, grading, and signage considerations. For lighting effect on driver safety, the applicable regulation is California Vehicle Code, Division 11.

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Table 5.106.8, Footnote 2, defines the location of the Property line for the purpose of evaluating compliance with the BUG ratings and provides that: "For property lines that abut public walkways, bikeways, plazas and parking lots, the property line may be considered to be 5 feet beyond the actual property line for purpose of determining compliance with this section. For property lines that abut public roadways and public transit corridors, the property line may be considered to be the centerline of the public roadway or public transit corridor for the purpose of determining compliance with this section." See Appendix E of SEIR Appendix C.

Rules of the Road. California Vehicle Code Chapter 2, Article 3, stipulates limits to the location of light sources that may cause glare and impair the vision of drivers.²

b. Existing Visual Environment

As more fully discussed in the FEIR and consistent with the existing setting, the Property is an undeveloped parcel, pocketed within an urbanized area (see FEIR [DEIR pp. 169–175]). Updated photographs of the Property are shown in **Figure IV.B-1**, **Viewpoint Location Map**, through **Figure IV.B-5**, **Viewpoints 13 through 16**, and match the viewpoints used in the FEIR. Views from these viewpoints remain substantially similar to views depicted in the FEIR, with some minor alterations due to recent activities related to remediation, capping, and operation and maintenance of the former landfill as was anticipated by the FEIR. In the Property's current condition, Viewpoint 1 at the entrance to Street A has a green mesh fence, while in 2006 the mesh fence was transparent allowing the rest of the closed road to be seen. Viewpoint 2 is unchanged and is of the vacant related project suite for Development District 3 (DD3). Viewpoint 3 is no longer paved, has a steeper berm along the side of the road with green mesh fencing on its base and transparent fencing along the top, and has an additional decomposed granite side road. While Viewpoint 3 has undergone change, this view is not accessible to the public. Some additional vegetation has grown since the FEIR was prepared, and is the only notable change in Viewpoints 4 through 7 and Viewpoint 9. Compared to the FEIR, Viewpoint 8 now has a construction trailer located on the Property, which was anticipated. No changes to views have occurred from the I-405 Freeway in Viewpoints 10 through 12, or along Main Street in Viewpoints 14 and 15. Viewpoint 13 now includes a construction trailer on the Property at the intersection of Main Street and Del Amo Boulevard, which was the type of temporary structure also anticipated by the FEIR. The Dominguez Hills Golf Course north of DD3 has been redeveloped into the Porsche Driving Experience, which can be seen in Viewpoint 16. Previously an open golf course, this view now includes open, hilly terrain with a paved race track.

considered vision impairing when its brilliance exceeds the values listed below.

ARTICLE 3. Offenses Relating to Traffic Devices [21450–21468] (Article 3 enacted by Stats. 1959, Ch. 3.), Section 21466.5. "No person shall place or maintain or display, upon or in view of any highway, any light of any color of such brilliance as to impair the vision of drivers upon the highway. A light source shall be

[&]quot;The brightness reading of an objectionable light source shall be measured with a 1½-degree photoelectric brightness meter placed at the driver's point of view. The maximum measured brightness of the light source within 10 degrees from the driver's normal line of sight shall not be more than 1,000 times the minimum measured brightness in the driver's field of view, except that when the minimum measured brightness in the field of view is 10 footlamberts or less, the measured brightness of the light source in footlambert shall not exceed 500 plus 100 times the angle, in degrees, between the driver's line of sight and the light source."



SOURCE: Vestar 2017; Nadel, 2017

The District at South Bay

Figure IV.B-1 Viewpoint Location Map





SOURCE: ESA, 2017; SCS Engineers, 2017

The District at South Bay

Figure IV.B-2 Viewpoints 1 through 4





SOURCE: ESA, 2017; SCS Engineers, 2017

The District at South Bay

Figure IV.B-3 Viewpoints 5 through 8





SOURCE: ESA, 2017

The District at South Bay

Figure IV.B-4 Viewpoints 9 through 12











SOURCE: ESA, 2017

The District at South Bay

Figure IV.B-5 Viewpoints 13 through 16



(1) Aesthetic Character

As explained in greater detail in the FEIR, the Property is predominantly bare soil that becomes green with nonnative grasses following winter rains and turns brown by summer (see FEIR [DEIR pp. 175–176]). Since the adoption of the FEIR, the Property has undergone, and continues to undergo remediation, capping, and maintenance of the former landfill, consistent with the FEIR. The Property currently includes construction trailers and equipment, in the northwest portion of the Property, along with soil and material stockpiles in various locations. Similar to the Property's condition at the time of approval of the approved Project, the Property still does not contain unique, natural resources or other features that would be considered aesthetic resources. The large expanse of undeveloped land still allows exposure to large visual expanses and provides a feeling of spaciousness, thereby providing a visual break from surrounding development.

The area south and southwest of the Property remains a residential neighborhood consisting of single-family residential units and mobile home parks. The eastern edge of the Property still faces the I-405 Freeway, and beyond that the Dominguez Channel, a large flood control facility. The western boundary of the Property continues to face Main Street, with off-site uses of light industrial interspersed with vacant area, a commercial landscape nursery, and residential uses. The Property is bounded by Del Amo Boulevard to the north. A residential development has been approved for development on DD3, beyond which is an open space/utility corridor with a commercial landscape nursery, grassy area, and utility lines, and the Porsche Driving Experience is beyond that. The larger regional context of the Property still includes an extremely large range of uses: residential neighborhoods, commercial corridors, centralized commercial centers, light and heavy industrial uses and recreational uses, as well as schools and service facilities. While the character of development varies at a local scale, these uses continue to blend into an overall pattern of a developed, urban/suburban environment, without remarkable organizing features.

(2) Views

As previously analyzed in the FEIR (see FEIR [DEIR pp. 176–179]) and consistent with the Property's existing setting, the view-scape in the Project area is that of an urban environment characterized by an array of interspersed developments, open spaces, and infrastructure improvements. As assessed in the approved Project, the Project vicinity does not contain notable features that would typically fall under the heading of view resources, e.g., unique geologic features, natural areas, etc. The Property still lies in a large basin with little vertical differentiation that might provide scenic quality (e.g., hillside areas). The nearest notable geologic feature, the Palos Verdes Peninsula, remains located approximately 5 miles southwest of the Property.

As described within the FEIR, there are notable features that might catch the eye of individuals travelling through the area. The port for the Goodyear Blimp, which is now Wingfoot

Two, a rigid-frame blimp replacement, continues to be located on the north side of the I-405 Freeway in the vicinity of the Property. This site has visual value due to its expanse of open space and, when the blimp is in port, its familiarity as a cultural symbol. One minor change in current conditions as compared to those assessed in the FEIR is related to the large fiberglass statue of a man located on the south side of the I-405 Freeway. In the previous FEIR, this statue held a golf club advertising the Dominguez Hills Golf Course. Currently, the fiberglass statue is in the same location; however, it holds a motorsport flag advertising the Porsche Driving Experience. While the advertisement has changed, the statue remains similar to the previous FEIR and continues to have historic value (as an extant example of roadside mimic architecture), and may be a recognizable visual feature for some travelers through the area.

The Property continues to be visible from the I-405 Freeway (along the northeast edge of the Property), Del Amo Boulevard (east/west thoroughfare along the northern portion of the Property), and Main Street (a north/south thoroughfare) and the Torrance Lateral define the western edge of the Property. None of these roadways is designated as a scenic highway. No notable view changes have occurred along these public roadways since the FEIR, with the exception of additional construction equipment on the Property due to site remediation activities, which was anticipated in the FEIR.

As was analyzed in the FEIR, the Property continues to be visible from private vantage points. Along the south and southwest boundary of the Property, there are still approximately 100 residential units, including mobile home units and single-family residences. Distant views are also available from the Porsche Driving Experience (previously the Dominguez Hills Golf Course) north of DD3. Views from these and other private locations have not changed since the FEIR was prepared, although additional construction may mean that the Property is visible from more locations.

3. ENVIRONMENTAL IMPACTS

a. Methodology

As discussed in greater detail in Chapter II, Modified Project Description, the purpose of this SEIR is to evaluate the changes considered by the proposed modified Project to the approved Project, and to determine whether changes in circumstances surrounding the Project site and the approved Project (if any), and new information (if any), require further analysis under CEQA. Specifically, the methodology is to comparatively analyze the approved Project with the proposed modified Project to determine if (1) substantial changes are suggested in the proposed modified Project that would require major revisions to the FEIR; (2) substantial changes arise in the circumstances of the proposed modified Project's undertaking, requiring major revisions to the FEIR; or (3) new information of substantial importance appears that was not known or available at the time the FEIR was certified. In doing so, the underlying methodology of

assessing impacts regarding visual resources continues to be relevant and has been carried forward from the FEIR, and has been updated to reflect the Property's existing condition as well as any changes in regulatory requirements. For the signage and lighting analysis, the governing regulations have been updated and the lighting impact analysis methodology is more detailed and more accurate (see FEIR [DEIR pp. 181–183] for additional details and discussion regarding methodology used for aesthetics, views, shade/shadow, and artificial lighting).

b. Thresholds of Significance

Thresholds of significance utilized by the City with respect to visual resources have not changed from those used in the FEIR, except as further updated and supplemented below:³

(1) Aesthetics

As set forth in the FEIR, the proposed modified Project would have a significant impact on aesthetics if:

- The proposed modified Project would substantially alter, degrade or eliminate the existing visual character of the area, including valued existing features, natural open space or other valued resources;
- The proposed modified Project features would substantially contrast with the visual character of the surrounding area and its valued architectural image; or
- The implementation of the proposed modified Project would preclude the attainment of existing aesthetics regulations as expressed in applicable regional and City planning documents.

(2) Views

The proposed modified Project would have a significant impact on views if:

- It would result in a substantial adverse effect on a scenic vista.
- The proposed modified Project's development would substantially obstruct an existing view of a valued view resource from a prominent view location.

(3) Shade/Shadow

The proposed modified Project would have a significant impact if:

• Shadow-sensitive uses would be shaded by structures on the Property for more than 3 hours between the hours of 9:00 a.m. and 3:00 p.m., between late October and early April, or more than 4 hours between the hours of 9:00 a.m. and 5:00 p.m. between April and late October.

This threshold has been revised to be more conservative by focusing only on the Property, which would allow for analysis of DD3 as a potential future sensitive receptor.

(4) Artificial Lighting

The proposed modified Project would have a significant impact if:

- The proposed modified Project would substantially alter the character of off-site areas surrounding the Property.
- The lighting for the proposed modified Project would interfere with the performance of an off-site activity.

In addition, these thresholds have been updated in accordance with CEQA Guidelines Appendix G (14 California Code of Regulations Sections 15000–15387), as follows:

• Would the proposed modified Project:

Create a new source of substantial light and glare which would adversely affect day or nighttime views in the area? The determination of significance takes into account the following factors:

- The change in ambient nighttime levels as a result of project sources; and
- The extent to which project lighting would spill off the Property and affect adjacent residential properties.

Criteria used to assess whether the proposed modified Project would exceed the thresholds identified above and thereby create a significant impact with regard to artificial light or glare are:

- The proposed modified Project exceeds 0.74 foot-candle at the property line of a residential zoned property and therefore adversely changes the ambient light level at residential properties.
- The proposed modified Project creates new high-contrast conditions visible from a field of view from a residentially zoned property.
- In addition, based on the California Vehicle Code requirements identified above, the proposed modified Project would create a significant impact with regard to artificial light or glare effects on drivers of motor vehicles if the proposed modified Project generates light intensity levels greater than 1,000 times the minimum measured brightness in the driver's field of view, except when the minimum values are 10 footlamberts (fL) or less, the measured brightness of the light source in footlamberts shall not exceed 500 plus 100 times the angle, in degrees, between the driver's field of view and the light source.

c. Project Design Features

As with the approved Specific Plan, the SPA elements do not define specific building sizes, locations and appearance, but they do set a framework that limits the potential effects of development on the visual qualities of the surrounding area. The proposed modified Project is subject to the regulations, standards, and guidelines in the SPA, which are more thoroughly discussed in Chapter II. Under the SPA, there is a change to perimeter building setbacks to reduce the required building setback from the I-405 Freeway from 110 feet to 75 feet in Planning

Area (PA) 2, the only planning area adjacent to the I-405 Freeway. Setbacks from the I-405 Freeway for DD3 remain unchanged.

The SPA also addresses project design features that provide guidelines for aesthetic elements. The following features were considered elemental to evaluation of aesthetics impacts in the FEIR and have been updated below:

Landscaping: Minor modifications and additions have been provided for the plant list; however, the intent to use native species in a manner that provides uniformity to the Property remains unchanged, including the creation of landscape theme areas. However, landscape on the Property will not be required to substantially coordinate with landscaped entries of adjacent developments, although enhanced landscape is still required at project entrances. Additionally, in order to allow visibility of the Property's signage, vertical landscape and/or hardscape elements along internal streetscapes may be placed every 50 feet on average (instead of every 50 feet on center), with the ability to plant required trees outside the right-of-way, so long as the number of trees provided is greater than or equal to the number of trees required for the length of the street.

Buildings: Buildings may be constructed from materials other than colorful stucco.

Signage: The proposed modified Project will provide a hierarchy of signs similar to the approved Project, with some modifications. As further set forth in SPA Section 6.6, the proposed modified Project will feature four freeway pylon signs of which two will be static digital signs with a maximum height of 70 feet above the I-405 Freeway, one will be of the same height but may include two-sided digital display, changeable message display, color changing illumination and electronic message display and a fourth will be a two sided LED digital display with changeable message display, color changing illumination and electronic message display and with an 88-foot maximum height above the I-405 Freeway. Up to 12 Vertical Project Name ID signs (38-foot maximum height) may be permitted, a maximum of two of which may be constructed along the Main Street frontage. Other wall-mounted signs and billboards, ranging in height from 6 to 30 feet, may be mounted on walls or roofs per **Table IV.B-1, General Sign Standards. Figure IV.B-6, Conceptual Sign Plan**, shows the conceptual sign plan.

Conceptual Sign Requirements as Set Forth in the SPA: Because of their high visibility, signs are prominent elements of the physical environment of the proposed modified Project. The conceptual sign requirements set forth in the SPA will be governed by a comprehensive sign program that will provide consistency in design style and direction for placement and size of signs, including a standardized way-finding program. The SPA's conceptual sign requirements also include provisions that ensure that lighting from signs shall not intrude or impact adjacent residential uses. The comprehensive sign program proposed by any applicant shall be consistent with the conceptual sign requirements in the SPA, and subject

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⁴ Certain pylon signs may have off-site advertising as noted in the SPA.

to approval by the City. Final sign designs, including designs for any electronic message center sign, may vary and will be provided as part of a comprehensive sign program that shall be reviewed and approved by the City.

Table IV.B-1
General Sign Standards

	Maximum			_	Nighttime Luminance ^b	
Sign Type ^a	Number			Notes	Digital	Static
Freeway Icon Pylon: ^{c, d} Double Faced LED Digital Display	1 – PA 2 Developer	88 feet	65 feet	The supporting pylon width will be 10 to 25 feet. The 20-foot-high and 60-foot-long LED digital display board with changeable message display, color changing illumination, and electronic message display will be attached to sign panels or a sign frame that will be a maximum of 25 feet high and 62 feet wide. The top of the reader board will be located no higher than 88 feet above measured I-405 Freeway elevation. Height is measured from the elevation of I-405 Freeway immediately adjacent to the sign location.	500 cd/m ²	
Freeway Icon Pylon: ^{c, d} Digital Display Allowed	1 – City of Carson	70 feet	48 feet	The base width will be 10 to 25 feet. If the base is greater than 15 feet, the sign will taper up to 15 feet at top. The sign face will be a 14-foot by 48-foot LED digital or static billboard display attached to the pylon. Height is measured from the elevation of the I-405 Freeway immediately adjacent to the sign location. This sign would allow off-site advertising if appropriate permits are obtained.	500 cd/m ²	500 cd/m ²
Freeway Icon Pylon ^{c, d}	2 – PA 3 Developer	70 feet	25 feet	The base width will be 10 to 25 feet. If the base is greater than 15 feet, the sign will taper up to 15 feet at top. Up to six tenant signs on two sides. Tenant signs may be 6 feet by 20 feet each. PA 3 Center ID may be placed on pylon. Height is measured from the elevation of the I-405 Freeway immediately adjacent to the sign location.	_	500 cd/m ²

Table IV.B-1 **General Sign Standards**

	Maximum	Maximum Sign Dimensions			Nighttime Luminance ^b	
Sign Type ^a	Number	Height	Width	Notes	Digital	Static
Vertical Project Name ID	6 – PA 2 Developer	38 feet	15 feet	Sign consists of three components: 7-foot by 15-foot base, 4-foot by 5-foot by 38-foot-high project tower, 2-foot by 8-foot by 18-foot-high tenant sign panel with up to six tenant signs of that size on each side. Height is measured from the finished pad. Signage could alternatively, at developer's discretion, meet standards for Vertical Project Name ID established for PA 3.	_	500 cd/m ²
Vertical Project Name ID	4 – PA 3 Developer	38 feet	15 feet	While the overall height is 38 feet with tower element, the sign consists of 14-foot-high by 8-foot-wide base element with tenant signage up to 6 feet high by 8 feet wide. Height is measured from the finished pad. Signage could alternatively, at developer's discretion, meet standards for Vertical Project Name ID established for PA 2.		500 cd/m ²
Main Street Entry Monument with Tower Element	1 – PA 2 Developer 1 – PA 3 Developer	38 feet	15 feet	While the overall height is 38 feet with tower element, the sign consists of a 14-foot-high by 8-foot-wide base element with tenant signage up to 6 feet high by 8 feet wide. Height is measured from the finished pad.	_	500 cd/m ²
Parking Garage Signage and Commercial – Elevated Podium Wall Signage	Multiple – PA 2 Developer	30 feet	300 feet	The multiple letter and graphic signs for tenant names and static billboard display shall be allowed on parking garage and commercial elevated – podium wall area facing Freeway, Street A, and site parking fields with 60 percent maximum wall coverage.	_	500 cd/m ²
Wall Mounted Project ID Exterior ^e	2 – PA 2 Developer 2 – PA 2 Developer	12 feet 8 feet	330 feet 230 feet	Individual illuminated sign letters located on building wall.	_	500 cd/m ²
Plaza Project ID Exterior (Entry SW and NW corners)	2 – PA 2 Developer	10 feet	12 or 24 feet	Individual illuminated sign letters. Two to four letters each location at grade-level exterior plaza.	_	500 cd/m ²

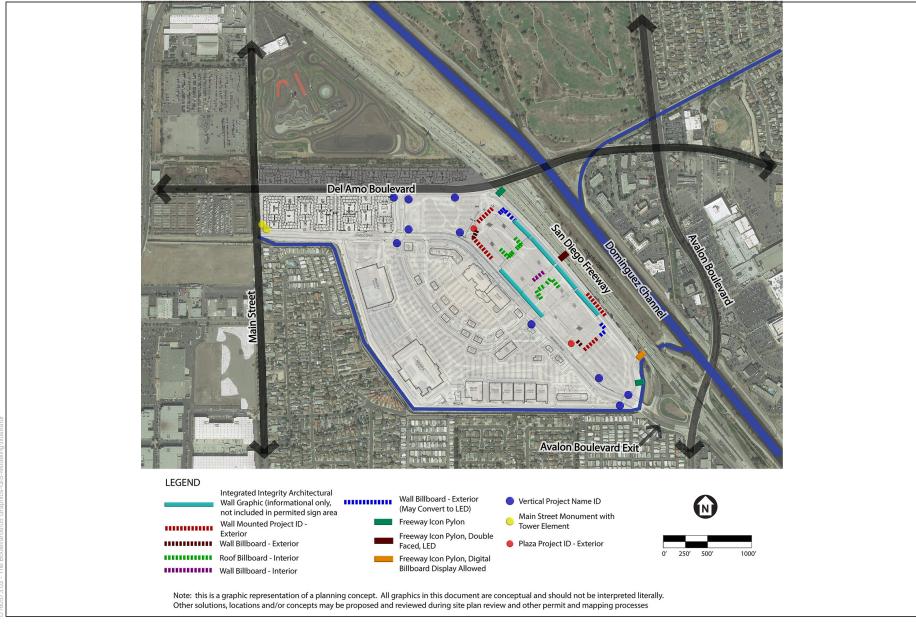
Table IV.B-1 General Sign Standards

	Maximum	Maximum Sign Dimensions			Nighttime Luminance ^b	
Sign Type ^a	Number	Height	Width	Notes	Digital	Static
Wall Billboard Exterior	4 – PA 2 Developer	20 feet	60 feet	Static billboards with external front illumination. Billboards allowed to extend above top of building wall. Billboards allowed to convert to digital LED display board in the future.	500 cd/m ²	500 cd/m ²
Wall Billboard Exterior	2 – PA 2 Developer	14 feet	48 feet	Static billboards with external front illumination. Billboards allowed to extend above top of building wall.	_	500 cd/m ²
Roof Billboard Interior	8 – PA 2 Developer	10 feet	34 feet	Static billboards with external front illumination. Billboards located on roof above top of building wall.	_	500 cd/m ²
Wall Billboard Interior	1 – PA 2 Developer	14 feet	48 feet	Static billboard with external front illumination. Billboard allowed to convert to digital LED display board in the future.	500 cd/m ²	500 cd/m ²
Integrated Identity Architectural Wall Graphic ^f	6 – PA 2 Developer	(2) 27 feet(1) 24 feet(1) 24 feet(1) 24 feet(1) 24 feet	265 feet235 feet220 feet	Painted Project ID Name integrated into architectural wall vertical fin design.	_	_

NOTES:

 $cd/m^2 = candelas per square meter$

- ^a All free-standing signs may be double-sided.
- b If any portion of the illuminated surface of the sign is visible from a residential use within 1,000 feet of said sign at night, then the proposed modified Project sign luminance shall be reduced to less than 300 cd/m² at night.
- Signage adjacent to the freeway will comply with applicable Caltrans standards and requirements.
- Prior to approval of any Development Plan or comprehensive sign program, the applicant requesting approval of a Development Plan or comprehensive sign program shall conduct a view analysis to determine the exact location of the freestanding freeway-oriented signs to ensure maximum visibility and maximum usability of all freestanding signs. Every effort shall be made to preserve the visibility of the freeway-oriented wall mounted signs for PA 2.
- ^e Wall-mounted project ID exterior signs may project above top of building wall.
- Integrated Identity Graphics/Murals are not considered signage; they are considered as architectural features, which are excluded from permitted signage area.



SOURCE: RE Solutions

The District at South Bay





d. Project Impacts

(a) Impacts on the Aesthetic Character of the Area

As with the analysis in the FEIR, this SEIR evaluated the impact of the proposed modified Project on aesthetics by evaluating five issues: (1) whether proposed development would substantially affect a valued aesthetic resource; (2) whether the visual character of the proposed development would substantially contrast with the visual character of surrounding development; (3) whether the Project would adversely affect existing retail activities so as to cause increased vacancies, with adverse effects on aesthetic character at off-site locations; (4) whether proposed development would cause greater effects than anticipated in existing regulations; and (5) whether the Project's construction activities would cause substantial changes to the environment of a nature different than those identified for the proposed modified Project.

(i) Impacts on Valued Resources

The Property remains substantially vacant and as described in the FEIR (see FEIR [DEIR p. 194]) contains no unique features or valued visual features. However, as identified in Section IV.B.2, Environmental Setting, the Property has been subject to minimal improvements since approval of the approved Project, including the temporary land-fill operations and construction of maintenance trailers, a foundation for the permanent operations building, two blowers and two combustion flare areas, and other infrastructure improvements to support future utility connections. Despite these improvements, consistent with the FEIR's description of the Project site, the Property contributes to the visual quality of the area by offering visual relief from development, and a sense of spaciousness to those surrounding and traveling through the area of the Property. The FEIR identified a significant impact related to the loss and conversion of the existing openness of the Project site to a developed appearance with the approved Project (see FEIR [DEIR p. 194]). The FEIR identified this change as having the greatest effect for travelers along Del Amo Boulevard, which is a public view corridor traveled by a large number of people. Because the Property remains substantially undeveloped, this SEIR also concludes that implementation of the proposed modified Project is also anticipated to result in significant and unavoidable impacts related to the conversion of the appearance of the Property.

Under the approved Project, the maximum base height for commercial buildings was limited to 32 feet, with allowable increases of up to 42 feet for secondary features (permitted only on portions of the building) and increases of up to 52 feet for major features (also permitted only on portions of the building). Although base heights for commercial-only buildings were limited to a maximum of 32 feet, maximum heights of 85 feet were allowed for mixed-use buildings. Under the SPA and the proposed modified Project, the primary change is the addition of the Commercial – Elevated Podium height category, which also allows buildings up to 85 feet high, with no permitted increases for secondary or major features. However, it is anticipated that the Commercial – Elevated Podium buildings will generally be approximately 55 feet. While this

is an increase for buildings in the commercial category, it does not exceed the maximum height of 85 feet for Mixed-Use buildings, which was permitted in the approved Project. These changes would not impact valued visual resources, as buildings of the same height were permitted in the approved Project, although in a different height category. Moreover, except as described above, maximum allowable building heights from the approved Project have not been changed in the proposed modified Project. Additional information on maximum permitted building heights is included in Table 6.2-2 of the Specific Plan.

(ii) Impacts on Contrast with Existing Development

a) Relationship to Nearby Uses

As identified in the FEIR (see FEIR [DEIR pp. 195–198]), residential neighborhoods are located to the south and southwest of the Property, the I-405 Freeway is located along the eastern edge, open space and commercial uses are located to the north, and light industrial uses are located to the west of the Property. None of these nearby uses has changed since the FEIR, although a development plan for 300 units in DD3 has been approved by the City. As with the approved Project, the proposed modified Project includes a berm separating the Property from the I-405 Freeway, although under the proposed modified Project, setbacks have been reduced in this area bringing the buildings closer to the freeway. Although the proposed modified Project would maintain the uses described in the FEIR, the proposed modified Project may differ visually from the approved Project due to its modified layout. These changes include changes to proposed site lighting and signage and inclusion of a podium building in PA 2 with a structure above surface level parking that will add height to this structure along the I-405 Freeway frontage as compared to the approved Project. These modifications may result in some changes from the approved Project to the proposed modified Project's relationship with nearby uses. However, due to the large size of the Property, the limited nature of changes in the development program, and the mitigation measures imposed with respect to signage and location of uses, these changes are not considered significant.

Both the approved and proposed modified Project would place uses on the Property that vary from existing off-site residential uses. Similar to the approved Project, the proposed modified Project would place commercial uses on the south and southwest edges of the Property, residential along the northern edge and commercial uses and a berm along the eastern edge. Unlike the approved Project, which allowed a theatre and hotel in proximity to residential uses to the south of the Property, under the proposed modified Project large parking areas would be located at the northeast and southeast corners, and smaller commercial uses would be spread within the center of the Property. Although it is at a height of up to 85 feet, the proposed building on PA 2 are more than 250 feet from the residential uses, and is sufficiently set back so as not to result in contrast with existing residential development. If the conceptual plans for the proposed modified Project were changed to permit development of tall buildings adjacent to existing

residential uses, the variation in heights of buildings could result in a potentially significant impact. However, such an impact can be reduced to a less than significant level through the provision of a greater setback for these uses to increase the amount of buffer area, in order to reduce the exposure of nearby residents to such a contrast. As with the approved Project, a mitigation measure is proposed below to reduce such an impact to a less than significant level.

As with the approved Project, the proposed modified Project would add a new developed appearance to the top of the Property along the I-405 Freeway. In addition, the approved Project and proposed modified Project would add signage along the I-405 Freeway. Table IV.B-1 above provides the general sign standards set forth in the SPA, and Figure IV.B-6 shows the conceptual sign plan for the proposed modified Project. The conceptual sign plan for the proposed modified Project differs from the conceptual sign plan for the approved Project with respect to, among other things, sign type, use of digital display, number of signs, sign dimensions, location of signs, and features. In addition, the proposed modified Project differs with respect to lighting, and it features lit wall and building signage that would vary in location, size, and intensity from that analyzed in the FEIR. Similar to the FEIR, mitigation measures would be required to ensure that the presentation of signs along the I-405 Freeway and the use of signage and lighting are in compliance with the conceptual sign requirements set forth in the SPA, to avoid a significant impact.

b) Regional Context

The Property is located within an urbanized area with residential neighborhoods to the south and light industrial and scattered commercial uses to the west. Since the FEIR was approved, the Dominguez Hills Golf Course north of the Property has been redeveloped into the Porsche Driving Experience. The approved Project and proposed modified Project would include commercial uses on a large portion of the Property, which would include large tracts of parking areas and landscaping features. This development under the approved Project and proposed modified Project would have a character that is typically expected at interspersed locations throughout this region. Similar to the approved Project, the proposed modified Project also proposes a mixed-use space with mid-rise residential units in the northwest portion of the Property. The proposed modified Project includes podium commercial retail development that will have the appearance of a taller building due to the construction of the development on a podium with parking beneath. This development would be located in an active urban area adjacent to and close to nearby freeways and would contribute to the urban form in an expected manner, and would therefore be in keeping with the overall character of the regional area. However, unlike the approved Project, which stated that densities would be 60 dwelling units per acre (du/ac) on the Property, under the proposed modified Project it is possible that densities could be increased up to 80 du/ac on PA 1 with a General Plan Amendment. Nevertheless, like the approved Project, the proposed modified Project would provide an in-fill development among the regional context, and contribute to the general urban character of the area (see FEIR [DEIR pp. 198–199]).

c) Environmental Operations and Equipment Station

As analyzed in the approved Project, the proposed modified Project must include an operations and equipment station for the landfill gas extraction system, groundwater extraction and treatment system, and other portions of the remediation program. A portion of the gas extraction system was completed in 2014, with small buildings housing the equipment and groundwater purification system. A foundation for a small landfill operations center office was also laid in 2014. The existing station and structures are constructed of neutral materials and would not cause a substantial contrast with surrounding buildings in the proposed modified Project.

d) Conclusions Regarding Impacts on Contrast

As discussed in the FEIR for the approved Project, the proposed modified Project would provide a distinct development set among the City's urban environment. Whether built according to the currently proposed Conceptual Plan, or variations from the Conceptual Plan that would be allowed under the SPA, the proposed modified Project would portray a character that is in keeping with similar large-scale developments within the region. The SPA establishes development standards and guidelines to regulate the aesthetics of the proposed modified Project and to reduce contrast with surrounding uses. Further, except as noted below, development along the Project edges would be limited and not substantially contrast with the visual character of the surrounding area, and its valued aesthetic image and impacts on aesthetic character would be less than significant. As in the FEIR with respect to the approved Project, these conclusions apply to all development under the proposed Conceptual Plan, and all development allowed under the SPA, with two exceptions. Potentially significant impacts on aesthetic character were identified in the FEIR for development that might vary from the conceptual plan contained in the approved Specific Plan along two project edges where additional heights of commercial buildings could result in a substantial contrast with the existing off-site residential development. In the second case, if signage along the eastern I-405 Freeway project edge were to be provided in a manner not consistent with that shown in the conceptual plan for the approved Project, the FEIR concluded that the overall thematic scheme that minimizes contrast within the Project site might not occur. Like the approved Project, the proposed modified Project could have potentially significant impacts on aesthetic character if development were to vary from the standards and guidelines set forth in the SPA or if the uses permitted on the Property were developed in close proximity to existing residential uses. Similar to the FEIR's conclusion, if commercial buildings were constructed close to existing residential uses, it could result in a substantial contrast with the existing off-site residential development. In addition, if signage along the eastern/I-405 Freeway Project edge were provided in a manner that is not consistent with that shown in the conceptual sign requirements in the SPA, the overall thematic scheme that minimizes contrast within the Property may not occur. However, with the application of substantially similar mitigation measures as required for the approved Project, both of these potential impacts are

reduced to less than significant levels. As such, the proposed modified Project would not result any new significant impacts as compared to the approved Project.

(iii) Off-Site Impacts on Aesthetic Character

Both the approved Project and proposed modified Project would not involve direct changes to the aesthetic character of any off-site locations. Similar to the approved Project (see FEIR [DEIR pp. 200–201]), the proposed modified Project poses a potential to affect existing retail businesses in the City, particularly the area in proximity to the Property, with a resulting increase in retail vacancies within existing off-site retail areas at off-site locations. Among these potential impacts continue to be the boarding up of buildings and lack of maintenance, which can cause degradation of the visual appearance of the area affected.

However, such occurrences would continue to be limited and short term in duration. In order to determine whether such effects could result with the implementation of the proposed modified Project, an updated study was undertaken to identify the proposed modified Project's effects on the sustainability of other economic areas as compare to the approved Project (see Appendix B, Urban Decay Retail Market Impact Analysis, of this SEIR). This study is discussed more fully in Section IV.A of this SEIR. In summary, the report concluded that during the short term (the first five years following completion of the proposed modified Project), an impact on vacancy and sales per square foot would be likely to occur, most likely in smaller, older retail centers. However, like the approved Project, the study determined that forecasted growth in retail demand that will occur over the next 15 years is sufficient to support existing retail development as well as the proposed modified Project. As a result, the long-term adverse impact on existing retail businesses is also not anticipated. Thus, the addition of the Project's new retail activities would also not likely cause any widespread, prolonged urban decay.

(iv) Comparison of Proposed Modified Project with Existing Regulations

The General Plan policies in the Land Use Element and the Open Space and Conservation Element analyzed in the FEIR have not changed since the FEIR. As described in Section IV.A.3.c(2), Modified Project Compatibility with Land Use Plans, Policies, and Regulations, the design features of the proposed modified Project are in substantial conformity with the applicable General Plan policies; thus, a less than significant impact would occur regarding General Plan consistency with respect to design and visual resources.⁵ The proposed modified Project will be subject to the detailed regulations established by the SPA, which pursuant to the City's Zoning Ordinance will be the governing regulations for the Property. As noted in Section IV.A, the SPA is determined to be in substantial conformity with the City's

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For visual resources impacts specifically, the table reflects the proposed modified Project's consistency with General Plan Policies LU-6.2, LU-6.3, LU-7.2, LU-7.3, LU-12.3, LU-12.5, LU-13.1, LU-13.3, LU-13.4, LU-13.5, LU-13.7, LU-14.1, LU-14.2, LU-14.4, OSC-1.2, and OSC-1.3.

approved General Plan. This regulatory structure continues to ensure substantial conformity of the proposed modified Project with the General Plan. The SPA restricts the potential for adverse effects of development on the visual quality of the area by regulating the development on the Property, including (but not limited to) the following areas: (1) permitted uses, (2) maximum permitted building heights, (3) setbacks, (4) signage, and (5) lighting.

Similar to the approved Project, the greatest impacts that could occur from the proposed modified Project development under the limitations established in the SPA have been addressed in the analysis in the remainder of this section of the SEIR. As indicated, development pursuant to the SPA would not have a significant impact on the visual quality of the environment, except for two situations (potentially tall buildings, and signs along the I-405 Freeway), which can be mitigated. Like the approved Project, since the proposed modified Project, with the implementation of the proposed mitigation measures below, would not result in significant impacts and would be in substantially conformity with the General Plan policies related to design as further described in Section IV.A, the proposed modified Project would continue to be compatible with existing zoning protections for the visual quality of the environment. As such, the proposed modified Project would not result any new significant impacts as compared to the approved Project. Table IV.A-1, Proposed Modified Project Consistency with City of Carson General Plan, describes the applicable General Plan policies and the proposed modified Project's consistency with these General Plan Land Use polices.

(v) Construction Impacts

The FEIR details how the approved Project would cause changes in the aesthetic conditions of the Property during the time of construction (see FEIR [DEIR p. 205]). This analysis remains fully applicable to the proposed modified Project, except that the Property already has existing construction buildings and equipment on site due to the remediation activities as anticipated by the FEIR. During the development of the proposed modified Project, the Property would continue to appear like a typical construction site, similar to existing conditions. As with the approved Project, as buildings are erected on the Property, the loss of undeveloped area and a feeling of spaciousness would continue to be incrementally altered. At some point during construction, enough of the new buildings would be erected on site to cause the significant impact identified above regarding the loss of a valued visual resource.

(b) Impact on Views

(i) Impacts from Public Vantage Points

Views toward and over the Property from the I-405 Freeway remain limited, and have not substantially changed as compared to the approved Project (see FEIR [DEIR p. 206]). Therefore, similar to the approved Project and described above, the two visual resources along the I-405 Freeway (the Wingfoot Two a rigid frame blimp replacement (when it is in port) and the large

statue of the man (now holding a flag) are located north of the Property and would still remain visible from freeway locations once proposed modified Project development is complete.

Views along Del Amo Boulevard have also not substantially changed since assessed in the FEIR, except for additional construction equipment on the Property due to remediation activities as was anticipated by the FEIR. The proposed modified Project's elevation and berms remain at a higher elevation, blocking clear views of surrounding development and features. When surrounding areas are apparent, those views are of the general urban environment and not toward any identified visual resource.

Views along Main Street continue to include industrial uses interspersed with vacant and underdeveloped lands on the west and residential development, the Property, and open space on the east. Views along Main Street remain similar to those addressed in the FEIR, except for additional construction equipment on the Property due to remediation activities. There are still no views of unique scenic resources from vantage points along Main Street.

(ii) Private Vantage Points

As detailed in the FEIR and consistent with existing conditions, views over the Property from the residential neighborhood located to the south and southwest of the Property would remain limited as discussed. There would be no views available of unique scenic resources, and views would largely be blocked by the slope along the Project edge and existing development. The same would apply to other private locations discussed in the FEIR, except that the views from the Dominguez Hills Golf Course would now be from the Porsche Driving Experience facility, which is somewhat hillier. However, due to the location of this site, and the viewing distance and parameters, this private location would experience substantially similar views as compared to the approved Project. Other private vantage points would continue to have views substantially similar to those outlined in the FEIR. Like the approved Project, there would be no views available of unique scenic resources from vantage points within these areas, and, as with the approved Project, views of the nearby Big Man statue and the Blimp facility would not be affected.

(iii) Conclusions Regarding View Impacts

As discussed in the FEIR (see FEIR [DEIR p. 208]), the Property is not considered a view resource, as it is still in a degraded state, and does not include qualifying unique or natural qualities. The Project vicinity still does not contain notable features that would typically fall under the heading of view resource, e.g., unique geologic features, natural areas, etc. Views of the two notable features that might catch the eye of travelers through the area, the Wingfoot Two and the Big Man statue on the south of the I-405 Freeway would not be lost due to development of the proposed modified Project. Views over the Property are limited due to intervening development, the flat terrain in the areas surrounding the Property, and the fact that the Property sits atop a berm that slopes down to surrounding areas. Therefore, similar to the approved Project, the proposed

modified Project would not substantially diminish any such views, and impacts on views of unique, valued scenic resources would be less than significant. As such, the proposed modified Project would not result any new significant impacts as compared to the approved Project.

(c) Shade and Shadow Impact

The FEIR included a shading analysis of the approved Project (see FEIR [DEIR pp. 208–213]). According to the FEIR, the maximum off-site shading that could occur on sun-sensitive uses is limited. The greatest shading on nearby residential development would occur during winter mornings. Impacts on shading from the approved Project were found to be less than significant. The FEIR did not identify any shade/shadows significant impacts for the approved Project. Given the heights, locations and setbacks of the proposed modified Project along the south and southwest boundaries of the Property would not change and given the setback requirements established by the Mitigation Measures below, impacts of the proposed modified Project would be substantially the same as compared to the approved Project and would therefore remain less than significant.

(d) Impact of Artificial Lighting

The approved Project and the proposed modified Project are located within an urban area, amidst existing roadways (including the I-405 Freeway) with numerous sources of nighttime illumination. No substantial changes in the surrounding overall urban glow of the Project area have occurred since the approved Project was assessed. As noted above, there are differences between the approved Project and the proposed modified Project. However, because proposed modified Project lighting would include design features included in the SPA and also must comply with CALGreen lighting standards that limit off-site light spill by controlling light intensity and by shielding of light sources, the proposed modified Project's ambient lighting would continue to blend with surrounding areas, and not create substantial contrast with overall urban lighting conditions.

The proposed modified Project could include larger and brighter signage internally and along the I-405 Freeway as compared to the approved Project. It would also include LED signs and displays. The proposed modified Project lighting and signage would be required to comply with all CALGreen site lighting and Caltrans glare standards. To determine whether the proposed modified Project would comply with these state lighting standards and also would not result in glare that would adversely affect nearby sensitive receptors and passersby, a detailed lighting analysis was undertaken to identify and quantify the proposed modified Project's specific light effects. The District at South Bay Lighting Study (SEIR Appendix C) reviews the applicable lighting metrics and regulations pertaining to artificial lighting, examines the existing lighting conditions within and surrounding the Property, and evaluates the proposed modified Project's illuminated signs and architectural building and site lighting to identify potential environmental impacts on surrounding properties.

The Lighting Study concluded that the proposed modified Project lighting would provide adequate illumination for the proposed modified Project buildings and site while limiting light trespass and glare to neighboring residential properties by (1) limiting the luminance of sign lighting and including mitigation measures to limit visible sign lighting at sensitive residential properties and (2) using shielded and focused light fixtures that meet CALGreen requirements, and that are set on maximum 40-foot-tall light poles located away from adjacent residential properties.

Light Trespass. Like the approved Project (see FEIR [DEIR p. 213]), the proposed modified Project would add new lighting to the Property, increasing the lighting levels of the existing setting. Because the proposed modified Project's lighting would be constrained by design standards and guidelines included in the SPA and also must comply with CALGreen lighting standards that limit off-site light spill by controlling light intensity and by shielding of light sources, the proposed modified Project's ambient lighting would continue to blend with surrounding areas and would not create substantial contrast with overall urban lighting conditions.

The Lighting Study analyzed the proposed building and street and parking lot lighting within PA 2. With respect to the building and site lighting analysis, although the proposed modified Project elements in PA 1 and PA 3 are not yet known, all projects in California must comply with the 2016 California Energy Code, California Code of Regulations, Title 24, Part 6 and Part 11 (CEC). Therefore, the same building and site lighting criteria applied to PA 2 would apply to future building and site lighting in PA 1 and PA 3. Therefore, the conclusions of the Lighting Study would apply for all building and site lighting within the SPA.

The Lighting Study concluded that, with implementation of these regulatory requirements and of new Mitigation Measure B-3b, below, with respect to signage on the Property, the calculated off-site light trespass would be less than 0.74 foot-candle⁶ of illuminance for the proposed modified Project, which is the regulatory standard established by State law. The Lighting Study confirms that the light trespass from proposed modified Project signage and from proposed modified Project building and site lighting would not create a new source of light trespass at adjacent residential properties. Since the proposed modified Project lighting would not substantially alter the character of off-site areas surrounding the Property and would not interfere with off-site activities, impacts of the proposed modified Project's off-site light trespass would be less than significant. Therefore, as with the approved Project, the impact of the proposed modified Project with respect to light trespass would be less than significant. The

⁶ All urban areas within California are designated as Lighting Zone 3 as default under the CEC, which limits the Light Trespass to 8 lux (0.74 fc). Per the CEC, California Building Energy Efficiency Standards Section 10-114, pp. 40, 41 (see Lighting Study's Appendix D), the designations for outdoor lighting zones in urban areas are as follows:

[&]quot;The default for urban areas, as defined by the U.S. Census Bureau, is Lighting Zone 3."

proposed modified Project's lighting impact to drivers' vision was also evaluated, as further discussed under Glare below.

Glare from Proposed Modified Project Light Sources—Residential. Glare from sign lighting occurs when the light source is visible against a dark background, such as a dark sky. The maximum source brightness is determined by the rated source luminance. The SPA has established the following parameters with respect to sign lighting:

- Internally illuminated signs will not exceed 500 cd/m² luminance at night from 45 minutes after sunset until 45 minutes prior to sunrise, and 10,000 cd/m² during day time hours from 45 minutes after sunrise until 45 minutes prior to sunset. Sign luminance shall transition smoothly from daytime luminance to nighttime luminance and vice versa.
- Illuminated signs that have the potential to exceed 500 cd/m² will include an electronic control mechanism to reduce sign luminance to 500 cd/m² at any time when ambient sunlight is less than 100 foot-candles.
- Externally illuminated signs will seek to incorporate design elements to limit the direct view of the light source surface at all exterior light fixtures to ensure that the light source cannot be seen from adjacent residential-zoned properties.

The conceptual sign locations established in the SPA for PA 2 were evaluated with all signs operating simultaneously at maximum nighttime luminance of 1,000 cd/m², all white. The proposed modified Project signs will not operate in this manner in practice, and the SPA limits maximum nighttime luminance to 500 cd/m². While the details of the sign lighting within PA 1 and PA 3 are not developed at this time, the analysis in the Lighting Study evaluates the potential for Sign lighting within all planning areas of the Property to create a new source of glare at adjacent residential properties. As such, this analysis represents a conservative evaluation of the proposed modified Project's signs potential for off-site visibility, glare, and light trespass. Therefore, the results of this analysis may be applied to the future conditions within PA 1 and PA 3.

The conclusions of the analysis indicate that in the absence of mitigation, signage at the proposed modified Project operating at 1,000 cd/m² may result in nighttime impacts to adjacent residential uses that are directly in the line of sight of the illuminated surface of the sign. Accordingly, the SPA would limit maximum nighttime operating luminance to 500 cd/m² as further described above, and Mitigation Measure B-3a would be imposed to reduce luminance to below a 30:1 contrast ratio by reducing signage operations to a maximum of 300 cd/m² where lighted signs facings would be visible from adjacent residential uses if within 1,000 feet of the sign. Therefore, with the imposition of this mitigation measure, the proposed modified Project would not create new high-contrast conditions visible from a field of view from a residentially zoned property. Therefore, as with the approved Project, the impact of the proposed modified Project with respect to glare would be less than significant.

Application of Light and Glare Analysis to Pylon Signs. As noted above, the proposed modified Project includes four pylon signs of which two would be static digital signs and two would have digital display, changeable message display, color changing illumination, and electronic message display. As shown on the conceptual sign plan (Figure IV.B-6), one of these signs (at up to 88 feet above the grade of the adjoining I-405 Freeway) is proposed to be located in the middle of the Property along the I-405 Freeway frontage, one is proposed to be located adjacent to the Del Amo Boulevard overcrossing of the freeway, and two others, including one of the changeable digital display signs, are proposed to be located near the southerly boundary of the Property along the I-405 Freeway and off-ramp frontage. As noted above, the dimensions and maximum luminance of these signs would be limited by the SPA. In addition, application of Mitigation Measure B-3a, which is slightly modified from that provided in the FEIR (FEIR Mitigation Measure B-3) to provide greater regulatory specificity, would ensure that glare contrast from these signs does not have a significant impact on adjacent residential units. In addition, new Mitigation Measure B-3b would ensure that off-site light trespass from such signs will not have a significant impact on adjoining residences by reducing either the size or luminance of such signs to ensure that light trespass illuminance is less than 0.74 foot-candles at the residential property line.

Glare from Proposed Modified Project Light Sources—Caltrans. As further discussed in the Lighting Study, glare impacts of the proposed modified Project's signs were evaluated for impacts to drivers on the I-405 Freeway, and it was determined that glare would be less than the Caltrans significance threshold for glare during night, twilight (sunrise/sunset), and daytime hours. The proposed modified Project does not exceed the California Vehicle Code standard for roadways approaching the proposed modified Project from all directions (i.e., the proposed modified Project would not create a significant impact with regard to artificial light or glare effects on drivers of motor vehicles if the proposed modified Project generates light intensity levels greater than 1,000 times the minimum measured brightness in the driver's field of view, except when the minimum values are less than 10 fL). Therefore, the impact of the proposed modified Project with respect to glare on the I-405 Freeway would be less than significant.

In conclusion, as the proposed modified Project's lighting would continue not to substantially alter the character of off-site areas surrounding the Property and would also not interfere with off-site activities, those impacts of proposed modified Project lighting would remain less than significant. The FEIR did impose a mitigation measure for the approved Project to limit any potential off-site effects on residential development adjacent to the proposed modified Project. The proposed modified Project would continue to be subject to this mitigation measure, as amended, based on the measures added by the Lighting Study. To further limit potential off-site effects on residential development, new Mitigation Measure B-3b is added address potential light trespass from signs on the Property onto adjacent residential properties. Like the approved Project, with the implementation of the mitigation measures, as amended, set

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Signs which exceed the luminance limits defined by the SPA will require separate analysis under CEQA.

forth in the FEIR and the additional mitigation measure described below, the proposed modified Project would result in a less than significant Project impact. As such, the proposed modified Project would not result any new significant impacts as compared to the approved Project.

4. MITIGATION MEASURES

Consistent with the FEIR, the above analysis identified a significant impact regarding the loss of a valued aesthetic resource; i.e., the spaciousness that is provided by the undeveloped Property. The loss of spaciousness occurs as a result of placing development at the Project's location rather than as a result of the particular type, size, or location of development. Any notable development on the Property would change its currently undeveloped character. Therefore, as was the case for the approved Project, this significant impact cannot be mitigated, and there would be no change under the proposed modified Project compared to the approved Project as to this impact.

With the implementation of the updated and additional mitigation measures listed below, like the approved Project, the proposed modified Project would result in less than significant impacts:⁸

- **Mitigation Measure B-1:** The minimum setback for hotel and theater uses <u>buildings</u> greater than 52 feet in height along the Torrance Lateral, adjacent to residential uses, shall be 250 feet.
- **Mitigation Measure B-2:** The distribution, placement, and orientation of signs along the I-405 Freeway shall be in substantial compliance with the signage concepts presented in the Conceptual Plan and in compliance with the sign standards in the SPA.
- Mitigation Measure B-3a: The line of sight between lighted signs on the Project site and existing residential development along the Torrance Lateral, opposite to the Project site shall be minimized. If any portion of the illuminated surface of the sign is visible from a residential use within 1,000 feet of said sign at night, then the proposed modified Project sign luminance shall be reduced to less than 300 cd/m² at night.
- Mitigation Measure B-3b: If any portion of the illuminated surface of the sign is visible from a residential use within 1,000 feet of said sign, sign area and/or sign luminance shall be limited so that the light trespass illuminance is less than 0.74 foot-candle at said residential property line.

The SPA continues to include a mechanism for site plan and design review of all development to ensure that it does in fact meet the requirements of the SPA. As was done in the

⁸ The mitigation measures below are updated from those set forth in the FEIR. For clarity, the changed text is marked as follows: new text is <u>underlined</u>, and deleted text is shown in strikeout format.

FEIR, as many of SPA features were relied upon in the above analysis, resulting in the following mitigation measure, which is slightly modified from that set forth in the FEIR in order to reflect the proposed modified Project's updated landscape and design standards:

Mitigation Measure B-4: All Project development shall undergo site plan review by the Planning Manager to <u>asen</u>sure that the following design measures have been implemented:

- Landscaping. All Landscaping shall be consistent with a plant palaette of native trees, shrubs, and groundcovers that shall add uniformity to the Project site Property. Plants shall be selected to support and complement the themes of the various Project components. Specially themed landscaping treatments shall occur at key locations (e.g., freeway edge, channel slope, and lifestyle and entertainment area). Of more detailed note: (1) landscaping themes on Del Amo Boulevard and Main Street shall be coordinated with the landscaping of the Carson Street Conceptual Visualization and the Home Depot Center; (21) continuous shrub and ground cover plantings shall be provided in the medians and edges of internal streets with vertical landscape and/or hardscape elements at a minimum of on average every 50 feet along the edges; (32) 5% landscape coverage shall be provided in parking lots, including landscape adjacent to edges of parking fields; and (43) 50% landscape coverage shall be provided on the sides of parking structures visible to residences, not inclusive of commercial over podium.
- Buildings. Buildings shall include the following design features: varied and
 articulated building façades featuring the use of colorful stucco, with a variety
 of architectural accent materials for exterior treatment at visually accessible
 locations.
- Accessory f<u>F</u>acilities and Walls. Wall facades shall be varied and articulated.
 Accessory facilities such as trash bins, storage areas, etc., shall be covered and screened as set forth in the SPA.
- Lighting. Lighting shall be limited in intensity, light control methods, and pole heights, so as to be directed on site, and not interfere with off-site activities.

(See FEIR [DEIR pp. 214–215].) When the proposed revisions to the proposed modified Project are compared to the Project analyzed under the FEIR, there are no new significant impacts or changes with the retention of the existing mitigation measures, as amended, in place and the addition of the mitigation measure as noted, and there is no new information of substantial importance. As such, no other additional mitigation measures would be required.

5. CUMULATIVE IMPACTS

Since the FEIR, the cumulative projects list has changed due to new development in the surrounding area. However, for the purposes of assessing cumulative impacts related to

shade/shadow, light trespass and glare, said cumulative sources must be both located within 1,000 feet of the proposed modified Project and in the same field of view as the proposed modified Project. Only one cumulative project potentially meets that criteria: the proposed 300-unit development on DD3. However, due to the relative locations of DD3 and the proposed modified Project, there is no field of view from a residential area that would receive light and glare from both of these sources, and there will be no overlapping shade/shadow impacts. Additionally, DD3 is already subject to existing mitigation measures in the FEIR. As such, the proposed modified Project's contribution to glare would not be cumulatively significant.

The FEIR identified a significant impact related to the loss and conversion of the existing openness of the Project site to a developed appearance with the approved Project (see FEIR [DEIR p. 194]). The FEIR identified this change as having the greatest effect for travelers along Del Amo Boulevard, which is a public view corridor traveled by a large number of people. DD3 is also substantially vacant at this time. Therefore, development of DD3 to the north of Del Amo Boulevard will, cumulatively with development of the currently undeveloped Property to the south of Del Amo Boulevard, result in the same significant and unavoidable impacts related to the conversion of the appearance of the Project site as described in the FEIR.

With regard to cumulative lighting impacts, internal lighting from each new cumulative project also must comply with CALGreen lighting standards. These standards limit off-site spill of light by controlling light intensity and requiring shielding of light sources. As a result, the lighting from each cumulative project would be limited and not create substantial contrast with overall urban lighting conditions. Therefore, the proposed modified Project's contribution to lighting would not be cumulatively significant.

As such, the proposed modified Project together with all related projects would not result in any new significant cumulative impacts as compared to the approved Project.

6. LEVEL OF SIGNIFICANCE AFTER MITIGATION

In summary, the proposed modified Project would not result in any new significant impacts as compared to the approved Project assessed in the FEIR. As compared to the approved Project, the proposed modified Project changes will not require major revisions to the FEIR because of the involvement of new significant impacts that were not previously evaluated. Specifically, with regard to visual resources, (1) no substantial changes are proposed in the proposed modified Project that would require major revisions to the FEIR; (2) no substantial changes arise in the circumstances of the proposed modified Project's undertaking, requiring major revisions to the FEIR; and (3) no new information of substantial importance appears that was not known or available at the time the FEIR was certified.

Like the approved Project, the proposed modified Project would still result in the conversion of the undeveloped vacant site to a developed use, causing a loss of spaciousness that

contributes to the aesthetic quality of the Property and its surroundings. Consistent with the FEIR and for the reasons specified therein, this SEIR concludes that this impact remains a significant impact that is inherent in the development of the Property, and thus cannot be mitigated or avoided.

As with the approved Project, with the updated and additional mitigation measures specified above, the proposed modified Project has reduced all other impacts to less than significant, and has substantially the same impacts as the approved Project.

Comparison to FEIR Findings: No New Significant Impact. Previous Mitigation Applies as Modified Herein. New Mitigation Measure(s) Identified and Applied.

IV.B. Visual Resources	
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IV. ENVIRONMENTAL IMPACT ANALYSIS C. TRAFFIC AND CIRCULATION

1. INTRODUCTION

This section addresses the potential impacts of the proposed modified Project relative to traffic and circulation impacts compared to the approved Project assessed by the FEIR, and supplements Section IV.C, Traffic, Circulation, and Parking, of the FEIR. This supplemental analysis compares the proposed modified Project to the approved Project to determine if the proposed changes will require major revisions to the FEIR because of the involvement of any new significant impacts as a result of changes to the approved Project, changes in circumstances, or new information that was not previously evaluated. To determine whether the proposed modified Project would result in any new impacts, or increases in the severity of traffic and circulation impacts previously disclosed in the FEIR, this analysis considers the impacts that would result from construction and operation activities for the proposed modified Project under Existing plus Project conditions and Future plus Project conditions, and compares these impacts to those identified in the FEIR as appropriate.

This section is based on the technical report, *The District at South Bay Project Transportation Impact Analysis* (TIA), prepared by Fehr & Peers, Inc., August 2017. The TIA has been reviewed and approved by the City's traffic engineer, and is provided in Appendix D, Transportation Impact Analysis, of this SEIR. It addresses the proposed modified Project's changes and their impacts to issues of transportation and traffic compared to the FEIR. In addition to providing a comparison of the traffic impacts on roadways, intersections, freeways, and transit, the traffic analysis also provides a detailed comparison of changes in the study area environmental setting between 2005 and 2017, including:

- Intersection traffic volumes and capacities;
- Approach and methodology used to analyze intersections for significant impacts;
- Trip generation rates;
- Method to estimate trip credits attributable to internal trip capture, transit, and pass-by);
- Application of estimating project trip generation, number and type of related projects; and
- Application and feasibility of mitigations involving both transportation demand management measures and physical improvements.

The analysis concludes that compared to the trip generation estimates presented in the FEIR, the proposed modified Project would result in approximately 11,733 (17.0 percent) fewer daily trips, 267 (11 percent) more A.M. peak hour trips, and 1,481 (26 percent) fewer P.M. peak hour trips as

compared to the approved Project. Like the approved Project, application of the mitigation set forth in the FEIR (as the same is updated below to reflect newer regulations and existing conditions) would result in less than significant proposed modified Project impacts as to those items for which feasible mitigation exists. Like the approved Project, this analysis further concludes that no feasible mitigation measures are available to mitigate the potentially significant impacts at certain study intersections or study freeway segments to less than significant levels; therefore, those impacts on service levels would be significant and unavoidable. While the approved Project resulted in fewer significant and unavoidable impacts at the time it was originally approved and in somewhat different locations, as compared to updated conditions assessed in this SEIR, the proposed modified Project would have similar types of significant and unavoidable impacts as compared to the approved Project being built under updated existing and future conditions.

2. ENVIRONMENTAL SETTING

a. Regulatory Setting

(1) Senate Bill 743 and Public Resources Code Section 21099

Since approval of the FEIR, on September 27, 2013, Governor Brown signed Senate Bill (SB) 743, which became effective on January 1, 2014. The purpose of SB 743 is to streamline the review under CEQA for several categories of development projects including the development of infill projects in transit priority areas and to balance the needs of congestion management with Statewide goals related to infill development, promotion of public health through active transportation, and reduction of greenhouse gas emissions.

SB 743 adds Chapter 2.7, Modernization of Transportation Analysis for Transit Oriented Infill Projects, to the CEQA Statute (Section 21099). Section 21099(d)(1) provides that aesthetic and parking impacts of a residential, mixed-use residential, or employment center project on an infill site within a transit priority area shall not be considered significant impacts on the environment. In addition, SB 743 will result in a change in the metrics for determining impacts relative to the transportation network through the development of new methodologies for traffic analyses for CEQA documents to promote the State's goals of reducing greenhouse gas emissions and traffic-related air pollution, promoting the development of multimodal transportation system, and providing clean, efficient access to destinations.

Currently, environmental review of transportation impacts focuses on the delay that vehicles experience at intersections and on roadway segments, which is often measured using level of service (LOS). Mitigation for increased delay often involves widening a roadway or the size of an intersection, which increases capacity and may, therefore, increase auto use and emissions and discourage alternative forms of transportation. Under SB 743, the focus of transportation analysis will shift from driver delay to reduction of greenhouse gas emissions, creation of multimodal networks, and promotion of a mix of land uses.

Among other things, SB 743 requires that the Office of Planning and Research (OPR) prepare revisions to the CEQA Guidelines criteria for determining the significance of transportation impacts of projects within transit priority areas. OPR will submit the proposed changes to the Secretary of the Natural Resources Agency to certify and adopt. In August 2014 OPR released a report entitled "Updating Transportation Impacts Analysis in the CEQA Guidelines" for public comment. The report contained a new proposed CEQA Guidelines Section 15064.3 as well as proposed amendments to CEQA Guidelines Appendix F, Energy Conservation, and CEQA Guidelines Appendix G, Initial Study Checklist. The comment period closed November 21, 2014, and OPR reviewed and considered comments to determine if revisions were needed. OPR conducted many months of intensive engagement with the public, public agencies, environmental organizations, development advocates, industry experts, and many others, regarding the analysis of transportation impacts. On January 20, 2016, OPR released a Notice of Availability for the Revised Proposal on Updates to the CEQA Guidelines on Evaluating Transportation Impacts in CEQA. The comment period closed on February 29, 2016. After substantial study and public comment throughout the process, it is expected that OPR will submit a set of final revisions to the Natural Resources Agency in late 2017. The subsequent "rulemaking" process is anticipated to take approximately 6 months and SB 743 is expected to go into effect sometime in 2018. Since the regulations of SB 743 have not been finalized or adopted, delay and LOS are the measures used in this SEIR to determine the significance of transportation impacts. This is consistent with how transportation impacts were evaluated in the FEIR.

(2) Sustainable Community Strategy (RTP/SCS)

Every 4 years, the Southern California Association of Governments (SCAG) updates its Regional Transportation Plan (RTP) for the 191-city SCAG region. The RTP assembles a regional project list based on input from cities, counties, transit agencies, congestion management agencies, regional transportation planning agencies, and Caltrans. This project list is then combined with population and employment growth forecasts to project how future (a minimum of 20 years) travel, air quality, and GHG conditions will change. Beginning with the 2012 RTP, SB 375 required the inclusion of a Sustainable Communities Strategy (SCS) in RTPs prepared by metropolitan planning organizations (MPOs) such as SCAG. The key goal of the SCS is to achieve GHG emission reduction targets through integrated land use and transportation strategies, although SB 375 did not require any modification of the regional project list contained in the RTP. Instead, the focus is on other transportation and land use strategies that influence vehicle travel; a key objective is for planners and developers to consider how land use patterns influence travel demand.

As part of the transportation modeling and analysis for the RTP/SCS, SCAG prepares population and employment growth projections by Transportation Analysis Zone (TAZ) and creates a future transportation network that represents the changes to the existing network based on the regional project list. TAZs are geographic polygons representing communities and neighborhoods at a sub-city level of detail.

(3) Los Angeles County Congestion Management Program

The Congestion Management Program for Los Angeles County (CMP) is a state-mandated program that was enacted by the California Legislature to address the impact of local growth on the regional transportation system (Metro 2010). Within Los Angeles County, Metro is responsible for planning and managing vehicular congestion and coordinating regional transportation policies. The 2010 CMP for Los Angeles County adopted by Metro provides screening criteria and traffic impact assessment methodology to assess the potential impacts on designated monitoring locations on the CMP system. Specifically, the CMP Guidelines require the evaluation of all arterial monitoring intersections where a project would add 50 or more trips during the morning or evening weekday peak hours, and all freeway segments where a project could add 150 or more trips, in either direction, during the morning or evening weekday peak hours. If, based on these screening criteria, no CMP facilities are identified for study, no further highway or freeway system analysis need be conducted and Project impacts are deemed to be less than significant.

(4) City of Carson General Plan

The City of Carson General Plan Transportation and Infrastructure Element, which remains unchanged since publication of the FEIR, provides information about the existing circulation system in the City as well as the future transportation system improvements needed given the anticipated development in the City and in the area surrounding the City. The Transportation and Infrastructure Element also identifies goals, policies, and implementation measures to meet the City's future transportation needs. Below are goals, policies, and implementation measures that are applicable to the proposed modified Project.

Goal TI-1—Minimize impacts associated with truck traffic through the City, as well as the truck parking locations.

Policy TI-1.2—Devise strategies to protect residential neighborhoods from truck traffic.

Policy TI-1.3—Ensure that the City's designated truck routes provide efficient access to and from the I-405, I-110, and Route-91 Freeways, as well as the Alameda Corridor.

Policy TI-1.4—Ensure that all new commercial projects have properly designed truck loading facilities.

Implementation Measure TI-IM-1.2—Require new development applications to provide estimates of truck trip generation as part of environmental studies and incorporate improvements as necessary to mitigate truck impacts.

Implementation Measure TI-IM-1.4—Ensure that the development review process incorporates consideration of an adequate design for off-street commercial loading requirements in all new commercial projects, where applicable.

Goal TI-2—Provide a sustainable, safe, convenient, and cost-effective circulation system to serve the present and future transportation needs of the Carson community.

Policy TI-2.1—Require that new projects not cause the Level of Service for intersections to drop more than one level if it is at Level A, B, or C, and not drop at all if it is at D or below, except when necessary to achieve substantial City development goals.

Policy TI-2.7—Provide all residential, commercial, and industrial areas with efficient and safe access to major regional transportation facilities.

Implementation Measure TI-IM-2.5—Evaluate traffic impacts, including truck impacts, associated with proposed new developments prior to project approval. Require the implementation of appropriate mitigation measures prior to, or in conjunction with, project development. Mitigation measures shall be required of the project developer on a "fair-share" basis.

Goal TI-6—Cooperate to the fullest extent possible with federal, State, County, and regional planning agencies responsible for maintaining and implementing circulation standards to ensure orderly and consistent development of the entire South Bay region.

Policy TI-6.2—Ensure that the City remains in compliance with the County, Regional, and State CMPs through the development of appropriate City programs and traffic impact analyses of new projects impacting the CMP routes.

Implementation Measure TI-IM-6.5—Monitor and comply with all CMP provisions.

(5) Carson Master Plan of Bikeways

The City of Carson Master Plan of Bikeways lays out a strategic vision for enhancing bicycle transportation in the city. The Plan is the guiding document for all bicycle infrastructure, policies, and programs in Carson. In addition to the proposed bikeway network, the Plan also contains bikeway design guidelines, recommended programs and policies to encourage bicycle travel and increase cyclist safety, potential funding sources for implementing the plan, and an implementation framework that prioritizes the most important bikeway projects. There are a number of bike lanes and bike routes planned throughout the study area with an extension of the bike path along the Dominguez Channel, east of the Interstate 405 (I-405) Freeway (the San Diego Freeway). There are also two planned bicycle facilities included as part of the proposed modified Project: a Class II bike lane with buffer on Street B and a Class I bike path on portions of Street A. There is also a Del Amo Boulevard bike lane with buffer. In addition to the City of Carson Master Plan of Bikeways, the City of Los Angeles *Mobility Plan 2035*, and Metro's Active Transportation Strategic Plan were consulted to identify planned bicycle facilities located in the study area, but outside the City of Carson. These planned bicycle facilities were not anticipated during the preparation of the FEIR.

b. Existing Environment

(1) Regional Network

In general, there are no substantive changes to the regional roadway network as described in the FEIR, and the discussion in the FEIR remains relevant. The I-405 Freeway and the I-110 Freeway (the Harbor Freeway) provide the primary regional access to the Project site. Refer to the FEIR (see FEIR [DEIR p. 217]) and Appendix D for a full description of the regional network.

(2) Local Street Network

In general, there are no substantive changes to the local street network as described in the FEIR, and the discussion in the FEIR remains relevant. The existing street system serving the Project site includes Avalon Boulevard, Main Street, Vermont Avenue, Hamilton Avenue, and Figueroa Street in the north/south direction and Del Amo Boulevard, Carson Street, Torrance Boulevard, and 213th Street in the east/west direction. Refer to the FEIR (see FEIR [DEIR p. 217]) and Appendix D for a full description of the local street network.

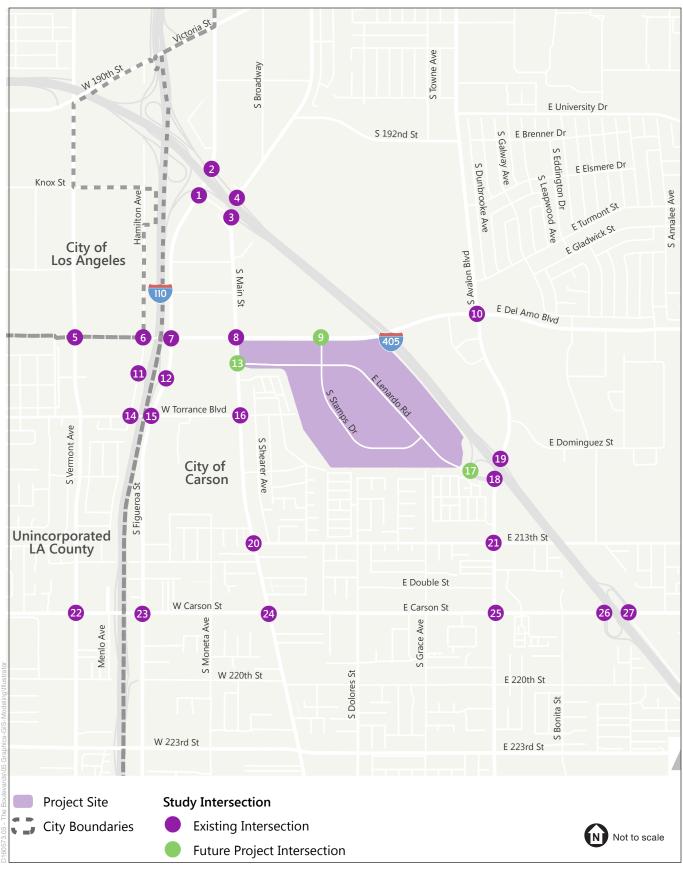
It should be noted that Carson Street is currently undergoing the construction of the Carson Street Master Plan, which stretches from the I-110 to the I-405 freeways. The proposed streetscape improvements include a number of streetscape improvements, pedestrian enhancements, and bicycle improvements. The following study intersections are affected for the duration of the construction of the Carson Street Master Plan:

- 23. Figueroa Street & Carson Street
- 24. Main Street & Carson Street
- 25. Avalon Boulevard & Carson Street
- 26. I-405 southbound ramps & Carson Street

The changes to these intersections were not anticipated or under construction during the preparation of the FEIR, and have been supplementally assessed in this SEIR.

(3) Existing Intersection Traffic Volumes and Service Levels

Existing intersection conditions for the same 27 intersections evaluated in the FEIR were evaluated in this SEIR using updated A.M. and P.M. peak hour traffic counts collected on Wednesday, November 16, 2016. Traffic counts used for the FEIR analysis were collected in 2004; traffic volumes at most of the study intersections have increased in the past 12 years. Of the 27 intersections, 23 are signalized intersections and four are unsignalized intersections. **Figure IV.C-1, Study Intersection Locations—Proposed Modified Project**, illustrates the locations of the 27 intersections in the context of the Project site and the local and regional roadway network. The three intersections identified as *future project intersection* are new project



SOURCE: Fehr & Peers, 2017

The District at South Bay



intersections and were only analyzed under the with-Project scenarios. This is consistent with the FEIR analysis. An ambient growth factor of 0.5 percent per year was applied to the Year 2016 traffic volumes to account for regional growth and represent Existing Conditions (Year 2017), based on regional growth patterns, Southern California Association of Government's (SCAG) 2016 Regional Transportation Plan Model, and the 2010 Congestion Management Program for Los Angeles County, and at the direction of the City of Carson.

Existing operating conditions at each intersection are by volume-to-capacity (V/C) ratios and LOS. The standard LOS methodology varies by jurisdiction. Study intersections are analyzed according to the methodology of the appropriate jurisdiction. If an intersection lies along a jurisdictional border and the methodology differs by jurisdiction, both methodologies are applied.

For signalized intersections, the two LOS methodologies that were used in this analysis were the Intersection Capacity Utilization (ICU) method and the Critical Movement Analysis (CMA) method. The ICU method, which is the standard method required by the City of Carson and Los Angeles County, estimates the V/C ratio for an intersection based on the individual V/C ratios for the conflicting traffic movements. The ICU value represents the percent signal green time of capacity of the intersection movements. The overall intersection V/C ratio is subsequently assigned an LOS value to describe intersection operations in **Table IV.C-1**, **Level of Service Definitions for Signalized Intersections**. LOS ranges from LOS A (free flow) to LOS F (jammed condition). The CMA method, which is the standard method required by the City of Los Angeles, determines the intersection V/C ratio and corresponding LOS for the turning movements and intersection characteristics at signalized intersections. The FEIR applied the City of Carson LOS methodology (ICU) for all study intersections, regardless of jurisdiction. Based on industry standards and current state-of-practice, the methodology used to analyze signalized intersections in this SEIR followed the guidance provided by each jurisdiction in which the intersection is located.

Unsignalized intersections in the City of Carson are analyzed using the Highway Capacity Manual (2010 HCM) methodology to determine traffic operations. The 2010 HCM analysis methodology describes the operation of an intersection using a range of LOS from LOS A (free-flow conditions) to LOS F (severely congested conditions), based on a range of stopped delay in seconds experienced per vehicle, shown in **Table IV.C-2**, **HCM Level of Service Definitions for Unsignalized Intersections**. Neither the City nor the County of Los Angeles require LOS analysis for unsignalized intersections. Rather, the *Transportation Impact Study Guidelines* (Los Angeles Department of Transportation [LADOT], December 2016) state that "unsignalized intersections should be evaluated solely to determine the need for the installation of a traffic signal or other traffic control device." Peak hour signal warrant analyses were conducted for unsignalized intersections within either the City of Los Angeles or County of Los Angeles jurisdictions. The FEIR evaluated all unsignalized study intersections using the 2000 HCM methodology, regardless of jurisdiction.

Table IV.C-1

Level of Service Definitions for Signalized Intersections

LOS	V/C Ratio	Definition
A	0.000-0.600	EXCELLENT. No vehicle waits longer than one red light and no approach phase is fully used.
В	>0.600-0.700	VERY GOOD. An occasional approach phase is fully utilized; many drivers begin to feel somewhat what restricted within groups of vehicles.
C	>0.700-0.800	GOOD. Occasionally drivers may have to wait through more than one red light; backups may develop behind turning vehicles.
D	>0.800-0.900	FAIR. Delays may be substantial during portions of the rush hours, but enough lower volume periods occur to permit clearing of developing lines, preventing excessive backups.
E	>0.900–1.000	POOR. Represents the most vehicles intersection approaches can accommodate; may be long lines of waiting vehicles through several signal cycles.
F	> 1.000	FAILURE. Backups from nearby locations or on cross streets may restrict or prevent movement of vehicles out of the intersection approaches. Tremendous delays with continuously increasing queue lengths.
SOUL	RCE: Transpo	ortation Research Board, Transportation Research Circular No. 212, Interim Materials on

Highway Capacity, 1980.

Table IV.C-2

HCM Level of Service Definitions for Unsignalized Intersections

Level of Service	Average Control Delay (seconds/vehicle)				
A	< 10.0				
В	> 10.0 and < 15.0				
C	> 15.0 and < 25.0				
D	> 25.0 and < 35.0				
E	> 35.0 and < 50.0				
F	> 50.0				

SOURCE: Transportation Research Board, Highway Capacity Manual, 2010.

Table IV.C-3, Existing Conditions Intersection Levels of Service, summarizes the results of the analysis of the existing weekday morning and evening peak hour V/C ratio and corresponding LOS at each of the analyzed intersections. Existing LOS were analyzed with the current lane configurations under the Carson Street Master Plan construction. As noted previously, the intersection changes associated with the Carson Street Master Plan were not included in the existing conditions analysis presented in the FEIR (see FEIR [DEIR pp. 222 and 223]). Of the 20 existing signalized intersections, 19 currently operate at LOS D or better during both peak periods across all analysis methodologies. As stated previously, only unsignalized intersections within the City of Carson are evaluated for LOS operations; unsignalized intersections within Los Angeles County and the City of Los Angeles are not evaluated for LOS operations.

Table IV.C-3

Existing Conditions Intersection Levels of Service

						Existing	
ID	N/S Street Name	E/W Street Name	Intersection Control	Jurisdiction ^a	Analyzed Period	V/C or Delay (s)	LOS
1	Figueroa St	I-405 SB On	Unsignalized	City of Carson	A.M.	0.9	В
		Ramp			P.M.	7.9	C
2	Figueroa St	I-405 NB Off	TWSC	City of Carson	A.M.	143.3	F
		Ramp			P.M.	84.6	F
3	S Main St	I-405 SB On	Signalized	City of Carson	A.M.	0.443	A
		Ramp			P.M.	0.891	D
4	S Main St	I-405 NB Off	Signalized	City of Carson	A.M.	0.547	A
		Ramp			P.M.	0.663	В
5	S Vermont	Del Amo	Signalized	City of	A.M.	0.683	В
	Ave	Blvd		Carson	P.M.	0.742	C
				Los Angeles	A.M.	0.740	C
				County	P.M.	0.796	C
6	Hamilton	Del Amo	AWSC	City of	A.M.	a	
	Ave	Blvd		Los Angeles	P.M.	a	
7	Figueroa St	Del Amo	Signalized	City of Carson	A.M.	0.828	D
		Blvd			P.M.	0.770	C
8	S Main St	E Del Amo	Signalized	City of Carson	A.M.	0.694	В
		Blvd			P.M.	0.813	D
9			Project Intersection	City of Carson	A.M.	Project Intersection	
		Blvd	Signalized		P.M.	Intersec	cuon
10	S Avalon	E Del Amo	Signalized	City of Carson	A.M.	0.843	D
	Blvd	Blvd			P.M.	0.892	D
11	Hamilton	I-110 SB	AWSC	Los Angeles	A.M.	a	
	Ave	Ramps		County	P.M.	a	
12	Figueroa St	I-110 NB	Signalized	Los Angeles	A.M.	0.846	D
		Ramps		County	P.M.	0.711	С
13	Main St	n St Street A	Project Intersection Signalized	City of Carson	A.M.	Proje Intersec	
					P.M.		
14	Hamilton Ave	W Torrance Blvd	Signalized	Los Angeles County	A.M.	0.733	C
				•	P.M.	0.624	В
15	Figueroa St	W Torrance Blvd	Signalized	City of Carson	A.M.	0.795	С
					P.M.	0.782	C
16	S Main St	W Torrance Blvd	Signalized	City of Carson	A.M.	0.631	В
		DIVU			P.M.	0.753	C

Table IV.C-3

Existing Conditions Intersection Levels of Service

						Existi	ng
ID	N/S Street Name	E/W Street Name	Intersection Control	Jurisdiction ^a	Analyzed Period	V/C or Delay (s)	LOS
17	Street A	I-405 SB Ramps	Project Intersection Signalized	City of Carson	A.M. P.M.	Project Intersec	
18	S Avalon Blvd	I-405 SB Ramps	Signalized	City of Carson	A.M. P.M.	0.631 0.584	B A
19	S Avalon Blvd	I-405 NB Ramps	Signalized	City of Carson	A.M.	0.506	A
20	S Main St	E 213th St	Signalized	City of Carson	P.M. A.M.	0.598 0.807	A D
21	S Avalon Blvd	E 213th St	Signalized	City of Carson	P.M. A.M.	0.810	D B
22 ^b	S Vermont Ave	W Carson St	Signalized	Los Angeles County	P.M. A.M.	0.745	C D
23 ^b	Figueroa St	W Carson St	Signalized	City of Carson	P.M. A.M.	0.747 0.942	C E
24 ^b	S Main St	W Carson St	Signalized	City of Carson	P.M. A.M.	1.063 0.457	F A
25 ^b	S Avalon	E Carson St	Signalized	City of Carson	P.M. A.M.	0.595 0.811	A D
26 ^b	Blvd I-405 SB	E Carson St	Signalized	City of Carson	P.M. A.M.	0.896 0.621	D B
27	Ramps I-405 NB	E Carson St	Signalized	City of Carson	P.M. A.M.	0.667 0.417	B A
21	Ramps	L Carson St	Signanzea	City of Carson	P.M.	0.417	A

NOTES

TWSC = *Two-Way Stop Controlled*; *AWSC* = *All Way Stop Controlled*

Methodology varies by Jurisdiction. If an intersection is located along a City border, both methodologies are applied.

Signalized intersections within the City of Carson and Los Angeles County are analyzed with Intersection Capacity Utilization (ICU) methodology.

Signalized intersections within the City of Los Angeles are analyzed with Critical Movement Analysis (CMA) methodology.

Un-signalized intersections within the City of Los Angeles and Los Angeles County are not included in the impact analysis; instead, signal warrant analyses are conducted.

Un-signalized intersections within the City of Carson are analyzed with HCM 2010, if the worst approach LOS is E or F, then impacts are determined based on ICU V/C.

Existing analysis evaluates LOS under construction lane configurations, future analysis assumes postconstruction lane configurations.

One signalized intersection currently operates at a poor LOS (i.e., LOS E or F) during both the A.M. and P.M. peak hours: Intersection No. 23 Figueroa Street & Carson Street. Of the two unsignalized intersections located within the City of Carson, one intersection currently operates at a poor LOS during both the A.M. and P.M. peak hours: Intersection No. 2 Figueroa Street & I-405 northbound off-ramp (LOS F during both the A.M. and P.M. peak hours). As stated in the methodology section above, unsignalized intersections within Los Angeles County and within the City of Los Angeles are not evaluated for LOS operations. Compared to the existing conditions LOS results reported in the FEIR (see FEIR [DEIR pp. 222 and 223]), which were based on 2005 traffic conditions, the number of study intersections operating at a poor LOS is one fewer than in 2005. Refer to Appendix D for the detailed LOS analysis sheets.

(a) Site Access

In general, there are no substantive changes to the Project site access as described in the FEIR. The Project site contains two existing paved streets, Street B and Street A. Street A intersects with Main Street, and Street B intersects with Del Amo Boulevard. In the south portion of the Project site, Street A currently dead ends within the Project site, short of the I-405/Avalon Boulevard southbound off ramp.

(b) Freeways and Freeway Ramps

The CMP requires that all CMP mainline freeway monitoring locations where a proposed project will add 150 or more trips, in either direction, during either the A.M. or P.M. peak hours be analyzed. The proposed modified Project is expected to add over 150 vehicle trips to the CMP mainline freeway monitoring station south of the I-110 Freeway at Carson Scales (Station 1067) during both the A.M. and P.M. peak hours. Due to the regional setting of the Project site within the freeway network and the regional nature of certain of the Project land uses a total of 23 freeway segments (in both travel directions) were included in the freeway impact analysis.

In addition, the City of Carson and Caltrans determined that the proposed modified Project would meet the criteria requiring a freeway ramp impact analysis. A freeway ramp impact analysis was not conducted as part of the FEIR. In consultation with Caltrans, a freeway ramp intersection queuing analysis was conducted for the following intersections:

- 2. Figueroa Street & I-405 northbound off-ramp
- 4. Main Street & I-405 northbound off-ramp
- 11. Hamilton Avenue & I-110 southbound ramps
- 12. Figueroa Street & I-110 northbound ramps

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Two unsignalized intersections in the City or County of Los Angeles jurisdictions were reported as operating at LOS E during the P.M. peak hour in the FEIR; however, since LOS analysis is no longer required by these jurisdictions, these two intersections are not included in this comparison.

- 17. Street A & I-405 southbound ramps
- 18. Avalon Boulevard & I-405 southbound ramps
- 19. Avalon Boulevard & I-405 northbound ramps
- 26. I-405 southbound ramps & Carson Street
- 27. I-405 northbound ramps & Carson Street

(i) Selected Freeway Segments

The following study freeway segments represent a subset of the freeway segments analyzed in the FEIR and include all locations where impacts were previously identified.²

- The I-110 Freeway
 - Northbound between Carson Street & Torrance Boulevard
 - Southbound between Carson Street & Torrance Boulevard
 - Northbound between Torrance Boulevard & I-405 Interchange
 - Southbound between Torrance Boulevard & I-405 Interchange
 - Northbound between I-405 Interchange & SR-91 Interchange
 - Southbound between I-405 Interchange & SR-91 Interchange
 - Southbound between SR-91 Interchange & Redondo Beach Boulevard
- The I-405 Freeway
 - Southbound between Alameda Street & Wilmington Avenue
 - Southbound between Wilmington Avenue & Carson Street
 - Northbound between Carson Street & Avalon Boulevard
 - Northbound between Avalon Boulevard & I-110 Interchange
 - Southbound between I-110 Interchange & Vermont Avenue
 - Southbound between Vermont Avenue & Normandie Avenue
- The I-710 Freeway (the Long Beach Freeway)
 - Southbound between I-405 Interchange & Del Amo Boulevard

(ii) Existing Freeway and Freeway Ramp Conditions

Baseline freeway volumes were obtained from the Caltrans Traffic Count Database (2015). Directional peak hour volumes were calculated using Caltrans Peak Hour Volume Data guidelines. Freeway mainline volumes for Year 2017 were calculated by applying a growth

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² Fehr & Peers conducted a sensitivity analysis to determine the scope of the freeway segment analysis. As a result of the sensitivity analysis, 23 segments were selected for evaluation in the SEIR.

factor of 0.5 percent to the baseline freeway segment volumes. The growth factor was informed by historic growth trends, the CMP growth factor, and in consultation with the City of Carson.

The 2010 HCM freeway segment methodology was used to analyze the capacity and LOS of basic freeway segments. A basic freeway segment can be characterized by three performance measures: density in terms of passenger cars per mile per lane, speed in terms of mean passenger-car speed, and V/C ratio. Each of these measures is an indication of how well the freeway is accommodating traffic flow. The measure used to provide an estimate of LOS is density. **Table IV.C-4, LOS Criteria for Freeway Segments**, identifies the LOS definitions for the freeway mainline analysis:

Table IV.C-4

LOS Criteria for Freeway Segments

Level of Service	Density Range (pc/mi/ln)	
A	0–11	
В	>11–18	
C	>18–26	
D	>26–35	
E	>35–45	
F	>45	

SOURCE: Transportation Research Board, Highway Capacity Manual, 2010, Exhibit 11-5.

Existing conditions on the study freeway segments are similar to what was reported in the FEIR. The highest congestion levels on the State Route 91 (SR-91) Freeway, the I-110 Freeway, the I-405 Freeway, and the I-710 Freeway, which correspond to the peak direction of travel, are summarized below. In total, 18 of the 23 analyzed segments currently operate at LOS E or F in at least one travel direction during at least one of the two analyzed peak periods. Addition LOS detail is provided in Appendix D.

- **State Route 91**—This freeway currently operates at LOS D or better for all analyzed segments and directions of travel during both the A.M. and P.M. peak hours.
- Interstate 110—This freeway currently operates at LOS E or F from Sepulveda Boulevard to the SR-91 Freeway and from Redondo Beach Boulevard to Rosecrans Avenue during the A.M. peak hour in the northbound direction. During the P.M. peak hour, LOS E or F conditions occur on the I-110 Freeway from Rosecrans Avenue to Carson Street in the southbound direction.
- Interstate 405—This freeway currently operates at LOS E or F from the I-710 Freeway to Carson Street and from Normandie Avenue to Vermont Avenue during

the A.M. peak hour in the southbound direction. In addition, A.M. peak hour LOS E or F conditions occur in the northbound direction from Wilmington Avenue to Avalon Boulevard and from Vermont Avenue to Redondo Beach Boulevard. During the P.M. peak hour, LOS E or F conditions occur on the I-405 Freeway for all analyzed segments in the southbound direction, and from Wilmington Avenue to Avalon Boulevard and Normandie Avenue to Redondo Beach Boulevard in the northbound direction.

• Interstate 710—This freeway currently operates at LOS E from Willow Street to the I-405 Freeway during the A.M. peak hour in both the southbound and northbound directions. In addition, Long Beach Boulevard to Del Amo Boulevard experiences A.M. peak hour LOS E conditions in the southbound direction. During the P.M. peak hour, LOS E conditions occur between the I-405 Freeway and Willow Street in the southbound direction.

A queuing analysis was conducted for key freeway off-ramps to identify whether vehicles exiting the freeway may create queues backing onto the freeway mainline. The queuing analysis for the off-ramp locations was conducted using Synchro software and the 2010 HCM methodology. Based on this analysis, the queue length does not currently exceed the available queue storage capacity at any of the nine analyzed freeway off-ramps during either of the analyzed peak hours. Addition detail on the ramp queuing analysis is provided in Appendix D.

(4) Public Transportation

The Project site is served by a moderate level of public transit. The proposed modified Project is located directly adjacent to the Carson Circuit North South Shuttle Line on Main Street. Three local Los Angeles County Metro (Routes 205, 246/45, 550), the Metro Silver Line, four Torrance Transit (1, 3, R3, 4), eight Carson Circuit (A, B, C, D, E, G, S), and one Commuter Express (Route 448) bus routes provide service within the study area. Additional transit detail is provided in Appendix D. The Project site was served by fewer public transit operators and routes, as described in the FEIR (see FEIR [DEIR pp. 226 and 227]), including seven Carson Circuit routes and four Metro routes.

(5) Bicycle and Pedestrian Facilities

Similar to the conditions at the time the FEIR was approved, the Project area has a limited existing bikeway network, which includes a Class II bike lane in each direction on Vermont Avenue, on Del Amo Boulevard east of Avalon Boulevard, and on Avalon Boulevard north of Del Amo Boulevard. There is also a Class III bike route on Dolores Street south of 213th Street and on Turmont Street. The study area generally has a mature network of 8-foot sidewalks throughout the study area but lacks in other pedestrian facilities such as 4-way crosswalks, countdown signals, and other safety features. Additional bicycle and pedestrian facility detail is provided in Appendix D.

3. PROJECT IMPACTS

a. Methodology

As discussed in greater detail in Chapter II, Modified Project Description, the purpose of this SEIR is to evaluate the changes considered by the proposed modified Project to the approved Project, and to determine whether changes in circumstances surrounding the Project site and the approved Project (if any), and new information (if any), require further analysis under CEQA. Specifically, the methodology used is to comparatively analyze the approved Project with the proposed modified Project to determine if (1) substantial changes are proposed in the proposed modified Project, which would require major revisions to the FEIR; (2) substantial changes arise in the circumstances of the proposed modified Project's undertaking, requiring major revisions to the FEIR; or (3) new information of substantial importance appears that was not known or available at the time the FEIR was certified. In doing so, the underlying methodology of assessing impacts regarding traffic and circulation continues to be relevant and has been carried forward from the FEIR, and has been updated to reflect the Project site's existing condition as well as any changes in regulatory requirements. In general, there are no substantive changes to the methodology as described in the FEIR, with the exceptions noted below. Refer to the FEIR (see FEIR [DEIR pp. 227–235]) and Appendix D for a full description of the methodology.

(1) Project Construction

In general, there are no substantive changes to the proposed modified Project construction methodology as described in the FEIR. Refer to the FEIR (see FEIR [DEIR p. 227]) for a full description of the Project construction methodology.

(2) Project Operation

In the FEIR, the existing base year for traffic conditions was Year 2005, while future year traffic conditions were evaluated for Year 2010. For the modified proposed Project, existing conditions are evaluated for 2017, and future conditions for 2023.³

(a) Future Year (2023) Conditions

Future traffic projections without the proposed modified Project were developed for Year 2023. The objective of this analysis was to project future traffic growth and operating conditions

The TIA prepared for the proposed modified Project assumed a build-out year of 2023, which is considered to be a worst-case scenario for traffic impacts for the future build-out year. The Air Quality and Noise impact assessments assumed a 32-month construction build-out, which is a worst-case scenario for those two environmental impact areas. It is worst case for air quality and noise because it assumes the most pieces of equipment operating on-site at the same time, which would assume a more conservative air quality emissions and construction noise.

that could be expected to result from regional growth, cumulative projects, and transportation network changes in the vicinity of the Project site by Year 2023.

(i) Related Projects

Future year traffic forecasts include the effects of known specific projects, called related projects, expected to be implemented in the vicinity of the Project site prior to the build-out date of the proposed modified Project. The list of related projects was prepared based on data from the City of Carson, the City of Los Angeles, and the County of Los Angeles. A total of 27 related projects were identified in the study area; these projects are listed in Table III.B-1, Cumulative Projects, p. III.B-2, and shown graphically in Figure III.B-1, Cumulative Project Locations, p. III.B-3, of this SEIR.

Trip generation estimates for the related projects were calculated using a combination of previous study findings, publicly available environmental documentation, and trip generation rates contained in *Trip Generation*, *9th Edition* (Institute of Transportation Engineers, 2012). The geographic distribution of the traffic generated by the related projects is dependent on several factors. These factors include the type and density of the proposed land uses, the geographic distribution of population from which employees and potential patrons of proposed commercial developments may be drawn, the locations of employment and commercial centers to which residents of residential projects may be drawn, and the location of the projects in relation to the surrounding street system. Additionally, if the traffic study or environmental document for a related project was available, the trip distribution from that study was used.

(ii) Ambient Growth

Based on historic trends and at the direction of the City of Carson, it was established that an ambient growth factor of 0.5 percent per year should be applied to adjust the existing base year traffic volumes to reflect the effects of regional growth and development by Year 2023. This growth factor was developed based on regional growth patterns, the SCAG 2016 Regional Transportation Plan Model, the 2010 Congestion Management Program for Los Angeles County, and at the direction of the City of Carson. This growth factor was applied to the 2016 traffic volume data to reflect the effect of ambient growth by Year 2023.

The FEIR assumed an ambient growth factor of 1 percent per year. The ambient growth rate used in the analysis of the approved Project was developed based on a review of the SCAG year 2000 and year 2015 model data, and the background growth rates contained in the 2004 Congestion Management Program for Los Angeles County for the South Bay sub-region.

(iii) Transportation Infrastructure Projects

As noted previously, the Carson Street Master Plan is currently under construction and will be completed by 2023. The infrastructure changes along Carson Street, specifically new lane

configurations for four intersections in the study area, were included in the analysis. The proposed streetscape improvements include drought tolerant streetscape improvements, trees, LED lighting, seating areas for pedestrians, crosswalk enhancements, street furniture, way-finding signage, and bicycle improvements on a 1.75-mile stretch of Carson Street between the I-110 and I-405 freeways. The improvements also include traffic signal modifications, reconfiguration of turn lanes, and reconstruction of driveways for ADA compliance. As noted previously, the changes associated with the Carson Street Master Plan were not anticipated or under construction during the preparation of the FEIR; therefore, they were not included in the future year analysis presented in the FEIR.

(b) Future Year (2023) Conditions with the Project

This traffic scenario provides projected traffic volumes and an assessment of operating conditions under future conditions with the addition of Project-generated traffic. The impacts of the proposed modified Project on future traffic operating conditions were then identified.

(i) Trip Generation Rates

Trip generation rates from *Trip Generation*, *9th Edition* (Institute of Transportation Engineers, 2012) were used to estimate the number of trips associated with the proposed modified Project and are presented in **Table IV.C-5**, **Proposed Modified Project Trip Generation Estimate**. A number of reductions were applied to the standard ITE rates to account for internal trip capture, transit/walk/bike credits, and pass-by trips.

Trip reductions were informed by the MainStreet Mixed-Use Trip Generation Methodology. MainStreet is an application that uses the MXD (mixed-use) trip generation methodology to estimate the Project trip generation by calibrating the ITE trip generation estimates to reflect the site-specific and regional characteristics of the Project site. A transit/walk/bike credit was developed and informed by the MainStreet Mixed-Use Trip Generation Methodology to account for transit, walking, and biking access to the Project site. The transit/walk/bike credit was also informed by the Project site plan, built environment context of the study area, and transit availability. A 1 percent transit/walk/bike credit was applied to be reflective of conditions at the Project site.

Internal trip credits can be defined as a reduction that can be applied to the trip generation estimates for individual land uses to account for trips occurring within the site between the different uses. These are trips usually made via walking within the site. The City of Carson does not have standard internal trip credit guidelines; therefore, local and national best practices were used to develop internal trip credits for the proposed modified Project. The internal trip credit applied to the Project trip generation estimates are informed by the *Trip Generation Handbook*, *3rd Edition* (Institute of Transportation Engineers 2014), the City of Los Angeles *Transportation Impact Study Guidelines*, and the MainStreet Mixed-Use Trip Generation Methodology. Based on this analysis, a ten to 20 percent internal trip capture credit was applied depending on the land use.

Table IV.C-5

Proposed Modified Project Trip Generation Estimate

	ITE				Tri	p Genera	tion R	ates ^a				E	stimated	l Trip Ge	neratio	n	
	Land			A.N	1. Peak	Hour	P.N	A. Peak	Hour	Trip		A.M. P	eak Hou	ır Trips	P.M. 1	Peak Ho	ur Trips
Land Use	Use Code	Size	Daily Rate	Rate	% In	% Out	Rate	% In	% Out	Rate Unit	Daily Trips	In	Out	Total	In	Out	Total
Shopping Center	820	635.000 ksf	e	e	62%	38%	[e]	48%	52%	per ksf	22,581	298	183	481	992	1,075	2,067
Transit, Walk, Bike credit ^b			1%		1%	1%		1%	1%		(226)	(3)	(2)	(5)	(10)	(11)	(21)
Internal capture ^c			10%		10%	10%		20%	20%		(2,236)	(30)	(18)	(48)	(196)	(213)	(409)
Total Driveway Trips											20,119	265	163	428	786	851	1,637
Pass-by credit ^d			10%		10%	10%		10%	10%		(2,012)	(27)	(16)	(43)	(79)	(85)	(164)
Net New Trips											18,107	238	147	385	707	766	1,473
Luxury Outlet Shops ^h	823	581.020 ksf	26.59	0.67	73%	27%	2.29	47%	53%	per ksf	15,449	284	105	389	626	705	1,331
Transit, Walk, Bike credit ^b			1%		1%	1%		1%	1%		(154)	(3)	(1)	(4)	(6)	(7)	(13)
Internal capture ^c			10%		10%	10%		20%	20%		(1,530)	(28)	(10)	(38)	(124)	(140)	(264)
Total Driveway Trips											13,765	253	94	347	496	558	1,054
Pass-by credit ^d			10%		10%	10%		10%	10%		(1,377)	(25)	(9)	(34)	(50)	(56)	(106)
Net New Trips											12,388	228	85	313	446	502	948
Restaurant (High Turnover Sitdown)	932	140.000 ksf	127.15	10.81	55%	45%	9.85	60%	40%	per ksf	17,801	832	681	1,513	827	552	1,379
Transit, Walk, Bike credit ^b			1%		1%	1%		1%	1%		(178)	(8)	(7)	(15)	(8)	(6)	(14)
Internal capture ^c			20%		10%	10%		30%	30%		(3,525)	(82)	(67)	(149)	(246)	(164)	(410)
Total Driveway Trips											14,098	742	607	1,349	573	382	955
Pass-by credit ^d			10%		10%	10%		10%	10%		(1,410)	(74)	(61)	(135)	(57)	(38)	(95)
Net New Trips											12,688	668	546	1,214	516	344	860

Table IV.C-5

Proposed Modified Project Trip Generation Estimate

	ITE				Tri	p Genera	tion R	ates ^a				E	stimated	l Trip Ge	neratio	1	
	Land			A.N	1. Peak	Hour	P.N	I. Peak	Hour	Trip		A.M. I	Peak Hou	ır Trips	P.M. 1	Peak Ho	ur Trips
Land Use	Use Code	Size	Daily Rate	Rate	% In	% Out	Rate	% In	% Out	Rate Unit	Daily Trips	In	Out	Total	In	Out	Total
Multiplex Movie Theater	443/445 ^f	2,500 seats	1.76	0.010	60%	40%	0.10	60%	40%	per seat	4,400	15	10	25	150	100	250
Transit, Walk, Bike credit ^b		80.000 ksf	1%		1%	1%		1%	1%		(44)	0	0	0	(2)	(1)	(3)
Internal capture ^c			10%		10%	10%		10%	10%		(436)	(2)	(1)	(3)	(15)	(10)	(25)
Total Driveway Trips											3,920	13	9	22	133	89	222
Pass-by credit ^d			10%		0%	0%		10%	10%		(392)	0	0	0	(13)	(9)	(22)
Net New Trips											3,528	13	9	22	120	80	200
Multipurpose Recreational Facility	435 ^g	25.000 ksf	59.67	1.181	80%	20%	3.58	55%	45%	per ksf	1,492	24	6	30	50	40	90
Transit, Walk, Bike credit ^b			1%		1%	1%		1%	1%		(15)	0	0	0	(1)	0	(1)
Internal capture ^c			20%		0%	0%		20%	20%		(295)	0	0	0	(10)	(8)	(18)
Total Driveway Trips											1,182	24	6	30	39	32	71
Pass-by credit ^d			10%		0%	0%		10%	10%		(118)	0	0	0	(4)	(3)	(7)
Net New Trips											1,064	24	6	30	35	29	64
Bowling Alley	437	25.000 ksf	33.33	3.130	60%	40%	3.54	55%	45%	per ksf	833	47	31	78	49	40	89
Transit, Walk, Bike credit ^b			1%		1%	1%		1%	1%		(8)	0	0	0	0	0	0
Internal capture ^c			20%		0%	0%		20%	20%		(165)	0	0	0	(10)	(8)	(18)
Total Driveway Trips											660	47	31	78	39	32	71
Pass-by credit ^d			10%		0%	0%		10%	10%		(66)	0	0	0	(4)	(3)	(7)
Net New Trips											594	47	31	78	35	29	64

Table IV.C-5

Proposed Modified Project Trip Generation Estimate

	ITE				Tri	p Genera	ation R	ates ^a				E	stimated	Trip Ge	neratio	n	
	Land			A.N	1. Peak	Hour	P.N	A. Peak	Hour	Trip		A.M. P	eak Hou	ır Trips	P.M.]	Peak Ho	ur Trips
Land Use	Use Code	Size	Daily Rate	Rate	% In	% Out	Rate	% In	% Out	Rate Unit	Daily Trips	In	Out	Total	In	Out	Total
Hotel	310	350 rooms	8.17	0.53	59%	41%	0.60	51%	49%	per room	2,860	110	76	186	107	103	210
Transit, Walk, Bike credit ^b			1%		1%	1%		1%	1%		(29)	(1)	(1)	(2)	(1)	(1)	(2)
Internal capture ^c			20%		10%	10%		30%	30%		(566)	(11)	(8)	(19)	(32)	(31)	(63)
Total Driveway Trips											2,265	98	67	165	74	71	145
Net New Trips											2,265	98	67	165	74	71	145
Residential	220	1,250 du	6.65	0.51	20%	80%	0.62	65%	35%	per du	8,313	128	510	638	504	271	775
Transit, Walk, Bike credit ^b			1%		1%	1%		1%	1%		(83)	(1)	(5)	(6)	(5)	(3)	(8)
Internal capture ^c			20%		10%	10%		30%	30%		(1,646)	(13)	(51)	(64)	(150)	(80)	(230)
Total Driveway Trips											6,584	114	454	568	349	188	537
Net New Trips											6,584	114	454	568	349	188	537
Project Total											73,729	1,738	1,602	3,340	3,305	2,886	6,191
Transit, Walk, Bike credit ^b											(737)	(16)	(16)	(32)	(33)	(29)	(62)
Internal capture ^c											(10,399)	(166)	(155)	(321)	(783)	(654)	(1,437)
Total Driveway Trips											62,593	1,556	1,431	2,987	2,489	2,203	4,692
Pass-by credit ^d											(5,375)	(126)	(86)	(212)	(207)	(194)	(401)
Project Total Trips											57,218	1,430	1,345	2,775	2,282	2,009	4,291

Table IV.C-5

Proposed Modified Project Trip Generation Estimate

	ITE				Tri	p Genera	ation Ra	ites ^a				E	stimated	Trip Ge	neratio	n	
	Land			A.M.	Peak	Hour	P.M	I. Peak	Hour	Trip		A.M. P	eak Hou	ır Trips	P.M. 1	Peak Ho	ur Trips
	Use		Daily							Rate	Daily						
Land Use	Code	Size	Rate	Rate	% In	% Out	Rate	% In	% Out	Unit	Trips	In	Out	Total	In	Out	Total

NOTES:

ksf = thousand square feet; du = dwelling unit

- Source: Institute of Transportation Engineers (ITE), Trip Generation, 9th Edition, 2012, unless otherwise noted.
- b A transit/walk/bike credit was developed based on the results of MXD 2.0 Mixed-Use Trip Generation Methodology to account for transit, walking, and biking access to the Project site.
- ^c Internal capture represents the percentage of trips between land uses that occur within the site. This percentage is informed by MXD 2.0 Mixed-Use Trip Generation Methodology, which incorporated the findings of NCHRP Project 8-51 as described in "Improved Estimation for Internal Trip Capture for Mixed-Use Developments," ITE Journal, August 2010.
- ^d A pass-by credits were informed by ITE pass-by rates and the City of Los Angeles Transportation Impact Study Guidelines Pass-by recommendations. Rates were considered reasonable given the location of the site along a major regional thoroughfare.
- e ITE Shopping Center trip generation equations used rather than trip generation rate:

Daily: Ln(T) = 0.65 * Ln(X) + 5.83, where T = trips, X = area in ksf

A.M. Peak Hour: Ln(T) = 0.61 * Ln(X) + 2.24, where T = trips, X = area in ksf

P.M. Peak Hour: Ln(T) = 0.67 * Ln(X) + 3.31, where T = trips, X = area in ksf

- f ITE rates for Multiplex Movie Theater (445) for Friday P.M. peak hour of adjacent streets were used for the P.M. peak hour analysis.

 Multiplex Movie Theater rate not available for Daily or A.M. analysis, ITE rates for Movie Theater without Matinee (443) were used for Daily and A.M.
- Weekday daily and A.M. peak hour rates not available from ITE. Weekday P.M. peak hour trips assumed to be 6% of the weekday daily trips, and weekday A.M. peak hour trips assumed to be 33% of the weekday P.M. peak hour trips.
- h Land use is primarily luxury outlet center with other regional commercial uses; ITE factory outlet center rates to determine trip generation.

Lastly, pass-by credits account for the patrons making an intermediate stop on the way from an origin to a primary trip destination without a route diversion. These trips would be attracted from traffic passing the site on nearby streets. The City of Carson does not have standard pass-by credit guidelines; therefore, local and national best practices were used to develop pass-by credits for the proposed modified Project. Pass-by credits were informed by both ITE pass-by rates and City of Los Angeles *Transportation Impact Study Guidelines* pass-by recommendations. A 10 percent pass-by credit was applied to commercial and restaurant uses. This rate is considered reasonable given the location of the Project site along a major regional thoroughfare.

As shown in Table IV.C-5, the proposed modified Project would generate an estimated net increase of 57,218 daily trips, including 2,775 trips (1,430 inbound/1,345 outbound) during the A.M. peak hour and 4,291 trips (2,282 inbound/2,009 outbound) during the P.M. peak hour. Compared to the trip generation estimates presented in the FEIR, the proposed modified Project would result in:

- 11,733 (17 percent) fewer daily trips
- 267 (11 percent) more A.M. peak hour trips
- 1,481 (26 percent) fewer P.M. peak hour trips

The FEIR analysis used trip generation Rates from *Trip Generation*, *7th Edition*. The trip generation model used for the FEIR applied an average combined internal capture and pass-by credit of 35 percent for daily trips, 29 percent A.M. peak hour trips, and 37 percent P.M. peak hour trips. The trip generation model used for the proposed modified Project applies state of the industry trip credits that are more conservative compared to the trip credits applied in the FEIR. The proposed modified Project trip generation model applies average combined internal capture, pass-by, and transit/walk/bike credits of 22 percent for daily trips, 17 percent for A.M. peak hour trips, and 31 percent for P.M. peak hour trips, which were informed by the MainStreet Mixed-Use Trip Generation Methodology.

In order to make a direct comparison in trip generation for the modified proposed Project and the approved Project, a trip generation model for the approved Project using the current state-of-practice trip generation model applied to the approved Project was also prepared. The results indicated that the approved Project would have generated 68,954 daily trips, 2,759 A.M. peak hour trips, and 5,420 P.M. peak hour trips. In comparison with the proposed modified Project, the approved Project generated 1 percent fewer A.M. peak hour trips and 21 percent more P.M. peak hour trips. Additional detail on this trip generation comparison is provided in Appendix D.

(3) Mitigation Phasing

(4) Freeway Traffic

(a) Freeway Level of Service

The FEIR analysis used CMP recommended methodology for all analyzed segments. The CMP methodology involved estimated volume over capacity ratios and had a criteria of significant impact if the Project increased traffic by ≥ 2 percent at LOS F or the Project increased traffic by ≥ 2 percent causing LOS F.

Under the proposed modified Project freeway impact analysis, HCM 2010 analysis was conducted, which measures LOS based on three performance measures: density in terms of passenger cars per mile per lane, speed in terms of mean passenger-car speed, and V/C ratio. Each of these measures is an indication of how well the freeway is accommodating traffic flow. The measure used to provide an estimate of LOS is density. Based on the current Caltrans guidelines, impacts were identified for the following conditions:

- Project traffic is associated with a change in LOS from LOS C to LOS D
- Project traffic is associated with a change in LOS from LOS C to LOS D
- Project traffic is associated with a change in LOS from LOS E to LOS F
- Project traffic is associated with an increase in volume of ≥ 2 percent at LOS F

(b) Future Year (2023) Conditions

Freeway mainline volumes for Year 2023 were calculated similar to the method used to project Year 2017 traffic volumes using the same growth factor. Traffic generated by the Project was added to the freeway mainlines for the Future Year (2023) plus Project analysis.

(5) Access

In general, there are no substantive changes to the access methodology as described in the FEIR. The impact of the proposed modified Project's points of access on the adjacent existing streets is determined by calculating the V/C ratio to find the corresponding LOS for with-Project conditions as was done in the FEIR.

(6) Regional Transit

Potential increases in transit trips generated by the proposed modified Project were estimated. 2010 CMP Appendix D.8.4 provides a methodology for estimating the number of transit trips expected to result from a proposed project based on the projected number of vehicle trips. This methodology assumes an average vehicle ridership (AVR) factor of 1.4 in order to estimate the number of person trips to and from the Project and then provides guidance regarding the percentage of person trips assigned to public transit depending on the type of use

(commercial/other versus residential) and the proximity to transit services. 2010 CMP Appendix D.8.4 recommends summarizing the fixed-route local bus services within 0.25 mile of the Project site and express bus routes and rail service within 2 miles of the Project site.

(7) Parking

Unlike the FEIR, parking impacts of the proposed modified Project are not evaluated in this SEIR. CEQA Guidelines Appendix G no longer includes parking impacts. However, information regarding parking supply and demand are provided for informational-purposes only.

b. Thresholds of Significance

Thresholds of significance utilized by the City with respect to traffic and circulation are the same as those used in the FEIR, except as updated and refined as noted below.

(1) Construction Impacts

As set forth in the FEIR, the Project would have a significant traffic and circulation impact relative to construction, if construction traffic or activities cause substantial delays and disruption of existing traffic flow, including emergency access.

(2) Operational Impacts

(a) Intersection Capacity

Signalized intersections in the City of Carson would be significantly impacted with an increase in V/C ratio equal to or greater than 0.02 for intersections operating at LOS E or F after the addition of Project traffic. Intersections operating at LOS A, B, C, or D after the addition of Project traffic are not considered significantly impacted regardless of the increase in V/C ratio. Signalized intersections in both the City and County of Los Angeles would be significantly impacted with an increase in V/C ratio equal to or greater than 0.04 for intersections operating at LOS C, equal to or greater than 0.02 for intersections operating at LOS D, and equal to or greater than 0.01 for intersections operating at LOS E or F after the addition of Project traffic. Intersections operating at LOS A or B after the addition of the Project traffic are not considered significantly impacted regardless of the increase in V/C ratio. The FEIR applied the City of Carson thresholds for all signalized study intersections, regardless of jurisdiction. Based on industry standards and current state-of-practice, thresholds use to evaluate signalized intersection capacity impacts in this SEIR followed the guidance provided by each jurisdiction in which the intersection is located.

Unsignalized intersections in the City of Carson operating at LOS A, B, C, or D after the addition of Project traffic are not considered significantly impacted regardless of the increase in delay or V/C ratio. For unsignalized intersections operating at a delay based LOS E or F under with Project conditions, an intersection is determined to be significantly impacted if the Project-

related increase in ICU V/C is 0.02 or greater. As noted previously, traffic study guidelines for the City of Los Angeles and Los Angeles County do not have LOS or impact thresholds for unsignalized intersections and require a signal warrant analysis only. The FEIR applied the City of Carson thresholds for all unsignalized study intersections, regardless of jurisdiction. Based on industry standards and current state-of-practice, thresholds used to evaluate unsignalized intersection capacity impacts in this SEIR followed the guidance provided by each jurisdiction in which the intersection is located.

(b) Freeway Impacts

Per the *Guide for the Preparation of Traffic Impact Studies* (State of California Department of Transportation [Caltrans], December 2002), Caltrans endeavors to maintain a target LOS at the transition between LOS C and LOS D on state highway facilities; however, Caltrans acknowledges that this may not always be feasible and recommends that the lead agency consult with Caltrans to determine the appropriate target LOS. If an existing State highway facility is operating above the appropriate target LOS, the existing measure of effectiveness (MOE) should be maintained.

Based on these guidelines, a project-related impact is considered significant when the baseline LOS is C and becomes D with the addition of the project, the baseline LOS is D and becomes E with addition of the project, or the baseline LOS is E and becomes F with addition of the project.

It should be noted the aforementioned criteria does not allow for determination of significant impact if the segment is operating at LOS F under baseline conditions. To determine significant impact for such segments, the CMP significant impact criteria (see below) were used to develop the following significance thresholds.

(c) CMP Traffic Impacts

The threshold of significance used to determine a CMP traffic impact are the same as those used in the FEIR. The CMP traffic impact analysis guidelines establish that a significant Project impact occurs when the following threshold is exceeded:

- The proposed project increases traffic demand on a CMP facility by 2 percent of capacity (V/C 0.02), causing LOS F (V/C > 1.00)
- If the facility is already at LOS F, a significant impact occurs when the proposed project increases traffic demand on a CMP facility by 2 percent of capacity (V/C 0.02)

(d) Access

There are no substantive changes to the thresholds of significance used to identify Project access impacts as described in the FEIR. Project access impacts would be considered significant under either of the following conditions:

- A new site access intersection is projected to operate at LOS E or F during one or both of the peak hours; or
- An existing site access intersection is projected to operate at LOS E or F during one or both of the peak hours and the increase in the V/C ratio at an existing site access intersection that can be attributed to the project is equal to or exceeds 0.020.

(e) Public Transportation

The threshold of significance used to determine a public transportation impacts is the same as that used by the FEIR. The determination of significance considers the number of additional passengers expected with the implementation of the proposed modified Project and the available transit capacity. A significant impact would occur if projected transit riders exceed available or projected transit capacity.

(f) Parking

As discussed above under methodology, parking is no longer called out as a part of CEQA Guidelines Appendix G. Therefore, unlike the FEIR, no significance criteria were applied in the qualitative discussion of parking, which is provided below under Project Design Features.

c. Analysis of Project Impacts

(1) Project Design Features

The proposed modified Project would have the following access locations:

- One of the three major access locations would be at Del Amo Boulevard & Street B
 (Intersection No. 9) where the south leg of Street B would provide vehicular access to
 and from development south of the Del Amo Boulevard. This intersection would be
 signalized as part of the proposed modified Project.
- The second major access location for the proposed modified Project would be provided at the new intersection of Main Street & Street A (Intersection No. 13). This intersection would be signalized as part of the proposed modified Project. This intersection would be signalized as part of the proposed modified Project.
- The third major access location would be provided at the intersection of the I-405 Freeway southbound on-/off-ramps and Street A (Intersection No. 17). This intersection will provide access to the Project site from the I-405 Freeway southbound off-ramp and from the intersection of Street A & Avalon Boulevard (Intersection No. 18). The existing signal at this intersection would be modified as part of the proposed modified Project.
- A stop-controlled driveway would be provided on eastbound Del Amo Boulevard between the intersections of Del Amo Boulevard & Street B (Intersection No. 8) and Del Amo Boulevard & Main Street (Intersection No. 9). This access would facilitate

residential access to the proposed modified Project and would provide right-turn-in and right-turn-out movements only.

The site-plan shows internally facing businesses with parking primarily within the central core of the site. There is minimal street parking available within the study area and the neighborhoods closest to the Project site are physically separated from the Project site by the Torrance Lateral Flood Control Channel. Based on the parking supply, site plan design, and physical separation between the Project site and any available on-street neighborhood parking, parking spill-over in to the adjacent neighborhood is not anticipated. Visitor parking is not expected to cause an adverse effect on on-street parking resources in the communities surrounding the Project site.

The approved Project included all of the above access points and driveways in the analysis. At the time of the approved Project, the Avalon Boulevard and I-405 Freeway interchange had not been reconfigured but was assumed to be in place upon the buildout of the approved Project. Additional detail on the proposed lane configurations for all access and egress points are illustrated in Figure II-7, Vehicular Circulation Concept.

(2) Project Impacts

(a) Construction Impacts

The FEIR did not include a comprehensive construction impact analysis. However, given the similar nature and scale of the approved Project and the proposed modified Project, it is expected that the construction impacts would be of similar scale and for a similar duration for both the approved Project and the proposed modified Project.

As detailed in Section F, Project Construction and Schedule, of Chapter II, construction of the proposed modified Project would consist of five phases lasting a total of approximately 3 years; however, an aggressive 18-month construction timeline was used to assess the maximum potential impact of construction activities on traffic and circulation.

(i) Worker Trips and Hauling

The number of construction workers would vary throughout the construction period with the building construction stage generating the highest number of trips. During Phase III (building construction) the proposed modified Project is expected to involve a total of 562 workers on site during peak construction days. During all phases of construction, construction workers are anticipated to park on-site at the western end of Cell 1 and at the southern end of Cell 3 adjacent to the existing landfill operations.

The site is expected to generate equipment and delivery trucks during each phase of construction. One example would be concrete delivery, which would be required for the buildings on-site. Other materials could include plumbing supplies, electrical fixtures, and items used in furnishing the buildings. These materials would be delivered to the site and stored on-

site. These deliveries are expected to occur in variously sized vehicles including small delivery trucks to cement mixer trucks and 18-wheel trucks. Additionally, construction equipment would have to be delivered to the site. This equipment could include cranes, bulldozers, excavators, and other large items of machinery. Most of the heavy equipment is expected to be transported to the site on large trucks such as 18-wheelers or other similar vehicles.

The proposed modified Project is estimated to generate a maximum of up to 124 delivery trucks per day on peak activity days during the approximate one-month overlap of Phases I and II. The vast majority of those delivery trucks (122) would be generated by Phase II activities. Pile driving and deep dynamic compaction (DDC) occurs on-site during the horizontal phase but does not occur during the month associated with peak activity days and is therefore associated with minimal additional trips. Consistent with the FEIR construction analysis, soil is expected to be balanced on site; therefore, no haul trips are expected during the peak activity days.

Based on the aforementioned information, a construction period trip generation analysis was conducted for each phase of construction to estimate daily, morning and evening peak hour passenger car equivalent (PCE) trips. Construction workers often travel to and from a worksite outside of the typical peak commute hours. For the purpose of the analysis, it was assumed that up to 40 percent of the construction workers will arrive during the peak morning commute hour and 40 percent will depart during the peak evening commute hour. Haul and delivery/equipment trucks were assumed to occur evening throughout the 11-hour construction day. A PCE factor of 2.0 was used for delivery trucks.

While there are overlapping phases of construction, the peak construction activity day would occur during the building construction phase. The maximum trip generation total to 1,584 daily PCE trips, of which 267 PCE trips would occur during each of the morning and evening peak hours. At any given time, the peak construction activity is estimated to generate fewer daily and peak hour trips than are projected for the proposed modified Project once it is completed and occupied (57,218 daily trips, 2,775 A.M. peak hour trips, and 4,291 P.M. peak hour trips, as shown in Table IV.C-5). Therefore, construction-related traffic impacts for the duration of the construction period are expected to be less than those described for proposed modified Project operations.

Influx of material and equipment could create adverse traffic effects on the adjacent roadway network based on the following considerations:

- There may be intermittent periods when large numbers of material deliveries are required, such as when concrete trucks will be needed for the parking garage and the buildings.
- Some of the materials and equipment could require the use of large trucks (18-wheelers), which could create additional congestion on the adjacent roadways.

• Delivery vehicles may need to park temporarily on adjacent roadways such as Main Street and Del Amo Boulevard as they deliver their items. Based on experience, it is not uncommon for these types of deliveries to result in temporary lane closures.

(ii) Emergency Access

The impact analysis of construction impacts to emergency access would not change substantially from the impact analysis provided in the FEIR (see FEIR [DEIR p. 241]), and will remain at a less than significant level.

(iii) Pedestrian and Vehicle Access

During all phases of construction, there will be no full-time closures to any parking or travel lanes near the Project site. Parking is currently permitted on Main Street. Since there are no lane closures during construction, there will be no anticipated construction impacts on the roadway network. There are no sidewalk closures for the duration of construction. The sidewalks along Main Street and Del Amo Boulevard fronting the construction site will be open during construction. As such, there are no anticipated significant pedestrian impacts during construction.

(b) Operational Impacts

(i) Study Intersections

a) Existing Conditions with the Proposed Modified Project

As stated previously, this traffic scenario provides projected traffic volumes and an assessment of operating conditions under existing conditions with the addition of proposed modified Project-generated traffic. The impacts of the proposed modified Project on existing traffic operating conditions were then identified. As previously noted, Existing plus Project conditions were not evaluated in the FEIR, but are identified herein.

The Existing plus Project traffic volumes were analyzed to determine the projected V/C ratios and LOS for each of the analyzed intersections under this scenario. **Table IV.C-6**, **Existing plus Project Intersection Levels of Service and Impact Analysis and Mitigations**, summarizes the Existing plus Project LOS. Detailed calculations are provided in Appendix D. As indicated in Table IV.C-6, 14 of the 27 analyzed with Project intersections are projected to operate at an acceptable LOS, i.e., LOS D or better, during both morning and evening peak hours.

As shown in Table IV.C-6 and based on the impact thresholds for each of the three jurisdictions in the study area, the proposed modified Project would result in significant traffic impacts at the following ten intersections:

- 3. Main Street & I-405 southbound on-ramp (P.M. peak hour)
- 5. Vermont Avenue & Del Amo Boulevard (A.M. and P.M. peak hours)

Table IV.C-6 Existing plus Project Intersection Levels of Service and Impact Analysis and Mitigations

						Existing		Existing + Pro	ject	Project		Existing + Project + Mi	itigations	Project	
ID	N/S Street Name	E/W Street Name	Intersection Control	Jurisdiction ^a	Analyzed Period	V/C or Delay (s)	LOS	V/C or Delay (s)	LOS	Increase in V/C or Delay (s)	Significant Impact?	V/C or Delay (s)	LOS	Increase in V/C or Delay (s)	Significant Impact?
1	Figueroa St	I-405 SB On Ramp	Unsignalized	City of Carson	A.M.	0.9	В	0.9	В	0.0	NO				
					P.M.	7.9	C	8.5	D	0.6	NO				
2	Figueroa St	I-405 NB Off Ramp	TWSC	City of Carson	A.M.	143.3	F	165.4	F	22.1	a				
					P.M.	84.6	F	98.3	F	13.7	a				
					A.M.	0.718	a	0.729	a	0.011	NO				
					P.M.	0.907	a	0.923	a	0.016	NO				
3	S Main St	I-405 SB On Ramp	Signalized	City of Carson	A.M.	0.443	A	0.472	A	0.029	NO	0.447	A	0.004	NO
					P.M.	0.891	D	0.929	E	0.038	YES	0.721	C	-0.170	NO
4	S Main St	I-405 NB Off Ramp	Signalized	City of Carson	A.M.	0.547	A	0.578	A	0.031	NO				
					P.M.	0.663	В	0.701	C	0.038	NO				
5	S Vermont Ave	Del Amo Blvd	Signalized	City of Los Angeles	A.M.	0.683	В	0.768	C	0.085	YES	0.654	В	-0.029	NO
					P.M.	0.742	C	0.886	D	0.144	YES	0.731	C	-0.011	NO
				Los Angeles County	A.M.	0.740	C	0.819	D	0.079	YES	0.682	В	-0.058	NO
					P.M.	0.796	C	0.930	E	0.134	YES	0.768	С	-0.028	NO
6	Hamilton Ave	Del Amo Blvd	AWSC	City of Los Angeles	A.M.	a									
					P.M.	a									
7	Figueroa St	Del Amo Blvd	Signalized	City of Carson	A.M.	0.828	D	0.968	E	0.140	YES	0.867	D	0.039	NO
					P.M.	0.770	C	1.241	F	0.471	YES	0.972	E	0.202	YES
8	S Main St	E Del Amo Blvd	Signalized	City of Carson	A.M.	0.694	В	0.852	D	0.158	NO	0.777	C	0.083	NO
					P.M.	0.813	D	1.028	F	0.215	YES	0.852	D	0.039	NO
9	Street B	Del Amo Blvd	Project Intersection	City of Carson	A.M.			0.579	A						
			Signalized		P.M.			0.840	D						
10	S Avalon Blvd	E Del Amo Blvd	Signalized	City of Carson	A.M.	0.843	D	0.926	E	0.083	YES	0.816	D	-0.027	NO
					P.M.	0.892	D	0.993	Е	0.101	YES	0.901	Е	0.009	NO
11	Hamilton Ave	I-110 SB Ramps	AWSC	Los Angeles County	A.M.	a									
					P.M.	a									
12	Figueroa St	I-110 NB Ramps	Signalized	Los Angeles County	A.M.	0.846	D	1.009	F	0.163	YES	0.741	C	-0.105	NO
					P.M.	0.711	C	1.018	F	0.307	YES	0.736	С	0.025	NO
13	Main St	Street A	Project Intersection	City of Carson	A.M.			0.483	A						
			Signalized		P.M.			0.581	A						
14	Hamilton Ave	W Torrance Blvd	Signalized	Los Angeles County	A.M.	0.733	C	0.746	C	0.013	NO				
					P.M.	0.624	В	0.655	В	0.031	NO				
15	Figueroa St	W Torrance Blvd	Signalized	City of Carson	A.M.	0.795	C	0.852	D	0.057	NO				
					P.M.	0.782	С	0.874	D	0.092	NO				

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Table IV.C-6

Existing plus Project Intersection Levels of Service and Impact Analysis and Mitigations

						Existing		Existing + Proj	ect	Project		Existing + Project + M	itigations	Project	
ID	N/S Street Name	E/W Street Name	Intersection Control	Jurisdiction ^a	Analyzed Period	V/C or Delay (s)	LOS	V/C or Delay (s)	LOS	Increase in V/C or Delay (s)	Significant Impact?	V/C or Delay (s)	LOS	Increase in V/C or Delay (s)	Significant Impact?
16	S Main St	W Torrance Blvd	Signalized	City of Carson	A.M.	0.631	В	0.710	C	0.079	NO				
					P.M.	0.753	C	0.827	D	0.074	NO				
17	Street A	I-405 SB Ramps	Project Intersection	City of Carson	A.M.			0.561	A						
			Signalized		P.M.			0.501	A						
18	S Avalon Blvd	I-405 SB Ramps	Signalized	City of Carson	A.M.	0.631	В	0.684	В	0.053	NO				
					P.M.	0.584	A	0.688	В	0.104	NO				
19	S Avalon Blvd	I-405 NB Ramps	Signalized	City of Carson	A.M.	0.506	A	0.575	A	0.069	NO				
					P.M.	0.598	A	0.794	C	0.196	NO				
20	S Main St	E 213th St	Signalized	City of Carson	A.M.	0.807	D	0.867	D	0.060	NO	0.678	В	-0.129	NO
					P.M.	0.810	D	0.906	E	0.096	YES	0.803	D	-0.007	NO
21	S Avalon Blvd	E 213th St	Signalized	City of Carson	A.M.	0.640	В	0.676	В	0.036	NO				
					P.M.	0.745	C	0.801	D	0.056	NO				
22 ^b	S Vermont Ave	W Carson St	Signalized	Los Angeles County	A.M.	0.876	D	0.901	E	0.025	YES	0.803	D	-0.073	NO
					P.M.	0.747	C	0.794	C	0.047	YES	0.732	C	-0.015	NO
23 ^b	Figueroa St	W Carson St	Signalized	City of Carson	A.M.	0.942	E	1.013	F	0.071	YES	0.693	В	-0.249	NO
					P.M.	1.063	F	1.172	F	0.109	YES	0.696	В	-0.367	NO
24 ^b	S Main St	W Carson St	Signalized	City of Carson	A.M.	0.457	A	0.546	A	0.089	NO				
					P.M.	0.595	A	0.679	В	0.084	NO				
25 ^b	S Avalon Blvd	E Carson St	Signalized	City of Carson	A.M.	0.811	D	0.899	D	0.088	NO	0.785	C	-0.026	NO
					P.M.	0.896	D	0.996	E	0.100	YES	0.904	E	0.008	NO
26 ^b	I-405 SB Ramps	E Carson St	Signalized	City of Carson	A.M.	0.621	В	0.621	В	0.000	NO				
					P.M.	0.667	В	0.667	В	0.000	NO				
27	I-405 NB Ramps	E Carson St	Signalized	City of Carson	A.M.	0.417	A	0.441	A	0.024	NO				
					P.M.	0.479	A	0.504	A	0.025	NO				

NOTES:

TWSC Two-Way Stop Controlled; AWSC All Way Stop Controlled

Methodology varies by Jurisdiction. If an intersection is located along a City border, both methodologies are applied.
 Signalized intersections within the City of Carson and Los Angeles County are analyzed with ICU methodology.
 Signalized intersections within the City of Los Angeles are analyzed with CMA methodology.
 Un-signalized intersections within the City of Los Angeles and Los Angeles County are included in the impact analysis; instead, signal warrant analyses are conducted.

Un-signalized intersections within the City of Carson are analyzed with HCM 2010, if the worst approach LOS is E or F, then impacts are determined based on ICU V/C.

b Existing analysis evaluates LOS under construction lane configurations, future analysis assumes post-construction lane configurations.

- 7. Figueroa Street & Del Amo Boulevard (A.M. and P.M. peak hours)
- 8. Main Street & Del Amo Boulevard (P.M. peak hour)
- 10. Avalon Boulevard & Del Amo Boulevard (A.M. and P.M. peak hours)
- 12. Figueroa Street & I-110 northbound ramps (A.M. and P.M. peak hours)
- 20. Main Street & 213th Street (P.M. peak hour)
- 22. Vermont Avenue & Carson Street (A.M. and P.M. peak hours)
- 23. Figueroa Street & Carson Street (A.M. and P.M. peak hours)
- 25. Avalon Boulevard & Carson Street (P.M. peak hour)

Some of the Existing plus Project significant impacts identified for study area intersections are located on the edge of the study area. A brief discussion of these significant edge impacts, and the manner in which Project traffic is expected affect upstream and downstream intersections, is provided in Appendix D. No further significant impacts are expected to occur at any intersections located just outside the study area as a result of the proposed modified Project.

a) Future Year (2023) Conditions

As stated previously, future traffic projections without the proposed modified Project were developed for Year 2023. 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 Year 2023. The FEIR evaluated Year 2010 conditions for the future year analysis.

Future year (2023) peak hour traffic volumes were analyzed to determine the projected V/C ratio and LOS for each of the analyzed intersections. **Table IV.C-7, Future Year (2023) plus Project Intersection Levels of Service and Impact Analysis and Mitigations**, summarizes the future LOS. Detailed calculations are provided in Appendix D. As shown in Table IV.C-7, 17 of the 22 intersections analyzed for impacts are projected to operate at LOS D or better during the morning and afternoon peak hours under future year conditions.

The following four signalized intersections are projected to operate at a poor LOS, i.e., LOS E or F:

- 3. Main Street & I-405 southbound on-ramp (P.M. peak hour)
- 10. Avalon Boulevard & Del Amo Boulevard (P.M. peak hour)
- 22. Vermont Avenue & Carson Street (A.M. peak hour)
- 25. Avalon Boulevard & Carson Street (P.M. peak hours)

One unsignalized intersection is projected to operate at a poor LOS (LOS F):

2. Figueroa Street & I-405 northbound off-ramp (A.M. & P.M. peak hours).

b) Future Year (2023) Conditions with the Proposed Modified Project

As stated previously, this traffic scenario provides projected traffic volumes and an assessment of operating conditions under future conditions with the addition of Project-generated traffic. The impacts of the proposed modified Project on future traffic operating conditions were then identified. The results of the Future Year (2023) plus Project analysis are also presented in Table IV.C-7, with additional detail provided in Appendix D. Thirteen of the 27 intersections analyzed for impacts are projected to operate at LOS D or better during the morning and afternoon peak hours under Future Year (2023) plus Project conditions.

As shown in Table IV.C-7, using the criteria for determination of significant impacts, the proposed modified Project would result in significant impacts at ten intersections under Future Year (2023) plus Project conditions:

- 3. Main Street & I-405 southbound on-ramp (P.M. peak hour)
- 5. Vermont Avenue & Del Amo Boulevard (A.M. and P.M. peak hours)
- 7. Figueroa Street & Del Amo Boulevard (A.M. and P.M. peak hours)
- 8. Main Street & Del Amo Boulevard (P.M. peak hour)
- 10. Avalon Boulevard & Del Amo Boulevard (A.M. and P.M. peak hours)
- 12. Figueroa Street & I-110 northbound ramps (A.M. and P.M. peak hours)
- 15. Figueroa Street & Torrance Boulevard (P.M. peak hour)
- 20. Main Street & 213th Street (P.M. peak hour)
- 22. Vermont Avenue & Carson Street (A.M. and P.M. peak hours)
- 25. Avalon Boulevard & Carson Street (A.M. and P.M. peak hours)

The incremental V/C increase associated with the proposed modified Project at each of the significantly impacted intersections is larger in the P.M. peak hour compared to the A.M. peak hour, and there are four intersections with significant impacts during the P.M. peak hour only.

Some of the Future plus Project significant impacts identified for study area intersections are located on the edge of the study area. A brief discussion of these significant edge impacts, and the manner in which Project traffic is expected affect upstream and downstream intersections, is provided in Appendix D. No further significant impacts are expected to occur at any intersections located just outside the study area as a result of the proposed modified Project.

Table IV.C-7 Future Year (2023) plus Project Intersection Levels of Service and Impact Analysis and Mitigations

						Future		Future + Proj	ject	Project		Future + Project + M	itigations	Project	
ID	N/S Street Name	E/W Street Name	Intersection Control	Jurisdiction ^a	Analyzed Period	V/C or Delay (s)	LOS	V/C or Delay (s)	LOS	Increase in V/C or Delay (s)	Significant Impact?	V/C or Delay (s)	LOS	Increase in V/C or Delay (s)	Significant Impact?
1	Figueroa St	I-405 SB On Ramp	Unsignalized	City of Carson	A.M.	0.9	В	0.9	В	0.0	NO				
		•	-	·	P.M.	9.1	D	9.9	D	0.8	NO				
2	Figueroa St	I-405 NB Off Ramp	TWSC	City of Carson	A.M.	171.8	F	195.4	F	23.6	a				
					P.M.	101.8	F	119.4	F	17.6	a				
					A.M.	0.738	a	0.749	a	0.011	NO				
					P.M.	0.933	a	0.949	a	0.016	NO				
3	S Main St	I-405 SB On Ramp	Signalized	City of Carson	A.M.	0.457	A	0.486	A	0.029	NO	0.460	A	0.003	NO
					P.M.	0.917	E	0.955	E	0.038	YES	0.742	C	-0.175	NO
4	S Main St	I-405 NB Off Ramp	Signalized	City of Carson	A.M.	0.563	A	0.594	A	0.031	NO				
					P.M.	0.683	В	0.721	C	0.038	NO				
5	S Vermont Ave	Del Amo Blvd	Signalized	City of Los Angeles	A.M.	0.712	C	0.797	C	0.085	YES	0.681	В	-0.031	NO
					P.M.	0.775	C	0.919	E	0.144	YES	0.758	C	-0.017	NO
				Los Angeles County	A.M.	0.768	C	0.847	D	0.079	YES	0.706	C	-0.062	NO
					P.M.	0.826	D	0.962	E	0.136	YES	0.795	C	-0.031	NO
6	Hamilton Ave	Del Amo Blvd	AWSC	City of Los Angeles	A.M.	a									
					P.M.	a									
7	Figueroa St	Del Amo Blvd	Signalized	City of Carson	A.M.	0.853	D	1.014	F	0.161	YES	0.892	D	0.039	NO
					P.M.	0.819	D	1.283	F	0.464	YES	1.003	F	0.184	YES
8	S Main St	E Del Amo Blvd	Signalized	City of Carson	A.M.	0.727	C	0.885	D	0.158	NO	0.808	D	0.081	NO
					P.M.	0.849	D	1.068	F	0.219	YES	0.887	D	0.038	NO
9	Street B	Del Amo Blvd	Project Intersection	City of Carson	A.M.			0.582	A						
			Signalized		P.M.			0.769	C						
10	S Avalon Blvd	E Del Amo Blvd	Signalized	City of Carson	A.M.	0.874	D	0.957	E	0.083	YES	0.842	D	-0.032	NO
					P.M.	0.937	Е	1.039	F	0.102	YES	0.933	Е	-0.004	NO
11	Hamilton Ave	I-110 SB Ramps	AWSC	Los Angeles County	A.M.	a									
					P.M.	a									
12	Figueroa St	I-110 NB Ramps	Signalized	Los Angeles County	A.M.	0.874	D	1.054	F	0.180	YES	0.767	C	-0.107	NO
					P.M.	0.734	C	1.050	F	0.316	YES	0.760	C	0.026	NO
13	Main St	Street A	Project Intersection	City of Carson	A.M.			0.492	A						
			Signalized		P.M.			0.581	A						
14	Hamilton Ave	W Torrance Blvd	Signalized	Los Angeles County	A.M.	0.756	C	0.769	C	0.013	NO				
					P.M.	0.643	В	0.674	В	0.031	NO				
15	Figueroa St	W Torrance Blvd	Signalized	City of Carson	A.M.	0.820	D	0.877	D	0.057	NO	0.851	D	0.031	NO
					P.M.	0.809	D	0.901	E	0.092	YES	0.876	D	0.067	NO

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Table IV.C-7

Future Year (2023) plus Project Intersection Levels of Service and Impact Analysis and Mitigations

						Future		Future + Proj	ect	Project		Future + Project + Mit	igations	Project	
ID	N/S Street Name	E/W Street Name	Intersection Control	Jurisdiction ^a	Analyzed Period	V/C or Delay (s)	LOS	V/C or Delay (s)	LOS	Increase in V/C or Delay (s)	Significant Impact?	V/C or Delay (s)	LOS	Increase in V/C or Delay (s)	Significant Impact?
16	S Main St	W Torrance Blvd	Signalized	City of Carson	A.M.	0.653	В	0.731	C	0.078	NO				
			Ç	·	P.M.	0.779	C	0.851	D	0.072	NO				
17	Street A	I-405 SB Ramps	Project Intersection	City of Carson	A.M.			0.577	A						
			Signalized		P.M.			0.516	A						
18	S Avalon Blvd	I-405 SB Ramps	Signalized	City of Carson	A.M.	0.663	В	0.715	С	0.052	NO				
					P.M.	0.612	В	0.716	C	0.104	NO				
19	S Avalon Blvd	I-405 NB Ramps	Signalized	City of Carson	A.M.	0.527	A	0.596	A	0.069	NO				
					P.M.	0.619	В	0.817	D	0.198	NO				
20	S Main St	E 213th St	Signalized	City of Carson	A.M.	0.831	D	0.891	D	0.060	NO	0.696	В	-0.135	NO
					P.M.	0.834	D	0.930	E	0.096	YES	0.823	D	-0.011	NO
21	S Avalon Blvd	E 213th St	Signalized	City of Carson	A.M.	0.661	В	0.698	В	0.037	NO				
					P.M.	0.776	C	0.832	D	0.056	NO				
22 ^b	S Vermont Ave	W Carson St	Signalized	Los Angeles County	A.M.	0.918	E	0.942	E	0.024	YES	0.835	D	-0.083	NO
					P.M.	0.778	C	0.825	D	0.047	YES	0.757	C	-0.021	NO
23 ^b	Figueroa St	W Carson St	Signalized	City of Carson	A.M.	0.713	C	0.724	C	0.011	NO				
					P.M.	0.703	C	0.719	C	0.016	NO				
24 ^b	S Main St	W Carson St	Signalized	City of Carson	A.M.	0.481	A	0.571	A	0.090	NO				
					P.M.	0.623	В	0.703	C	0.080	NO				
25 ^b	S Avalon Blvd	E Carson St	Signalized	City of Carson	A.M.	0.872	D	0.920	E	0.048	YES	0.843	D	-0.029	NO
					P.M.	0.951	E	1.000	F	0.049	YES	0.958	E	0.007	NO
26 ^b	I-405 SB Ramps	E Carson St	Signalized	City of Carson	A.M.	0.652	В	0.652	В	0.000	NO				
					P.M.	0.704	C	0.704	C	0.000	NO				
27	I-405 NB Ramps	E Carson St	Signalized	City of Carson	A.M.	0.385	A	0.465	A	0.080	NO				
					P.M.	0.497	A	0.522	A	0.025	NO				

NOTES:

TWSC Two-Way Stop Controlled; AWSC All Way Stop Controlled

Methodology varies by Jurisdiction. If an intersection is located along a City border, both methodologies are applied.
 Signalized intersections within the City of Carson and Los Angeles County are analyzed with ICU methodology.
 Signalized intersections within the City of Los Angeles are analyzed with CMA methodology.

Unsignalized intersections within the City of Los Angeles and Los Angeles County are not included in the impact analysis; instead, signal warrant analyses are conducted. Unsignalized intersections within the City of Carson are analyzed with HCM 2010, if the worst approach LOS is E or F, then impacts are determined based on ICU V/C.

b Existing analysis evaluates LOS under construction lane configurations, future analysis assumes post-construction lane configurations.

c) Approved Project and Proposed Modified Project Intersection Impact Comparison

A comparison of intersection impacts between the approved Project and the proposed modified Project was conducted by applying the 2017 state-of-the-practice methodology and approach used in the analysis of the proposed modified Project to the approved Project. As stated previously, this included an updated trip generation analysis for the approved Project and assignment of the approved Project trips to the existing (2017) and future (2023) roadway network. Results of the trip generation, LOS, and significant impact analyses are provided in Appendix D. The approved Project, if analyzed under existing (2017) and future (2023) conditions, would have resulted in significant traffic impacts at the following 11 intersections:

- 3. Main Street & I-405 southbound on-ramp (P.M. peak hour 2017 and 2023)
- 5. Vermont Avenue & Del Amo Boulevard (A.M. and P.M. peak hours 2017 and 2023)
- 7. Figueroa Street & Del Amo Boulevard (A.M. and P.M. peak hours 2017 and 2023)
- 8. Main Street & Del Amo Boulevard (P.M. peak hour 2017 and 2023)
- 10. Avalon Boulevard & Del Amo Boulevard (A.M. and P.M. peak hours 2017 and 2023)
- 12. Figueroa Street & I-110 northbound ramps (A.M. and P.M. peak hours 2017 and 2023)
- 15. Figueroa Street & Torrance Boulevard (P.M. peak hour 2017 and 2023)
- 20. Main Street & 213th Street (P.M. peak hour 2017 and 2023)
- 22. Vermont Avenue & Carson Street (A.M. and P.M. peak hours 2017 and 2023)
- 23. Figueroa Street & Carson Street (A.M. and P.M. peak hours 2017 only)
- 25. Avalon Boulevard & Carson Street (P.M. peak hour 2017 and 2023; A.M. peak hour 2023 only)

The proposed modified Project would result in 11 significant impacts, one fewer significant impact than the approved Project, and seven significant and unavoidable impacts, six additional significant and unavoidable impacts compared to the approved Project. The difference in number, degree, and location of significant impacts identified for the approved Project compared to the analysis for the proposed modified Project, is a result of changes in background traffic conditions, related project traffic patterns, roadway and freeway capacity changes, as well as differences in analysis methodology. The difference in the number of significant and unavoidable impacts is a result of differences in analysis methodology and changes in City of Carson policy and design standards.

The proposed modified Project has the same number of significant impacts and one fewer significant and unavoidable impact compared to the approved Project when analyzed using the same 2017 methodology. The difference in number, degree, and location of significant impacts identified between the proposed modified Project and the approved Project analyzed with the

2017 state-of-practice methodology is a result of differences in the Project Description. A more detailed comparison of intersection impacts in the FEIR versus those identified for the proposed modified Project is provided in Appendix D.

d) Unsignalized Intersection Signal Warrant Analysis

There are two unsignalized intersections that fall within the jurisdiction of either the City of Los Angeles or Los Angeles County. Traffic volumes and lane configurations were used to prepare the MUTCD Peak Hour (Warrant 3) signal warrant analysis for the following two intersections:

- 6. Hamilton Avenue & Del Amo Boulevard (City of Los Angeles and Los Angeles County)
- 11. Hamilton Avenue & I-110 southbound ramps (Los Angeles County)

These two unsignalized intersections were analyzed under Existing, Existing plus Project, Future Base, and Future plus Project conditions. The volumes at the Hamilton Avenue & Del Amo Boulevard intersection met the signal warrant thresholds during both peak hours under all analysis scenarios. The volumes at the Hamilton Avenue and I-110 southbound ramps intersection also met the signal warrant thresholds during both peak hours under all analysis scenarios. Signal analysis worksheets are included in Appendix D. Unlike the SEIR, the FEIR did not include a signal warrant analysis for any of the unsignalized intersections. Instead, the delay and LOS for the intersections of Hamilton Avenue & Del Amo Boulevard (Intersection No. 6) and Hamilton Avenue and the I-110 Freeway southbound ramps (Intersection No. 11) were included in the impact analysis, which determined that significant impacts would occur at both intersections during both the A.M. and P.M. peak hours.

Should either LADOT and/or the County of Los Angeles prefer to install traffic signals at either of these locations, the proposed modified Project would be responsible for a fair share contribution to the costs of the signal installation.

(ii) Caltrans Freeways and Freeway Ramps

Traffic generated by the proposed modified Project was added to freeway mainlines for the Existing plus Project analysis. The FEIR did not evaluate this scenario. Freeway mainline volumes for Year 2023 were calculated similar to the method used to project Year 2017 traffic volumes using the same growth factor. Traffic generated by the proposed modified Project was added to the freeway mainlines for the Future Year (2023) plus Project analysis.

Using the freeway analysis methodology described previously for Existing Conditions, the LOS for the 23 freeway study segments was calculated, the results of which are summarized in **Table IV.C-8**, **Freeway Segment Impact Analysis—A.M. Peak Hour**, and **Table IV.C-9**, **Freeway Segment Impact Analysis—P.M. Peak Hour**. As shown in Table IV.C-8 and Table IV.C-9, significant impacts would occur at the following study freeway segments:

Table IV.C-8 Freeway Segment Impact Analysis—A.M. Peak Hour

					Existi	ing (Year	2017)	Exis	ting + Pro	oject	Percent	Change	Futu	re (Year	2023)	Fut	ture + Pro	ject	Percent	Change
Fwy Name	From	То	Dir	Period	Volume	LOS	Density	Volume	LOS	Density	Increase	in MOE?	Volume	LOS	Density	Volume	LOS	Density	Increase	in MOE?
SR-91	110 WB	Avalon	WB	A.M.	8,490	D	31.5	8,524	D	31.6	0.4%	No	8,742	D	32.7	8,776	D	32.9	0.4%	No
	110 WB	Avalon	EB	A.M.	5,186	В	14.5	5,277	В	14.8	1.8%	No	5,340	В	14.9	5,431	В	15.2	1.7%	No
	Avalon	Central	WB	A.M.	8,660	D	30.7	8,755	D	31.1	1.1%	No	8,917	D	32.0	9,012	D	32.5	1.1%	No
	Avalon	Central	EB	A.M.	5,290	В	17.8	5,381	C	18.1	1.7%	No	5,447	C	18.3	5,538	C	18.6	1.7%	No
	Central	Wilmington	WB	A.M.	8,830	D	31.5	8,925	D	32.0	1.1%	No	9,092	D	33.0	9,187	D	33.5	1.0%	No
	Central	Wilmington	EB	A.M.	5,393	C	18.1	5,484	C	18.4	1.7%	No	5,553	C	18.6	5,644	C	18.9	1.6%	No
I-110	SR-1	Sepulveda	NB	A.M.	7,256	D	32.8	7,298	D	33.1	0.6%	No	7,470	D	34.4	7,512	D	34.7	0.6%	No
	SR-1	Sepulveda	SB	A.M.	5,300	C	22.2	5,341	C	22.4	0.8%	No	5,456	C	22.9	5,497	C	23.1	0.8%	No
	Sepulveda	Carson	NB	A.M.	7,807	E	35.5	7,871	E	36.0	0.8%	No	8,037	E	37.4	8,101	E	37.9	0.8%	No
	Sepulveda	Carson	SB	A.M.	5,747	C	24.3	5,814	C	24.6	1.2%	No	5,916	C	25.1	5,983	C	25.4	1.1%	No
	Carson	Torrance	NB	A.M.	8,985	F	47.2	9,061	F	48.2	0.8%	No	9,250	F	50.7	9,326	F	51.8	0.8%	No
	Carson	Torrance	SB	A.M.	6,614	D	27.4	6,686	D	27.8	1.1%	No	6,809	D	28.6	6,881	D	29.0	1.1%	No
	Torrance	I-405	NB	A.M.	9,508	F	315.3	9,756	F	575.9	2.6%	Yes	9,789	F	646.7	10,037	F	7527.3	2.5%	Yes
	Torrance	I-405	SB	A.M.	6,999	D	29.7	7,249	D	31.4	3.6%	No	7,206	D	31.1	7,456	D	32.8	3.5%	No
	I-405	SR-91	NB	A.M.	11,602	F	54.0	11,850	F	57.3	2.1%	Yes	11,944	F	58.7	12,192	F	62.5	2.1%	Yes
	I-405	SR-91	SB	A.M.	8,540	E	44.1	8,790	F	47.0	2.9%	Yes	8,792	F	47.1	9,042	F	50.4	2.8%	Yes
	SR-91	Redondo Beach	NB	A.M.	9,037	D	32.6	9,096	D	33.0	0.7%	No	9,274	D	34.0	9,333	D	34.3	0.6%	No
	SR-91	Redondo Beach	SB	A.M.	10,847	E	43.6	10,894	E	44.0	0.4%	No	11,131	F	46.2	11,178	F	46.7	0.4%	No
	Redondo Beach	Rosecrans	NB	A.M.	8,232	E	40.9	8,273	E	41.3	0.5%	No	8,476	E	43.4	8,517	E	43.9	0.5%	No
	Redondo Beach	Rosecrans	SB	A.M.	9,880	F	65.2	9,912	F	66.0	0.3%	No	10,173	F	72.5	10,205	F	73.4	0.3%	No
I-405	I-710	Alameda	NB	A.M.	8,308	D	28.9	8,386	D	29.3	0.9%	No	8,552	D	30.1	8,630	D	30.5	0.9%	No
	I-710	Alameda	SB	A.M.	11,328	F	125.5	11,423	F	133.4	0.8%	No	11,661	F	158.0	11,756	F	170.5	0.8%	No
	Alameda	Wilmington	NB	A.M.	8,302	D	27.6	8,429	D	28.2	1.5%	No	8,538	D	28.7	8,665	D	29.3	1.5%	No
	Alameda	Wilmington	SB	A.M.	11,320	F	48.1	11,454	F	49.5	1.2%	No	11,641	F	51.6	11,775	F	53.2	1.2%	No
	Wilmington	Carson	NB	A.M.	8,002	E	37.1	8,169	E	38.6	2.1%	No	8,225	E	39.1	8,392	E	40.7	2.0%	No
	Wilmington	Carson	SB	A.M.	10,911	F	99.6	11,078	F	108.7	1.5%	No	11,215	F	117.3	11,382	F	130.0	1.5%	No
	Carson	Avalon	NB	A.M.	8,926	F	46.5	9,132	F	49.1	2.3%	Yes	9,185	F	49.8	9,391	F	52.7	2.2%	Yes
	Carson	Avalon	SB	A.M.	7,324	D	31.9	7,523	D	33.3	2.7%	No	7,536	D	33.4	7,735	D	34.9	2.6%	No
	Avalon	I-110	NB	A.M.	9,419	D	34.9	9,536	E	35.6	1.2%	Yes	9,697	E	36.6	9,814	E	37.4	1.2%	No
	Avalon	I-110	SB	A.M.	7,728	D	26.4	7,896	D	27.1	2.2%	No	7,956	D	27.4	8,124	D	28.1	2.1%	No
	I-110	Vermont	NB	A.M.	9,415	D	33.3	9,586	D	34.4	1.8%	No	9,688	E	35.0+	9,859	E	36.1	1.8%	No
	I-110	Vermont	SB	A.M.	7,725	D	34.8	7,901	E	36.2	2.3%	Yes	7,949	E	36.6	8,125	E	38.2	2.2%	No
	Vermont	Normandie	NB	A.M.	9,558	E	35.7	9,688	E	36.6	1.4%	No	9,841	E	37.6	9,971	E	38.5	1.3%	No
	Vermont	Normandie	SB	A.M.	7,843	E	37.3	7,966	E	38.4	1.6%	No	8,075	E	39.4	8,198	E	40.6	1.5%	No
	Normandie	Western	NB	A.M.	9,477	F	57.2	9,572	F	58.9	1.0%	No	9,750	F	62.5	9,845	F	64.5	1.0%	No
	Normandie	Western	SB	A.M.	6,422	D	27.7	6,513	D	28.2	1.4%	No	6,607	D	28.7	6,698	D	29.3	1.4%	No
	Western	Crenshaw	NB	A.M.	9,232	F	50.5	9,311	F	51.6	0.9%	No	9,492	F	54.3	9,571	F	55.5	0.8%	No
	Western	Crenshaw	SB	A.M.	6,255	C	25.4	6,326	C	25.8	1.1%	No	6,432	D	26.4	6,503	D	26.8	1.1%	No
	Crenshaw	Redondo Beach	NB	A.M.	8,818	F	45.2	8,880	F	45.9	0.7%	No	9,073	F	48.3	9,135	F	49.1	0.7%	No
	Crenshaw	Redondo Beach	SB	A.M.	5,975	C	24.0	6,026	C	24.3	0.9%	No	6,148	C	24.9	6,199	C	25.1	0.8%	No

Table IV.C-8

Freeway Segment Impact Analysis—A.M. Peak Hour

					Existi	ng (Year	2017)	Exis	ting + Pr	oject	Percent	Change	Futu	re (Year 2	2023)	Fut	ure + Pro	ject	Percent	Change
Fwy Name	From	To	Dir	Period	Volume	LOS	Density	Volume	LOS	Density	Increase	in MOE?	Volume	LOS	Density	Volume	LOS	Density	Increase	in MOE?
I-710	Willow	I-405	NB	A.M.	5,995	E	38.6	6,015	E	38.9	0.3%	No	6,173	E	40.9	6,193	E	41.1	0.3%	No
	Willow	I-405	SB	A.M.	6,358	E	43.4	6,375	E	43.7	0.3%	No	6,547	F	46.3	6,564	F	46.6	0.3%	No
	I-405	Del Amo	NB	A.M.	6,557	D	28.4	6,590	D	28.6	0.5%	No	6,751	D	29.6	6,784	D	29.8	0.5%	No
	I-405	Del Amo	SB	A.M.	7,326	D	33.3	7,356	D	33.5	0.4%	No	7,543	D	34.9	7,573	E	35.1	0.4%	Yes
	Del Amo	Long Beach	NB	A.M.	6,806	C	22.9	6,839	C	23.0	0.5%	No	7,008	C	23.6	7,041	C	23.7	0.5%	No
	Del Amo	Long Beach	SB	A.M.	7,605	E	35.4	7,635	E	35.6	0.4%	No	7,830	E	37.2	7,860	E	37.5	0.4%	No

Table IV.C-9 Freeway Segment Impact Analysis—P.M. Peak Hour

Fwy					Existi	ng (Year	2017)	Exis	ting + Pro	oject	Percent	Change in MOE?	Futu	re (Year 2	2023)	Future + Project			_ Percent	Change
Name	From	To	Dir	Period	Volume	LOS	Density	Volume	LOS	Density	Increase		Volume	LOS	Density	Volume	LOS	Density	Increase	in MOE?
SR-91	I-110 WB	Avalon	WB	P.M.	6,034	С	21.9	6,094	С	22.1	1.0%	No	6,214	С	22.6	6,274	С	22.8	1.0%	No
	I-110 WB	Avalon	EB	P.M.	7,661	C	21.4	7,789	C	21.8	1.7%	No	7,889	C	22.1	8,017	C	22.4	1.6%	No
	Avalon	Central	WB	P.M.	6,155	C	20.6	6,303	C	21.2	2.4%	No	6,338	C	21.3	6,486	C	21.8	2.3%	No
	Avalon	Central	EB	P.M.	7,814	D	26.8	7,942	D	27.3	1.6%	No	8,047	D	27.8	8,175	D	28.3	1.6%	No
	Central	Wilmington	WB	P.M.	6,275	C	21.0	6,423	C	21.6	2.4%	No	6,462	C	21.7	6,610	C	22.2	2.3%	No
	Central	Wilmington	EB	P.M.	7,968	D	27.4	8,096	D	28.0	1.6%	No	8,204	D	28.5	8,332	D	29.1	1.6%	No
I-110	SR-1	Sepulveda	NB	P.M.	4,874	C	20.4	4,950	C	20.8	1.6%	No	5,018	C	21.0	5,094	C	21.4	1.5%	No
	SR-1	Sepulveda	SB	P.M.	7,403	D	33.9	7,473	D	34.4	0.9%	No	7,622	E	35.5	7,692	E	36.1	0.9%	No
	Sepulveda	Carson	NB	P.M.	5,442	C	21.5	5,559	C	22.0	2.1%	No	5,603	C	22.2	5,720	C	22.8	2.1%	No
	Sepulveda	Carson	SB	P.M.	7,512	D	34.7	7,618	E	35.5	1.4%	Yes	7,734	E	36.4	7,840	E	37.3	1.4%	No
	Carson	Torrance	NB	P.M.	6,263	C	25.5	6,396	D	26.2	2.1%	Yes	6,448	D	26.5	6,581	D	27.2	2.1%	No
	Carson	Torrance	SB	P.M.	8,645	E	43.3	8,767	E	44.6	1.4%	No	8,901	F	46.2	9,023	F	47.7	1.4%	No
	Torrance	I-405	NB	P.M.	6,628	F	45.4	7,006	F	52.0	5.7%	Yes	6,823	F	48.6	7,201	F	56.0	5.5%	Yes
	Torrance	I-405	SB	P.M.	9,149	F	49.3	9,574	F	55.6	4.6%	Yes	9,419	F	53.2	9,844	F	60.4	4.5%	Yes
	I-405	SR-91	NB	P.M.	8,087	D	27.9	8,465	D	29.7	4.7%	No	8,326	D	29.0	8,704	D	30.9	4.5%	No
	I-405	SR-91	SB	P.M.	11,163	F	113.9	11,588	F	149.5	3.8%	Yes	11,493	F	139.8	11,918	F	196.7	3.7%	Yes
	SR-91	Redondo Beach	NB	P.M.	8,773	D	31.2	8,841	D	31.6	0.8%	No	9,002	D	32.4	9,070	D	32.8	0.8%	No
	SR-91	Redondo Beach	SB	P.M.	10,709	E	42.4	10,791	E	43.1	0.8%	No	10,989	E	44.9	11,071	F	45.6	0.7%	Yes
	Redondo Beach	Rosecrans	NB	P.M.	7,990	E	38.6	8,035	E	39.0	0.6%	No	8,228	E	40.8	8,273	E	41.3	0.5%	No
	Redondo Beach	Rosecrans	SB	P.M.	9,754	F	62.5	9,809	F	63.7	0.6%	No	10,044	F	69.1	10,099	F	70.5	0.5%	No
I-405	I-710	Alameda	NB	P.M.	8,536	D	30.0	8,679	D	30.8	1.7%	No	8,787	D	31.3	8,930	D	32.0	1.6%	No
	I-710	Alameda	SB	P.M.	10,930	F	100.7	11,051	F	107.2	1.1%	No	11,251	F	119.8	11,372	F	129.1	1.1%	No
	Alameda	Wilmington	NB	P.M.	8,530	D	28.6	8,765	D	29.8	2.8%	No	8,772	D	29.8	9,007	D	31.1	2.7%	No
	Alameda	Wilmington	SB	P.M.	10,922	E	44.3	11,133	F	46.2	1.9%	Yes	11,232	F	47.2	11,443	F	49.4	1.9%	No
	Wilmington	Carson	NB	P.M.	8,221	E	39.0	8,525	E	42.0	3.7%	No	8,451	E	41.2	8,755	E	44.5	3.6%	No
	Wilmington	Carson	SB	P.M.	10,527	F	83.5	10,804	F	94.5	2.6%	Yes	10,821	F	95.4	11,098	F	109.8	2.6%	Yes
	Carson	Avalon	NB	P.M.	8,124	E	38.2	8,496	E	41.7	4.6%	No	8,359	E	40.3	8,731	E	44.2	4.5%	No
	Carson	Avalon	SB	P.M.	9,264	F	50.9	9,607	F	56.2	3.7%	Yes	9,533	F	55.0	9,876	F	60.9	3.6%	Yes
	Avalon	I-110	NB	P.M.	8,572	D	30.2	8,807	D	31.4	2.7%	No	8,826	D	31.5	9,061	D	32.8	2.7%	No
	Avalon	I-110	SB	P.M.	9,776	E	37.1	10,033	E	38.9	2.6%	No	10,065	E	39.2	10,322	E	41.1	2.6%	No
	I-110	Vermont	NB	P.M.	8,569	D	28.8	8,843	D	30.2	3.2%	No	8,817	D	30.1	9,091	D	31.5	3.1%	No
	I-110	Vermont	SB	P.M.	9,773	F	59.0	10,077	F	65.0	3.1%	Yes	10,055	F	64.6	10,359	F	71.7	3.0%	Yes
	Vermont	Normandie	NB	P.M.	8,700	D	30.8	8,890	D	31.8	2.2%	No	8,957	D	32.2	9,147	D	33.3	2.1%	No
	Vermont	Normandie	SB	P.M.	9,921	F	66.2	10,136	F	71.5	2.2%	Yes	10,215	F	73.7	10,430	F	80.1	2.1%	Yes
	Normandie	Western	NB	P.M.	9,050	F	50.5	9,205	F	52.8	1.7%	No	9,311	F	54.4	9,466	F	57.0	1.7%	No
	Normandie	Western	SB	P.M.	9,758	F	62.6	9,929	F	66.4	1.8%	No	10,039	F	69.0	10,210	F	73.5	1.7%	No
	Western	Crenshaw	NB	P.M.	8,815	F	45.2	8,938	F	46.6	1.4%	No	9,064	F	48.2	9,187	F	49.8	1.4%	No
	Western	Crenshaw	SB	P.M.	9,504	F	54.5	9,639	F	56.7	1.4%	No	9,773	F	59.0	9,908	F	61.6	1.4%	No
	Crenshaw	Redondo Beach	NB	P.M.	8,421	E	41.0	8,511	E	41.8	1.1%	No	8,664	E	43.5	8,754	E	44.4	1.0%	No
	Crenshaw	Redondo Beach	SB	P.M.	9,079	F	48.4	9,180	F	49.8	1.1%	No	9,341	F	52.0	9,442	F	53.5	1.1%	No

Table IV.C-9
Freeway Segment Impact Analysis—P.M. Peak Hour

Fwv	Fwv				Exist	ing (Year	2017)	Existing + Project			Percent	Change	Future (Year 2023)			Fut	ure + Pro	ject	Percent	Change
Name	From	То	Dir	Period	Volume	LOS	Density	Volume	LOS	Density	Increase	in MOE?	Volume	LOS	Density	Volume	LOS	Density	Increase	in MOE?
I-710	Willow	I-405	NB	P.M.	5,458	D	33.0	5,492	D	33.3	0.6%	No	5,620	D	34.5	5,654	D	34.9	0.6%	No
	Willow	I-405	SB	P.M.	5,724	E	35.6	5,757	E	36.0	0.6%	No	5,894	E	37.5	5,927	E	37.8	0.6%	No
	I-405	Del Amo	NB	P.M.	6,781	D	29.8	6,838	D	30.1	0.8%	No	6,982	D	31.0	7,039	D	31.4	0.8%	No
	I-405	Del Amo	SB	P.M.	6,414	D	27.6	6,467	D	27.9	0.8%	No	6,604	D	28.7	6,657	D	29.0	0.8%	No
	Del Amo	Long Beach	NB	P.M.	7,039	C	23.7	7,096	C	23.9	0.8%	No	7,248	C	24.5	7,305	C	24.7	0.8%	No
	Del Amo	Long Beach	SB	P.M.	6,658	D	29.0	6,711	D	29.3	0.8%	No	6,856	D	30.2	6,909	D	30.5	0.8%	No

• The I-110 Freeway

- Southbound between Sepulveda Boulevard and Carson Street (Existing plus Project, P.M. only)
- Northbound between Carson Street and Torrance Boulevard (Existing plus Project, P.M. only)
- Southbound between Carson Street and Torrance Boulevard (Existing plus Project, P.M. only)
- Northbound between Torrance Boulevard and I-405 (A.M. and P.M.)
- Southbound between Torrance Boulevard and I-405 (P.M. only)
- Northbound between the I-405 and SR-91 freeways (A.M. only)
- Southbound between the I-405 and SR-91 freeways (A.M. and P.M.)
- Southbound between the SR-91 Freeway and Redondo Beach Boulevard (Future plus Project, P.M. only)

• The I-405 Freeway

- Southbound between Alameda Street and Wilmington Avenue (Existing plus Project, P.M. only)
- Southbound between Wilmington Avenue and Carson Street (P.M. only)
- Northbound between Carson Street and Avalon Boulevard (A.M. only)
- Southbound between Carson Street and Avalon Boulevard (P.M. only)
- Northbound between Avalon Boulevard and the I-110 Freeway (Existing plus Project, A.M. only)
- Southbound between the I-110 Freeway and Vermont Avenue (Existing plus Project A.M. and P.M., Future plus Project, P.M. only)
- Southbound between Vermont Avenue and Normandie Avenue (P.M. only)

• The I-710 Freeway

 Southbound between the I-405 Freeway and Del Amo Boulevard (Future plus Project, A.M. only)

The detailed results of a comparison of freeway segment impacts between those identified in the FEIR and those identified above is provided in Appendix D. In general, the proposed modified Project would result in more significant freeway segment impacts than those identified for the approved Project. The difference in number, degree, and location of significant freeway impacts is a result of changes in background traffic conditions, related project traffic patterns, and roadway and freeway capacity changes. If the approved Project evaluated in the FEIR were analyzed under the current conditions, the Caltrans freeway impacts would be more severe for the approved Project than for the proposed modified Project. As such, the proposed

modified Project would not result in any new significant Caltrans freeway impacts as compared to the approved Project.

As stated previously, a queuing analysis was conducted for key freeway off-ramps to identify whether vehicles exiting the freeway may create queues backing onto the freeway mainline. Under the Existing plus Project, Future Year (2023), and Future Year (2023) plus Project analysis scenarios, the queue length is not projected to exceed the available queue storage capacity at any of the nine analyzed freeway off-ramps during either of the analyzed peak hours. Addition detail on the ramp queuing analysis is provided in Appendix D. As such, the proposed modified Project would not result any new significant queuing impacts.

(iii) CMP Facilities

None of the study area intersections are CMP arterial monitoring locations. The CMP arterial monitoring stations nearest to the Project study area are:

- Western Avenue & 190th Street (City of Torrance)
- Western Avenue & Carson Street (City of Torrance)
- Western Avenue at Sepulveda Boulevard (City of Torrance)

The CMP arterial monitoring station closest to the Project site is at Western Avenue and Carson Street located 2 miles west of the Project site. Western Avenue and 190th Street is located approximately 2 miles northwest of the Project site and Western Avenue and Sepulveda Boulevard is located approximately 2.5 miles southwest of the Project site. Based on the Project trip distribution and trip generation, the proposed modified Project is not expected to add 50 peak hour vehicle trips through the CMP arterial monitoring station. The majority of neighborhood commercial Project trips are anticipated to disperse among the transportation network within close proximity to the study area and less than 2 percent of total Project trips (or a maximum of 46 trips) are expected at any of the CMP monitoring stations.

Regional access to the Project site is provided by the I-110 Freeway located approximately 0.5 mile west of the Project site and the I-405 Freeway immediately east of the Project site. The CMP freeway monitoring stations closest to the Project site is immediately adjacent to the Project site along the I-405 Freeway south of the I-110 Freeway and north of Del Amo Boulevard. Based on the Project distribution and Project trip assignment, greater than 150 trips will be added to the monitoring site during the A.M. and P.M. peak hours. As a result, a CMP freeway impact analysis was conducted. **Table IV.C-10, CMP Freeway Analysis**, shows the Existing, Existing plus Project, Future Base, and Future plus Project operating conditions at the CMP freeway monitoring station closest to the Project (CMP Station 1067).

Table IV.C-10 **CMP Freeway Analysis**

СМР		Post		Post			Project			Demano 2009	d	Existing V	Vithout I 2017	Project		Ex	isting W 20	ith Project 17		Future W	ithout P 2024	roject		Ft	iture Wi 20	ith Project 24	
_	Freeway Route	Mile			Trips	Capacity	Demand	D/C	LOS	Demand	D/C	LOS	Demand	D/C	LOS	Change in D/C	Impact	Demand	D/C	LOS	Demand	D/C	LOS	Change in D/C	Impact		
1067	I-405	11.9	NB	A.M.	117	10,000	10,900	1.090	F(0)	11,282	1.128	F(0)	11,399	1.140	F(0)	0.012	NO	11,521	1.152	F(0)	11,638	1.164	F(0)	0.012	NO		
	s/o I-110			P.M.	235	10,000	9,400	0.940	E	9,729	0.973	E	9,964	0.996	E	0.023	NO	9,936	0.994	E	10,171	1.017	F(0)	0.023	YES		
			SB	A.M.	168	10,000	9,400	0.940	E	9,729	0.973	E	9,897	0.990	E	0.017	NO	9,936	0.994	E	10,104	1.010	F(0)	0.016	NO		
				P.M.	257	10,000	11,300	1.130	F(0)	11,696	1.170	F(0)	11,953	1.195	F(0)	0.025	YES	11,944	1.194	F(0)	12,201	1.220	F(0)	0.026	YES		

SOURCE: Metropolitan Transportation Authority, 2010 Congestion Management Program for Los Angeles County, September 2010, Appendix D, Exhibit D-1.

C. Traffic and Circulation		

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Table IV.C-10 shows that the proposed modified Project would result in significant impacts during the existing year analysis in the southbound direction during the P.M. peak hour only. During the future year analysis, the proposed modified Project would result in significant impacts in both the southbound and northbound directions during the P.M. peak hour.

The CMP freeway analysis for the proposed modified Project was a conducted at a single CMP monitoring station and identified P.M. peak hour impacts. The FEIR identified only A.M. impacts at that location. The differences in number and severity of impacts is a result of changes in background traffic, freeway capacity, and regional development patterns. If the approved Project evaluated in the FEIR were analyzed under the current conditions, the CMP freeway impacts would be more severe for the approved Project than for the proposed modified Project. As such, the proposed modified Project would not result in any new significant CMP traffic impacts as compared to the approved Project.

(iv) Access

An LOS analysis was conducted to evaluate the ability of the proposed modified Project's access plan to accommodate the anticipated traffic levels at the site access points. As noted previously and shown in Figure II-7, Vehicular Circulation Concept, the proposed modified Project would include three signalized access locations and one unsignalized driveway. The signalized site access locations were already analyzed as study intersections using the ICU methodology. The stop-controlled access driveway was analyzed using the 2010 HCM methodology. The HCM methodology determines the average vehicle delay for the stop-controlled approach to find the corresponding LOS based on the definitions presented in Table IV.C-2. Site access analysis LOS worksheets are provided in Appendix D. The analysis concluded that the driveways are projected to operate at an acceptable LOS (LOS D or better) under Existing (2017) plus Project and Future (2023) plus Project conditions, with the exception of the residential driveway, which is projected to operate at LOS E during the P.M. peak hour under both Project scenarios. These findings are consistent with the access impact findings described in the FEIR (see FEIR [DEIR pp. 251 and 252]).

(v) **Public Transportation**

As noted previously, the analysis of public transportation impacts was conducted using the same methodology as that described in the FEIR. Potential increases in transit trips generated by the proposed modified Project were estimated using the previously described CMP regional transit analysis methodology. As shown below, the proposed modified Project had less severe CMP transit impacts than the impacts described for the FEIR. As such, the proposed modified Project would not result in any new significant impacts as compared to the approved Project.

The Project site is located adjacent to the Carson Circuit North-South Shuttle at the Del Amo/Main stop, 1-mile from the Metro Silver Line at the Carson Station, and 0.5 mile from the Torrance Transit Rapid 3 Line at Avalon and Carson. However, the Project site is not located within 0.25 mile of a designated CMP transit center, multi-modal transportation center, or transit corridor. Therefore, the CMP guidelines provide that approximately 3.5 percent of total person trips generated are assumed to use transit to travel to and from the site.

Without applying the transit/walk/bike trip credit in the trip generation table shown in Table IV.C-5 (which assumes 1 percent of trips use transit to access the site), the proposed modified Project would result in an estimated increase in vehicle trip generation of approximately 2,807 net vehicle trips during the A.M. peak hour and 4,353 during the P.M. peak hour. Applying the AVR factor of 1.4 to the estimated vehicle trips would result in an estimated increase of approximately 3,930 and 6,094 person trips during the A.M. and P.M. peak hours, respectively. Applying the 3.5percent transit use would result in approximately 138 new transit person trips during the weekday A.M. peak hour and 213 new transit person trips during the weekday P.M. peak hour.

Within the 2 miles of the Project site, Metro operates the Silver Line (950) with 5-minute headways during peak hours and Torrance Transit operates the Rapid 3 with 30-minute headways during the peak hour. Within 0.25 mile of the Project site, the Carson Circuit North-South shuttle operates with 50-minute headways during the peak periods. The total of these bus services has an estimated seating capacity of 1,900 persons per hour during the peak periods based on a seating capacity of 40 persons for a shuttle and 65 persons for a Rapid articulated bus. The proposed modified Project would utilize up to 11 percent of available transit capacity during the peak hours using the CMP assumption of transit trips equating to 3.5 percent of all trips generated. At this level of transit capacity utilization, the proposed modified Project is anticipated to result in a significant CMP transit impact. However, the impact would be less severe than the impact described for the approved Project in the FEIR, which reported a utilization of up to 25 percent of available transit capacity. At this level of absorption of transit system capacity, it is concluded that Project-related impacts to the regional transit system would be potentially significant.

4. MITIGATION MEASURES

a. Construction

As stated previously, impacts related to construction traffic were found to be less than those described for proposed modified Project operations, as the peak of construction activity would generate fewer daily and peak hour trips than are projected for the proposed modified Project once it is completed and occupied. However, like the approved Project, construction-related impacts would still be potentially significant. To address the potentially significant

construction period traffic impacts, a Construction Traffic Management Plan shall be implemented.⁴ Mitigation Measure C-1, provides the parameters for and implementation of a Construction Traffic Management Plan.

Mitigation Measure C-1: The Project shall submit aA Construction Traffic Management Plan or Worksite Traffic Control Plan (WTCP) to shall be developed by the contractor and approved by the City of Carson and appropriate police and fire services prior to the start of any to alleviate construction work phase period impacts, which includes Project scheduling and the location of any roadway closures, traffic detours, haul routes, protective devices, and warning signs, for the purpose of minimizing pedestrian and vehicular impediment and interference of emergency vehicles from Project construction activities. may include but is not limited to the following measures:

- Provide off-site truck staging in a legal approved area (per the local jurisdiction's municipal code) furnished by the construction truck contractor.
 Anticipated truck access to the Project site will be off Street B and Street A.
- Schedule deliveries and pick-ups of construction materials during non-peak travel periods to the extent possible and coordinate to reduce the potential of trucks waiting to load or unload for protracted periods.
- As a vehicular travel lane, parking lane, bicycle lane, and/or sidewalk closures
 are anticipated, worksite traffic control plan(s), approved by the City of
 Carson, should be implemented to route vehicular traffic, bicyclists, and
 pedestrians around any such closures.
- Establish requirements for loading/unloading and storage of materials on the
 Project site, where parking spaces would be encumbered, length of time traffic
 travel lanes can be encumbered, sidewalk closings or pedestrian diversions to
 ensure the safety of the pedestrian and access to local businesses and
 residences.
- Ensure that access will remain unobstructed for land uses in proximity to the Project site during project construction.
- Coordinate with the City and emergency service providers to ensure adequate access is maintained to the Project site and neighboring businesses and residences.

Mitigation Measure C-1 was identified in the FEIR, albeit with less specificity of the elements that should be included as part of the Construction Traffic Management Plan. Construction impacts would be reduced with implementation of Mitigation Measure C-1.

An additional construction mitigation measure (Mitigation Measure C-2) was identified in the FEIR to address pedestrian access along Del Amo Boulevard; however, this mitigation

.

The mitigation measures below are updated from those set forth in the FEIR. For clarity, the changed text is marked as follows: new text is <u>underlined</u>, and deleted text is shown in strikeout format.

measure would no longer be applicable to the proposed modified Project because, as stated previously, the sidewalks along Main Street and Del Amo Boulevard fronting the construction site will remain open at all times during construction. As such, unlike the approved Project, there is no impact to mitigate regarding pedestrian access with regard to the proposed modified Project, and Mitigation Measure C-2 from the approved Project is not required.

Mitigation Measure C-2: During construction, at least one sidewalk on either the north or south side of Del Amo Boulevard shall remain open and accessible to pedestrian traffic.

b. Operation

(1) Intersection Mitigation Measures

As noted previously, there are substantial differences in number, degree, and location of impacts identified in the FEIR compared to the analysis for the proposed modified Project. This is primarily a result of changes in background traffic conditions, related Project traffic patterns, roadway and freeway capacity changes, as well as slight differences in updated methodology. Because of this, the mitigation measures described below to address the significant impacts expected to result from the proposed modified Project are different than those identified in the FEIR, with one exception (noted below under Mitigation Measure C-11). Therefore, the mitigation measures identified below replace those identified in the FEIR. A more detailed comparison of intersection impacts in the FEIR versus those identified for the proposed modified Project is provided in Appendix D.

It should be noted that the Existing plus Project significant impact identified for Figueroa Street and Carson Street (Intersection No. 23) during the A.M. and P.M. peak hours does not warrant any mitigation measure. Separate from the proposed modified Project, this intersection is already being reconstructed as part of the Carson Street Master Plan, and is anticipated to be completed later this year (2017) before construction activities commence for the proposed modified Project. The Carson Street Master Plan improvements are assumed in the Future plus Project analysis and, as a result of those improvements, the significant impact would no longer occur at the intersection.

The following discussion identifies each intersection where the proposed modified Project would result in a significant impact, the mitigation measure proposed to address the significant impact, and whether or not the mitigation measure is feasible. All mitigation measure intersection geometries are provided in Appendix D. The results of the operational analysis referenced in the assessment of the various mitigation measures below are shown in Table IV.C-6 and Table IV.C-7.

(a) Mitigation Measure C-2.1

Proposed modified Project Mitigation Measure C-2.1, discussed below, was developed to mitigate Project impacts at the Main Street and the I-405 Freeway southbound on-ramp.

- Mitigation Measure C-2.1: Main Street and I-405 Southbound On-Ramp (Intersection No. 3). A significant impact would occur at this intersection during the P.M. peak hour under the existing year and future year analysis. The Applicant shall pay a fair-share contribution for the following intersection striping improvement:
 - Conversion of the eastbound left-turn lane to a through/left-turn lane is proposed.

The improvement is feasible within the existing right-of-way and would require restriping the turn lane on the west leg of the intersection. The eastbound receiving lanes do not need to be restriped. This lane conversion would fully mitigate the impact under all scenarios.

Mitigation Measure C-2.1 has been reviewed by the City of Carson traffic engineer; however, Caltrans has jurisdiction over the intersection and, therefore, coordination and detailed design review with Caltrans is needed to determine its feasibility. Since it is unknown at this time whether Caltrans would allow implementation of this mitigation measure, the impact would be significant and unavoidable.

The FEIR did not identify a significant impact at this intersection and, therefore, no mitigation was analyzed. However, there has been an increase in P.M. peak hour traffic volumes of approximately 15 percent at this intersection since publication of the FEIR.

Analyzing the approved Project using the current 2017 state-of-practice methodologies identified a significant impact during the P.M. peak hour under both the existing year and future year analysis. Consistent with the determination above for the proposed modified Project, it is uncertain whether Mitigation Measure C-2.1 could be implemented; therefore, the approved Project impact would be significant and unavoidable.

(b) Mitigation Measure C-3

Proposed modified Project Mitigation Measure C-3, discussed below, was developed to mitigate Project impacts at the <u>Vermont Avenue and Del Amo Boulevard intersection.</u>

- Mitigation Measure C-3: Vermont Avenue and Del Amo Boulevard (Intersection No. 5). A significant impact would occur at this intersection during the A.M. and P.M. peak hours under the existing year and future year analysis. The Applicant shall pay a fair-share contribution for the following intersection striping and geometric improvements:
 - A second left turn lane shall be added to westbound Del Amo Boulevard. The westbound approach shall be improved to include two left-turn lanes, a

through lane, and a right turn lane. The improvement is feasible within the existing right of way.

- This mitigation measure shall be implemented at the point of development in which the Project generates 51 to 60 percent of its total trips, in accordance with Draft EIR Table 24.
- Addition of a second westbound left-turn lane; and
- Conversion of the northbound through/right-turn lane to a second northbound through and a dedicated right-turn lane. This would require the removal of approximately eight parking spaces.

These improvements are feasible within the existing right-of-way and would require restriping the westbound approach to add a second left-turn lane, restriping the east and west legs of the intersection to align the through lanes, restriping the northbound approach to add the right-turn lane, and extending the red curb along the northbound approach to accommodate the northbound right-turn lane. These improvements would fully mitigate the impact under all scenarios.

Mitigation Measure C-3 has been reviewed by the City of Carson traffic engineer; however, the City of Los Angeles and Los Angeles County share jurisdiction over the intersection and, therefore, coordination and detailed design review with those jurisdictions is needed to determine its feasibility. Since it is unknown at this time whether these jurisdictions would allow implementation of this mitigation measure, the impact would be significant and unavoidable.

The FEIR only identified a P.M. peak hour significant impact at this intersection. An additional westbound left-turn lane was proposed to mitigate this impact. The additional improvement included as part of Mitigation Measure C-3 is needed due to the application of Los Angeles County's significant impact criteria, which is more restrictive compared to the City of Carson's significant impact criteria, which was applied in the FEIR.

Analyzing the approved Project using the current 2017 state-of-practice methodologies identified a significant impact during the A.M. and P.M. peak hours under both the existing year and future year analysis. Consistent with the determination above for the proposed modified Project, it is uncertain whether Mitigation Measure C-3 could be implemented; therefore, the approved Project impact would be significant and unavoidable.

(a) Mitigation Measure C-4

Mitigation Measure C-4 from the approved Project no longer applies to the proposed modified Project due to changes in conditions from 2006 to 2017; therefore, Mitigation Measure C-4 is removed from this SEIR.

Mitigation Measure C-4: Hamilton Avenue & Del Amo Boulevard (Intersection No. 6):

- The Applicant shall install a traffic signal at this location.
- A right-turn lane shall be added to northbound Hamilton Avenue. The northbound approach shall be improved to include a left-turn lane, two through lanes, and a right-turn lane. This improvement is feasible within the existing right-of-way.
- This mitigation measure shall be implemented at the point of development in which the Project generates 1 to 10 percent of its total trips, in accordance with Draft EIR Table 24.⁵

(b) Mitigation Measure C-5

Proposed modified Project Mitigation Measure C-5, discussed below, was developed to mitigate Project impacts at the Figueroa Street and Del Amo Boulevard intersection.

- Mitigation Measure C-5: Figueroa Street & Del Amo Boulevard (Intersection No. 7). A significant impact would occur at this intersection during the a.m. and p.m. peak hours under the existing year and future year analysis. The Applicant shall pay a fair-share contribution for the following intersection striping and geometric improvements:
 - A right-turn lane shall be added to southbound Figueroa Street. The southbound approach shall be improved to include one left-turn lane, two through lanes, and a right-turn lane. This improvement is feasible within the existing right-of-way
 - A second westbound left turn lane shall be added to westbound Del Amo Boulevard. The westbound approach shall be improved to include two left-turn lanes, two through lanes, and a right-turn lane. This improvement is feasible within the existing right of way.
 - An eastbound through lane and a right turn lane shall be added to eastbound Del Amo Boulevard. The eastbound approach shall be improved to include one left-turn lane, three through lanes, and a right-turn lane. This improvement is feasible within the existing right-of-way.

This mitigation measure has been deleted because Hamilton Avenue and Del Amo Boulevard is located on the border of the City of Los Angeles and Los Angeles County and the traffic study guidelines for the City of Los Angeles and Los Angeles County do not have LOS or significant impact thresholds for unsignalized intersections.

- This mitigation measure shall be implemented at the point of development in which the Project generates 1 to 10 percent of its total trips, in accordance with Draft EIR Table 24.
- Addition of a second westbound left-turn lane;
- Conversion of the westbound right-turn lane to a through/right-turn lane;
- Addition of a second southbound left-turn lane;
- Conversion of the southbound through and southbound right-turn lane to a through/right-turn lane;
- Conversion of the eastbound right-turn lane to a through/right-turn lane; and
- Addition of a northbound right-turn-only lane.

These improvements are feasible within the existing right-of-way but would require removing all medians, restriping and realigning the intersection, and narrowing lane widths to a minimum of 10 feet. These improvements would mitigate the impact during the A.M. peak hour under all scenarios, but would not completely mitigate the significant traffic impact at this intersection during the P.M. peak hour. The City of Carson has reviewed Mitigation Measure C-5 and determined that it would conflict with the Carson General Plan (including but not limited to LU-13.1 and TI-7.1-4, which prioritize the continued use of landscaped medians for aesthetic purposes and to improve the quality of transportation corridors). The proposed mitigation measure would also conflict with the Carson Master Plan of Bikeways (2013), which proposes buffered bike lanes along Figueroa Street north of Del Amo Boulevard, bike lanes along Figueroa Street south of Del Amo Boulevard, and buffered bike lanes along Del Amo Boulevard. Further, both Figueroa Street and Del Amo Boulevard are identified as Truck Routes within the City of Carson, and the proposed mitigation measure would reduce lane widths below the City standards set forth in the Carson Master Plan of Bikeways (12-foot minimums along Del Amo Boulevard and 11-foot minimums along Figueroa Street). Due to the incompatibility of Mitigation Measure C-5 with City plans and policies described above, the impact at this intersection would be significant and unavoidable.

The FEIR also identified a significant impact at this intersection during both the A.M. and P.M. peak hours. An additional westbound left-turn lane, southbound right-turn lane, eastbound through lane, and eastbound right-turn lane were proposed to mitigate the significant impact. However, background traffic has increased along the northbound right-turn, eastbound through, and southbound left-turn movements, since publication of the FEIR. Therefore, the improvements identified in the FEIR would no longer mitigate the impact to a less than significant level.

Analyzing the approved Project using the current 2017 state-of-practice methodologies identified a significant impact during the A.M. and P.M. peak hours under both the existing year and future year analysis. Consistent with the determination above for the proposed modified

Project, the implementation of Mitigation Measure C-5 is not feasible; therefore, the approved Project impact would be significant and unavoidable.

(c) Mitigation Measure C-6

Proposed modified Project Mitigation Measure C-6, discussed below, was developed to mitigate Project impacts at the Main Street and Del Amo Boulevard intersection.

- Mitigation Measure C-6: Main Street and Del Amo Boulevard (Intersection No. 8). A significant impact would occur at this intersection during the P.M. peak hour under the existing year and future year analysis. The Applicant shall pay a fair-share contribution for the following intersection striping and geometric improvements:
 - Land shall be dedicated, as required, to add a second left-turn lane and a right-turn lane to southbound Main Street. The southbound approach shall be improved to provide two left-turn lanes, two through lanes and a right-turn lane.
 - A second left-turn lane shall be added to westbound Del Amo Boulevard. The
 westbound approach shall be improved to provide two left-turn lanes, two
 through lanes and an optional through and a right-turn lane.
 - Land shall be dedicated, as required, to add a second left turn lane and a right-turn lane to northbound Main Street. The northbound approach shall be improved to provide two left-turn lanes, two through lanes, and a right-turn lane.
 - A second left-turn lane shall be added to eastbound Del Amo Boulevard. The
 eastbound approach shall be improved to provide two left-turn lanes, two
 through lanes, and an optional through and a right-turn lane.
 - This mitigation measure shall be implemented at the point of development in which the Project generates 51 to 60 percent of its total trips, in accordance with Draft EIR Table 24.
 - Addition of a second westbound left-turn lane;
 - Addition of a second southbound dedicated through lane;
 - Conversion of the eastbound through/right-turn lane to a through lane and a right-turn lane; and
 - Conversion of the northbound through/right-turn lane to a through lane and a right-turn lane.

These improvements would require acquisition of right-of-way from the undeveloped parcel on the northeast corner to accommodate the additional westbound left-turn lane. The improvements would also require removal or narrowing of the existing median islands (if right-of-way cannot be acquired), narrowing lanes to a minimum of 10 feet, and realigning the intersection to accommodate the proposed lane configurations.

The City of Carson reviewed the components of Mitigation Measure C-6 and determined that it would conflict with the Carson General Plan (including but not limited to LU-13.1 and TI-7.1-4, which prioritize the continued use of landscaped medians for aesthetic purposes and to improve the quality of transportation corridors) if right-of-way cannot be acquired to accommodate the proposed improvements. The proposed mitigation measure would also conflict with the Carson Master Plan of Bikeways (2013), which proposes buffered bike lanes along both Del Amo Boulevard and Main Street, if additional right-of-way cannot be acquired. Further, both Main Street and Del Amo Boulevard are identified as Truck Routes within the City of Carson and the proposed mitigation measure would reduce lane widths below the City standards set forth in the Carson Master Plan of Bikeways (12-foot minimums along Del Amo Boulevard and 11-foot minimums along Main Street). Due to the uncertainty regarding the ability to acquire additional right-of-way on the northeast corner of the intersection, and the incompatibility of Mitigation Measure C-5 with City plans and policies described above if the right-of-way cannot be acquired, the impact would be significant and unavoidable.

The FEIR also identified a significant impact at this intersection during the P.M. peak hour. An additional westbound left-turn lane, southbound left-turn lane, southbound right-turn lane, eastbound left-turn lane, northbound left-turn lane, and northbound right-turn lane were proposed to mitigate the significant impact. However, background traffic has increased in the southbound through and eastbound through movements since publication of the FEIR. Therefore, the improvements identified in the FEIR would no longer mitigate the impact to a less than significant level.

Analyzing the approved Project using the current 2017 state-of-practice methodologies identified a significant impact during the A.M. and P.M. peak hours under both the existing year and future year analysis. Consistent with the determination above for the proposed modified Project, the implementation of Mitigation Measure C-6 is not feasible; therefore, the approved Project impact would be significant and unavoidable.

(d) Mitigation Measure C-6.1

Proposed modified Project Mitigation Measure C-6.1, discussed below, was developed to mitigate Project impacts at the <u>Avalon Boulevard and Del Amo Boulevard intersection</u>.

Mitigation Measure C-6.1: Avalon Boulevard and Del Amo Boulevard (Intersection No. 10). A significant impact would occur at this intersection during the a.m. and p.m. peak hours under the existing year and future year analysis. The Applicant shall pay a fair-share contribution for the following intersection striping and geometric improvements:

- Conversion of the southbound through/right-turn lane to a through lane and a right-turn lane; and
- Addition of a second northbound left-turn lane.

These improvements are conceptually feasible within the existing right-of-way but would require removing and reconstructing all median islands, restriping a bicycle lane to provide a southbound right-turn lane, and realigning the intersection approaches. These improvements would fully mitigate the impact under all scenarios.

The City of Carson reviewed the components of Mitigation Measure C-6.1 and determined that it would conflict with the Carson General Plan (including but not limited to LU-13.1 and TI-7.1-4, which prioritize the continued use of landscaped medians for aesthetic purposes and to improve the quality of transportation corridors). Due to the incompatibility of Mitigation Measure C-6.1 with City plans and policies described above, the impact would be significant and unavoidable.

The FEIR did not identify an impact at this intersection and, therefore, no mitigation was analyzed. However, there has been an increase in P.M. peak hour traffic volumes of approximately 20 percent at this intersection since publication of the FEIR.

Analyzing the approved Project using the current 2017 state-of-practice methodologies identified a significant impact during the A.M. and P.M. peak hours under both the existing year and future year analysis. Consistent with the determination above for the proposed modified Project, the implementation of Mitigation Measure C-6.1 is not feasible; therefore, the approved Project impact would be significant and unavoidable.

(e) Mitigation Measure C-7

Mitigation Measure C-7 from the approved Project no longer applies to the proposed modified Project due to changes in conditions from 2006 to 2017; therefore, Mitigation Measure C-7 is removed from this SEIR.

Mitigation Measure C-7: Hamilton Avenue & I-110 Southbound Ramps (Intersection No. 11):

- The Applicant shall install a traffic signal at this location.
- The southbound approach shall be re-striped to provide for one left turn lane and a shared left turn/through lane. The improvement is feasible within the existing right-of way.
- This mitigation measure shall be implemented at the point of development in which the Project generates 21 to 30 percent of its total trips, in accordance with Draft EIR Table 24.6

This mitigation measure has been deleted because Hamilton Avenue and I-110 Southbound Ramps is located in unincorporated Los Angeles County and the traffic study guidelines for Los Angeles County do not have LOS or significant impact thresholds for unsignalized intersections.

(f) Mitigation Measure C-8

Proposed modified Project Mitigation Measure C-8, discussed below, was developed to mitigate Project impacts at the Figueroa Street and the I-110 Freeway northbound ramps.

- Mitigation Measure C-8: Figueroa Street & I-110 Northbound Ramps (Intersection No. 12). A significant impact would occur at this intersection during the A.M. and p.m. peak hours under the existing year and future year analysis. The Applicant shall pay a fair-share contribution for the following intersection striping and geometric improvements:
 - A second right-turn lane shall be added to the southbound approach. The southbound approach shall be improved to provide two through lanes and two right-turn lanes.
 - A right turn lane shall be added to the eastbound approach. The eastbound approach shall be improved to provide two left turn lanes and a right turn lane. The improvements are feasible within the existing right-of-way.
 - This mitigation measure shall be implemented at the point of development in which the Project generates 1 to 10 percent of its total trips, in accordance with Draft EIR Table 24.
 - Addition of a southbound through/right-turn lane;
 - Addition of a third southbound receiving lane; and
 - Conversion of the eastbound left/right-turn lane to a dedicated left-turn lane and a dedicated right-turn lane.

The improvements along the southbound approach would require a combination of partial widening on the west side of the north leg of the intersection along with modifying the median islands and restriping and realigning the lanes on both the north and south legs. An additional southbound receiving lane would also need to be added south of the intersection. The improvements along the eastbound approach would require reconfiguring and widening the Caltrans off-ramp. These improvements would fully mitigate the impact under all scenarios.

Mitigation Measure C-8 has been reviewed by the City of Carson, who determined that it would conflict with the Carson Mater Plan of Bikeways (2013), which proposes bike lanes along Figueroa Street. Furthermore, Caltrans has jurisdiction over the intersection and, therefore, coordination and detailed design review with these jurisdictions is needed to determine its feasibility. Since it is unknown at this time whether these jurisdictions would allow implementation of this mitigation measure, and because of the incompatibility with existing City plans and policies, the impact would be significant and unavoidable.

The FEIR also identified a significant impact at this intersection during both the A.M. and P.M. peak hours. An additional southbound right-turn lane, eastbound right-turn lane, and removal of an eastbound shared left-right-turn lane were proposed to mitigate the significant

impact. The improvements identified in the FEIR would have mitigated the significant A.M. peak hour impact to a less than significant level, but not the P.M. peak hour impact.

Analyzing the approved Project using the current 2017 state-of-practice methodologies identified a significant impact during the A.M. and P.M. peak hours under both the existing year and future year analysis. Consistent with the determination above for the proposed modified Project, it is uncertain whether Mitigation Measure C-8 could be implemented; therefore, the approved Project impact would be significant and unavoidable.

(g) Mitigation Measure C-9

Proposed modified Project Mitigation Measure C-9, discussed below, was developed to mitigate Project impacts at the Figueroa Street and Torrance Boulevard intersection.

- Mitigation Measure C-9: Figueroa Street & Torrance Boulevard (Intersection No. 15). A significant impact would occur at this intersection during the P.M. peak hour under the future year analysis only. The Applicant shall pay a fair-share contribution for the following intersection striping and geometric improvements:
 - A second southbound left-turn lane shall be added to southbound Figueroa Street. The southbound approach shall be improved to include two left-turn lanes, two through lanes, and a right-turn lane. This improvement is feasible within the existing right-of-way.
 - This mitigation measure shall be implemented at the point of development in which the Project generates 71 to 80 percent of its total trips, in accordance with Draft EIR Table 24.
 - Conversion of the northbound through/right-turn lane to a through lane and a right-turn lane.

This improvement is feasible within the existing right-of-way but would require restriping and the removal of approximately eight on-street parking spaces. This improvement would fully mitigate the impact.

The City of Carson traffic engineer reviewed the components of Mitigation Measure C-9 and determined that the elimination of eight on-street parking spaces would be acceptable to the City and that its implementation would be feasible. Therefore, the impact would be mitigated to a less than significant level.

The FEIR also identified a significant impact at this intersection during the P.M. peak hour. An additional southbound left-turn lane and the associated reconfiguration or removal of the medial island was proposed to mitigate the significant impact. However, traffic volumes in the southbound left-turn movement have decreased since publication of the FEIR. The improvements identified in the FEIR are no longer required to mitigate the impact.

Analyzing the approved Project using the current 2017 state-of-practice methodologies identified a significant impact during the P.M. peak hour under both the existing year and future year analysis. Consistent with the determination above for the proposed modified Project, Mitigation Measure C-9 would mitigate the approved Project impact at this intersection to a less than significant level.

(a) Mitigation Measure C-10

Mitigation Measure C-10 from the approved Project no longer applies to the proposed modified Project due to changes in conditions from 2006 to 2017; therefore, Mitigation Measure C-10 is removed from this SEIR.

Mitigation Measure C-10: Main Street & Torrance Boulevard (Intersection No. 16):

- The eastbound approach shall be re-striped to provide one left-turn lane and a shared through/right turn lane.
- This mitigation measure shall be implemented at the point of development in which the Project generates 81 to 90 percent of its total trips, in accordance with Draft EIR Table 24.

(b) Mitigation Measure C-10.1

Proposed modified Project Mitigation Measure C-10.1, discussed below, was developed to mitigate Project impacts at the Main Street and 213th Street intersection.

- Mitigation Measure C-10.1: Main Street and 213th Street (Intersection No. 20). A significant impact would occur at this intersection during the P.M. peak hour under the existing year and future year analysis. The Applicant shall pay a fair-share contribution for the following intersection striping and geometric improvements:
 - Conversion of the westbound left/right-turn lane to a left-turn lane and a right-turn lane.

This improvement is feasible within the existing right-of-way but would require restriping and the removal of approximately eight on-street parking spaces. This improvement would fully mitigate the impact.

The City of Carson traffic engineer reviewed the components of Mitigation Measure C-10.1 and determined that the elimination of eight on-street parking spaces would be acceptable to the City and that its implementation would be feasible; therefore, the impact would be mitigated to a less than significant level.

The FEIR did not identify an impact at this intersection and, therefore, no mitigation was analyzed.

Analyzing the approved Project using the current 2017 state-of-practice methodologies identified a significant impact during the P.M. peak hour under both the existing year and future year analysis. Consistent with the determination above for the proposed modified Project, Mitigation Measure C-10.1 would mitigate the approved Project impact at this intersection to a less than significant level.

(c) Mitigation Measure C-11

Proposed modified Project Mitigation Measure C-11 discussed below, was developed to mitigate Project impacts at the Vermont Avenue and Carson Street intersection.

- Mitigation Measure C-11: Vermont Avenue & Carson Street (Intersection No. 22).

 A significant impact would occur at this intersection during the A.M. and P.M. peak hours under the existing year and future year analysis. The Applicant shall pay a fair-share contribution for the following intersection striping and geometric improvements:
 - The westbound right turn lane shall be re-striped to provide a shared through/right turn lane. The westbound approach shall be improved to provide one left turn lane, two through lanes, and a shared through/right turn lane.
 - The eastbound right-turn lane shall be re-striped to provide a shared through/right-turn lane. The eastbound approach shall be improved to provide one left turn lane, two through lanes, and a shared through/right turn lane.
 - This mitigation measure shall be implemented at the point of development in which the Project generates 31 to 40 percent of its total trips, in accordance with Draft EIR Table 24.
 - Conversion of the westbound right-turn lane to a through/right-turn lane; and
 - Conversion of the eastbound right-turn lane to a through/right-turn lane.

The improvement is feasible within the existing right-of-way but would require restriping and the addition of a receiving lane in the westbound direction. Parking would need to be removed along Carson Street to provide a third through lane in the eastbound and westbound directions to create a consistent configuration along the corridor. These improvements would fully mitigate the impact under all scenarios.

Within the City of Carson, Carson Street is currently being redesigned per the Carson Street Master Plan to provide two lanes in each direction with curb extensions, sharrow pavement markings and a center median island.⁷ The City of Carson has reviewed Mitigation Measure C-11 and determined that it would conflict with the Carson General Plan (including but not limited to LU-13.1 and TI-7.1-4, which prioritize the continued use of landscaped medians to aesthetic purposed and to improve the quality of transportation corridors) as well as the Carson

⁷ Sharrows are road markings used to indicate a shared-lane environment for bicycles and automobiles.

Street Master Plan, which is currently being implemented along Carson Street. Further Los Angeles County has indicated that the loss of on-street parking on the north side of Carson Street west of Vermont Avenue, which is within its jurisdiction, is not acceptable because of the potential impacts to the adjacent commercial uses. Due to the reasons cited above, the impact would be significant and unavoidable.

This is the same mitigation measure identified in the FEIR as Mitigation Measure C-11.

Analyzing the approved Project using the current 2017 state-of-practice methodologies identified a significant impact during the P.M. peak hour under both the existing year and future year analysis. Consistent with the determination above for the proposed modified Project, the implementation of Mitigation Measure C-11 is not feasible; therefore, the approved Project impact would be significant and unavoidable.

(d) Mitigation Measure C-12

Mitigation Measure C-12from the approved Project no longer applies to the proposed modified Project due to changes in conditions from 2006 to 2017; therefore, Mitigation Measure C-12 is removed from this SEIR.

Mitigation Measure C-12: Figueroa Street and Carson Street (Intersection No. 23):

- A right-turn lane shall be added to the southbound approach. The southbound approach shall be improved to provide two left turn lanes, two through lanes, and a right turn lane.
- This mitigation measure shall be implemented at the point of development in which the Project generates 71 to 80 percent of its total trips, in accordance with Draft EIR Table 24.8

(e) Mitigation Measure C-13

Mitigation Measure C-13 from the approved Project no longer applies to the proposed modified Project due to changes in conditions from 2006 to 2017; therefore, Mitigation Measure C-13 is removed from this SEIR.

Mitigation Measure C-13: Main Street & Carson Street (Intersection No. 24):

A second left-turn lane shall be added to the westbound approach. The
westbound approach shall be improved to provide two left-turn lanes, two
through lanes, and a shared through/right-turn lane

This mitigation measure has been deleted because the impact is temporary due to ongoing construction, and once completed, the existing intersection geometry will be returned, which fully accommodates Future year traffic/proposed modified Project build-out.

- A second left turn lane shall be added to the eastbound approach. The eastbound approach shall be improved to provide two left turn lanes, two through lanes, and a shared through/right turn lane.
- This mitigation measure shall be implemented at the point of development in which the Project generates 61 to 70 percent of its total trips, in accordance with Draft EIR Table 24.9

(f) Mitigation Measure C-14

Proposed modified Project Mitigation Measure C-14, discussed below, was developed to mitigate Project impacts at the Avalon Boulevard and Carson Street intersection.

- Mitigation Measure C-14: Avalon Boulevard & Carson Street (Intersection No. 25).

 A significant impact would occur at this intersection during the P.M. peak hour under the existing year analysis, and during the A.M. and P.M. peak hours under the future year analysis. The Applicant shall pay a fair-share contribution for the following intersection striping improvements:
 - A right-turn lane shall be added to the southbound approach. The southbound approach shall be improved to include one left-turn lane, three through lanes, and a right-turn lane.
 - A right turn lane shall be added to the westbound approach. The westbound approach shall be improved to provide two left-turn lanes, two through lanes, and a right-turn lane.
 - A right-turn lane shall be added to the northbound approach. The northbound approach shall be improved to provide one left-turn lane, three through lanes, and a right-turn lane

⁹ This mitigation measure has been deleted because no significant impacts are shown under existing (2017) with project or Future (2023) with Project conditions.

⁴⁰ Any future street widening improvements for the intersection of Avalon Boulevard and Carson Street are not feasible within the existing right of way and would require acquisition or dedication of right of way from adjacent parcels. The adjacent land uses include the Carson City Hall on the northeast corner of the intersection and commercial uses on the remaining three corners of the intersection. The necessary width can be obtained adjacent to City Hall on the north side of Carson Street through reduction of a portion of the existing landscaped area, allowing construction of the right-turn lane on the westbound Carson Street approach. Information from the City of Carson indicates that the parcels on the southeast and northwest corners may redevelop, at which point it may be possible to obtain the necessary right of way on the east side of Avalon Boulevard south of Carson Street and on the west side of Avalon Boulevard north of Carson Street, allowing construction of the right-turn lanes on the northbound and southbound Avalon Boulevard approaches. If the proposed right turn lanes were provided on these three approaches but not on the eastbound Carson Street approach, it is estimated that the projected afternoon peak hour V/C would be reduced from 0.973 to 0.901. Although this would partially alleviate the Project impact, it would not fully mitigate the impact to a less than significant level.

- A right turn lane shall be added to the eastbound approach. The eastbound approach shall be improved to provide two left turn lanes, two through lanes, and a right turn lane
- This mitigation measure shall be implemented at the point of development in which the Project generates 21 to 30 percent of its total trips, in accordance with Draft EIR Table 24.
- Convert the southbound through/right-turn lane to a dedicated right-turn lane;
 and
- Convert the northbound through/right-turn lane to a dedicated right-turn lane.

These improvements are feasible within the existing right-of-way and would require restriping the northbound and southbound right-turn lanes and restriping the three receiving lanes to provide only two receiving lanes. These improvements would fully mitigate the impact under all scenarios for impacts at Avalon Boulevard and Carson Street intersection.

The City of Carson reviewed the components of Mitigation Measure C-14 and determined that it is consistent with existing City plans and policies, and that its implementation would be feasible. Therefore, the impact would be mitigated to a less than significant level.

The FEIR only identified a P.M. peak hour impact at this intersection. An additional westbound right-turn lane, southbound right-turn lane, eastbound right-turn lane, and northbound right-turn lane were proposed to mitigate the significant impact. However, these improvements did not reduce the significant impact to a less than significant level. The improvements identified in the FEIR are no longer feasible because they would require additional right-of-way to implement.

Analyzing the approved Project using the current 2017 state-of-practice methodologies identified a significant impact during the P.M. peak hour under the existing year analysis and during the A.M. and P.M. peak hours under the future year analysis. Unlike with the determination above for the proposed modified Project, the implementation of Mitigation Measure C-14 would not fully mitigate the approved Project impact at this intersection; therefore, the approved Project impact would be significant and unavoidable.

(g) Mitigation Measure C-15

Mitigation Measure C-15 from the approved Project no longer applies to the proposed modified Project due to changes in conditions from 2006 to 2017; therefore, Mitigation Measure C-15 is removed from this SEIR.

Mitigation Measure C-15: No Certificate of Occupancy shall be issued for commercial development in District 2, or for commercial development in Districts 1 and 3 that is greater than the amount of commercial development shown in the Applicant's

Conceptual Plan (i.e., 150,000 square feet and 50,000 square feet, respectively), prior to the completion of the I 405 ramp improvements at Avalon Boulevard.

(2) Caltrans and CMP Freeway Segment Mitigation Measures

Implementation of additional freeway capacity to address significant cumulative conditions is beyond the ability of any individual project to implement. In addition, any improvements to freeway capacity would be outside the jurisdiction of the City of Carson. Therefore, the proposed modified Project's incremental impacts on poor cumulative conditions on identified segments would be considered significant and unavoidable. The FEIR also concluded that the approved Project's impacts were significant, and there were no feasible mitigation measures available.

(3) Site Access Mitigation Measures

Like the approved Project, no impacts were identified in the site access evaluation for the proposed modified Project. Therefore, no mitigation measures would be required.

(4) Public Transportation Mitigation Measures

(a) Mitigation Measure C-16

As stated previously, the proposed modified Project would result in a potentially significant impact to regional public transportation. Mitigation Measure C-16, discussed below, addresses this impact.

Mitigation Measure C-16: In coordination with the City of Carson Circuit, Metro, Torrance Transit Authority, and the Metropolitan Transit Authority (Metro), LADOT, the Applicant shall-provide:

- Request an extension of existing public bus routes into the Project site, which will increase transit capacity by adding service to the area;
- Request that additional <u>buses be deployed on extended routes to increase</u> frequency and capacity on key routes serving the Project site; and
- Provide transit stops, <u>potentially</u> including benches and shelters, in and adjacent to the Project site, <u>which will improve the quality and increase the</u> <u>network density of transit service</u>.

Mitigation Measure C-16 was identified in the FEIR as Mitigation Measure C-16, but has been updated to include all transit agencies currently serving the Project vicinity. Construction impacts would be mitigated to a less than significant level with implementation of Mitigation Measure C-16.

(b) Mitigation Measure C-17

Mitigation Measure C-17 from the approved Project no longer applies to the proposed modified Project due to changes in conditions from 2006 to 2017; therefore, Mitigation Measure C-17 is removed from this SEIR.

Mitigation Measure C-17: The Applicant shall provide a fair share contribution for funding of the Carson North-South Shuttle operations. 11

(5) Transportation Demand Management

A Transportation Demand Management (TDM) program could further reduce the number and degree of impacts associated with the proposed modified Project and could be developed for in consultation with the City. It should be noted that the proposed modified Project trip generation already accounts for the trip reduction associated with the use of charter buses to transport some visitors to and from the outlet center use. However, to be conservative, the transportation analysis did not assume any additional trip generation reduction for any of the potential TDM strategies listed below. Several Project design features could enhance the usage of walking, biking, and transit modes as alternatives to the automobile, including wider sidewalks, the planting of street trees along the Project site perimeter, and improved street and pedestrian lighting.

Additional TDM program elements could include the following:

- *Unbundled Parking*—Unbundling parking typically separates the cost of purchasing or renting parking spaces from the cost of the purchasing or renting a dwelling unit. Saving money on a dwelling unit by forgoing a parking space acts as an incentive that minimizes auto ownership. Similarly, paying for parking (by purchasing or leasing a space) acts as a disincentive that discourages auto ownership and trip-making.
- Rideshare Programs
 —Rideshare programs typically include the provision of an on-site transit and rideshare information center that provides assistance to help people form carpools or access transit alternatives. Rideshare programs often also include priority parking for carpools. Rideshare programs are more commonly provided for Project site employees but residents could also benefit from a similar program.
- Transit Pass Discount Program—Transit pass discount programs are typically negotiated with transit service providers to purchase transit passes in bulk, and therefore at a discounted rate. Discounted passes are then sold to interested residents or employees, helping them to obtain price discounts through the economies of scale of bulk purchasing. Transit pass discount programs are generally provided to Project site employees but could also be sold to Project site residents.
- Bicycle Parking and Bike Share Program—The proposed modified Project is already providing bicycle facilities within the Project site as well as short-term bicycle

¹¹ This mitigation measure has been addressed by Mitigation Measure G-21.

- parking. The proposed modified Project could provide additional complementary amenities such as long-term bicycle parking, self-service bike repair area, and potentially a bike share service among residents, employees and visitors of the site.
- Car Share Program—The proposed modified Project could allow space for a car share service within its proposed parking facilities. A car share program is a model of car rental where people rent cars for short periods of time, often by the hour. The programs are attractive to customers who make only occasional use of a vehicle, as well as others who would like occasional access to a vehicle of a different type than they use day-to-day.
- Upgrade to Transit Amenities—The Project, in conjunction with MTA or the Carson
 Circuit, could identify potential bus routes that may be modified to provide direct service
 to the Project site. Additionally, the proposed modified Project could identify nearby busstops to upgrade stop locations to further encourage the use of transit in the area.

The trip reduction benefits associated with each of these strategies varies based on several factors including the type of Project land uses, the types of adjacent land uses, the density of development in the area, and the combination of strategies applied. To be conservative, the specific trip reduction associated with these strategies was not included in the LOS analysis of the physical mitigation measures. Instead, the TDM strategies that apply to the commercial uses will be required of employer/tenant with more than 75 employees, as a means to further reduce vehicle trips associated with the proposed modified Project.

5. CUMULATIVE IMPACTS

As noted previously, 27 related projects were identified by the City of Carson to be included in the future year, or cumulative impact, analysis. In total, these 27 related projects are estimated to generate a combined total of approximately 1,300 A.M. peak hour trips and 1,536 P.M. peak hour trips. Compared to the approved Project, which included 36 related projects estimated to generate 4,419 A.M. peak hour trips and 6,879 P.M. peak hour trips, the proposed modified Project's related projects would produce far fewer trips. In addition, the proposed modified Project would generally produce fewer trips than the approved Project. As such, the cumulative impacts of the proposed modified Project would be less severe than those identified for the approved Project. The following describes the cumulative impacts of the proposed modified Project on transportation conditions.

a. Construction

(1) Worker Trips

The cumulative impact conclusion from the FEIR (less than significant) with respect to worker trips would remain valid and applicable to the proposed modified Project. As such, the proposed modified Project together with all related projects would not result in any new

significant impacts related to worker trips as compared to the approved Project. Refer to the FEIR (see FEIR [DEIR p. 264]) for further detail.

(2) Hauling

The cumulative impact conclusion from the FEIR (less than significant) with respect to trucks used for hauling would remain valid and applicable to the proposed modified Project. As such, the proposed modified Project together with all related projects would not result in any new significant impacts related to hauling trips as compared to the approved Project. Refer to the FEIR (see FEIR [DEIR p. 264]) for further detail.

(3) Emergency Access

The cumulative impact conclusion from the FEIR (less than significant) with respect to emergency access during construction would remain valid and applicable to the proposed modified Project. As such, the proposed modified Project together with all related projects would not result in any new significant impacts related to emergency access as compared to the approved Project. Refer to the FEIR (see FEIR [DEIR p. 264]) for further detail.

b. Operation

(1) Intersection Service Levels

The cumulative impact of the 27 related projects and ambient growth were considered for the purpose of assessing the proposed modified Project's impact on intersection levels of service. As shown in Table IV.C-7, 11 of the 27 intersections analyzed for impacts are projected to operate at a poor LOS of LOS E or F during one or both of the analyzed peak hours under Future Year (2023) plus Project conditions. It is anticipated that related projects contributing to cumulative growth would be required on an individual basis to mitigate potentially significant traffic impacts to the extent possible. However, since no guarantee exists that mitigation measures would be implemented with the identified related projects, in conjunction with the significant proposed modified Project impact after mitigation, it is concluded that the cumulative traffic impact on intersection operations would be significant and unavoidable.

The proposed modified Project has the same number of significant intersection impacts and one fewer significant and unavoidable intersection impact compared to the approved Project when analyzed using the same 2017 methodology. The difference in number, degree, and location of significant impacts identified between the proposed modified Project and the approved Project analyzed with the 2017 state-of-practice methodology is a result of differences in the Project Description. Further, as noted above, the total trip generation contribution of related projects to the study area roadway network would be less than the related project trip generation identified for the approved Project. Therefore, the proposed modified Project together

with all related projects would not result in any new significant cumulative intersection LOS impacts as compared to the approved Project.

(2) Freeway Service Levels

Ambient growth in accordance with CMP guidelines has been considered in the evaluation of the proposed modified Project's impact on regional freeways. Table IV.C-8 and Table IV.C-9 demonstrates that cumulative impacts would occur on three segments of the I-110 Freeway, four segments of the I-405 Freeway, and one segment of the I-710 Freeway. In addition, a cumulative impact would also occur on the analyzed CMP-monitored freeway segment of the I-405 Freeway south of the I-110 Freeway (see Table IV.C-10). Like the approved Project, no feasible mitigation measures are available to the Applicant or any individual project to mitigate the potentially significant impacts on these freeway segments to less than significant levels. Therefore, cumulative impacts on freeway service levels would also be significant and unavoidable for the approved Project. As such, the proposed modified Project together with all related projects would not result in any new significant cumulative impacts regarding freeway service levels as compared to the approved Project.

(3) Access

In general, there are no substantive changes to cumulative access impacts as described in the FEIR. As stated in the FEIR (see FEIR [DEIR p. 265]), no related projects would be located adjacent to the Project site or share conjoining or adjacent access points. Therefore, like the approved Project, no significant cumulative impacts relative to access would occur as a result of the proposed modified Project. As such, the proposed modified Project together with all related projects would not result in any new significant cumulative impacts regarding access as compared to the approved Project.

(4) Public Transit

In general, there are no substantive changes to cumulative access impacts as described in the FEIR. As stated in the FEIR (see FEIR [DEIR p. 265]), the combination of the modified proposed Project and related projects would generate a demand for public transportation that would exceed existing transit capacity. Therefore, like the approved Project, a significant cumulative impact relative to public transit services would also occur for the proposed modified Project, and the impacts would be substantially the same. As such, the proposed modified Project together with all related projects would not result in any new significant cumulative impacts for public transit as compared to the approved Project.

6. SIGNIFICANCE AFTER MITIGATION

In summary, overall the proposed modified Project would not result in any new significant impacts as compared to the approved Project assessed in the FEIR. As compared to the approved

Project, the proposed modified Project changes will not require major revisions to the FEIR because of the involvement of new significant impacts that were not previously evaluated. Specifically, with regard to traffic and circulation (1) no substantial changes are proposed in the proposed modified Project, which would require major revisions to the FEIR; (2) no substantial changes arise in the circumstances of the proposed modified Project's undertaking, requiring major revisions to the FEIR; and (3) there is new information of substantial importance as further explained in greater detail in the section, and was taken into account in the analysis. No substantial changes are proposed with regarding to Project construction, operations, etc., as addressed more fully, below. Since the proposed modified Project would have the same types of threshold of significance exceedances regarding traffic and circulation as noted above, impacts would be similar to those of the approved Project assessed in the FEIR, and no new or worsening impacts would occur in comparison with the approved Project.

a. Construction

Like the approved Project, construction impacts for the proposed modified Project would also be mitigated to a less than significant level with implementation of Mitigation Measure C-1. The approved Project's impacts were also less that significant with mitigation, impacts of the proposed modified Project would be similar to those of the approved Project assessed in the FEIR, and no new or worsening impacts would occur in comparison with the approved Project. As such, the proposed modified Project would not result any new significant construction impacts as compared to the approved Project.

b. Operation

(1) Intersection Service Levels

To be conservative, intersection impact analysis assumes significant and unavoidable impacts at all significantly impacted intersections where the proposed mitigation measures either, (a) do not fully mitigate the operational impact, (b) have been determined to be inconsistent City policies (would require removing a median island), or (c) have a probability of being determined infeasible by a private entity or a public agency (other than City of Carson) having jurisdiction over components of the impacted intersection. Provided below is a list of study intersections where proposed modified Project impacts will remain significant and unavoidable after the aforementioned mitigation measures:

- 3. Main Street & I-405 SB On-Ramp (Caltrans Jurisdiction)
- 5. Vermont Avenue & Del Amo Boulevard (Los Angeles County/City of Los Angeles Jurisdiction)
- 7. Hamilton Avenue & Del Amo Boulevard (Mitigation does not fully mitigate and is inconsistent with City policies)
- 8. Main Street & Del Amo Boulevard (Mitigation is inconsistent with City policies)

- 10. Avalon Boulevard & Del Amo Boulevard (Mitigation is inconsistent with City policies)
- 12. Figueroa Street & I-110 NB Ramps (Caltrans)
- 22. Vermont Avenue & Carson Street (Los Angeles County)

As stated previously, the proposed modified Project would result six additional significant and unavoidable impacts compared to the approved Project. The difference in number, degree, and location of significant impacts identified for the approved Project compared to the analysis for the proposed modified Project, is a result of changes in background traffic conditions, related Project traffic patterns, roadway and freeway capacity changes, as well as differences in analysis methodology. The difference in the number of significant and unavoidable impacts is a result of differences in analysis methodology and changes in City of Carson policy and design standards.

The proposed modified Project has one fewer significant and unavoidable impact compared to the approved Project when analyzed using the same 2017 methodology. As such, the proposed modified Project would result in fewer significant and unavoidable intersection impacts as compared to the approved Project.

(2) Freeway Service Levels

As previously noted, significant impacts would occur on three segments of the I-110 Freeway, four segments of the I-405 Freeway, and one segment of the I-710 Freeway. In addition, a significant impact would occur on the analyzed CMP-monitored freeway segment of the I-405 Freeway south of the I-110 Freeway (see Table IV.C-10). No feasible mitigation measures are available to the Applicant or any individual project to mitigate the potentially significant impacts on these freeway segments to less than significant levels. Therefore, cumulative impacts on freeway service levels would be significant and unavoidable. The approved Project's impacts were also significant and unavoidable, impacts of the proposed modified Project would be similar to those of the approved Project assessed in the FEIR, and no new or worsening impacts would occur in comparison with the approved Project.

(3) Public Transportation

Regional transit impacts for the proposed modified Project would be mitigated to a less than significant level with implementation of Mitigation Measure C-16. In comparison, the impact of the approved Project would be significant an unavoidable. As such, the proposed modified Project would not result any new significant impacts as compared to the approved Project.

Comparison to FEIR Findings: New Significant Unavoidable Impact. Previous Mitigation Applies as Modified Herein. New Mitigation Measure(s) Identified; Inapplicable Mitigation Removed. Mitigation Previously Applied Determined to Be Infeasible.

IV.C. Traffic and Circulation	
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IV. ENVIRONMENTAL IMPACT ANALYSIS E. GEOLOGY AND SOILS

1. INTRODUCTION

This section addresses the potential impacts of the proposed modified Project relative to geologic and seismic hazards compared to the approved Project assessed by the FEIR, and supplements Section IV.E, Geology and Soils, of the FEIR where there are changes to the regulatory setting. In all other respects, the FEIR analysis remains applicable to the proposed modified Project. This supplemental analysis compares the proposed modified Project to the approved Project to determine if the proposed changes will require major revisions to the FEIR because of the involvement of any new significant impacts as a result of changes to the approved Project, changes in circumstances, or new information that was not previously evaluated. To determine whether the proposed modified Project would result in any new impacts, or increases in the severity of geological and seismic hazard impacts previously disclosed in the FEIR, this analysis considers the impacts that would result from construction and operation activities for the proposed modified Project under current physical and regulatory circumstances, and compares these impacts to those identified in the previous FEIR. The following analysis describes the regulatory setting, regional and local earthquake faults, existing physical features of the Project site, and the context of the proposed modified Project in relation to soil stability and geologic risk. The evaluation of soils and geologic conditions on the Project site is based on the resources used from the FEIR; the Tetra Tech, Draft Deep Dynamic Compaction Report for the Boulevards at South Bay (formerly Carson Marketplace), Carson, California, April 2012; and resources found at www.envirostor.dtsc.ca.gov/public/profile_report.asp?global_id=19490019, as accessed September 22, 2017.

The analysis concludes that the proposed modified Project would result in similar types of geologic and seismic hazards compared to the approved Project, and like the approved Project, with the application of the mitigation set forth in the FEIR (as the same is updated below to reflect newer regulations), would result in less than significant project impacts. This analysis further concludes that with respect to geologic and seismic hazards there are no changes in circumstances arising since the preparation of the FEIR or new information not known at the time the FEIR was prepared requiring further analysis under CEQA. All previously adopted mitigation measures remain applicable and continue to be applied to the proposed modified Project. No new impact, as compared to the approved Project, is identified.

2. ENVIRONMENTAL SETTING

a. Regulatory Environment

(1) State of California Alquist-Priolo Earthquake Fault Zones

The regulatory environment discussed in the FEIR for the Alquist-Priolo Earthquake Fault Zoning Act remains fully relevant, and there is no substantive change in circumstances or information regarding this item (see FEIR [DEIR pp. 311–312]). The Project site is still not located within an Alquist-Priolo fault zone, and as a result the requirements of the Act do not apply to the Project site or the proposed modified Project.

(2) State of California Seismic Hazards Mapping Act

The regulatory environment under the Seismic Hazards Mapping Act as discussed in the FEIR remains fully relevant, and there is no substantive change in circumstances or information regarding this item (see FEIR [DEIR p. 312]). Currently, updated State publications supporting the requirements of the Seismic Hazards Mapping Act include the California Geological Survey SP 117A, Guidelines for Evaluating and Mitigating Seismic Hazards in California, which performs the same objectives as its successor, SP 117, which was discussed in the FEIR. State Seismic Hazards Maps still identify portions of the City of Carson, including the Project site as an area susceptible to liquefaction potential, based on soil type, ground water tables, and the high seismicity of the area.

(3) State of California Department of Toxic Substances Control Remedial Action Plan

The following information is discussed in the FEIR and is provided here to provide context for discussion of modifications to the Upper OU RAP (as defined below) made following the certification of the FEIR. As discussed in the Hazards and Hazardous Materials section of the FEIR (see FEIR [DEIR p. 280]), the State of California Department of Toxic Substances Control (DTSC) approved a Final Remedial Action Plan (RAP) in 1995 to address contamination in soils and groundwater on the former landfill site in what is known as the Upper Operable Unit (Upper OU). Pertinent to soil stability, the RAP for the Upper OU (the Upper OU RAP) outlines a procedure for the capping of the waste layers and the overlaying and compaction of fill soils. Due to the presence of the capped waste and the need to maintain the integrity of the proposed

The Upper Operable Unit (Upper OU) consists of the site soils, the waste zone above and within the Bellflower Aquitard, and the Bellflower Aquitard down to but not including, the Gage Aquifer. The Lower Operable Unit (Lower OU) is composed of the Gage, Lynwood, and Silverado Aquifers, and all other areas impacted by the geographic extent of any hazardous substances which may have migrated or may migrate from the aforementioned areas or from the Upper OU. The operable units are also established to prioritize the remedial response to the areas of known impacts (Upper OU) versus potential impacts (Lower OU).

cap, the Upper OU RAP soil cover depths are addressed in Chapter VII, Other Environmental Considerations, of the FEIR. The Upper OU RAP anticipates that building foundations would use a pile system, with individual piles driven to the bearing soil beneath the waste and that this design would support buildings over the landfill waste. The Upper OU RAP also specifies that the piles would incorporate a sealable sleeve between the piles and the waste liner and provide controlled slacks² to allow for settlement. Subsequent to certification of the FEIR, the Upper OU RAP was modified in 2009 to include some changes to the construction material for the landfill cap and the addition of a building protection system to provide an enhanced vapor barrier to potential future residential land uses. As described in the FEIR (see FEIR [DEIR pp. 292–295]), a RAP for the Lower OU was approved by DTSC in 2005 (Lower OU RAP), to address protection of deeper groundwater resources by implementing a groundwater monitoring program and is not altered as a result of implementation of the proposed modified Project.

(4) City of Carson General Plan Seismic Safety and Safety Element (2004)

The regulatory environment discussed in the FEIR for the City of Carson General Plan Seismic Safety and Safety Element remains fully relevant, and there is no substantive change in circumstances or information regarding this item (see FEIR [DEIR pp. 313–314]). Although the General Plan has been amended, no amendment affected the relevant objectives of the Seismic Safety and Safety Element outlined in the FEIR.

(5) City of Carson Municipal Code

The regulatory environment discussed in the FEIR for the City of Carson Municipal Code (Carson Municipal Code) remains fully relevant, and there is no substantive change in circumstances or information regarding this item. The Carson Municipal Code, which includes the City's Building Code (City's Building Code), remains generally consistent with the Carson Municipal Code and City Building Code in effect at the time of FEIR preparation (see FEIR [DEIR pp. 314–315]). The City's Building Code incorporates by reference the building requirements of the Los Angeles County Code in relation to grading, soils, and geologic issues. As required by State law, the City updates its Building Code every three years. Most recently, the City re-adopted Title 26, Building Code, of the Los Angeles County Code, as amended and in effect on January 1, 2017, which adopted the California Building Code, 2016 Edition (Part 2 of Title 24 of the California Code of Regulations) with minor amendments not relevant to the discussion in this section, as its current Building Code (Carson Municipal Code Section 8100). The most recent version of the City's Building Code, including Chapter 33 of the State Building Code (Safeguards during Construction), remains generally consistent with the regulatory environment discussed more

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² "Controlled slacks" is a term used in the Upper OU RAP. Since that time, the sleeve specified in the RAP (now called a "pile cap boot") has been designed. It has accordion-like folds that allow it to expand/extend to allow for settlement.

fully in the FEIR. Since preparation of the FEIR, there are no substantive changes in circumstances or information related to geology or soils associated with regulatory changes to the Carson Municipal Code, County Building Code or State Building Code.

b. Physical Environment

(1) Soils and Geology Profile

In general, there are no substantive changes to the underlying geology of the Project site as described in the FEIR (see FEIR [DEIR pp. 315–317]). However, as anticipated by the FEIR, there have been some changes to the surface deposits and underlying thicknesses of the waste materials due to the implementation of deep dynamic compaction (DDC) that occurred on the Property (i.e., the 157-acre former landfill portion of the Project site) in 2008 and 2009 to consolidate loosely packed soil and landfill waste.

Beginning in April 2008, a densification program was initiated at the Property to densify the upper portion of the landfill waste and provide a more stable base foundation layer for the landfill cap and any subsequent improvements.³ After a pilot test program, a total of 68 acres of the Property over three areas around the intersection of Street A (existing Lenardo Drive) and Street B (existing Stamps Drive) (Figure IV.E-1, Deep Dynamic Compaction Areas) was subjected to the densification process known as DDC. DDC is a process where a very heavy weight is repeatedly dropped over an area causing the underlying materials to compress and consolidate. The approximately 68 acres of the Property chosen for DDC represent areas that are proposed for parking lots and new roads. The DDC was carried out with a total of 105,800 large weight drops followed by 31,800 smaller "ironing passes" over periods from October to December 2008 and intermittently from May to September 2009. Approximately 272,000 cubic yards of airspace was created over the 68-acre waste area through the consolidation process. Approximately 109,000 cubic yards of soil was placed over the compacted waste for a net reduction of approximately 163,000 cubic yards. As a result, this area of the Property will be much less susceptible to subsidence or settlement than it had been prior to the DDC operations. As noted in the FEIR, depressions caused by the DDC were filled with soil to create a smooth soil surface upon which the landfill cap was constructed (see FEIR [DEIR pp. 281, 327]).

With this update, the FEIR remains fully relevant, and there is no substantive change in circumstances or information regarding this item.

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³ Tetra Tech, Draft Deep Dynamic Compaction Report, 2012.



SOURCE: SCS Engineers, 2017

The District at South Bay

Figure IV.E-1
Deep Dynamic Compaction Areas



(2) Geological Hazards

(a) Earthquake Faults

There have been no substantive changes to the identification or designation of active faults in the immediate vicinity of the Project site since preparation of the FEIR (see FEIR [DEIR pp. 317–319]).

(b) Potential Ground Shaking

Ground shaking effects are dependent on a number of factors such as the distance to the epicenter of the seismic effect, the duration of ground shaking, and the geotechnical characteristics of the underlying materials. Areas underlain by thick unconsolidated deposits can be the most susceptible to the effects of groundshaking due to their potential to amplify and prolong the surface waves produced in an earthquake. Whereas the characterization of the Southern California region as an area of high seismic activity has not changed since the preparation of the FEIR, the probability of a substantial seismic event occurring in the Southern California region has been raised since publication of the FEIR. Nonetheless, as stated in the FEIR, the Project site remains in an area that is susceptible and likely to experience a substantial seismic event(s) over the next 30 years.⁴ As such, the FEIR remains relevant, and there is no substantive change in circumstances or information regarding this item as compared to the approved Project.

(c) Surface Rupture

As indicated previously in the FEIR and above, the Alquist-Priolo Earthquake Fault Zoning Act, which enforces a 50-foot setback zone, regulates development near active faults to mitigate the likelihood of surface rupture on a given fault. The Project site remains outside of any established Alquist-Priolo Earthquake Fault Zone for fault rupture hazards. No active or potentially active faults are known to pass directly under the Project site. Since no active earthquake faults intersect the Project site, the potential for ground rupture within the Project site is considered low. As such, there is no substantive change in circumstances or information regarding this item as compared to the approved Project.

(d) Liquefaction

As described more fully in the FEIR, the Project site is largely located within an area designated by the City of Carson General Plan Safety Element and the State of California

⁴ United States Geological Survey (USGS), UCERF3: A New Earthquake Forecast for California's Complex Fault System, USGS Fact Sheet 2015-3009, March 2015.

Seismic Hazard Maps as a CGS Liquefaction Hazard Zone.⁵ However, as stated in the FEIR, further analysis and reporting of liquefaction potential on the Project site would be performed prior to further construction, in accordance with the City's Building Code requirements and Special Publication 117A. Prior geotechnical evaluations determined that the potential for liquefaction at the Project site would be low.⁶ As such, there is no substantive change in circumstances or information regarding this item as compared to the approved Project.

(e) Subsidence

As described above, the DDC activities at the Property were conducted to densify the upper portion of the landfill waste and provide a more stable base foundation layer for the landfill cap and any subsequent improvements. DDC is a proven geotechnical engineering approach to minimize future subsidence associated with development over areas with loose uncompacted materials such as fill or waste. Therefore, while additional DDC is necessary to achieve the design requirements as further described below, the DDC activities that have occurred since preparation of the FEIR have improved the geotechnical characteristics of the underlying materials and reduced the potential for subsidence.

(f) Slope Stability/Landslides

There is no substantive change in circumstances or information regarding this item. See the FEIR (DEIR p. 335) for additional information.

3. ENVIRONMENTAL IMPACTS

a. Methodology

As discussed in greater detail in Chapter II, Modified Project Description, the purpose of this SEIR is to evaluate the changes considered by the proposed modified Project to the approved Project, and to determine whether changes in circumstances surrounding the Project site and the approved Project (if any), and new information (if any), require further analysis under CEQA. Specifically, the methodology used is to comparatively analyze the approved Project with the proposed modified Project to determine if (1) substantial changes are proposed in the proposed modified Project, which would require major revisions to the FEIR; (2) substantial changes arise in

⁵ City of Carson General Plan EIR, Exhibit 4.6-2 (October 22, 2002), based on State of California Seismic Hazard Zone Maps: Inglewood Quadrangle, Long Beach Quadrangle, Southgate Quadrangle, and Torrance Quadrangle (March 26, 1999); Special Studies Zones, Torrance Quadrangle (July 1, 1986), as cited in the FEIR.

⁶ Western Laboratories, Geotechnical Engineering Report for Proposed Commercial Development and Northeast Corner of Main Street and Del Amo Boulevard, December 24, 1996; and Law/Crandall, Report of Geotechnical Investigation and Pile Loading Testing for L.A. Metromall, September 5, 1996, as cited in the FEIR.

⁷ Tetra Tech, Draft Deep Dynamic Compaction Report, 2012.

the circumstances of the proposed modified Project's undertaking, requiring major revisions to the FEIR; or (3) new information of substantial importance appears that was not known or available at the time the FEIR was certified. In doing so, the underlying methodology of assessing impacts regarding geology and soils continues to be relevant and has been carried forward from the FEIR, and has been updated to reflect the Project site's existing condition as well as any changes in regulatory requirements.

The determination of significance is based on the findings of the summarized geological references and any changes to the conditions or risks that might be associated with the proposed modified Project that might differ from the FEIR analysis. The determination of significance is also based on a comparison of site preparation and structural design with existing City and State regulations as well as any changes in regulatory requirements since the FEIR.

b. Thresholds of Significance

Thresholds of significance utilized by the City with respect to geology and soils have not changed from those used in the FEIR, and this SEIR therefore utilizes the same thresholds of significance. As set forth in the FEIR, the proposed modified Project would be considered to have a significant geological impact if:

- The proposed Project would be susceptible to ground shaking, liquefaction, or settlement, which would result in substantial damage to structures or infrastructure and an exposure of people to risk of loss, injury, or death.
- The proposed Project would be in non-compliance with the requirements of the Carson Municipal Code and State regulations set forth in this section.

c. Project Impacts

(1) Project Design Features

The proposed modified Project's structural design would continue to comply with the design standards set forth in the Carson Municipal Code, which incorporates, by reference, Los Angeles County Code, Title 26, including Chapter 16, Seismic Design Standards. The proposed modified Project would also comply with Titles 21 and 26 of the Los Angeles County Code in meeting all applicable building regulations and required evaluation of current soils, project-specific geotechnical, and site-specific geologic conditions for the development of the proposed modified Project in accordance with the California Building Code as well as any local amendments. In addition, all proposed development associated with the proposed modified Project would be required to adhere to Special Publication 117A in accordance with the Seismic Hazards Mapping Act.

The proposed modified Project would include approximately 1.83 million square feet of commercial floor area (including hotel uses) and 1,250 residential units, for a reduction of

approximately 160,000 square feet of commercial development as compared with the approved Project analyzed by the FEIR. Site preparation activities would continue to be integrated with remediation and subsurface construction standards required by the Upper OU RAP. As discussed in the FEIR, the Upper OU RAP outlined a procedure for the capping of the waste layers and the overlaying and compaction of fill soils. Due to the presence of the capped waste and need to maintain the integrity of the landfill cap, the Upper OU RAP establishes specific criteria for development of the Property. A modification to the Upper OU RAP was approved by DTSC in the Explanation of Significant Differences (ESD) issued in July 2009. The ESD allows for use of a linear low-density polyethylene (LLDPE) geomembrane instead of clay as the main component of the cap, and changes required to the vapor barrier to allow residential land use. Other changes included modifications to the design employed for the landfill gas control and groundwater treatment systems which ultimately do not affect the geotechnical hazards present at the Property but would nonetheless be considered in the ultimate foundation design of all proposed improvements.

Project design features would still include the implementation of driven piles, in lieu of slabs on grade as outlined by the FEIR. Piles would be driven through existing fill/waste soils to approximately 10 to 20 feet into underlying native soils. Floor slabs, including parking structures and residences, would be supported by these piles. Pile caps would be used to connect the piling and the overlying impermeable cap. Piles could range from approximately 40 to 90 feet in length, with an average length of 65 feet. Existing roadways are not underlain by fill/waste and, as such, roadway construction in existing alignments would not require the use of foundation pilings but would still require evaluation and design in accordance with the City's Building Code requirements.

To further avoid differential settlement, DDC was completed on approximately 68 acres as anticipated by the FEIR. Depressions that were caused by DDC were filled with fill to create a smooth surface. As noted below, additional DDC may take place as shown on Figure IV.E-1.

(2) Construction

As with the approved Project, generalized site preparation would require DDC, mass grading, backfill, capping and pile driving, rough grading and pad construction substantially the same as to what was analyzed in the FEIR. Remediation activities would continue to occur during the site preparation stage although some activities including installation of the Groundwater Extraction and Treatment System (GETS), some of the landfill cap membrane, and

As previously noted, 300 residential units have received City approvals and are entitled for construction in the 11-acre area north of Del Amo Boulevard, referred to as Development District 3 (DD3). These units are not part of the proposed modified Project, but are being treated as a related project. However, they may also be included in this SEIR from time to time for informational purposes to facilitate comparisons with the FEIR. The overall total number of residential units within the Project site remains unchanged from that assessed in the FEIR.

portions of the landfill gas system have already been completed since the FEIR. Nonetheless, construction would require the excavation, movement, and on-site storage of large volumes of soil. Site preparation would be coordinated with any remaining remediation procedures as approved by the DTSC. Consistent with the analysis of the FEIR, construction of the proposed modified Project would be coordinated with the remaining elements of the Upper OU RAP that need to be installed on site. Phased implementation and occupancy of the Property would occur with the proposed modified Project in accordance with the requirements of the Upper OU RAP, the Carson Municipal Code, DTSC approvals, and any other relevant requirements necessary to meet the remediation goals of the Upper OU RAP.

At the beginning of the construction process, DDC will be performed in many areas of the Property other than embankments (Torrance Lateral slope and the I-405 Freeway slope), landscaped areas, areas not underlaid by waste, and portions of the Property where DDC has been previously completed. DDC will be utilized to minimize differential settlement on the Property and to provide a stable base for placement of landfill cap. Actual locations that require DDC will be confirmed by a site-specific geotechnical evaluation (see Figure IV.E-1). As conducted during the previous DDC activities at the site, future DDC would be conducted in accordance with the Deep Dynamic Compaction Work Plan, which includes vibration monitoring to ensure that there are no off-site adverse effects related to subsidence. Vibration monitoring includes field measurements and vibration monitoring with adaptive management of the weight drop height to ensure that the specified threshold peak particle velocity (PPV) of 0.20 inch/second is met. According to the findings of the vibration monitoring previously conducted, the maximum recorded PPV at the nearest sensitive receptor ranged from 0.020 to 0.101 inch/second (Tetra Tech 2012). Therefore, the vibration monitoring that would be required by Mitigation Measure H-3, as described in Section IV.H, Noise, would ensure that adverse effects such as subsidence would be minimized and considered a less than significant impact.

As with the approved Project, construction would be conducted according to the requirements of the Carson Municipal Code, the Upper OU RAP, as well as requirements of the NPDES General Construction Permit. An Applicant would submit updated soils engineering and engineering geology report(s) prior to any grading activities or modification of topography. With the enforcement of code and permit requirements, similar to what was discussed under the FEIR, including geotechnical and geological analyses of the Property and code-established procedures associated with grading and construction, the proposed modified Project would remain in compliance with existing regulatory requirements. Therefore, the potential for the proposed modified Project to be susceptible to geologic hazards caused by grading and other construction activities would be less than significant, similar to the FEIR. As such, the proposed modified Project would not result in any new significant impacts as compared to the approved Project.

For the proposed structures constructed as part of the proposed modified Project, as with those analyzed in the FEIR, exposure to settlement would be reduced to less than significant

levels through the implementation of driven pile foundations, in which concrete building pads and floors would be supported by piles driven through the waste and into underlying soils capable of supporting proposed new loadings. Exposure to ground shaking hazards would remain reduced through the implementation of seismic construction standards set forth in the Carson Municipal Code, Chapter 16, and the City's Building Code, which include design provisions for structures within 15 km (9.3 miles) of an active fault. The Carson Municipal Code would also still require the preparation of updated soils, geotechnical, or geology reports and the compliance of the proposed modified Project with any recommendations developed as part of any such report. The required final design level geotechnical reports would also still be required to adhere to Special Publication 117A, updated in 2008, to address potential liquefaction hazards that may be present at the Property.

Therefore, as stated in the FEIR, with compliance with the most recent State Building Code and the City's Building Code seismic design standards and site evaluation requirements including adherence to Special Publication 117A, the risk of exposure of the Project's occupants and structures to ground shaking, liquefaction, differential settlement, or other geologic hazards would be less than significant. Similar to the FEIR, implementation of the final design level geotechnical recommendations would ensure that the final site conditions would not be susceptible to, and would not cause, off site geologic hazards.

As such, the proposed modified Project would not result any new significant geologic impacts as compared to the approved Project.

(3) Operation

As noted above in the setting and as described in the FEIR, the Project site remains located within a seismically active region that is susceptible to seismic risks. The proposed modified Project use is the same as the approved Project, and as such, there will be no additional impacts as compared to the approved Project.

4. MITIGATION MEASURES

The proposed modified Project would not result in new impacts with respect to geology and soils as compared to the approved Project. The mitigation measures identified in the FEIR, which are set forth below (with minor updates to reflect newer regulations, i.e., SP 117A), would still apply:⁹

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The mitigation measures below are updated from those set forth in the FEIR. For clarity, the changed text is marked as follows: new text is <u>underlined</u>, and deleted text is shown in strikeout format.

- **Mitigation Measure E-1:** In accordance with City of Carson Municipal Code, the Applicant shall comply with site-specific recommendations set forth in engineering geology and geotechnical reports prepared to the satisfaction of the City of Carson Building Official, as follows:
 - The engineering geology report shall be prepared and signed by a California Certified Engineering Geologist and the geotechnical report shall be prepared and signed by a California Registered Civil Engineer experienced in the area of geotechnical engineering. Geology and geotechnical reports shall include site-specific studies and analyses for all potential geologic and/or geotechnical hazards. Geotechnical reports shall address the design of pilings, foundations, walls below grade, retaining walls, shoring, subgrade preparation for floor slab support, paving, earthwork methodologies, and dewatering, where applicable.
 - Geology and geotechnical reports may be prepared separately or together.
 - Where the studies indicate, compensating siting and design features shall be required.
 - Laboratory testing of soils shall demonstrate the suitability of underlying native soils to support driven piles to the satisfaction of the City of Carson Building Official.
- Mitigation Measure E-2: Due to the classification of portions of the Project site

 Property as a liquefaction zone, the Applicant shall demonstrate that liquefaction either (a) poses a sufficiently low hazard to satisfy the defined acceptable risk criteria, in accordance with CDMG-CGS Special Bulletin 117A, or

 (b) implements suitable mitigation measures to effectively reduce the hazard to acceptable levels (CCR Title 14, Section 3721). The analysis of liquefaction risk shall be prepared by a registered civil engineer and shall be submitted to the satisfaction of the City Building Official.
- Mitigation Measure E-3: Any roads realigned from the existing configuration, or otherwise, located in areas underlain by waste soils, shall comply with site-specific recommendations as set forth in engineering, geology, and geotechnical reports prepared to the satisfaction of the City of Carson building officials.

(See FEIR [DEIR pp. 332–333; FEIR pp. 78–79].) When the proposed revisions to the proposed modified Project are compared to the approved Project analyzed under the FEIR, there are no new significant impacts or changes with the retention of the existing mitigation measures in place. As such, no additional mitigation measures are required.

5. CUMULATIVE IMPACTS

The cumulative context for the proposed modified Project is the seismic region of the greater Los Angeles Basin. As discussed in the FEIR, due to the high seismic activity common to the region, the potential for ground shaking and other geological hazards would be similar

throughout the related Project study area. In general, seismic and other geotechnical hazards do not combine with one another making the hazards site specific. Each of the cumulative projects would require case-by-case approvals, including plan check and issuance of building permits similar to what would be required of the proposed modified Project. Building permits for the related projects would involve a site-specific evaluation of slope stability, ground rupture, liquefaction, and ground movement just as the proposed modified Project would be required to implement. As required by the City Code and State regulations, appropriate structural design and site preparation requirements would still be enforced for each of the related projects. Although the related projects, in combination with the proposed modified Project, would expose more people and structures to seismic risk or other potentially hazardous geologic conditions, with the implementation of City Code regulations, cumulative impacts related to geologic risk would be minimized and thus less than significant. Although other geologic hazards related to soil stability may be localized because the Property comprises a former landfill, the related project to be constructed on DD3 (300 units of housing) is located outside of the footprint of the landfill and therefore will not affect the proposed modified Project. As such, the proposed modified Project together with all related projects would not result in any new significant cumulative impacts as compared to the approved Project.

6. LEVEL OF SIGNIFICANCE AFTER MITIGATION

In summary, the proposed modified Project would not result in any new significant impacts as compared to the approved Project assessed in the FEIR. As compared to the approved Project, the proposed modified Project changes will not require major revisions to the FEIR, nor involve new significant impacts that were not previously evaluated. Specifically, with regard to geology and soils (1) no substantial changes are proposed in the proposed modified Project, which would require major revisions to the FEIR; (2) no substantial changes arise in the circumstances of the proposed modified Project's undertaking, requiring major revisions to the FEIR; and (3) no new information appears that was not known or available at the time the FEIR was certified. No substantial changes are proposed with regarding to Project design features, construction, or operations. The proposed modified Project would remain in compliance with City and State regulations and is not expected to expose people or structures to any unstable geologic conditions or seismically related geologic hazards that would result in substantial damage to structures or infrastructure or exposure of people to risk of loss, injury, or death. Since the proposed modified Project would not exceed the thresholds of significance relative to City and State regulations, or expose persons to geologic hazards, impacts would be similar to those of the approved Project assessed in the FEIR (less than significant), and no new or worsening impacts would occur in comparison with the approved Project.

Comparison to FEIR Findings: No New Significant Impact. Previous Mitigation Applies as Modified Herein. No New Mitigation Measure(s) Identified or Required.

IV.E. Geology and Soils	
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IV. ENVIRONMENTAL IMPACT ANALYSIS G. AIR QUALITY

1. INTRODUCTION

The following analysis describes changes to the existing air quality environment within the Project area and estimates air emissions taking into account potential changes brought about by the proposed modified Project's construction and operation compared to the approved Project and supplements Section IV.G, Air Quality, of the FEIR where there are changes to the regulatory setting or recent case law decisions. In all other respects, the FEIR analysis remains applicable to the proposed modified Project. To determine whether the proposed modified Project would result in any new impacts, or increases in the severity of impacts previously disclosed in the FEIR, this analysis considers the impacts from proposed construction and operation activities under current environmental and regulatory circumstances, and compares these impacts to those identified in the FEIR, and mitigation measures in that document. In doing so, this supplemental analysis compares the proposed modified Project to the approved Project to determine if the proposed changes will require major revisions to the FEIR because of the involvement of any new significant impacts as a result of changes to the project, changes in circumstances or new information that was not previously evaluated.

The analysis concludes that the proposed modified Project would result in similar types of air quality impacts compared to the approved Project, and like the approved Project, would result in significant and unavoidable regional construction emissions related to reactive organic compound (ROC) and regional operational impacts with respect to ROC, nitrogen oxides (NO_X), carbon monoxide (CO), and respirable particulate matter (PM₁₀). Like the approved Project, the proposed modified Project would result in less than significant impacts related to localized construction and operational emissions, CO hotspots, and odors. In regards to changes in circumstances arising since the preparation of the FEIR, fine particulate matter (PM_{2.5}) has been added as a pollutant of concern and is, therefore, analyzed in this SEIR.

2. ENVIRONMENTAL SETTING

a. Regulatory Setting

A number of statutes, regulations, plans, and policies addressing air quality issues have been adopted by federal, state, and local agencies. A summary of new, modified, or repealed statutes, regulations, plans, and policies potentially applicable to the proposed modified Project are presented below.

(a) Federal

At the federal level, the United States Environmental Protection Agency (USEPA) is responsible for implementation of the federal Clean Air Act (CAA). Some portions of the CAA (e.g., certain mobile source and other requirements) are implemented directly by the USEPA. Other portions of the CAA (e.g., stationary source requirements) are implemented by state and local agencies. Since the FEIR, there are no new federal regulations relating to air quality. All regulations stated in the FEIR are still applicable to the proposed modified Project. Refer to the FEIR (see FEIR [DEIR p. 335]) for the Regulatory Setting. However, while no new regulations have been promulgated, updates to the federal CAA continue to occur. Updates have been implemented with respect to the National Ambient Air Quality Standards (NAAQS).

Table IV.G-1, Ambient Air Quality Standards, shows the NAAQS currently in effect for each criteria pollutant. Additionally, the attainment status for the South Coast Air Basin (SCAB) has been updated since certification of the FEIR. The current attainment status for the Basin is shown in Table IV.G-2, South Coast Air Basin Attainment Status (Los Angeles County). As compared to the attainment status as summarized in the FEIR (see FEIR Table 33 [DEIR p. 359]), the SCAB is now in attainment for CO and PM₁₀ with respect to the NAAQS.

Table IV.G-1

Ambient Air Quality Standards

	Average	California	Standards ^a		National Stand	lards ^a	
Pollutant	Time	Concentration ^b	Method ^c	Primary ^{b,d}	Secondary ^{b,e}	Method ^f	
O3 ^g	1-hour	0.09 ppm (180 µg/m^3)	Ultraviolet Photometry	_	Same as	Ultraviolet	
	8-Hour	0.070 ppm (137 μg/m³)		0.070 ppm (137 μg/m³)	Primary Standard	Photometry	
	1-Hour	0.18 ppm (339 μg/m³)	Gas Phase	100 ppb (188 μg/m³)	None	Gas Phase Chemi-	
$\mathbf{NO}_{2}^{\mathrm{h}}$	Annual Arithmetic Mean	0.030 ppm (57 μg/m ³)	Chemi- luminescence	53 ppb (100 μg/m ³)	Same as Primary Standard	luminescence	
	1-Hour	20 ppm (23 mg/m ³)		35 ppm (40 mg/m ³)	Nana		
СО	8-Hour	9.0 ppm (10mg/m ³)	Non-Dispersive Infrared	- 9 nnm		None	Non-Dispersive Infrared Photometry
	8-Hour (Lake Tahoe)	6 ppm (7 mg/m ³)	(NDIR)	_		(NDIR)	

Table IV.G-1

Ambient Air Quality Standards

	Average	California	a Standards ^a	National Standards ^a			
Pollutant	Time	Concentration ^b	Method ^c	Primary ^{b,d}	Secondary ^{b,e}	Method ^f	
	1-Hour	0.25 ppm (655 μg/m³)	-	75 ppb (196 μg/m³)			
	3-Hour	_			0.5 ppm $(1,300 \mu g/m^3)$	Ultraviolet Fluorescence;	
SO ₂ i	24-Hour	0.04 ppm $(105 \mu g/m^3)$	Tradrescence	0.14 ppm (for certain areas) ⁱ	_	Spectrophotometry (Pararosaniline Method) 9	
	Annual Arithmetic Mean	_		0.030 ppm (for certain areas) ⁱ			
	24-Hour	50 μg/m ³	-	150 μg/m ³	Same as	Inertial Separation	
$\mathbf{PM}_{10^{\mathrm{j}}}$	Annual Arithmetic Mean	$20~\mu g/m^3$	Gravimetric or Beta Attenuation	_	Primary Standard	and Gravimetric Analysis	
PM _{2.5} ^j	24-Hour	No Separate	Same as State Standard 35 µg/m³ Primary Standard		Inertial Separation and Gravimetric		
1 1112.5	Annual Arithmetic Mean	12 μg/m ³	Gravimetric or Beta Attenuation	12.0 μg/m ^{3 j}	15 μg/m ³	Analysis	
	30-Day Average	$1.5 \mu g/m^3$			_		
$\mathbf{Lead}^{k,l}$	Calendar Quarter	_	Atomic Absorption	1.5 µg/m ³ (for certain areas) ¹	Same as	High Volume Sampler and Atomic Absorption	
	Rolling 3-Month Average ^l		-	0.15 μg/m ³	Primary Standard	Atomic Absorption	
Visibility Reducing Particles ^m	8-Hour	kilometer—visib more (0.07—30 Lake Tahoe) du relative humidit Method: Beta	ficient of 0.23 per bility of 10 miles or 0 miles or more for e to particles when y is less than 70%. Attenuation and prough Filter Tape.		No Federal		
Sulfates (SO ₄)	24-Hour	25 μg/m ³	Ion Chromatography	Standards		s	
Hydrogen Sulfide	1-Hour	0.03 ppm (42 μg/m³)	Ultraviolet Fluorescence	-			
Vinyl Chloride ^k	24-Hour	0.01 ppm (26 μg/m³)	Gas Chromatography				

Table IV.G-1

Ambient Air Quality Standards

	Average	California S	Standards ^a	National Standards ^a			
Pollutant	Time	Concentration ^b	Method ^c	Primary ^{b,d}	Secondary ^{b,e}	Method ^f	

NOTES:

California standards for ozone, carbon monoxide (except 8-hour Lake Tahoe), sulfur dioxide (1- and 24-hour), nitrogen dioxide, and particulate matter (PM₁₀, PM_{2.5}, and visibility-reducing particles), are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in California Code of Regulations Title 17, Section 70200.

- ^a National standards (other than ozone, particulate matter, and those based on annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over 3 years, is equal to or less than the standard. For PM₁₀, the 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 micrograms/per cubic meter (μg/m³) is equal to or less than one. For PM_{2.5}, the 24-hour standard is attained when 98 percent of the daily concentrations, averaged over 3 years, are equal to or less than the standard.
- b Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25°C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.
- ^c Any equivalent procedure which can be shown to the satisfaction of the California Air Resources Board to give equivalent results at or near the level of the air quality standard may be used.
- Mational Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.
- National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.
- Reference method as described by the USEPA. An "equivalent method" of measurement may be used but must have a "consistent relationship to the reference method" and must be approved by the USEPA.
- g On October 1, 2015, the national 8-hour ozone primary and secondary standards were lowered from 0.075 to 0.070 ppm.
- h To attain the 1-hour national standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 ppb. Note that the national 1-hour standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the national 1-hour standard to the California standards the units can be converted from ppb to ppm. In this case, the national standard of 100 ppb is identical to 0.100 ppm.
- On June 2, 2010, a new 1-hour SO₂ standard was established and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO₂ national standards (24-hour and annual) remain in effect until 1 year after an area is designated for the 2010 standard, except that in areas designated non-attainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.
- ^j On December 14, 2012, the national annual PM_{2.5} primary standard was lowered from 15 μ g/m³ to 12.0 μ g/m³.
- ^k The California Air Resources Board has identified lead and vinyl chloride as TACs with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.
- The national standard for lead was revised on October 15, 2008 to a rolling three-month average. The 1978 lead standard (1.5 μg/m³ as a quarterly average) remains in effect until 1 year after an area is designated for the 2008 standard, except that in areas designated non-attainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.
- ^m In 1989, the California Air Resources Board converted both the general statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are "extinction of 0.23 per kilometer" and "extinction of 0.07 per kilometer" for the statewide and Lake Tahoe Air Basin standards, respectively.

SOURCE: CARB, 2017.

Table IV.G-2
South Coast Air Basin Attainment Status (Los Angeles County)

Pollutant	National Standards	California Standards
Ozone (1-hour standard)	Non-attainment – Extreme	Non-attainment-Extreme
Ozone (8-hour standard)	Non-attainment – Extreme	Non-Attainment
Carbon Monoxide	Attainment	Attainment
Nitrogen Dioxide	Attainment (Maintenance)	Attainment
Sulfur Dioxide	Attainment	Attainment
PM_{10}	Attainment (Maintenance)	Non-attainment
PM _{2.5}	Non-attainment - Serious	Non-attainment
Lead	Non-attainment (Partial, Los Angeles County) ^a	Attainment
Visibility Reducing Particles	N/A	Unclassified
Sulfates	N/A	Attainment
Hydrogen Sulfide	N/A	Unclassified
Vinyl Chloride	N/A	N/A^b

NOTES:

N/A = not applicable

SOURCES: SCAQMD, 2017; United States Environmental Protection Agency, The Green Book Non-attainment Areas for Criteria Pollutants, https://www3.epa.gov/airquality/greenbook/mbcty.html Accessed June 2016; California Air Resources Board, Area Designations Maps/State and National, http://www.arb.ca.gov/desig/adm/adm.htm. Accessed June 2017.

(b) State

There are two new State regulations with respect to on- and off-road vehicle rules and revisions to some of the regulations identified in the FEIR. The following discusses only the revisions and new regulations. Refer to the State Regulatory Setting of the FEIR (see FEIR [DEIR p. 356]).

(i) California Clean Air Act

Updates have been implemented with respect to the California Ambient Air Quality Standards (CAAQS). Table IV.G-1 shows the CAAQS currently in effect for each criteria pollutant. Additionally, the attainment status for SCAB has been updated since certification of the FEIR. The current attainment status for the SCAB is shown in Table IV.G-2. As compared to

The NAAQS for 1-hour ozone was revoked on June 15, 2005, for all areas except Early Action Compact areas.

b In 1990, the California Air Resources Board identified vinyl chloride as a TAC and determined that it does not have an identifiable threshold. Therefore, the California Air Resources Board does not monitor or make status designations for this pollutant.

the attainment status as summarized in the FEIR (see FEIR Table 33 [DEIR p. 359]), the SCAB is now in extreme nonattainment with respect to the State ozone 1-hour standard and in attainment for CO.

(ii) California Air Resources Board On-Road and Off-Road Vehicle Rules

In 2004, the California Air Resources Board (CARB) adopted an Airborne Toxic Control Measure (ATCM) to limit heavy-duty diesel motor vehicle idling in order to reduce public exposure to DPM and other TACs. The ATCM applies to diesel-fueled commercial vehicles with gross vehicle weight ratings greater than 10,000 pounds that are licensed to operate on highways, regardless of where they are registered. This ATCM does not allow diesel-fueled commercial vehicles to idle for more than 5 minutes at any given time. This regulation has not changed since certification of the FEIR.

After certification of the FEIR, in 2008, CARB approved the Truck and Bus regulation to reduce NOx, PM₁₀, and PM_{2.5} emissions from existing diesel vehicles operating in California. The requirements were amended in December 2010 and apply to nearly all diesel fueled trucks and buses with a gross vehicle weight rating greater than 14,000 pounds. For the largest trucks in the fleet, i.e., those with a gross vehicle weight rating greater than 26,000 pounds, there are two methods to comply with the requirements. The first method is for the fleet owner to retrofit or replace engines, starting with the oldest engine model year, to meet 2010 engine standards, or better. This is phased over 8 years, starting in 2015 and would be fully implemented by 2023, meaning that all trucks operating in the State subject to this option would meet or exceed the 2010 engine emission standards for NOx and PM by 2023. The second option, if chosen, requires fleet owners, starting in 2012, to retrofit a portion of their fleet with diesel particulate filters achieving at least 85 percent removal efficiency, so that by January 1, 2016, their entire fleet is equipped with diesel particulate filters. However, diesel particulate filters do not typically lower NOx emissions. Thus, fleet owners choosing the second method must still comply with the 2010 engine emission standards for their trucks and busses by 2020.

In addition to limiting exhaust from idling trucks, CARB recently promulgated emission standards for off-road diesel construction equipment of greater than 25 horsepower (hp) such as bulldozers, loaders, backhoes and forklifts, as well as many other self-propelled off-road diesel vehicles. This regulation adopted by the CARB on July 26, 2007, aims to reduce emissions by installation of diesel soot filters and encouraging the retirement, replacement, or repower of older, dirtier engines with newer emission controlled models. Implementation is staggered based on fleet size (which is the total of all off-road horsepower under common ownership or control), with the largest fleets to begin compliance January 1, 2014. Each fleet must demonstrate compliance through one of two methods. The first method is to calculate and maintain fleet average emissions targets, which encourages the retirement or repowering of older equipment and rewards the introduction of newer cleaner units into the fleet. The second method is to meet

the Best Available Control Technology (BACT) requirements by turning over or installing Verified Diesel Emission Control Strategies (VDECS) on a certain percentage of its total fleet horsepower. The compliance schedule requires that BACT turn overs or retrofits (VDECS installation) be fully implemented by 2023 in all equipment in large and medium fleets and across 100 percent of small fleets by 2028.

(iii) South Coast Air Quality Management District

The South Coast Air Quality Management District (SCAQMD) has jurisdiction over air quality planning for all of Orange County, Los Angeles County except for the Antelope Valley, the non-desert portion of western San Bernardino County, and the western and Coachella Valley portions of Riverside County. SCAB is a subregion within SCAQMD jurisdiction. While air quality in SCAB has improved, SCAB requires continued diligence to meet the air quality standards.

SCAQMD has adopted a series of Air Quality Management Plans (AQMPs) to meet the CAAQS and NAAQS. Since certification of the FEIR, the SCAQMD and CARB adopted the 2016 AQMP which incorporates the latest scientific and technological information and planning assumptions, including the Southern California Association of Governments (SCAG) 2016 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), and updated emission inventory methodologies for various source categories. The Final 2016 AQMP was adopted by the AQMD Governing Board on March 3, 2016.

The AQMP builds upon other agencies' plans to achieve federal standards for air quality in SCAB. The AQMP incorporates a comprehensive strategy aimed at controlling pollution from all sources, including stationary sources, and on-road and off-road mobile sources. The 2016 AQMP buildings upon improvements in previous plans, and includes new and changing federal requirements, implementation of new technology measures, and the continued development of economically sound, flexible compliance approaches. In addition, it highlights the significant amount of emission reductions needed and the urgent need to identify additional strategies, especially in the area of mobile sources, to meet all federal criteria pollutant standards within the timeframes allowed under the federal CAA.

The 2016 AQMP's key undertaking is to bring SCAB into attainment with NAAQS for 24-hour PM_{2.5}. SCAQMD has since determined that this deadline was impractical due to drought conditions in the region.² In 2016, AQMP demonstrates that the 24-hour standard will be met by 2019 with no additional reductions beyond already adopted and implemented measures. The

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¹ SCAQMD, 2016 Air Quality Management Plan, 2016. Available at http://www.aqmd.gov/home/library/clean-air-plans/air-quality-mgt-plan/final-2016-aqmp. Accessed May 2017.

² SCAQMD, Revised Draft 2016 Air Quality Management Plan, 2016. Available at http://www.aqmd.gov/home/library/clean-air-plans/air-quality-mgt-plan/reviseddraft2016AQMP. Accessed May 2017.

2016 AQMP also intensifies the scope and pace of continued air quality improvement efforts toward meeting the 2024 and 2032 8-hour ozone standard deadline with new measures designed to reduce reliance on the CAA Section 183(e)(5) long-term measures for NO_X and VOC reductions. SCAQMD expects exposure reductions to be achieved through implementation of new and advanced control technologies as well as improvement of existing technologies.

The control measures in the 2016 AQMP consist of 8-hour ozone control measures and PM_{2.5} control measures designed to achieve the O₃ and PM_{2.5} NAAQS by statutory deadlines. The AQMP includes ten PM_{2.5} control measures, 15 stationary source 8-hour ozone measures and 15 early action measures for mobile sources. In general, the SCAQMD's control strategy for stationary and mobile sources is based on the following approaches: (1) available cleaner technologies; (2) best management practices; (3) incentive programs; (4) development and implementation of zero- near-zero technologies and vehicles and control methods; and (5) emission reductions from mobile sources. While the 2016 AQMP was adopted by the SCAQMD and CARB, it has not been yet received USEPA approval for inclusion in the State Implementation Plan (SIP). Therefore, until such time as the 2016 AQMP is approved by the USEPA, the 2012 AQMP remains the applicable AQMP.

The CEQA Air Quality Handbook was published by the SCAQMD in November 1993 to provide local governments with guidance for analyzing and mitigating project-specific air quality impacts. The CEQA Air Quality Handbook provides standards, methodologies, and procedures for conducting air quality analyses in EIRs and was used extensively in the preparation of this analysis. However, the SCAQMD is currently in the process of replacing the CEQA Air Quality Handbook with the Air Quality Analysis Guidance Handbook. While this process is underway, the SCAQMD recommends that lead agencies avoid using the screening tables in CEQA Air Quality Handbook Chapter 6, Determining the Air Quality Significance of a Project, because the tables were derived using an obsolete version of CARB's mobile source emission factor inventory, and the trip generation characteristics of the land uses identified in these screening tables were based on the fifth edition of the Institute of Transportation Engineer's Trip Generation Manual, instead of the most current edition. Additionally, the lead agency should avoid using the on-road mobile source emission factors in Table A9-5-J1 through Table A9-5-L (EMFAC7EP Emission Factors for Passenger Vehicles and Trucks, Emission Factors for Estimating Material Hauling, and Emission Factors for Oxides of Sulfur and Lead). The SCAQMD instead recommends using other approved models to calculate emissions from land use projects, such as the California Emissions Estimator Model (CalEEMod) software, initially released in 2011 and updated in 2016.³

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SCAQMD, CEQA Air Quality Handbook, 1993. Available at http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/ceqa-air-quality-handbook-(1993). Accessed April 2016.

The SCAQMD has published a guidance document called Final Localized Significance Threshold Methodology for CEQA evaluations that is intended to provide guidance in evaluating localized effects from mass emissions during construction.⁴ The SCAQMD adopted additional guidance regarding PM_{2.5} in a document called Final Methodology to Calculate Particulate Matter (PM)_{2.5} and PM_{2.5} Significance Thresholds.⁵ This latter document has been incorporated by the SCAQMD into its CEQA significance thresholds and Localized Significance Threshold Methodology.

(c) Local

There are no new local regulations or updates to the City's General Plan relating to air quality. All regulations and General Plan policies stated in the FEIR are still applicable to the proposed modified Project. Refer to the FEIR (see FEIR [DEIR p. 361]) for the local Regulatory Setting.

b. Existing Conditions

(1) Regional Context

As discussed in the FEIR, the proposed modified Project is located within the SCAB. Conditions within the SCAB, such as geographical location, climate, and pollutant dispersion, as described in the FEIR remain unchanged. Refer to the FEIR (see FEIR [DEIR p. 365]) for a description of the conditions within the SCAB.

Since certification of the FEIR, the Basin-wide air toxics study (MATES II), as described in the FEIR (see FEIR [DEIR pp. 365–366]), has been updated. To date, the most comprehensive study on air toxics in the SCAB is the Multiple Air Toxics Exposure Study (MATES IV), conducted by the SCAQMD. The monitoring program measured more than 30 air pollutants, including both gases and particulates. The monitoring study was accompanied by a computer modeling study in which SCAQMD estimated the risk of cancer from breathing toxic air pollution throughout the region based on emissions and weather data. Subsequent to the SCAQMD's risk calculations estimates performed for MATES IV, the California Environmental Protection Agency Office of Environmental Health Hazard Assessment (OEHHA) updated the methods for estimating cancer risks. The updated method utilizes higher estimates of cancer potency during early life exposures and uses different assumptions for breathing rates and length

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⁴ SCAQMD, Final Localized Significance Threshold Methodology, 2008.

⁵ SCAQMD, Final Methodology to Calculate Particulate Matter (PM)_{2.5} and PM_{2.5} Significance Thresholds, 2006.

⁶ Office of Health Hazard Assessment, Air Toxics Hot Spots Program, Guidance Manual for Preparation of Health Risk Assessments, 2015. Available at http://oehha.ca.gov/air/crnr/notice-adoption-air-toxics-hot-spots-program-guidance-manual-preparation-health-risk-0. Accessed March 2017.

of residential exposures. When combined together, SCAQMD staff estimates that risks for the same inhalation exposure level will be about 2.5 to 3 times higher using the updated methods. Taking into account the revised OEHHA methodology, MATES-IV found that the average cancer risk at a project site from carcinogenic air pollutants is approximately 1,138 in 1 million, with an average regional risk of approximately 1,023 in 1 million. This risk is 65 percent lower than the monitored average in the MATES III study. According to MATES IV, risk within the project area would be approximately 3,000 in a million (see **Figure IV.G-1, MATES-IV Cancer Risk for Project Area**).

The ARB prepared a series of maps that show regional trends in estimated outdoor inhalable cancer risk from air toxic emissions in an ongoing effort to provide insight as to the relative risk. The estimates represent the number of potential cancers per million people based on a lifetime of breathing air toxics (i.e., 24 hours per day outdoors for 70 years). The Year 2001 Southern Los Angeles County map, was the most current available map at the time of the FEIR was certified and, as identified in the FEIR (see FEIR [DEIR p. 366]), the cancer risk ranged from 100 to 1,500 cancers per million, while the vast majority of the area is between 250 and 1,000 cancers per million (See **Figure IV.G-2, Total Cancer Risk for Southern Los Angeles County – 2001/2010**). Since that time, the 2010 Southern Los Angeles County map has become available to represent existing conditions, as provided in Figure IV.G-2.

As shown in Figure IV.G-2, while the cancer risk is lower than identified in 2001, the cancer risk still ranges from 100 to 1,500 cancers per million, with the vast majority of the Project area between 250 and 1,000 cancers per million. Generally, the risk from air toxics is lower near the coastline and increases inland, with higher risks concentrated near large diesel sources (e.g., freeways, airports, and ports). Note that the cancer risks identified in Figure IV.G-2 do not take into account the revised OEHHA guidelines on modeling as discussed above. Taking into account the revised methodology, the risk would range from between 675 and 2,700 per in a million.

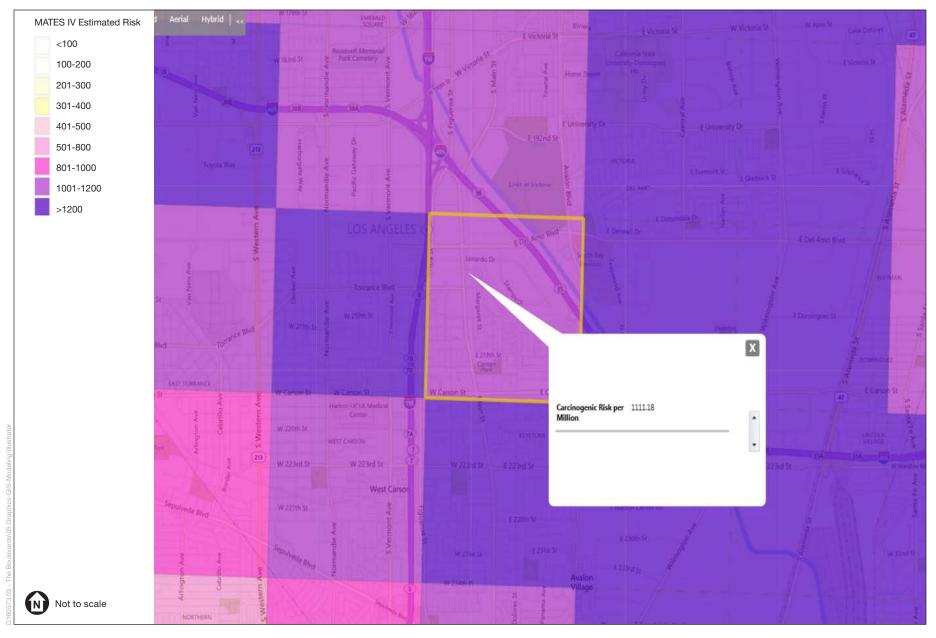
⁷ SCAQMD, Mates IV Carcinogenic Risk Interactive Map, 2015. http://www.aqmd.gov/home/library/air-quality-data-studies/health-studies/mates-iv/estimated-carcinogenic-risk, accessed May 2017.

⁸ SCAQMD, Final MATES IV Report, 2015. Available at http://www.aqmd.gov/docs/default-source/air-quality/air-toxic-studies/mates-iv/mates-iv-final-draft-report-4-1-15.pdf?sfvrsn=7, accessed May 2017.

http://www3.aqmd.gov/webappl/OI.Web/OI.aspx?jurisdictionID=AQMD.gov&shareID=73f55d6b-82cc-4c41b779-4c48c9a8b15b. Accessed August 2017. Note, this takes into account the 2.7 times increase based on the OEHHA revised methodology.

¹⁰ http://www.arb.ca.gov/toxics/cti/hlthrisk/cncrinhl/riskmapviewfull.htm.

¹¹ http://www.arb.ca.gov/toxics/cti/hlthrisk/cncrinhl/riskmapviewfull.htm.

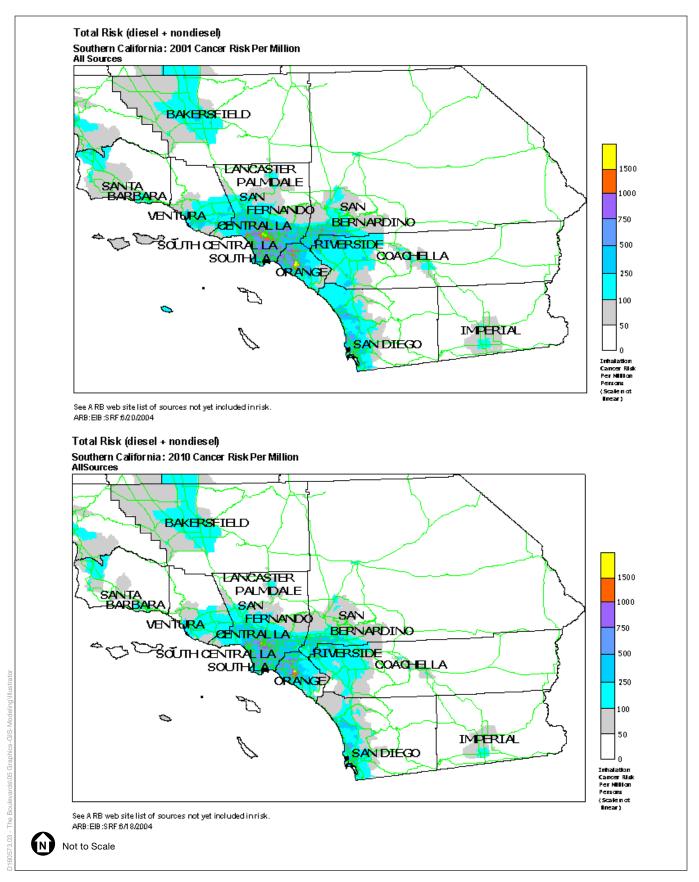


SOURCE: South Coast Air Quality Management District, 2017

The District at South Bay

Figure IV.G-1
MATES-IV Cancer Risk for Project Area





SOURCE: http://www.arb.ca.gov/toxics/cti/hlthrisk/cncrinhl/riskmapviewfull.htm

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The District at South Bay

(2) Local Area Conditions

(a) Existing Pollutant Levels at Nearby Monitoring Stations

The SCAQMD maintains a network of air quality monitoring stations located throughout the SCAB to measure ambient pollutant concentrations. The Property is located in SCAQMD Source Receptor Area (SRA) 4; therefore, the monitoring station most representative of the Property is the South Los Angeles County Coastal Monitoring Station 033 in the City of Long Beach. Criteria pollutants monitored at this station include ozone, NO₂, SO₂, CO, and PM₁₀.

The South Los Angeles County Coastal Monitoring Station 072 in north Long Beach collects data for PM_{2.5} and South Los Angeles County Coastal Monitoring Station 077 in south Long Beach collects data for lead. Where data is not available for Station 033, monitoring data from Station 072 or Station 077 are listed. The most recent data available from the SCAQMD for these monitoring stations are from Years 2011 to 2016. The pollutant concentration data for these years are summarized in **Table IV.G-3**, **Pollutant Standards and Ambient Air Quality Data**.

Table IV.G-3
Pollutant Standards and Ambient Air Quality Data

Pollutant/Standard	2011	2012	2013	2014	2015	2016
O ₃ (1-HOUR)						
Maximum Concentration (ppm)	0.074	0.08	0.090	0.087	0.87	0.079
Days > CAAQS (0.09 ppm)	0	0	0	0	0	0
<u>O₃ (8-HOUR)</u>						
Maximum Concentration (ppm)	0.063	0.066	0.069	0.072	0.066	0.059
4 th High 8-hour Concentration (ppm)	0.057	0.054	0.057	0.061	0.056	0.055
Days > CAAQS (0.070 ppm)	0	0	0	1	0	0
Days $>$ NAAQS $(0.070 \text{ ppm})^a$	0	0	0	1	0	0
<u>NO₂ (1-HOUR)</u>						
Maximum Concentration (ppb)	90.0	97.8	81.3	135.9	101.8	75.6
98 th Percentile Concentration (ppb)	74.0	77.4	71.3	84.8	64.4	66.3
NO ₂ (ANNUAL)						
Annual Arithmetic Mean (0.030 ppb)	24.7	25.3	21.5	20.7	19.8	18.5
CO (1-HOUR)						
Maximum Concentration (ppm)	_	_	_	4	3.3	3.3
CO (8-HOUR)						
Maximum Concentration (ppm)	3.3	2.6	2.6	2.6	2.2	2.2
<u>SO₂ (1-HOUR)</u>						
Maximum Concentration (ppb)	43.3	22.7	15.1	14.7	37.5	17.8
99 th Percentile Concentration (ppb)	24.7	21.3	11.6	10.1	11.8	12.0

Table IV.G-3
Pollutant Standards and Ambient Air Quality Data

Pollutant/Standard	2011	2012	2013	2014	2015	2016
SO ₂ (24-HOUR)						
Maximum Concentration (ppb)	_		_		_	_
<u>PM₁₀ (24-HOUR)</u>						
Maximum Concentration (μg/m³)	43	45	37	59	80	75
Samples > CAAQS (50 μ g/m ³)	0	0	0	2	6	8
Samples $>$ NAAQS (150 μ g/m ³)	0	0	0	0	0	0
PM ₁₀ (ANNUAL AVERAGE)						
Annual Arithmetic Mean (20 µg/m³)	24.2	23.3	23.2	26.6	31.5	31.9
<u>PM_{2.5} (24-HOUR)</u>						
Maximum Concentration (μg/m³)	39.7	49.8	47.2	51.5	54.6	29.37
98 th Percentile Concentration (μg/m³)	27.8	26.4	26.1	31.3	32.1	23.56
Samples $>$ NAAQS (35 μ g/m ³)	1	4	2	2	3	0
PM _{2.5} (ANNUAL)						
Annual Arithmetic Mean (12 µg/m³)	11.0	10.37	11.34	11.42	10.81	10.36
<u>LEAD</u>						
Maximum 30-day average (µg/m³)	0.013	0.007	0.012	0.012	0.008	0.008

NOTES:

 $ppm = parts \ per \ million; \ ppb = parts \ per \ billion; \ \mu g/m^3 = micrograms \ per \ cubic \ meter$

NAAQS O₃ 8-hour standard 0.075 ppm through Year 2013.

SOURCE: SCAQMD, 2017.

(b) Existing Health Risk in the Surrounding Area

As shown above in Figure IV.G-1, the Property is located within a cancer risk zone of 3,000 in 1 million. However, the visual resolution available in the map is 1 kilometer by 1 kilometer and, thus, impacts from individual facilities for individual neighborhoods are not discernable on this map. In general, the Property is indicative of other areas in Carson.

(c) Sensitive Receptors and Locations

Some population groups, such as children, the elderly, and acutely and chronically ill persons, especially those with cardio-respiratory diseases, are considered more sensitive to air pollution than others. Sensitive land uses in the Project vicinity are shown in the FEIR (see FEIR Figure 36 [DEIR p. 372]), and include one- and two-story detached residences and mobile homes that are located to the south and west of the Property. The closest existing residences are located adjacent to the Project boundary directly to the south and west of the Torrance Lateral Flood

Control Channel to the west of the Property. Residential use for Development District 3 (DD3) contemplated in the approved Project has been approved, and is located across Del Amo Boulevard from the proposed modified Project. As these future residential units may be occupied prior to the beginning of construction and operation of the proposed modified Project, they are considered in this analyses as off-Property sensitive receptors. Other potentially sensitive uses in the more distant area include multi-family and single-family residences, schools, libraries, religious institutions, hospitals and nursing homes. The closest school to the Property is the Carson Street Elementary School, which is located approximately 1,800 feet to the south of the Property.

(d) Existing Property Emissions

As described in detail in the FEIR, the proposed modified Project, in addition to the proposed urban development program, includes the closure of the former landfill in compliance with the Final Remedial Action Plan (RAP). Implementation of the RAP includes a Landfill Gas Collection and Control System (GCCS) and a Groundwater Extraction and Treatment System (GETS).

The GCCS system has been designed to collect and deliver landfill gas (LFG) to a treatment facility that includes a flare system to destroy LFG. One flare is currently in operation and it is anticipated that this flare would cease operation and be replaced by a larger flare once the LFG treatment system is implemented for the entire Property. Since the preparation of the FEIR, approximately half of the anticipated GCCS system was installed in 2014, including the flare. The remaining portions of the GCCS, consisting of both vertical and horizontal gas extraction wells would be installed as part of the landfill closure under this Project. Ultimately flare use may be discontinued and LFG may be treated by granulated activated carbon (GAC) before discharge to the atmosphere. However, for purposes of this air quality analysis, it has been assumed that two flares would operate as a worst-case analysis.

Consistent with the FEIR, the GETS contemplated in the RAP has been installed and has been operating on the Property since May 27, 2014. The System performance is evaluated periodically, and adjustments to its operational parameters may be made; however, no significant modifications to the GETS are anticipated.

The system has six current SCAQMD Permits to Operate associated with it under facility name Cal Compact and Facility ID No. 183607. **Table IV.G-4, Regional Operational Emissions (Unmitigated) (lbs/day)**, shows the existing emissions associated with the operation of the permitted equipment. These permits are as follows:

- Permit No. G43918: Emergency backup generator.
- Permit No. G43919: Landfill gas control system consisting of: knockout vessel, primary and backup blower, 4 carbon adsorber vessels, primary potassium permanganate vessel and backup, flame arrestor, exhaust stack without rain cap. This

equipment is only to be used when landfill gas does not exceed 3 million BTU per hour, except when the flares are non-operational for breakdowns or other exception events.

- Permit No. G43920: Up to 43 groundwater extraction wells and piping, 3 storage tanks, particulate filters, air stripper, carbon adsorbers and stand by adsorbers, 3 potassium permengate media vessels, and two liquid phase carbon adsorbers.
- Permit No. G43921: Landfill gas flaring system consisting of: moisture separator, two centrifugal blowers, optional small flow blower, two flame arrestors, Flare #1 (small flare), and Flare #2 (large flare). Currently only the small flare is operational.
- Permit No. G43922: Landfill Gas Collection System, consisting of: up to 248 vertical and 112 horizontal landfill gas extraction wells and associated laterals.
- Permit No. G43923: Landfill condensate collection system consisting of: condensate sumps, storage tank, 2 condensate transfer pumps.

Table IV.G-4

Regional Operational Emissions (Unmitigated) (lbs/day)

	ROC	NOx	CO	SOx	PM ₁₀	PM _{2.5}
MAXIMUM DAILY EMISSIONS						
Landfill Gas Control System ^a	2.28	N/A	N/A	N/A	N/A	N/A
Flare ^a	0.21	0.90	3.67	0.26	0.72	0.65
Emergency Generator	2.03	5.68	5.18	0.01	0.30	0.30
Condensate Collection System	0.02	N/A	N/A	N/A	N/A	N/A
Total Projects	4.54	6.58	8.85	0.27	1.02	0.95

NOTES:

Emission quantities are rounded to "whole number" values. As such, the "total" values presented herein may be one unit more or less than actual values.

SOURCE: ESA, 2017.

3. ENVIRONMENTAL IMPACTS

a. Methodology

As discussed in greater detail in Chapter II, Modified Project Description, the purpose of this SEIR is to evaluate the changes considered by the proposed modified Project to the previously approved Project, and to determine whether changes in circumstances surrounding the Property and the approved Project (if any), and new information (if any), require further analysis

^a Under normal conditions the Landfill Gas Control System only operates when the Flare is not operational. Therefore, maximum daily emissions added into the totals are the greater of the landfill gas control system or the flare on a pollutant basis.

under CEQA. Specifically, the methodology used is to comparatively analyze the approved Project with the proposed modified Project to determine if (1) substantial changes are proposed in the proposed modified Project that would require major revisions to the FEIR; (2) substantial changes arise in the circumstances of the proposed modified Project's undertaking, requiring major revisions to the FEIR; or (3) new information of substantial importance appears that was not known or available at the time the FEIR was certified. In doing so, the underlying methodology of impacts regarding air quality has been carried forward from the FEIR, and has been updated to reflect the Property's existing condition as well as any changes in regulatory requirements.

The FEIR evaluated construction and operational impacts, including mobile-source and stationary-source emissions, utilizing URBEMIS 2002 software, which is now obsolete. In addition to the use of updated software, construction and operational emissions associated with the proposed modified Project are lower due to current improvements in efficiencies. These efficiencies include reduced emissions factors for mobile sources such as passenger cars, trucks, and construction equipment and continuing improvements in energy and water efficiency systems. The evaluation of potential impacts to local and regional air quality resulting from the construction and long-term operations of the proposed modified Project is based on the most recent methodology and the following methodological approach:

(1) Consistency with Air Quality Plan

SCAQMD is required, pursuant to the CAA, to reduce emissions of criteria pollutants for which the SCAB is in non-attainment of the NAAQS (e.g., ozone and PM_{2.5}). SCAQMD's 2012 AQMP contains a comprehensive list of pollution control strategies directed at reducing emissions and achieving the NAAQS. These strategies are developed, in part, based on regional growth projections prepared by the SCAG. As part of its air quality planning, SCAG has prepared the Regional Comprehensive Plan and Guide and the 2012–2035 RTP/SCS, which provide the basis for the land use and transportation components of the 2012 AQMP and are used in the preparation of the air quality forecasts and the consistency analysis included in the AQMP. Both the Regional Comprehensive Plan and AQMP are based, in part, on projections originating with county and city general plans.

The 2012 AQMP was prepared to accommodate growth, reduce the high levels of pollutants within the areas under the jurisdiction of SCAQMD, return clean air to the region, and minimize the impact on the economy. Projects that are consistent with the assumptions used in the AQMP do not interfere with attainment because the growth is included in the projections utilized in the formulation of the AQMP. Thus, projects, uses, and activities that are consistent with the applicable growth projections and control strategies used in the development of the AQMP would not jeopardize attainment of the air quality levels identified in the AQMP, even if they exceed SCAQMD's significance thresholds.

(2) Construction Impacts

Similar to the approved Project, construction of the proposed modified Project has the potential to generate temporary criteria pollutant emissions through the use of heavy-duty construction equipment, such as excavators, and through vehicle trips generated from workers and haul trucks traveling to and from the Property. In addition, fugitive dust emissions would result from various soil-handling activities. Mobile source emissions, primarily NOx, would result from the use of construction equipment such as dozers and loaders. Construction emissions can vary substantially from day to day, depending on the level of activity, the specific type of construction activity, and prevailing weather conditions. The assessment of construction air quality impacts considers each of these potential sources.

Since the FEIR, the recommended emissions estimator model has changed. The analysis included in the FEIR utilized the URBEMIS 2002 software, which is now obsolete and no longer recommended by SCAQMD.¹² The current SCAQMD-recommended model is the CalEEMod, which was developed in collaboration with California air districts and generates default emissions data based on survey data, current emissions factors, trip lengths, and meteorology provided by local air districts. Daily regional emissions during construction are forecasted by assuming a conservative estimate of construction activities (i.e., assuming all construction occurs at the earliest feasible date) and applying the mobile source and fugitive dust emissions factors. The emissions are estimated using CalEEMod (Version 2016.3.1) software, an emissions inventory software program recommended by the SCAQMD. CalEEMod is based on outputs from OFFROAD and EMFAC, which are emissions estimation models developed by CARB and used to calculate emissions from construction activities, including on- and off-road vehicles. The input values used in this analysis were adjusted to be Project-specific based on equipment types and the construction schedule. These values were then applied to the construction phasing assumptions used in the criteria pollutant analysis to generate criteria pollutant emissions values for each construction activity. Detailed construction equipment lists, construction scheduling, and emissions calculations are provided in Appendix G, Air Quality Data. 13 Project design features are also incorporated into the construction emissions analysis. Use of diesel particulate traps would reduce regional and localized pollutant emissions.

Compared to the FEIR construction schedule (see FEIR [DEIR p. 99]) of approximately 4 years, construction activities for the proposed modified Project are proposed to require 32 months. Although it was thought possible that construction could begin as early as the fourth

¹² SCAQMD, Air Quality Modeling. Available at http://www.aqmd.gov/home/regulations/ceqa/air-quality-modeling. Accessed August 2017.

The CalEEMod model provides output for both the winter and summer seasons. Depending on the pollutant and source, emissions may be higher in the summer than the winter or the winter rather than the summer. As a conservative scenario, this analysis reports the higher of the two daily values.

quarter of 2017 at the time the analyses were performed, current plans would have construction starting no earlier than first quarter 2018. Thus, the construction emission calculations presented below are slightly more conservative since emission factors for on- and off-road vehicles improve over time as new standards are incorporated into the fleets. Subphases of construction would include remedial construction (placing of the permanent landfill cap as part of the RAP, which may include limited trash relocation and additional deep dynamic compaction (DDC) to stabilize the Property), horizontal construction (placing of project infrastructure, including the remainder of the landfill gas collection system, and Property paving), and vertical construction (actual construction of on-Property buildings). Soils generated during Property grading are anticipated to be balanced on Property. Heavy-duty equipment, vendor supply trucks and concrete trucks would be used during all phases of construction. Landscaping and architectural coating would occur during the finishing activities. Due to a compressed construction schedule, greater numbers of construction equipment would be required on Property simultaneously than compared to the approved Project. The maximum daily regional emissions from these activities are estimated by construction phase and compared to the SCAQMD significance thresholds. The maximum daily regional emissions are predicted values for the worst-case day and do not represent the emissions that would occur for every day of proposed modified Project construction.

The analysis in the FEIR incorporated a project design feature stipulating construction equipment use diesel particulate traps as feasible, into the non-mitigated scenario. However, since that time, the USEPA has promulgated more stringent performance standards for off-road construction equipment. Specific to PM, the use of Tier 4 equipment would result in PM₁₀ emission reductions of between 82 and 96 percent from the standard 2017 fleet compared to the 80 percent reduction associated with the diesel particulate traps in the FEIR. The Tier 4 reduction depends on the equipment used for each phase of construction. In addition, Tier 4 standards result in lower emissions of other criteria pollutants of concern, including NO_X. Thus, the approved Project design feature has been updated to incorporate the most stringent controls reasonably available.

The localized effects from the on-Property portion of the construction emissions are evaluated at nearby sensitive receptor locations potentially impacted by the proposed modified Project according to the SCAQMD's Localized Significance Threshold Methodology, like the approved Project. The localized significance thresholds are only applicable to NOx, CO, PM₁₀, and PM_{2.5}. The FEIR did not calculate localized PM_{2.5} emissions since PM_{2.5} was not a pollutant of concern at the time. Localized PM_{2.5} emissions have been calculated and analyzed below.

(3) Operational Impacts

Operation of the proposed modified Project has the potential to generate criteria pollutant emissions through vehicle trips traveling to and from the Property. In addition, emissions would result from area sources on Property such as natural gas combustion, landscaping equipment, use of consumer products, and continued use of the permitted stationary uses (GCCS and GETS). Operational impacts were assessed for the Project build-out year (i.e., as early as 2020 assuming construction begins at the earliest possible time in the fourth quarter of 2017).

The operational emissions are also estimated using the CalEEMod software. CalEEMod was used to forecast the proposed modified Project's daily regional emissions from area sources that would occur during long-term Project operations. Mobile source emissions are estimated based on CARB's updated version of the on-road vehicle emissions factor (EMFAC) model. The most recent version is EMFAC2014, which "represents [California Air Resources Board's] current understanding of motor vehicle travel activities and their associated emission levels." Mobile source emissions are based on the trip generation rates provided in the proposed modified Project's Transportation Study, which accounts for trip reductions from public transportation options. In calculating mobile-source emissions, the trip length values were modified to result in the daily trip rates provided in the proposed modified Project's Transportation Study.

Area source emissions are based on natural gas (building heating and water heaters), landscaping equipment, and consumer product usage (including paints) rates provided in CalEEMod. Natural gas usage factors in CalEEMod are based on the California Energy Commission (CEC) California Commercial End Use Survey (CEUS) data set, which provides energy demand by building type and climate zone. The data from the CEUS is from 2002. Currently CalEEMod is designed to account for the 2013 Title 24 Building Energy Efficiency Standards. However, currently the 2016 Title 24 Building Energy Efficiency Standards are those that need to be incorporated for the proposed modified Project. Therefore, correction factors are incorporated into CalEEMod to account for the appropriate version of the Title 24 Building Energy Efficiency Standards in effect for commercial and residential uses.

In addition to mobile, area, and energy emission sources, there are current on-Property point sources that will continue to operate and new ones that will begin operation after the remainder of the landfill gas system is completed. Currently, as discussed in Section IV.G.2.(d), Existing Property Emissions, there are four point sources that result in the emission of criteria pollutants; the landfill gas control system, the small flare, the emergency generator, and the condensate collection system. In addition, there is a second "large" flare that will become operational once the landfill gas collection system is fully installed. Emissions from the larger flare, the landfill gas control system, and the condensate collection system are based on the permits to operate that are on file for the systems. Emissions from the emergency generator is based on horsepower and hours of use identified in the permit to operate, but the emissions were

modeled using CalEEMod. Emissions for the small flare were taken from the emissions testing report for the flare.¹⁴

Operational air quality impacts are assessed based on the incremental increase in emissions compared to baseline conditions. The maximum emissions from operation of the proposed modified Project are compared to the SCAQMD daily regional significance thresholds. Detailed operational assumptions and emissions calculations are provided in Appendix G.

The localized effects from the on-Property portion of the operational emissions are evaluated at nearby sensitive receptor locations potentially impacted by the Project. The analysis was conducted according to the SCAQMD's Localized Significance Threshold Methodology, which relies on on-site mass emission rate screening tables and project-specific dispersion modeling, where appropriate. Similar to construction, the SCAQMD LST screening criteria applicable to a 5-acre site in SRA 4 with sensitive receptors located adjacent to the Property was used. Because the Property is greater than 5 acres, assuming that all activity would occur on a smaller area would provide a conservative analysis because emissions would be more concentrated. Where emissions exceed the screening tables, a refined screening analysis was conducted to determine the potential to result in significant impacts.

(4) Toxic Air Contaminants

The potential for the proposed modified Project to cause impacts from toxic air contaminants (TACs) are evaluated by conducting a health risk assessment (HRA). The HRA consists of reviewing the proposed modified Project's site plan and the Project Description to identify any new or modified TAC emission sources. If it is determined that the proposed modified Project will introduce a new source of TACs, or modify an existing source, then downwind sensitive receptor locations are identified and a Property-specific analysis is conducted.

OEHHA is responsible for developing and revising guidelines for performing HRAs under the State's Air Toxics Hot Spots Program Risk Assessment (AB 2588) regulation. In March 2015, OEHHA adopted revised guidelines that update the previous guidance by incorporating advances in risk assessment with consideration of infants and children using Age Sensitivity Factors (ASF). The construction HRA was performed in accordance with the revised OEHHA Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments (OEHHA Guidance).

¹⁴ Horizon Air Measurement Services, Inc., Emission Compliance Test on Landfill Gas Flare FL-150, May 26, 2017.

(a) Construction

The greatest potential for TAC emissions during construction would be diesel particulate matter (DPM) emissions associated with heavy-duty equipment during grading and building construction activities. Construction activities associated with the proposed modified Project would be sporadic, transitory, and short term in nature. In addition, incidental amounts of toxic substances such as oils, solvents, and paints would be used. These products would comply with all applicable SCAQMD rules for their manufacture and use. The Project will be subject to several SCAQMD rules designed to limit exposure to TACs during construction activities.

The Project would be required to comply with the CARB Air Toxics Control Measure that limits diesel-powered equipment and vehicle idling to no more than 5 minutes at a location, and the CARB In-Use Off-Road Diesel Vehicle Regulation, adopted after certification of the FEIR. Compliance with these would minimize emissions of DPM during construction. Risk assessment methodology is the same for both construction and operation and as they are health risk is inherently cumulative, risks from the two phases, whether overlapping or sequential, are combined for the 30-year duration. Risk assessment methodology is discussed in detail below.

Constituents of Concern (COCs) have been identified in the soil, soil-vapor, and groundwater through characterization activities in support of the RAP.¹⁵ The relocation of landfill material as well as the DDC would generate fugitive dust potentially containing COCs. According to the Final Human Health Risk Evaluation Report prepared by Tetra Tech, the following constituents have been identified in Property cover soil and are therefore considered in this Project-level HRA to represent a worst-case exposure during the remedial phase of construction.¹⁶

Metals

Aluminum Lead Antimony Manganese Arsenic Mercury Barium Nickel Beryllium Selenium Silver Cadmium Chromium Vanadium Cobalt Zinc Copper

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¹⁵ Brown & Root Environmental, Final Remedial Action Plan, Cal Compact Landfill (Upper Operable Unit), October 1995.

¹⁶ Tetra Tech, Inc. Final Human Health Risk Evaluation Report Carson Marketplace Carson, California, August 8, 2006.

• PCBs

- Arocloro-1260
- Arocloro-1262

Pesticides

- beta-BHC
- Chlordane
- DDD/DDE/DDT
- Endrin aldehyde
- Heptachlor

• VOCs

- Sec-Butylbenzene
- Dibromoform
- Isopropylbenzene
- p-Isoprpoyltoluene
- Methylene Chloride

- n-PropylBenzene
- Toluene
- 1,2,4-Trimethylbenzene
- 1,3,5-Trimetnylbenzene

Because construction activities would not reach the depths of groundwater, no exposure to COCs in groundwater is anticipated or assessed. Due to the limited amount of time that trash would be exposed to the atmosphere during relocation and the assumption that after 50 years, vapors would no longer be present within the trash layers, risk from vapor inhalation is not anticipated or assessed in this Project-level HRA.

In addition to the operation of off-road equipment and potential COC release through fugitive dust generation, small amounts of TACs not destroyed in the LFG flaring system will be emitted concurrently with construction activities. In addition to the criteria pollutants, CO, SO₂. NO_X, and particulate matter, COCs in the LFG, including methane, total non-methane hydrocarbons (as hexane), hydrogen sulfide, benzene, bencylchloride, chlorobenzene, dichlorobenzenes, 1,1-dichloroethane, 1,2-dichloroethane, 1,1-dichloroethylene, dichloromethane, 1,2-dibromomethane, perchloroethene, carbon tetrachloride, toluene, 1,1,1trichloroethane, trichloroethene, chloroform, vinyl chloride, m+p-xylenes, and o-xylenes, may be released. The system is currently operated with one flare. Once the landfill gas collection system is upgraded to include the whole Property, it is anticipated that the smaller flare would cease use and the larger flare would begin operation. However, it is unknown for certain if this is the case. Flare use may be discontinued and LFG may be treated by GAC before discharge to the atmosphere. Additionally, the GAC system is required to reduce total non-methane organic compounds by a minimum of 98 percent by weight. Therefore, the operation of the flares would result in greater emission than the operation of the GAC system and the GAC system is not included in the health risk modeling since its implementation would reduce risk to below that which would occur using the flares. As a conservative analysis, the small flare is assumed to be operational during all of the remedial and horizontal construction phasing and the large flare is anticipated to come online during the vertical construction activities. The operation of both flares at build out has been assumed as a worst-case analysis. Both are assumed to continue for the duration of the 30-year modeling with continued augmentation by natural gas. There is currently an emergency back-up generator on Property. The emissions from the generator are also included in the risk analysis.

(b) Operations

During long-term operations, TACs could be emitted as part of periodic maintenance operations, cleaning, painting, etc., and from periodic visits from delivery trucks and service vehicles. However, maintenance operations, cleaning, and painting uses are expected to be occasional and result in minimal exposure to off-Property sensitive receptors.

The FEIR conducted a qualitative analysis due to the fact that the main source of emissions would be from delivery trucks and that approved Project emissions from on-Property trucks would be "limited" (not what the SCAQMD recommends as substantial usage based on their Health Risk Assessment Guidance). ¹⁷ CARB identifies distribution centers as potential risk sources where the warehouse accommodates more than 100 trucks or more than 40 trucks with transportation refrigeration units per day. ¹⁸ However, since certification of the FEIR, OEHHA has revised the health risk methodology and, as discussed previously, risk now results in a 2.5 to 3 times increase in risk due to the change in methodology. Because there has been a change in methodology which increases risk levels, there will be a large number of daily delivery trucks, and the operation of the landfill gas flare system, the analysis for the proposed modified Project conducts a quantitative HRA for on-Property operations.

Due to the large number of trucks that are anticipated to access the Property daily, an HRA is conducted to determine the potential for exposure to both off-Property and on-Property receptors. Due to the nature of the on-Property uses (restaurants), it is anticipated that at least some of the trucks would require the use of transportation refrigeration units (TRUs).

Table IV.G-5, Daily Diesel Delivery Trucks, shows the number of trucks accessing the Property daily by land use and with or without the operation of TRUs. The number of daily diesel delivery trucks has been estimated based on the freight trip generation rate research under the National Cooperative Freight Research Program (NCFRP). The freight trip generation rate is based on industry sector (land use type) and employment.

¹⁷ SCAQMD, Health Risk Assessment Guidance for Analyzing Cancer Risks from Mobile Source Diesel Emissions, December 2002.

¹⁸ CARB, Air Quality and Land Use Handbook: A Community Health Perspective, April 2005.

¹⁹ Rensselaer Polytechnic Institute University at Albany, NCFRP Project 25 (Jointly Funded as NCHRP Project 08-80): Freight Trip Generation and Land Use Handbook, 2012. Available at http://transp.rpi.edu/~NCFRP25/NCFRP%2025%20HandBook%20Draft%2011%20Nov%2012.pdf. Accessed August 2017.

Table IV.G-5

Daily Diesel Delivery Trucks

		Trucks	TRUs
<u>PA2</u>			
Regional Commercial		74	0
High Turnover Restaurant		5	3
<u>PA3</u>			
Regional Commercial		62	0
Neighborhood Serving Commercial		21	0
High Turnover Restaurant		20	10
Movie Theatre		19	4
Recreational Facility		16	0
Hotel		20	5
7	Total Trucks	237	22

NOTE:

Detailed calculations are presented in Appendix G.

SOURCE: ESA, 2017.

Long term operational activities on the Property are conservatively assumed to include the operation of the two landfill gas flares, even though it is anticipated that the smaller flare would cease to operate once the larger flare comes online. According to the Emission Compliance Test on Landfill Gas Flare FL-150 report dated May 26, 2017, the existing flare has a methane destruction efficiency rate of 99 percent. The Property is designated Mixed-Use Residential by the Carson General Plan, which would not allow industrial uses. Like the approved Project, the proposed modified Project zoning would include commercial and residential uses, and not allow light industrial uses as originally envisioned for the Property. Thus, the proposed modified Project would not include additional sources of substantive TAC emissions identified by the SCAQMD or CARB siting recommendations, and the only sources modeled for operational activities include the landfill gas system and the delivery trucks.

According to CARB's Air Quality and Land Use Handbook, a site-specific health risk analysis is required if a sensitive receptor is cited within 500 feet of a freeway. Residential uses within DD3, now approved, would be located adjacent to the I-405 Freeway. Therefore, the FEIR addressed health risk impacts associated with proximity of the proposed residential uses to

²⁰ Horizon Air Measurement Services, Inc., Emission Compliance Test on Landfill Gas Flare FL-150. May 26, 2017.

²¹ CARB, Air Quality and Land Use Handbook: A Community Health Perspective, April 2005.

the Interstate 405 (I-405) Freeway (the San Diego Freeway). DD3 is not a part of the proposed modified Project. Proposed residential uses within PA 1 would be sited at a minimum of 1,400 feet from the I-405 Freeway. Therefore, a site-specific health risk analysis is not required. Additionally, since certification of the FEIR, California's Supreme Court has heard CEQA litigation cases related to this topic. In *California Building Industry Association v. Bay Area Air Quality Management District (CBIA v. BAAQMD)*, the Supreme Court held that "agencies subject to CEQA generally are not required to analyze the impacts of existing environmental conditions on a project's future users or residents." Therefore, a qualitative analysis has been included below.

(c) Risk Assessment

The revised OEHHA Guidance take into account the sensitivity of children to TAC emissions, different breathing rates, and time spent at home. Children have a higher breathing rate compared to adults and would likely spend more time at home resulting in longer exposure durations. On June 5, 2015, SCAQMD incorporated these guidelines in to relevant rules designed for permitting of stationary sources. Although construction would be temporary, construction impacts associated with TACs are addressed quantitatively in a refined HRA. The HRA was performed in accordance with the OEHHA Guidance.

The process of assessing health risks and impacts includes a degree of uncertainty. The level of uncertainty depends on the availability of data and the extent to which assumptions are relied upon in cases where the data are incomplete or unknown. All HRAs rely upon scientific studies to reduce the level of uncertainty; however, it is not possible to completely eliminate uncertainty from the analysis. Where assumptions are used to substitute for incomplete or unknown data, it is standard practice in performing HRAs to err on the side of health protection to avoid underestimating or underreporting the risk to the public. In general, sources of uncertainty that may lead to an overestimation or an underestimation of the risk include extrapolation of toxicity data in animals to humans and uncertainty in the exposure estimates. In addition to uncertainty, there exists "a natural range or variability in measured parameters defining the exposure scenario" and that the "the greatest quantitative impact is variation among the human population in such properties as height, weight, food consumption, breathing rates, and susceptibility to chemical toxicants." As mentioned previously, it is typical to err on the side of health protection by assessing risk on the most sensitive populations, such as children and the elderly, by modeling potential impacts based on high-end breathing rates, by incorporating age sensitivity factors, and by not taking into account exposure reduction measures, such as mechanical air filtration building systems.

(i) Dispersion Modeling

The analysis incorporates the estimated construction and operational emissions, as previously discussed, and dispersion modeling was performed using the USEPA-approved

AERMOD with meteorological data from the representative SCAQMD monitoring station located in South Coastal County LA (Long Beach). The SCAQMD specifically recommends that projects use the nearest representative SCAQMD meteorological station for modeling, which is usually the nearest station; however, an interfering terrain feature may dictate the use of an alternate station. Emission sources were located on the Property corresponding to the areas of construction activity. Multiple volume sources were used to represent the construction emission sources and truck routes on the Property. During operational activities trucks are assumed to idle for a total of 15 minutes on Property (up to 5 minutes upon arrival, 5 minutes during delivery, and 5 minutes before departing), and TRUs were modeled as individual volume sources. The landfill gas flare system was modeled as two flare sources and a point source for the on-Property emergency generator. Construction emissions would not be generated during the nighttime hours; therefore, the dispersion modeling allocates the emissions during the active daytime construction hours. Deliveries and operation of the flares are assumed to operate 24 hours a day.

Sensitive receptors identified for modeling were placed at the location of nearby sensitive land uses, which includes residential uses adjacent to west and south of the Property and north of Del Amo Boulevard (DD3) for construction activities. These land uses plus the on-Property residents were included as receptors for operational sources. This analysis focuses on residential impacts. Although off-Property workers may be in close proximity to the Property, their intermittent exposure duration would be less than that of a residence (8 hours compared to 24 hours) and adult breathing rates compared to children are lower as well. Therefore, worker impacts would be less than that of a residence. Receptor spacing ranged from 25 meters within 100 feet of the Property to 75 meters at greater than 300 feet from the Property.

(ii) Cancer Risk

Health risk impacts are assessed using the HARP2 model developed by CARB, which was released March 2015. The health risk calculation methodology is consistent with the 2015 OEHHA Guidance. Health impacts address construction and operational diesel particulate matter emissions, flare emissions, and the effects on nearby sensitive uses (residential).

Health impacts are evaluated using a dose-response assessment, which describes the relationship between the level of exposure to a substance (i.e., the dose) and the incidence or occurrence of injury (i.e., the response). In order to determine the total dose to off-Property sensitive receptors, the applicable pathways of exposure should be identified. The applicable exposure pathways (e.g., inhalation, soil) are identified for the emitted substances, and the receptor locations are identified. The applicable exposure pathways determine the exposure algorithms that are used to estimate dose. After the exposure pathways are identified, the applicable fate and transport algorithms are used to estimate concentrations in the applicable exposure media (e.g., air) and the exposure algorithms are used to determine the substance-specific dose.

In accordance with the OEHHA Guidance, the inhalation pathway was evaluated for construction related DPM. For the inhalation pathway, dose is directly proportional to the breathing rate. As a conservative (i.e., health protective) approach, maximum breathing rates were used in this analysis.

Once dose is calculated, cancer risk is calculated by accounting for cancer potency of the specific pollutant, age sensitivity, exposure duration, averaging time for lifetime cancer risk, and fraction of time spent at home (sensitive receptor). The cancer potency factor (CPF) is specific for each pollutant and is determined through peer-reviewed scientific studies. The Scientific Review Panel recommends a CPF for DPM of $3.0\times10\text{-}4~(\mu\text{g/m}^3)\text{-}1$ and a slope factor of 1.1 (ppm-day)-1. The ASFs account for greater susceptibility in early life as compared to adult exposure, starting from the third trimester of pregnancy to 18 years. The fraction of time at home (FAH) takes into account the time actually residing at the sensitive receptor location. FAH also takes into account time spent at home for various age groups. For example, newborns are expected to reside at home for longer periods of time compared to school age children, and the elderly (retirees) are expected to spend more time at home compared to people of working age. As indicated in the equation above, each age group has different exposure parameters which require cancer risk to be calculated separately for each age group.

The estimation of cancer risk uses the following algorithms:

```
Risk = Dose inhalation \times Inhalation CPF \times ASF (Equation 1)
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Where:

Dose inhalation = $CAIR \times DBR \times A \times EF \times ED \times FAH / AT$ (Equation 2)

Inhalation CPF = inhalation cancer potency factor

ASF = age-sensitivity factor

Where:

CAIR = concentration of compound in air in micrograms per cubic meter ($\mu g/m^3$)

DBR = breathing rate in liter per kilogram of body weight per day (L/kg-body weighty/day)

A = inhalation absorption factor (1 for DPM)

EF = exposure frequency in days per year (day/year)

ED = exposure duration in years (year)

FAH = fraction of time at home

AT = averaging time period over which exposure is averaged in days (day)

The OEHHA recommended values for the parameters listed above were used in the HRA analysis. The daily breathing rate (DBR) used in the analysis was based on OEHHA

recommendations which vary depending on age which are shown in **Table IV.G-6**, **OEHHA Recommended Residential Daily Breathing Rates**, **ASF**, and **FAH**. The recommended exposure frequency (EF) is 350 days per year which is equivalent to 0.96 (350 days / 365 days a year). The inhalation absorption factor (A) is assumed to be 1 for inhalation-based risk assessment.

Table IV.G-6
OEHHA Recommended Residential Daily Breathing Rates, ASF, and FAH

Receptor Type	Third Trimester	0<2 Years	2<9 Years	16<30 Years
Daily Breathing Rate ^a	361	1090	861	_
Age Sensitive Factor	10	10	3	1
FAH	0.85	0.85	0.72	0.73

NOTES:

SOURCE: OEHHA Air Toxics Hot Spots Program Guidance Manual. February 2015.

As indicated in Equation 1 above, each age group has different exposure parameters which require cancer risk to be calculated separately for each age group. Values for FAH are presented in Table IV.G-6. Once dose is calculated, cancer risk is calculated by accounting for cancer potency of the specific pollutant, and the ASF.

It should be noted that the FAH values presented above are used for evaluating long-term exposure. Elderly receptors over age 70, would be classified in the 2–70-year age group. As stated previously maximum breathing rates are applied to all age groups and especially for the 2–70 age group where the breathing rate is very conservative for adults. Typical breathing rates for adults 16–70 years old is 185 liters per kilogram per day (L/kg-day), this analysis used 861 L/kg-day. Newborns and elderly would be more sensitive to acute (1-hour) or chronic (annual) exposure. As discussed previously, OEHHA has developed methodology and Reference Exposure Levels (RELs) to evaluate acute and chronic exposure which would address non-cancer health impacts to elderly and the very young.

The incremental increase in cancer risk is the dose multiplied by the pollutant-specific CPF values. Cancer risk is calculated by multiplying the inhalation dose by the inhalation CPF to yield the potential inhalation excess cancer risk. Cancer risk was evaluated for residences in the surrounding area.

^a The maximum daily breathing rate was used.

There are three different receptor groups modeled as part of the analysis:

- On-Property receptors are those located in Planning Area (PA) 1 of the proposed modified Project;
- Off-Property receptors in DD3; and
- Other existing off-Property residences within 1,000 feet of the Project boundaries.

Maximum risk determined is the maximum potential impact to a receptor location based on the above criteria as well as timing of exposure. Because risk to young children is greater than risk to adults, and because there is the potential for a fetus in their third trimester of pregnancy and young children to be residing in the off-Property locations (off-Property as well as those residing in DD3) both during construction activities as well as after construction has been completed, two scenarios were modeled for off-Property receptors. Previously health risk methodology did not require the consideration different age groups or risks to fetuses. Therefore, utilizing current methodology, health risks discussed below would represent a more conservative analysis.

For off-Property receptors in the DD3 area, there are currently no residences there. However, because a residential development has been approved for DD3, there is the potential that development could occur and residences be occupied before the start of the third year of construction. Therefore, for these receptors, the first scenario assumes that a fetus in the third trimester of pregnancy moves into the location when construction of the final year starts and therefore is exposed to 1 year of construction risk and 29 years of operational risk. The second scenario assumes that a fetus in the third trimester of pregnancy moves into a residence after construction is completed and therefore is exposed to operational emissions for 30 years.

For the remaining off-Property receptors, the first scenario assumes that a fetus in the third trimester of pregnancy moves into the location when construction starts and therefore is exposed to 3 years of construction risk and 27 years of operational risk. The second scenario assumes that a fetus in the third trimester of pregnancy moves into the location after construction is completed and therefore is exposed to operational emissions for 30 years.

Because on-Property receptors would not be occupied during construction activities, risk from construction activities is not quantified for these receptors. Therefore, for on-Property receptors there is only one scenario and that assumes that a woman in her third trimester of pregnancy moves into the location and the fetus/child is exposed to 30 years of operational emissions as it grows up at that location.

Because of the nature of emissions sources, there is the potential for not only the maximum emissions scenario to change, but also for the receptor locations to change between the unmitigated and mitigated scenarios. Only the risk from the maximally exposed receptor for each area (on-Property, off-Property, off-Property DD3) is reported. Risk for all receptors is included as part of Appendix G.

(iii) Non Cancer Risk

Non-cancer chronic impacts were assessed based on the Hazard Index (HI). The evaluation of chronic impacts is based on the maximum annual emissions over a 12-month period of construction activity. The chronic Hazard Index is calculated by dividing the maximum modeled annual average concentration at the maximum impacted sensitive receptor by the REL. The REL is the concentration at or below which no adverse health effects are anticipated. For example, OEHHA has recommended an ambient concentration of 5 μ g/m³ as the chronic inhalation REL for DPM exhaust. Therefore, a sensitive receptor exposed to an annual average DPM concentration of 5 μ g/m³ or less would not result in a chronic impact. Non-cancer chronic impacts affect specific target organ systems (also called toxicological endpoints), such as the eye, nervous system, reproductive system, and respiratory system. The chronic health impact with the maximum Hazard Index for the same target organ system is used for impact determination. As a conservative assumption, the non-cancer health impact analyses do not take into account FAH.

(5) CO Hotspot

The potential for the proposed modified Project to cause or contribute to CO hotspots is evaluated by comparing proposed modified Project Traffic Study intersections (both intersection geometry and traffic volumes) with prior studies conducted by SCAQMD in support of their AQMPs and considering existing background CO concentrations. SCAQMD conducted CO modeling for the 2003 AQMP for the four worst-case intersections in the SCAB: (1) Wilshire Boulevard and Veteran Avenue, (2) Sunset Boulevard and Highland Avenue, (3) La Cienega Boulevard and Century Boulevard, and (4) Long Beach Boulevard and Imperial Highway. In the 2003 AQMP, SCAQMD notes that the intersection of Wilshire Boulevard and Veteran Avenue is the most congested intersection in Los Angeles County, with an average daily traffic volume of approximately 100,000 vehicles per day. This intersection is located near the on- and off-ramps to the I-405 Freeway in West Los Angeles. The evidence provided in the 2003 AQMP (Table 4-10 of Appendix V) shows that the peak modeled CO concentration due to vehicle emissions at these four intersections was 4.6 ppm (1-hour average) and 3.2 (8-hour average) at Wilshire Boulevard and Veteran Avenue. When added to the existing background CO concentrations, the screening values would be 7.6 ppm (1-hour average) and 5 ppm (8-hour average), which are less than the CAAQS of 20 ppm and 9 ppm respectively for one-hour and eight-hour averages. Therefore, any intersection that operates with less than 100,000 vehicles per day would be anticipated to have less emissions than the intersection at Wilshire Boulevard and Veteran Avenue and therefore also would not exceed the NAAQS or CAAQS. Intersections operating at greater than 100,000 vehicles per day would require additional analysis.

(6) Odor Impacts (Construction and Operations)

Potential odor impacts are evaluated by conducting a screening-level analysis followed by a more detailed analysis (i.e., dispersion modeling) as necessary. The screening-level analysis consists of reviewing the proposed modified Project's site plan and Modified Project Description to identify any new or modified odor sources. If it is determined that the proposed modified Project would introduce a new odor source, or modify an existing odor source, then downwind sensitive receptor locations are identified and site-specific dispersion modeling is conducted to determine proposed modified Project impacts.

b. Significance Thresholds

The thresholds of significance have not changed from those used in the FEIR, and remain the same. However, since certification of the FEIR, PM_{2.5} has been included as a pollutant of concern and has been analyzed in this SEIR. Significance thresholds are listed below, with modifications to include PM_{2.5}.

(1) Construction Emissions

The proposed modified Project would have a significant impact with regard to construction emissions if any of the following occur:

- Regional emissions from both direct and indirect sources would exceed any of the following SCAQMD prescribed threshold levels: (1) 75 pounds per day (lbs/day) for ROC, (2) 100 lbs/day for NOx, (3) 550 lbs/day for CO, (4) 150 lbs/day for PM₁₀ or SOx, and (5) 55 lbs/day for PM_{2.5}.²²
- Project-related fugitive dust and construction equipment combustion emissions cause an incremental increase in localized PM_{10} and $PM_{2.5}$ concentrations of 10.4 $\mu g/m^3$ or cause a violation of NO_2 or CO ambient air quality standards.²³
- Increased landfill gas emissions cause an incremental health risk to on- or off-Property receptors as regulated by the SCAQMD and DTSC.
- The proposed modified Project creates objectionable odors affecting a substantial number of people.

²² SCAQMD, CEQA Air Quality Handbook, Chapter 6 (Determining the Air Quality Significance of a Project), 1993, revised March 2015. Available at http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook. Accessed August 2017.

²³ While the SCAQMD CEQA Air Quality Handbook (CEQA Handbook, 1993), does not provide any localized thresholds, the SCAQMD currently recommends localized significance thresholds (LST) for PM10, NO2, and CO in its draft document titled "SCAQMD Localized Significance Threshold Methodology for CEQA Evaluations (SCAQMD LST Guidelines)," June 19, 2003.

(2) Operational Emissions

The proposed modified Project would have a significant impact with regard to operational emissions if any of the following occur:

- Regional emissions from both direct and indirect sources would exceed any of the following SCAQMD prescribed threshold levels: (1) 55 lbs/day for ROC,
 (2) 55 lbs/day for NOx, (3) 550 lbs/day for CO, (4) 150 lbs/day for PM₁₀ or SOx, and (5) 55 lbs/day for PM_{2.5}.²⁴
- The proposed modified Project results in an exceedance of the California 1-hour or 8-hour CO standards of 20 or 9.0 ppm, respectively, at an intersection or roadway within one-quarter mile of a sensitive receptor.
- Project-related stationary source combustion equipment emissions cause an incremental increase in localized PM₁₀ and PM_{2.5} concentrations of 2.5 μg/m³.²⁵
- The proposed modified Project creates objectionable odors affecting a substantial number of people.
- The proposed modified Project is incompatible with SCAQMD and SCAG air quality policies. The proposed modified Project would not be compatible with these polices if it:
 - Causes an increase in the frequency or severity of existing air quality violations;
 - Causes or contributes to new air quality violations;
 - Delays timely attainment of air quality standards or the interim emission reductions specified in the AQMP; or
 - Exceeds the assumptions utilized in the SCAQMD's AQMP.
- The proposed modified Project is incompatible with City of Carson air quality policies. The proposed modified Project would not be compatible with these policies if it does not substantially comply with the air quality goals and policies set forth within the City's General Plan.

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²⁴ SCAQMD, CEQA Air Quality Handbook, Chapter 6 (Determining the Air Quality Significance of a Project), 1993, revised March 2015. Available at http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook. Accessed August 2017.

²⁵ While the SCAQMD CEQA Air Quality Handbook (CEQA Handbook, 1993), does not provide any localized thresholds, the SCAQMD currently recommends localized significance thresholds (LST) for PM₁₀, NO₂, and CO in its document titled "SCAQMD Localized Significance Threshold Methodology for CEQA Evaluations (SCAQMD LST Guidelines)," June 19, 2003.

(3) Toxic Air Contaminants

The proposed modified Project would have a significant impact with regard to TACs if any of the following occur:

- On-Property construction activities and stationary sources emit carcinogenic or toxic air contaminants that individually or cumulatively exceed the maximum individual cancer risk of 10 in 1 million or an acute or chronic hazard index of 1.0.²⁶
- Hazardous materials associated with on-Property stationary sources result in an
 accidental release of air toxic emissions or acutely hazardous materials posing a threat
 to public health and safety.
- Hazardous materials associated with the landfill that result in an accidental release of air toxic emissions or acutely hazardous materials posing a threat to public health and safety.

c. Project Design Features

The proposed modified Project would be developed under regulations, standards, and guidelines established in the Specific Plan Amendment (SPA). The proposed modified Project would use the same Project Design Features as the FEIR, except for the changes detailed within Chapter II, Modified Project Description, of this SEIR. Major changes from the previous FEIR include phased development of the Project, a reduction of residential units and commercial space, and increased billboard size. The following design features were included in the approved Project and are applicable to the proposed modified Project. These features result in a reduction in air quality emissions and are proposed as part of the modified Project.

(1) Construction

- Mobile off-road construction equipment (wheeled or tracked) used during construction of the proposed modified Project shall meet the USEPA Tier 4 final standards, either as original equipment or equipment retrofitted to meet the Tier 4 final standards. In the event of specalized equipment use where Tier 4 equipment is not commercially available at the time of construction, then the equipment shall, at a minimum, meet the Tier 3 standard. A copy of each unit's certified tier specification or model year specification shall be available upon request at the time of mobilization of each applicable unit of equipment.
- Land uses that would locate on the Property would be limited to those that do not emit high levels of potentially toxic contaminants or odors.
- Limiting excavations to avoid exposing landfill contents.

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²⁶ SCAQMD Risk Assessment Procedures for Rules 1401 and 212, November 1998.

(2) Operation

A primary objective in the design of the proposed modified Project is to create a development that minimizes the air pollutant emissions that are generated by the proposed modified Project. To achieve this objective, the Applicant focused on reducing the number of vehicle trips as well as vehicle miles traveled. This approach to minimizing pollutant emissions implements the policy direction provided by the SCAG for land development projects such as the proposed modified Project. The design program incorporated into the proposed modified Project to minimize pollutant emissions consists of the choice and organization of land uses within the Property. The following are the key elements of the proposed modified Project that implement this design program:

- The proposed array of residential, retail, and commercial uses would, in itself, promote a reduction of mobile source emissions by providing a supply of housing as well as employment opportunities within close proximity to one another, making it possible for an individual to both reside and work within the Property (jobs/housing linkage).
- The placement of commercial uses in the design of the proposed modified Project serves the objective of minimizing mobile source pollutant emissions. Commercial uses that would be developed within the proposed modified Project would be located in close proximity to the access ramps of the I-405 Freeway and the I-110 Freeway (the Harbor Freeway). Such concentration and placement are intended to reduce vehicle miles traveled within the Property and within the region and subregion by reducing commute distances for non-resident workers. The provision of commercial space in close proximity to existing and proposed residential uses increases the probability that residents may work nearer to their home, thus reducing the vehicle miles traveled.
- The proposed modified Project would include an impervious barrier to control odiferous and air toxic emissions in compliance with the approved RAP.
- All stationary-source emissions sources (e.g., landfill gas flares, emergency generator) would utilize BACT to meet SCAQMD requirements.

In addition, the FEIR implements Mitigation Measure G-25, which requires that air filtration systems be installed for proposed dwelling units to reduce the potential exposure of off-Property toxic air emissions. This is included as part of the project design features as it is no longer required for mitigation for the proposed modified Project. Mitigation Measure G-25 from the FEIR states "The Project shall include air filtration systems for residential dwelling units designed to have a minimum efficiency reporting value (MERV) of 12 as indicated by the American Society of Heating Refrigerating and Air Conditioning Engineers (ASHRAE) Standard 52.2. The air handling systems shall be maintained on a regular basis per manufacturer's recommendations by a qualified technician employed or contracted by the Applicant or successor. Operation and maintenance of the system shall ensure that it performs above the minimum reporting value. In light of the new methodology and analysis results, this mitigation measure is no longer required to reduce TAC emissions."

d. Project Impacts

(1) Construction

(a) Regional Construction Impacts

The FEIR concluded that impacts related to implementation of the RAP with refinements to the design (which is the design currently proposed), preparation of the Property, and Property construction would substantially exceed the SCAQMD significance thresholds for ROC, CO, PM₁₀, and NO_x emissions, as summarized in the FEIR (see FEIR Table 36 [DEIR p. 383]). A significant impact was identified with respect to ROC, CO, and NO_x.

Implementation of the RAP for the proposed modified Project would be the same as previously analyzed, except construction of the proposed modified Project is anticipated to occur over a compressed duration (approximately 32 months). **Table IV.G-7, Proposed Modified Project Regional Construction Emissions (Unmitigated) (lbs/day)**, shows that construction emissions anticipated from the proposed modified Project would result in lower emissions than were anticipated in the FEIR. Due to the change in regulatory requirements regarding construction fleet efficiencies as well as architectural coating ROC content between the original 2005 analysis and this analysis, the emissions from the proposed modified Project are substantially less than those originally modeled.

Therefore, the proposed modified Project would not result in any new significant impact as compared to the approved Project with respect to ROC, NOx, CO, SOx, and PM₁₀ emissions. Emissions of NO_x from the proposed modified Project would result in less than significant impacts whereas the FEIR reported significant and unavoidable impacts for this pollutant even with mitigation. This is due largely to the advances in technology for off-road equipment in response to more stringent federal and local emission standards. Emissions of PM_{2.5}, which was not previously analyzed and has been identified as a pollutant of concern since certification of the FEIR, would not exceed the SCAQMD daily threshold. Impacts related to PM_{2.5} emissions would be less than significant.

(b) Localized Construction Impacts

The FEIR analyzed localized construction impacts utilizing 1998 USEPA guidance and the ISC3-ST microscale dispersion model. The analysis concluded that localized PM₁₀ concentrations attributable to on-Property construction activity could potentially exceed the SCAQMD significant threshold at residential receptors located south and west of the Property, as shown in the FEIR (see FEIR Table 38 [DEIR p. 386]). A significant impact was identified with respect to PM₁₀ emissions.

Table IV.G-7

Proposed Modified Project Regional Construction Emissions (Unmitigated) (lbs/day)

	ROC	NO_X	CO	SO _X	PM_{10}^{b}	PM _{2.5} ^b
MAXIMUM DAILY EMISSIONS						
Year 1	20	99	668	1	57	20
Year 2	29	98	237	1	18	6
Year 3	183	94	220	<1	18	6
Maximum Daily ^a	183	99	668	1	57	20
SCAQMD Daily Significance Threshold	75	100	550	150	150	55
Significant?	Yes	No	Yes	No	No	No
FEIR	1,662	851	1,121	<1	1,275	N/A
Difference (Proposed Modified Project minus FEIR)	(1,479)	(752)	(453)	<1	(1,218)	N/A

Emission quantities are rounded to "whole number" values. As such, the "total" values presented herein may be one unit more or less than actual values. Exact values (i.e., non-rounded) are provided in the CalEEMod model printout sheets and/or calculation worksheets that are presented in Appendix G.

SOURCE: ESA, 2017.

Methodology for analyzing localized construction impacts have changed considerably since the 2005 analysis. The analysis of the impacts from localized emissions associated with the proposed modified Project is assessed based on the revised methodology and therefore direct correlation of values may not applicable between the two analyses. Previous methodology analyzed localized impacts on specific receptors. Current screening methodology does not require modeling for specific receptors. Instead, localized impacts are analyzed at the distance to the nearest receptor. Table IV.G-8, Proposed Modified Project Localized Construction Emissions (Unmitigated) (lbs/day), shows that construction emissions anticipated from the proposed modified Project would result in less than significant impacts for all criteria pollutants. Because PM₁₀ and PM_{2.5} emissions exceed the screening level criteria a refined analysis was conducted to determine emissions that are project specific. Table IV.G-8 shows the results of the refined analysis with their associated numeric indicators. Impacts from the proposed modified Project would not result in new significant impacts with respect to NOx, CO, or PM₁₀. Emissions of PM_{2.5}, which were not previously analyzed and have been identified as a pollutant of concern since certification of the FEIR, would not exceed the maximum daily threshold. Impacts related to PM_{2.5} emissions would be less than significant.

^a PM₁₀ emission estimates are based on compliance with SCAQMD Rule 403 requirements for fugitive dust suppression, which require that no visible dust be present beyond the Property boundaries.

b On-Property and off-Property maximum emissions represent the maximum emissions that may occur throughout the duration of the proposed modified Project and therefore may not occur at the same time. Maximum on-Property and off-Property emissions may not add up to total emissions.

Table IV.G-8

Proposed Modified Project Localized Construction Emissions (Unmitigated) (lbs/day)

	NOx (lbs/day)	CO (lbs/day)	PM ₁₀ ^b (lbs/day)	PM _{2.5} b (lbs/day)
MAXIMUM DAILY EMISSIONS (SCREENING A	NALYSIS)			
Year 1	66	627	49	18
Year 2	30	281	1	1
Year 3	21	133	1	1
Maximum Daily ^a	66	627	49	18
SCAQMD Daily Significance Threshold ^c	68	1,530	14	8
Potentially Significant?	No	No	Yes	Yes
MAXIMUM DAILY CONCENTRATION (REFINE	ED ANALYSIS	<u>5)</u>	PM ₁₀ b, d (μg/m ³)	PM _{2.5} b, d (μg/m ³)
Maximum Daily Impact			5	1.8
Threshold			10.4	10.4
Significant?			No	No

Emission quantities are rounded to "whole number" values. As such, the "total" values presented herein may be one unit more or less than actual values. Exact values (i.e., non-rounded) are provided in the CalEEMod model printout sheets and/or calculation worksheets that are presented in Appendix G.

SOURCE: ESA, 2017.

(c) Toxic Air Contaminants

The FEIR evaluated the potential for TAC emissions related to DPM emissions associated with heavy equipment operations during construction activities. The maximum individual increase in lifetime cancer risk of 1.2 in a million, less than the applicable threshold of 10 in a million, was determined to be less than significant.

^a PM₁₀ emission estimates are based on compliance with SCAQMD Rule 403 requirements for fugitive dust suppression, which require that no visible dust be present beyond the Property boundaries.

On-Property maximum emissions represent the maximum emissions that may occur throughout the duration of the project and therefore may not occur at the same time. Maximum on-Property emissions may not add up to total emissions

^c Significance thresholds are based on SCAQMD mass look-up screening levels for SRA 4 and conservatively assuming 5 acres of disturbance daily with sensitive receptors are within 25 meters of the Property. Mass look-up screening levels are based on allowable maximum emissions that would not cause or contribute to an exceedance of the most stringent applicable federal or state ambient air quality standard, which is developed based on ambient concentrations of that pollutant for each specific SRA.

The refined analysis utilized dispersion modeling. Because the Basin is in non-attainment for PM_{10} and $PM_{2.5}$, the threshold is based on the allowable change in PM emissions.

Implementation of the RAP for the proposed modified Project would be the same as previously analyzed. DDC has been implemented on approximately 68 acres of the Property. Additional DDC may be needed.

Methodology for analyzing risk from construction impacts have changed since the 2005 analysis. The analysis of the impacts from TAC emissions from construction of the proposed modified Project is assessed based on the revised methodology. While construction risk is called out separately in **Table IV.G-9**, **Proposed Modified Project Construction Risk** (**Unmitigated**), cancer and chronic risk, as discussed in Section IV.G.3.a, Methodology, are cumulative over their averaging periods and therefore comparison to numeric indicators is for informational purposes only. Significance determinations for associated risk from the proposed modified Project combines construction and operational risk under Section IV.G.3.d(2)(d), Toxic Air Contaminants, over the 30-year averaging period. The increased efficiencies of the construction equipment (meeting Tier 4 emissions standards or Tier 3 emissions standards, at a minimum, if Tier 4 equipment is not commercially available) and efficiencies of diesel reduction features demonstrate that the proposed modified Project's risk from construction would be less than that originally identified in the FEIR with the use of a diesel particulate trap (1.2 per million). Impacts from the proposed modified Project would not result in new significant impacts with respect to TAC emissions from construction.

Table IV.G-9

Proposed Modified Project Construction Risk (Unmitigated)

	Cancer	Chronic	Acutea
Off-Property Receptor #94	0.48	< 0.1	N/A
DD3 Receptor #703	0.09	< 0.1	N/A
On-Property Receptor #N/A ^b	N/A	N/A	N/A
SCAQMD Numeric Indicators	10	1	1
FEIR	1.2	N/A	N/A
Difference (Proposed Modified Project minus FEIR)	(0.76)	N/A	N/A

NOTES:

Risk is rounded. As such, the "total" values presented herein may be one unit more or less than actual values. Exact values (i.e., non-rounded) are provided in Appendix G.

SOURCE: ESA, 2017.

a Particulate Matter does not have an acute risk.

b On-Property receptors will not be occupied during construction and therefore no construction risk is associated with these receptors.

(d) Odors

With implementation of mandatory compliance with SCAQMD Rule 402 (nuisances), the FEIR determined that construction activities would not create objectionable odors. Because the proposed modified Project would entail similar construction activities and use of similar construction equipment, the proposed modified Project would not result in any new significant impact compared to the approved Project.

(2) Operational Impacts

(a) Regional Operations Impacts

The FEIR calculated regional operational emissions generated by the consumption of electricity and natural gas, area sources, and mobile sources at build out of the approved Project. According to the calculations, the approved Project was anticipated to exceed regional SCAQMD thresholds for ROC, CO, NO_x, and PM₁₀, and significant impacts were identified, as shown in the FEIR (see FEIR Table 39 [DEIR p. 390]).

Operational emissions of the proposed modified Project are anticipated to begin as early as 2020. **Table IV.G-10, Proposed Modified Project Regional Operational Emissions** (**Unmitigated**) (**Ibs/day**), shows that maximum daily operational emissions anticipated from the proposed modified Project would result in potentially significant regional impacts for ROC, NOx, CO, PM₁₀, and PM_{2.5}. The addition of the PM_{2.5} threshold occurred since certification of the FEIR. While the proposed modified Project would result in exceedances of the SCAQMD's regulatory thresholds, it would result in less daily emissions than anticipated under the FEIR. The stationary source emissions included in the FEIR analysis account for natural gas consumption and electricity generation. The CalEEMod model, used for analyzing the proposed modified Project's emissions, accounts for this as energy consumption. Stationary sources analyzed for the proposed modified Project refer only to the emissions from the operation of the on-Property permitted equipment.

As shown in Table IV.G-10, the proposed modified Project would not result in any new significant impact with respect to emissions of ROC, NO_X, CO, and PM₁₀. However, emissions of PM_{2.5}, which was not previously analyzed and has been identified as a pollutant of concern since certification of the FEIR. Regional emissions of PM_{2.5} are in excess of current SCAQMD thresholds and would result in a potentially significant impact arising from a newly assessed regulatory requirement. Applying SCAQMD's methodology²⁷ to the PM₁₀ results of the FEIR, PM_{2.5} regional emissions from the approved Project would be in excess of the thresholds if current PM_{2.5} thresholds had been promulgated and applied in 2006. Therefore, PM_{2.5} impacts

South Coast Air Quality Management District, Final – Methodology to Calculate Particulate Matter (PM)
 2.5 and PM_{2.5} Significance Thresholds, October 2006.

for the proposed modified Project are substantially the same as for the approved Project if PM_{2.5} had been regulated in 2006.

Table IV.G-10

Proposed Modified Project Regional Operational Emissions (Unmitigated) (lbs/day)

	ROC	NOx	CO	SOx	PM ₁₀	PM _{2.5}
MAXIMUM DAILY EMISSIONS						
Area	75	20	113	<1	2	2
Energy	2	14	10	<1	1	1
Mobile	111	530	1,483	5	373	103
Stationary ^a	5	14	27	4	7	7
Total Project	193	578	1,633	9	384	113
SCAQMD Significance Threshold	55	55	550	150	150	55
Significant?	Yes	Yes	Yes	No	Yes	Yes
FEIR	506	719	4,449	17	595	NA
Difference (Proposed Modified Project minus FEIR)	(313)	(141)	(2,816)	(8)	(211)	NA

NOTES:

Emission quantities are rounded to "whole number" values. As such, the "total" values presented herein may be one unit more or less than actual values. Exact values (i.e., non-rounded) are provided in the CalEEMod model printout sheets and/or calculation worksheets that are presented in Appendix G.

(b) Local Impacts

The FEIR evaluated Project-generated CO concentrations at intersection locations that would experience a 2 percent increase in traffic volumes. CO concentrations anticipated to be generated by the approved Project was found to be negligible and therefore, less than significant. Localized emissions associated with the operation of diesel-fueled emergency generators, with compliance with SCAQMD Rules 201, 202, and 203, where determined to be less than significant.

Methodology for analyzing localized impacts have changed considerably since the 2005 FEIR analysis. The analysis of impacts associated with the proposed modified Project from localized emissions is assessed based on the revised methodology and, therefore, direct correlation of values is not applicable between the two analysis for CO hotspot determination. The FEIR qualitatively analyzed localized impacts from on-Property operational activities. Based on the revised SCAQMD Methodology, a quantitative analysis was performed to assess on-Property impacts to local sensitive receptors.

^a Emissions due to Stationary Sources are from the operation of the on-Property flare system. SOURCE: ESA, 2017.

As detailed in Section IV.G.3.a, Methodology, CO hotspots are now analyzed based on average daily trips through the intersection rather than LOS determinations. Based on the new methodology, any intersection that operates with less than 100,000 vehicles per day would be anticipated to have less emissions than the intersection at Wilshire Boulevard and Veteran Avenue and therefore also would not exceed the NAAQS or CAAQS. Intersections operating at greater than 100,000 vehicles per day would require additional analysis. Under the new methodology, the intersection with the greatest traffic under the future plus project scenario is the intersection of S. Main Street and E. Del Amo Boulevard with average daily vehicles of 62,297 through that intersection. This is below the 100,000 vehicles per day threshold and therefore would be less than significant with respect to mobile emissions of CO. The proposed modified Project would not result in any new significant impacts as compared to the approved Project.

As detailed in Section IV.G.3.a, Methodology, the analysis was conducted according to the SCAQMD's Localized Significance Threshold Methodology. Previous methodology analyzed localized impacts on specific receptors. Current screening methodology does not require modeling for specific receptors. Instead, localized impacts are analyzed at the distance to the nearest receptor. The SCAQMD LST screening criteria applicable to a 5-acre site in SRA 4 with sensitive receptors located adjacent to the Property was used. As discussed above, assuming that all activity would occur within a smaller area (5 acres) provides a worst case analysis as emissions would be more concentrated within a smaller area. Where emissions exceed the screening tables, a refined screening analysis was conducted to determine the potential to result in significant impacts. Operational emissions of the proposed modified Project are anticipated to begin as early as 2020. **Table IV.G-11**, **Proposed Modified Project Localized Operational Emissions** (**Unmitigated**) (**Ibs/day**), shows that maximum daily operational emissions anticipated from on-Property emissions of the proposed modified Project exceed the screening level thresholds for PM₁₀ and PM_{2.5}. Localized PM₁₀ emissions would result in potentially significant impacts.

Localized emissions of PM_{2.5} are in excess of current SCAQMD thresholds and would result in a potentially significant impact arising from a newly assessed regulatory requirement. Applying SCAQMD's methodology²⁸ to the PM₁₀ results of the FEIR, PM_{2.5} localized emissions from the approved Project would be in excess of the thresholds at the nearest sensitive receptor if current PM_{2.5} thresholds had been promulgated and applied in 2006. Therefore, localized PM_{2.5} impacts for the proposed modified Project are substantially the same as for the approved Project if PM_{2.5} had been regulated in 2006.

²⁸ South Coast Air Quality Management District. Final – Methodology to Calculate Particulate Matter (PM) 2.5 and PM 2.5 Significance Thresholds. October 2006

Table IV.G-11

Proposed Modified Project Localized Operational Emissions (Unmitigated) (lbs/day)

	NO _X	CO	PM ₁₀ ^b	PM _{2.5} ^b
MAXIMUM DAILY EMISSIONS (SCREENING ANALYSI	<u>(S)</u>			
Area Source	20	113	2	2
Energy	14	10	1	1
Mobile ^a	5	15	4	1
Stationary Source ^b	14	27	7	7
Maximum Daily	53	164	14	11
SCAQMD Daily Significance Threshold ^c	68	1,530	4	2
Significant?	No	No	Yes	Yes

NOTES:

Emission quantities are rounded to "whole number" values. As such, the "total" values presented herein may be one unit more or less than actual values. Exact values (i.e., non-rounded) are provided in the CalEEMod model printout sheets and/or calculation worksheets that are presented in Appendix G.

- ^a Mobile sources represent a conservative estimate of 1 percent of all mobile emissions occurring on Property.
- b Stationary sources represent emissions from the operation of both flares, the GAC, and the emergency generator.
- ^c Significance thresholds are based on SCAQMD screening levels for SRA 4 and conservatively assuming 5 acre of disturbance daily with sensitive receptors are within 25 meters of the Property.

SOURCE: ESA, 2017.

(c) Regional Concurrent Construction and Operation Impacts

As a conservative approach, the FEIR calculated emissions that could occur should a nearly built-out Project operate while remaining construction activities occur. As shown in the FEIR (see FEIR Table 41 [DEIR p. 395]), concurrent construction and operation emissions were anticipated to exceed SCAQMD thresholds for CO, NO_X, PM₁₀, and ROC, and a significant impact was identified.

Consistent with the analysis in the FEIR, this analysis includes the combined construction and operational emissions in the event that the commercial phases are operational while the residential phase is still under construction. In accordance with applicable SCAQMD methodology, the concurrent emissions are compared to the operational thresholds. As shown in **Table IV.G-12, Proposed Modified Project Concurrent Operation and Construction Emissions (pounds per day)**, the proposed modified Project would exceed the SCAQMD's significant thresholds for ROC, NOx, CO, PM₁₀, and PM_{2.5}. However, the proposed modified Project would not result in any new or greater significant impact as compared to the approved Project with respect to ROC, NOx, CO, and PM₁₀ with new mitigation incorporated. Emissions of PM_{2.5} are in excess of current SCAQMD thresholds and would result in a potentially significant

impact arising from a newly assessed regulatory requirement. Applying SCAQMD's methodology to the PM₁₀ results of the FEIR, PM_{2.5} regional emissions from the approved Project would be in excess of the thresholds if current PM_{2.5} thresholds had been promulgated and applied in 2006. Therefore, PM_{2.5} impacts for the proposed modified Project are substantially the same as for the approved Project if PM_{2.5} had been regulated in 2006.

Table IV.G-12

Proposed Modified Project Concurrent Operation and Construction Emissions (pounds per day)

Emission Source	ROC	NOx	CO	SOx	PM ₁₀	PM _{2.5}
COMBINED PA 2 AND PA 3 OPERATIONS AND	PA 1 CON	STRUCT	ION EMISS	SIONS		
Operation Emissions	147	492	1,343	8	337	98
On-Property Construction Emissions	54	32	172	<1	11	3
Total	201	524	1,515	8	348	102
SCAQMD Construction Significance Threshold	55	55	550	150	150	55
Significant?	Yes	Yes	Yes	No	Yes	Yes
FEIR	1,819	1,133	4,283	14	1,295	NA
Difference (Proposed Modified Project minus FEIR)	(1,618)	(609)	(2,768)	(6)	(947)	NA

SOURCE: ESA, 2017.

(d) Toxic Air Contaminants

As discussed in the FEIR, on-Property sources of DPM emissions would be minimal. Therefore, an HRA for the approved Project operations was not warranted and no significant impact on human health was anticipated to occur. The proposed modified Project would result in similar land uses and include regional commercial, general commercial, entertainment, residential, and hotels. Like the approved Project, operations of the proposed modified Project would result in minimal on-Property emissions of DPM. However, to provide a worst-case analysis, operational DPM emissions have been accounted for in the HRA for the proposed modified Project. Additionally, the FEIR did not analyze construction-related health risk to off-Property receptors. Utilizing the most recent methodology, as discussed above, a combined construction and operational HRA has been conducted and is discussed below.

(e) On-Property Operation Impacts

(i) On-Property Sources

As discussed in the FEIR, the Department of Toxic Substances Control (DTSC) has determined that potential health affects due to air emissions relative to on-Property commercial

activities would be less than significant. Additionally, development of the residential uses would not be allowed until DTSC has concluded that the development would be implemented in a manner that is protective of human health and the environment. The proposed modified Project is subject to DTSC authority and would be subject to the same remedial actions and clearances as the approved project.

Methodology for analyzing risk from operational impacts have also changed since the 2005 analysis, which qualitatively stated that risk from on-Property operations would be less than significant.

The analysis of the impacts from TAC emissions from construction and the operation of the proposed modified Project is assessed based on the revised methodology. Construction emissions are detailed in Table IV.G-9 above. Operation of the proposed modified Project is anticipated to begin directly after construction and would represent the remainder of the 30-year risk. Combined construction and operational risk is called out in **Table IV.G-13**, **Proposed Modified Project Combined Risk (Unmitigated)**. **Figure IV.G-3**, **Unmitigated Maximum Cancer Risk Locations**, shows the locations of the unmitigated maximum receptors for each area. Maximum Chronic and Acute risk are below numeric indicators for all receptor locations. The total combined risk is below the SCAQMD numeric indicators. Therefore, without mitigation, the calculated combined risk from the construction and operation of the proposed modified Project would not result in a new significant impact as compared to the approved Project.

Table IV.G-13

Proposed Modified Project Combined Risk (Unmitigated)

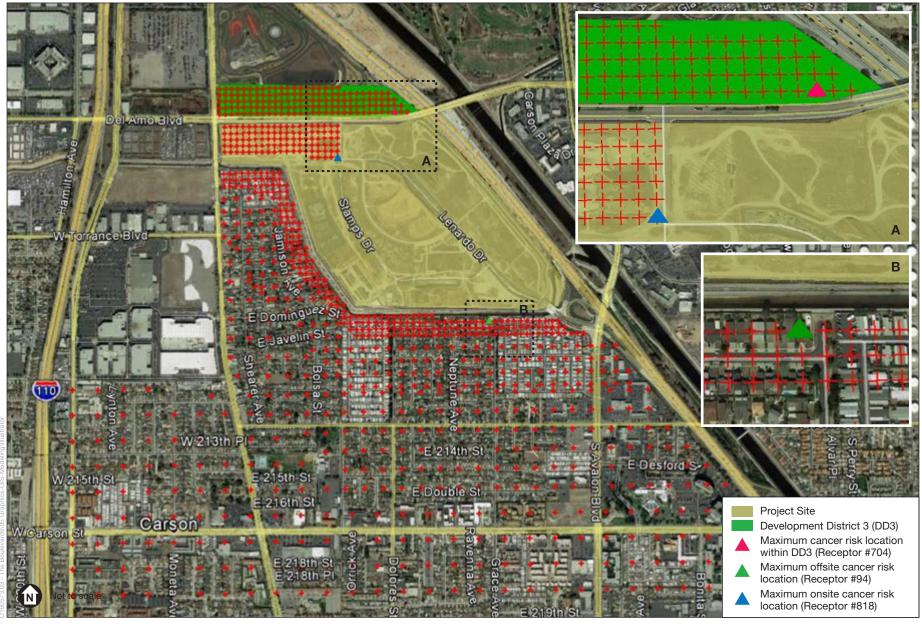
		Can				
	Total	Constructiona	Stationary	Trucks	Chronic	Acute
Off-Property Receptor #94	2.7	0	< 0.1	2.6	< 0.01	< 0.01
DD3 Receptor #704	2.1	0	< 0.1	2.1	< 0.01	< 0.01
On-Property Receptor #818 ^b	3.6	N/A	< 0.1	3.6	< 0.01	< 0.01
SCAQMD Numeric Indicators	10				1	1

NOTE:

Risk is rounded. As such, the "total" values presented herein may be one unit more or less than actual values. Exact values (i.e., non-rounded) are provided in Appendix G.

^a Construction emissions show 0.0 for all receptors because as on-Property truck emissions during operation represent the greatest portion of risk, risk is higher for receptors when the 30-year risk is all operational related. Construction emissions are low (as seen in Table IV.G-9). This analysis represents the worst-case scenario.

While the project is not required to determine risk to itself, the risk to on-Property receptors from operation of the Property is provided for informational purposes and is not included as part of the significance finding.
 SOURCE: ESA, 2017.



SOURCE: Google Earth, 2017; ESA, 2017

The District at South Bay

Figure IV.G-3
Unmitigated Maximum Cancer Risk Locations



(ii) Off-Property Sources

According to CARB's Air Quality and Land Use Handbook, a site-specific health risk analysis is required if a sensitive receptor is cited within 500 feet of a freeway. Residential uses within DD3 are located within 500 feet of the I-405 Freeway. Therefore, the FEIR addressed health risk impacts associated with proximity of the proposed residential uses to the I-405 Freeway. Pursuant to FEIR Mitigation Measure G-25, air filtration systems with a minimum efficiency reporting value of 12 (MERV 12) will be installed for residential units within DD3 to reduce exposure to traffic-related emissions from the I-405 Freeway.

As discussed above, the SCAQMD's series of MATES studies verify that ambient levels of TACs, especially DPM, have been steadily decreasing over time. Future on-Property residential units within PA 1 would be sited a minimum of 1,400 feet from the I-405, well beyond the CARB's recommended separation distance. In *California Building Industry Association v. Bay Area Air Quality Management District (CBIA v. BAAQMD)*, the Supreme Court held that "agencies subject to CEQA generally are not required to analyze the impacts of existing environmental conditions on a project's future users or residents". For all of these reasons, a quantitative evaluation of the impact to future on-Property residents from exposure to TACs generated on the I-405 Freeway is not required in this SEIR. However, because the proposed modified Project is subject to FEIR mitigation, FEIR Mitigation Measure G-25, requiring installation of MERV 12 air filtration systems on future residential units, has been included as a PDF for the proposed modified Project. Thus, impacts to on-Property residents from off-Property sources of TACs (I-405 Freeway) would be less than significant.

(f) Odors

As discussed in the FEIR, implementation of the RAP would limit potential odiferous emissions from the former landfill that could affect on-Property and off-Property uses. Therefore, impacts were found to be less than significant. Implementation of the RAP would still occur under the proposed modified Project. Therefore, the proposed modified Project would not result in any new significant impact as compared to the approved Project.

(g) SCAQMD Handbook Policy Analysis

The FEIR found that the approved Project would be consistent with the AQMP, would not cause or worsen an exceedance of an ambient air quality standard, would not delay the attainment of an air quality standard, is consistent with the AQMP's growth projections, implements all feasible mitigation measures, and is consistent with the AQMP land use policies (see FEIR [DEIR pp. 402–405]).

²⁹ CARB, Air Quality and Land Use Handbook: A Community Health Perspective, April 2005.

In accordance with the procedures established in the SCAQMD CEQA Air Quality Handbook, the following criteria are required to be addressed in order to determine the proposed modified Project's consistency with SCAQMD and SCAG policies:

- Will the Project exceed the assumptions utilized in the SCAQMD's AQMP and therefore result in any of the following:
 - An increase in the frequency or severity of existing air quality violations; or
 - Cause or contribute to new air quality violations; or
 - Delay timely attainment of air quality standards or the interim emission reductions specified in the AQMP.
- Will the Project exceed the assumptions utilized in preparing the AQMP?

The AQMP was adopted by the SCAQMD as a program to lead SCAB into compliance with several criteria pollutant standards and other federal requirements. It relies on emissions forecasts based on demographic and economic growth projections provided by SCAG's Regional Transportation Program. SCAG is charged by California law to prepare and approve "the portions of each AQMP relating to demographic projections and integrated regional land use, housing, employment, and transportation programs, measures and strategies." Projects whose growth is included in the projections used in the formulation of the AQMP are considered to be consistent with the plan and not to interfere with its attainment. The SCAQMD recommends that, when determining whether a project is consistent with the current AQMP, a lead agency must assess whether the project would directly obstruct implementation of the plan and whether it is consistent with the demographic and economic assumptions upon which the plan is based.

The proposed modified Project would have the potential to increase the frequency or severity of existing air quality violations and obstruct implementation of the AQMP because the actual construction and operational emissions would exceed the SCAQMD's significance criteria even with the incorporation of mitigation (as discussed in Section IV.G.5, Level of Significance after Mitigation). However, as the FEIR was approved in 2006, the emissions associated with the implementation of the FEIR would have been incorporated into future iterations of the AQMP, including the current 2012 and 2016 AQMPs. Therefore, even though implementation of the proposed modified Project would result in exceedances to the regional and local thresholds, as identified previously, the emissions anticipated from implementation of the Project would be less than those identified in the FEIR and would not result in any new significant impact. Therefore, the emissions anticipated in the 2012 and 2016 AQMP for the SCAQMD's jurisdiction would already account for the emissions of the proposed modified Project and would over predict emissions from the Property. Therefore, the proposed modified Project's criteria pollutant emissions would not cause SCAB's criteria pollutant emissions to worsen so as to impede the SCAQMD's efforts to achieve attainment with respect to any criteria pollutant for which it is

currently not in attainment, or to cause SCAB to deteriorate from its current attainment status with respect to any other criteria pollutant emissions.

The proposed modified Project is also affirmatively consistent with the AQMP. The proposed modified Project would promote the reduction in mobile source emissions by providing housing and commercial within close proximity to one another and by locating it in close proximity to the I-405 and I-110 freeways, which is intended to reduce vehicle miles traveled within the Property as well as within the region.

During its construction phase, the proposed modified Project would ensure compliance with CARB requirements to minimize short-term emissions from on-road and off-road diesel equipment, and with SCAQMD's regulations for controlling fugitive dust and other construction emissions. Compliance with these measures and requirements is consistent with and meets or exceeds the AQMP requirements for control strategies intended to reduce emissions from construction equipment and activities.

The proposed modified Project would generate short-term construction jobs, but it would not necessarily create new construction jobs, since construction workers typically travel amongst construction sites as individual projects are completed within a particular area and are not typically brought from other areas to work on developments such as the proposed modified Project. Moreover, these jobs would be temporary in nature. Therefore, construction jobs under the Project would not conflict with the long-term employment projections upon which the AQMP are based.

The proposed modified Project's growth would be consistent with SCAG RTP/SCS goals and objectives. As the approved Project was originally certified in 2006, the growth anticipated from approved Project, for which the proposed modified Project is within, has been incorporated into subsequent SCAG RTP/SCS growth projections. Due to the decrease in overall nonresidential square footage, the proposed modified Project would result in a decrease in anticipated employment growth. Under the FEIR population would increase based on the addition of 1,550 residential units. Although the proposed modified Project includes 1,250 units, the remaining 300 units have been approved for development within DD3, which is a part of the overall SPA area but not a part of the proposed modified Project area. Therefore, increases in population due to development of the overall SPA area would remain the same. Employment is based on the square footage of non-residential land use. Under the FEIR the total square footage (including hotel use) would be approximately 1,995,125 square feet (sq.ft.) whereas the total square footage under proposed modified Project (including hotel use) would be approximately 1,834,800 sq.ft. Therefore, as employment is based on square footage, the reduction in total square footage would result in a reduction of projected employment. Therefore, the proposed modified Project would be consistent with the growth forecasts incorporated in the RTP/SCS and would be consistent with SCAG's RTP/SCS goals. As a result, the proposed modified Project

would be consistent with the growth projections for the period between 2020 and 2040 for the City as a whole. The proposed modified Project would therefore also be consistent with the growth projections as contained in the City's General Plan, and ultimately consistent with the growth projections in the AQMP, since the AQMP is based on RTP/SCS growth forecasts. For these reasons, the proposed modified Project would not result in any new significant impact as compared to the approved Project.

(i) City of Carson Policies

The FEIR determined that the approved Project would be consistent with General Plan policies by redeveloping an underutilized site with a mixed-use development in the middle of an urbanized area in proximity to existing regional and local transit facilities and encourages pedestrian activity. The proposed modified Project would result in a similar mixed-use development on the same underutilized site. The objectives of the proposed modified Project, as discussed in Chapter II, Modified Project Description, maintain the same emphasis of mixed uses, economic well-being of the City, diversity of employment, improvement of the housing stock, and meeting market need. Therefore, the proposed modified Project would not result in any new significant impact as compared to the approved Project.

(3) General Plan Consistency

Similar to the approved Project, the proposed modified Project would be consistent with the goals and policies of the General Plan Air Quality Element, which have not been modified since certification of the FEIR.

4. MITIGATION MEASURES

The proposed modified Project is subject to the same mitigation measures implemented by the FEIR as updated. In addition to the mitigation measures implemented by the FEIR (Mitigation Measures G-1 through G-25), the current analysis introduces new mitigation for both construction and operational activities (see Mitigation Measures G-26 through G-29). Additionally, based on the new analysis some of the Mitigation Measures have been modified, such as Mitigation Measures G-5 reduces idling from 10 minutes to 5 minutes, and Mitigation Measure G-15 changes from compliance with Title 24 to exceedance of the 2016 Title 24 requirements by a minimum of 5 percent.³⁰

Mitigation Measure G-1: General contractors shall implement a fugitive dust control program pursuant to the provisions of SCAQMD Rule 403.6.31

The mitigation measures below are updated from those set forth in the FEIR. For clarity, the changed text is marked as follows: new text is <u>underlined</u>, and deleted text is shown in strikeout format.

³¹ SCAQMD Rule 403 requirements are detailed in Appendix G.

- **Mitigation Measure G-2:** All construction equipment shall be properly tuned and maintained in accordance with manufacturer's specifications.
- **Mitigation Measure G-3:** General contractors shall maintain and operate construction equipment so as to minimize exhaust emissions. During construction, trucks and vehicles in loading and unloading queues would turn their engines off, when not in use, to reduce vehicle emissions. Construction emissions should be phased and scheduled to avoid emissions peaks and discontinued during second-stage smog alerts.
- **Mitigation Measure G-4:** Electricity from power poles rather than temporary diesel- or gasoline-powered generators shall be used to the extent feasible.
- **Mitigation Measure G-5:** All construction vehicles shall be prohibited from idling in excess of <u>five5</u> minutes, both on- and off<u>-site Property</u>.
- **Mitigation Measure G-6:** Project heavy-duty construction equipment shall use alternative clean fuels, such as low-<u>-</u>sulfur diesel-<u>with sulfur content of 15 ppm by weight or less</u> or compressed natural gas with oxidation catalysts or particulate traps, to the extent feasible.
- Mitigation Measure G-7: The Applicant shall utilize coatings and solvents that are less than required by consistent with applicable SCAQMD rules and regulations, and encourage water based coatings or other low-emitting alternatives, restrict the number of gallons of coatings used per day, or where feasible, paint contractors should use hand applications instead of spray guns.
- **Mitigation Measure G-8:** The Applicant shall comply with SCAQMD Rule 402 to reduce potential nuisance impacts due to odors from construction activities.
- **Mitigation Measure G-9:** All construction vehicle tires shall be washed at the time these vehicles exit the <u>project site Property</u>, or use vehicle tracking pad per approved SWPPP.
- **Mitigation Measure G-10:** All fill material carried by haul trucks shall be covered by a tarp or other means.
- **Mitigation Measure G-11:** Any intensive dust-<u>generating activity such as grinding concrete for existing roads <u>must-shall</u> be controlled to the greatest extent feasible.</u>
- **Mitigation Measure G-12:** The Applicant shall provide documentation to the City indicating both on- and off-<u>siteProperty</u> air-borne risks associated with Remedial Action Plan construction have been evaluated to the satisfaction of the DTSC, and at a minimum, perimeter air monitoring will-shall be completed for dust, particulates, and constituents determined to be Constituents of Concern (COCs).
- **Mitigation Measure G-13:** All point source facilities shall obtain all required permits from the SCAQMD. The issuance of these permits by the SCAQMD shall require

- the operators of these facilities to implement Best Available Control Technology and other required measures that reduce emissions of criteria air pollutants.
- **Mitigation Measure G-14:** Land uses on the <u>Project site Property</u> shall be limited to those that do not emit high levels of potentially toxic contaminants or odors.
- Mitigation Measure G-15: All residential and non-residential buildings shall meet exceed the 2016 California Title 24 Energy Efficiency standards for water heating, space heating, and cooling, to the extent feasible by a minimum of 5 percent or achieve equivalent energy efficiency savings by other means.
- **Mitigation Measure G-16:** All fixtures used for lighting of exterior common areas shall be regulated by automatic devices to turn off lights when they are not needed, but a minimum level of lighting should be provided for safety.
- Mitigation Measure G-17: Building materials, architectural coatings and cleaning solvents shall comply with all applicable SCAQMD rules and regulations. The use of low-VOC cleaning products shall be required in all hotels. The Project shall incorporate the use of low-VOC architectural coating for repainting and maintenance/touch-up of the non-residential buildings and residential buildings for all common/non-living space/outdoor areas.
- **Mitigation Measure G-18:** The Applicant shall, to the extent feasible, schedule deliveries during off-peak traffic periods to encourage the reduction of trips during the most congested periods.
- **Mitigation Measure G-19:** The Applicant shall coordinate with the MTA and the City of Carson and Los Angeles Department of Transportation to provide information with regard to local bus and rail services.
- **Mitigation Measure G-20:** During site plan review, consideration shall be given regarding the provision of safe and convenient access to bus stops and public transportation facilities.
- Mitigation Measure G-21: The Applicant shall pay a fair-share contribution for a low-emission shuttle service between the <u>project site Property</u> and other major activity centers within the <u>pProject vicinity</u> (i.e., the Metro_Rail Blue Line station at Del Amo Boulevard and Santa Fe <u>Avenue</u> and the Carson Transfer Station at the South Bay Pavilion).
- **Mitigation Measure G-22:** The Applicant shall provide bicycle racks located at convenient locations throughout-Carson Marketplace The District at South Bay.
- Mitigation Measure G-23: The Applicant shall provide bicycle paths along the main routes through<u>out</u>-Carson Marketplace The District at South Bay consistent with the Specific Plan.
- **Mitigation Measure G-24:** The Applicant shall provide convenient pedestrian access throughout-Carson Marketplace The District at South Bay.

- Mitigation Measure G-25: The Project shall include air filtration systems for residential dwelling units designed to have a minimum efficiency reporting value (MERV) of 12 as indicated by the American Society of Heating Refrigerating and Air Conditioning Engineers (ASHRAE) Standard 52.2. The air handling systems shall be maintained on a regular basis per manufacturer's recommendations by a qualified technician employed or contracted by the Applicant or successor. Operation and maintenance of the system shall ensure that it performs above the minimum reporting value.
- Mitigation Measure G-26: Project construction shall be phased to extend the architectural coating phase to the greatest extent feasible to meet construction schedule. Further, architectural coating shall be required to meet the lowest VOC content available for the type of coating being applied.
- <u>Mitigation Measure G-27:</u> The on-Property residential units shall not contain any hearths, either wood burning, natural gas, or propane.
- <u>Mitigation Measure G-28:</u> The Project shall incorporate outdoor electrical outlets such that 10 percent of outdoor landscaping equipment can be electrically powered.
- Mitigation Measure G-29: The Project shall designate at least 8 percent of all commercial parking spaces for priority parking for carpool/vanpool and/or clean air vehicles and comply with California Green Building Standards Code (CALGreen).

5. LEVEL OF SIGNIFICANCE AFTER MITIGATION

In summary, the proposed modified Project would not result in new significant and unavoidable impacts as compared to the approved Project assessed in the FEIR even with the addition of construction and operational mitigation as set forth above. As compared to the approved Project, the proposed modified Project changes will require new mitigation measures not identified in the FEIR because of the involvement of significant impacts that were not previously evaluated. Specifically, with regard to pollutant emissions, (1) no substantial changes are proposed in the proposed modified Project that would require major revisions to the FEIR; (2) no substantial changes arise in the circumstances of the proposed modified Project's undertaking, requiring major revisions to the FEIR; and (3) no new information of substantial importance appears that was not known or council not have been known at the time the FEIR was prepared. Although there is new information that was not known or available at the time the FEIR was certified regarding the addition of PM_{2.5} as a pollutant of concern, the modification of Mitigation Measure G-5 would reduce construction impacts to less than significant for the proposed modified Project as it would be for the approved Project. With regards to operational emissions, the revisions to Mitigation Measures G-15 and G-17 and the addition of Mitigation Measures G-27, G-28, and G-29 would reduce operational emissions of PM_{2.5}, but not to a less than significant level.

a. Construction

Since the certification of the FEIR, the SCAQMD has promulgated new regulation which reduces the VOC content allowed in architectural coatings. SCAQMD Rule 1113, which covers architectural coatings has been amended three times since the FEIR, once in 2007, in 2013, and finally in 2016. However, the modeling software has not caught up to the 2016 amendments regarding architectural coating. With the implementation of Mitigation Measure G-26, regional construction emissions for the proposed modified Project would further reduce ROC emissions. Depending on the flexibility of construction schedule, daily ROG emissions may be reduced from what was modeled as the amount of architectural coating applied daily will decrease as the length of architectural coating application is extended. Additionally, as the availability of lower VOC content architectural coatings increases, the potential for their use on the project also increases. With the extension of the architectural coating schedule and the reduction in VOC emissions there is the potential that emissions could be reduced to below regulatory thresholds. However, because the exact VOC content of available architectural coating is not known, and the flexibility of the architectural coating schedule is unknown, the extent of ROC reductions from the implementation of mitigation cannot be accurately quantified. ROC emissions would remain significant and unavoidable.

Therefore, the proposed modified Project would not result in any new significant impact as compared to the approved Project with respect to ROC, NOx, CO, and PM₁₀ emissions. Emissions of NOx and CO from the proposed modified Project would result in less than significant impacts whereas the FEIR reported significant and unavoidable impacts for both even with mitigation. Emissions of PM_{2.5}, which was not previously analyzed and has been identified as a pollutant of concern since certification of the FEIR, would not exceed the SCAQMD daily threshold. Emissions of PM_{2.5} would not exceed current SCAQMD thresholds and would not result in a potentially significant impact arising from a newly assessed regulatory requirement. Therefore, PM_{2.5} impacts for the proposed modified Project are substantially the same as for the approved Project if PM_{2.5} had been regulated in 2006. Impacts related to PM_{2.5} emissions would remain less than significant.

Implementation of the above mitigation would not reduce localized construction emissions for the proposed modified Project. Therefore, the proposed modified Project still would not result in any new significant impacts as compared to the approved Project with respect to NOx, CO, and PM₁₀. Localized emissions of PM_{2.5} would not exceed current SCAQMD thresholds at the nearest receptor and would not result in a potentially significant impact arising from a newly assessed regulatory requirement. Therefore, PM_{2.5} impacts for the proposed modified Project are substantially the same as for the approved Project if PM_{2.5} had been regulated in 2006. Localized PM_{2.5} emissions would be less than significant with no new mitigation required.

Implementation of the above mitigation would not further reduce construction cancer risk. As discussed previously risk conclusions are combined for construction and operation under the operational analysis and the significance over the 30-year averaging period is determined. As shown in Table IV.G-13, combined construction and operational health risk would be less than significant and the proposed modified Project would not result in any new significant impacts as compared to the approved Project.

Like the approved Project, implementation of the proposed modified Project is not anticipated to generate a substantial amount of objectionable odor emissions during construction. Via mandatory compliance with SCAQMD Rules, no construction activities or materials are proposed that would create objectionable odors. Therefore, the proposed modified Project would not result in any new significant impacts as compared to the approved Project.

b. Operation

The FEIR concluded that even with implementation of mitigation, operation of the Project would remain significant and unavoidable for regional emissions of ROC, NO_X, CO, and PM₁₀. Localized CO and odor emissions were determined to be less than significant. TAC emission impacts to off-Property receptors were qualitatively dismissed as less than significant.

Like the approved Project, regional operational emissions of ROC, NOx, CO, and PM₁₀ for the proposed modified Project would not be reduced to below regulatory thresholds as shown in **Table IV.G-14**, **Proposed Modified Project Regional Operational Emissions (Mitigated)** (**Ibs/day**), even with implementation of mitigation. Although emissions for these pollutants would exceed regulatory thresholds, emissions associated with the proposed modified Project would not exceed those that were anticipated in the FEIR. Therefore, the proposed modified Project would not result in any new significant impacts as compared to the approved Project with respect to ROC, NO_x, CO, SO_x, and PM₁₀. Emissions of PM_{2.5} are in excess of current SCAQMD thresholds and would result in a potentially significant impact arising from a newly assessed regulatory requirement. Therefore, PM_{2.5} impacts for the proposed modified Project are substantially the same as for the approved Project if PM_{2.5} had been regulated in 2006. As shown in Table IV.G-14, PM₁₀ and PM_{2.5} emissions are driven by mobile sources. The Applicant does not have control over the vehicles used by residents, workers, consumers, or vendor. Therefore, there is no feasible or enforceable mitigation that would reduce PM₁₀ or PM_{2.5} emissions to less than significant levels.

As shown in **Table IV.G-15**, **Proposed Modified Project Localized Operational Emissions** (**Mitigated**) (**Ibs/day**), with the implementation of the above mitigation, localized operational emissions for the proposed modified Project would exceed the screening level thresholds for localized emissions of PM₁₀, and PM_{2.5}. Therefore, a refined analysis was conducted to determine the potential for localized PM₁₀ and PM_{2.5} emissions to impact sensitive receptors. The results of the refined analysis are also included in Table IV.G-15. The results of

the analysis show that with mitigation the proposed modified Project would reduce impacts to below the regulatory requirements and therefore would not result in a new significant impact as compared to the approved Project with respect to PM_{10} . A not previously analyzed impact with respect to localized $PM_{2.5}$ emissions would be less than significant with incorporation of previously implemented and new mitigation, identified above.

Table IV.G-14

Proposed Modified Project Regional Operational Emissions (Mitigated) (lbs/day)

	ROC	NOx	CO	SOx	PM ₁₀	PM _{2.5}
MAXIMUM DAILY EMISSIONS						
Area	73	1	102	<1	1	1
Energy	2	14	10	<1	1	1
Mobile	111	530	1,484	5	373	103
Stationary ^a	5	14	27	4	7	7
Total Projects	191	560	1,622	9	382	111
SCAQMD Significance Threshold	55	55	550	150	150	55
Significant?	Yes	Yes	Yes	No	Yes	Yes

NOTES:

Emission quantities are rounded to "whole number" values. As such, the "total" values presented herein may be one unit more or less than actual values. Exact values (i.e., non-rounded) are provided in the CalEEMod model printout sheets and/or calculation worksheets that are presented in Appendix G.

With respect to TAC impacts to off-Property receptors and CO hot spots impacts at vicinity intersections, the proposed modified Project would result in less than significant impacts, and no mitigation is needed. Like the approved Project, the proposed modified Project would comply with industry standard odor control practices, SCAQMD Rule 402 (Nuisance), and SCAQMD Best Available Control Technology Guidelines. Therefore, the proposed modified Project would not result in any new significant odor impacts as compared to the approved Project.

^a Emissions due to Stationary Sources are from the operation of the on-Property flare system. SOURCE: ESA, 2017.

Table IV.G-15

Proposed Modified Project Localized Operational Emissions (Mitigated) (lbs/day)

	NOx	CO	PM_{10}^{b}	PM _{2.5} ^b
MAXIMUM DAILY EMISSIONS (SCREENING ANALYSIS)	(lbs/day)			
Area Source	1	102	1	1
Energy	14	10	1	1
Mobile ^a	6	15	4	1
Stationary Source ^b	14	27	7	7
Maximum Daily	35	154	13	9
SCAQMD Daily Significance Threshold ^c	68	1,530	4	2
Potentially Significant?	No	No	Yes	Yes
MAXIMUM DAILY EMISSIONS (REFINED ANALYSIS)			μg	/m ³
Maximum Daily			1.9	1.6
Threshold			2.5	2.5
Significant?			No	No

NOTES:

Emission quantities are rounded to "whole number" values. As such, the "total" values presented herein may be one unit more or less than actual values. Exact values (i.e., non-rounded) are provided in the CalEEMod model printout sheets and/or calculation worksheets that are presented in Appendix G.

- ^a Mobile sources represent a conservative estimate of 1 percent of all mobile emissions occurring on Property.
- b Stationary sources represent emissions from the operation of both flares.
- ^c Significance thresholds are based on SCAQMD screening levels for SRA 4 and conservatively assuming 5 acres of disturbance daily with sensitive receptors are within 25 meters of the Property. Mass look-up screening levels are based on allowable maximum emissions that would not cause or contribute to an exceedance of the most stringent applicable federal or state ambient air quality standard, which is developed based on ambient concentrations of that pollutant for each specific SRA.
- ^d The refined analysis utilized dispersion modeling. Because the Basin is in non-attainment for PM_{10} and $PM_{2.5}$, the threshold is based on the allowable change in PM emissions.

SOURCE: ESA, 2017.

c. Regional Concurrent Construction and Operation Impacts

As shown in **Table IV.G-16**, **Mitigated Proposed Modified Project Concurrent Operation and Construction Emissions (pounds per day)**, the combined mitigated construction and operational emissions for the proposed modified Project would exceed the SCAQMD's significant thresholds for ROC, NOx, CO, PM₁₀, and PM_{2.5}. However, the proposed modified Project would not result in any new or greater significant impact as compared to the approved Project with respect to ROC, NOx, CO, and PM₁₀ with new mitigation incorporated. Emissions of PM_{2.5} are in excess of current SCAQMD thresholds and would result in a potentially significant impact arising from a newly assessed regulatory requirement. Therefore, PM_{2.5} impacts

for the proposed modified Project are substantially the same as for the approved Project if PM_{2.5} had been regulated in 2006. As discussed above, aside from mitigation listed above, no other feasible or enforceable mitigation that would reduce construction and operational emissions to less than significant levels are available. Therefore, similar to the approved Project, impacts would remain significant and unavoidable.

Table IV.G-16

Mitigated Proposed Modified Project Concurrent Operation and Construction Emissions (pounds per day)

Emission Source	ROC	NOx	CO	SOx	PM ₁₀	PM _{2.5}
COMBINED PA 2 AND PA 3 OPERATIONS AND P	A 1 CONS	TRUCTIO	ON EMISSI	ONS		
Operation Emissions	147	478	1,340	8	337	98
On-Property Construction Emissions	54	32	172	<1	11	3
Total	201	509	1,512	8	348	102
SCAQMD Construction Significance Threshold	55	55	550	150	150	55
Significant?	Yes	Yes	Yes	No	Yes	Yes
FEIR	1,819	1,133	4,283	14	1,295	NA
Difference (Proposed Modified Project minus FEIR)	(1,618)	(623)	(2,771)	(6)	(947)	NA

SOURCE: ESA, 2017.

6. CUMULATIVE IMPACTS

a. Construction

Of the related projects that have been identified within the Project study area, there are a number of related projects that have not yet been built or are currently under construction. Since the Applicant has no control over the timing or sequencing of the related projects, any quantitative analysis to ascertain daily construction emissions that assumes multiple, concurrent construction projects would be entirely speculative. For this reason, the SCAQMD's methodology to assess a project's cumulative impact differs from the cumulative impacts methodology employed elsewhere in this SEIR.

With respect to the proposed modified Project's construction-period air quality emissions and cumulative Basin-wide conditions, the SCAQMD has developed strategies to reduce criteria pollutant emissions outlined in the AQMP pursuant to federal CAA mandates. As such, the proposed modified Project would comply with SCAQMD Rule 403 requirements, and implement all feasible mitigation measures. In addition, the proposed modified Project would comply with adopted AQMP emissions control measures. Per SCAQMD rules and mandates as well as the CEQA requirement that significant impacts be mitigated to the extent feasible, these same

requirements (i.e., Rule 403 compliance, the implementation of all feasible mitigation measures, and compliance with adopted AQMP emissions control measures) would also be imposed on construction projects Basin-wide, which would include each of the related projects. However, since construction ROC emissions would be significant on its own, as was the approved Project, emissions of ROC due to construction of the proposed modified Project in combination with any of the related projects would also be significant with incorporation of mitigation.

Similar to the approved Project, the proposed modified Project would emit TACs through the construction of the proposed modified Project. As discussed previously, carcinogenic health risk is cumulative over a thirty-year period of both construction and operational activities. Therefore, construction risk by itself does not result in a significance finding. As identified in Table IV.G-13, Proposed Modified Project Combined Risk (Unmitigated), with implementation of construction PDFs, risk would be significantly reduced. Therefore, the proposed modified Project would not result in any new significant impacts as compared to the approved Project with respect to construction risk.

Like the approved Project, the proposed modified Project may emit odors during construction activities at each related project would include the use of architectural coatings and solvents. SCAQMD Rule 1113 limits the amount of volatile organic compounds from architectural coatings and solvents. Via mandatory compliance with SCAQMD Rules, it is anticipated that construction activities or materials used in the construction of the related projects would not create objectionable odors. Thus, odor impacts from the related projects are anticipated to be less than significant unto themselves, as well as cumulatively in conjunction with the proposed modified Project.

b. Operation

The SCAQMD's approach for assessing cumulative impacts is based on the SCAQMD's AQMP forecasts of attainment of ambient air quality standards in accordance with the requirements of the federal and state CAAs. This forecast also takes into account SCAG's forecasted future regional growth. As such, the analysis of cumulative impacts focuses on determining whether the proposed modified Project is consistent with forecasted future regional growth. Therefore, if all cumulative projects are individually consistent with the growth assumptions upon which the SCAQMD's AQMP is based, then future development would not impede the attainment of ambient air quality standards and a significant cumulative air quality impact would not occur. As discussed in detail under Section IV.G.3.d, Project Impacts, the proposed modified Project would be consistent with the assumptions and forecasts in the most recent AQMP. Despite these conclusions, the proposed modified Project would contribute to a significant cumulative regional air quality impact as the Basin is non-attainment for ozone and PM₁₀ and PM_{2.5}, and the proposed modified Project would exceed the SCAQMD daily significance thresholds for ROC and NOx emissions (i.e., ozone precursors), CO, PM₁₀, and PM_{2.5}. Therefore,

the proposed modified Project, like the approved Project, would result in a cumulatively significant impact with regards to ROC, NOx, CO, and PM₁₀. The proposed modified Project would result in a new, not previously analyzed, cumulative impact with regard to PM_{2.5}.

With respect to TACs, specifically health risk, the proposed modified Project would emit TACs through the construction and operation of the proposed modified Project. However, as identified in Table IV.G-13, with implementation of the construction PDF requiring Tier 4 emissions ratings for construction equipment, risk would be reduced to less than significant levels. Therefore, the proposed modified Project would not result in any new significant impacts as compared to the approved Project.

With implementation of the proposed modified Project, neither the Project's land use nor any of the related projects land uses have a high potential to generate odor impacts. Furthermore, any related project that may have a potential to generate objectionable odors would be required by SCAQMD Rule 402 (Nuisance) to implement Best Available Control Technology to limit potential objectionable odor impacts to a less than significant level. Thus, potential odor impacts from related projects are anticipated to be less than significant unto themselves, as well as cumulatively, in conjunction with the proposed modified Project.

Comparison to FEIR Findings: New Significant Impact Due to Changes in Regulatory Requirements. Previous Mitigation Applies as Modified Herein. New Mitigation Measure(s) Identified; Inapplicable Mitigation Removed.

IV. ENVIRONMENTAL IMPACT ANALYSIS H. NOISE

1. INTRODUCTION

The following analysis describes changes to the existing noise environment within the proposed modified Project area and estimates future noise levels at surrounding land uses due to potential changes brought about by the proposed modified Project's construction and operation compared to the approved Project and supplements Section IV.H, Noise, of the FEIR where there are changes to the regulatory setting. In all other respects, the FEIR analysis remains applicable to the proposed modified Project. To determine whether the proposed modified Project would result in any new impacts, or increases in the severity of impacts previously disclosed in the FEIR, this analysis considers the impacts that would result from construction and operation activities that would take place within the Property under current environmental and regulatory circumstances, and compares these impacts to those identified in the FEIR, and mitigation measures in that document. In doing so, this supplemental analysis compares the proposed modified Project to the approved Project to determine if the proposed changes will require major revisions to the FEIR because of the involvement of any new significant impacts as a result of changes to the approved Project, changes in circumstances, or new information that was not previously evaluated.

The analysis concludes the proposed modified Project would not result in any new significant impacts as compared to the approved Project with the additional mitigation as set forth below. As compared to the approved Project, the modifications as part of the proposed modified Project changes will not require major revisions to the FEIR because of the involvement of new significant impacts that were not previously evaluated. Specifically, with regard to noise, (1) no substantial changes are proposed in the proposed modified Project that would require major revisions to the FEIR, and (2) no substantial changes arise in the circumstances of the proposed modified Project's undertaking, requiring major revisions to the FEIR.

2. ENVIRONMENTAL SETTING

a. Noise and Vibration Basics

The mechanics and understanding of noise and vibration measurement and analysis as discussed in the FEIR remains fully relevant, and there is no substantive change in circumstances or information regarding this item (see FEIR [DEIR pp. 415–418]).

b. Regulatory Framework

Many government agencies have established noise standards and guidelines to protect people from potential hearing damage and various other adverse physiological and social effects associated with noise and groundborne vibration. There are no new federal, state, or local regulations relating to noise and vibration in addition to those already discussed in the FEIR, and there is no substantive change in circumstances or information regarding this item. As part of the approved Project, minor modifications to the following General Plan Noise Element policies and implementation measures have made. Modifications are identified via <u>underlined</u> text. All other regulations stated in the FEIR are still applicable to the proposed modified Project. Refer to the FEIR (see FEIR [DEIR pp. 418–427]) for the Regulatory Framework.

Policy N-8.1 Require the design of mixed use structures to incorporate techniques to prevent <u>or minimize</u> transfer of noise and vibration from the commercial to the residential uses.

Implementation Measure N-IM-8.1 Orient residential units away from major noise sources in mixed use projects or incorporate design features to minimize noise impacts.

Implementation Measure N-IM-8.2 Locate balconies and operable windows of residential units in mixed use projects away from primary roadways and other major noise sources to the extent feasible.

(1) Approved Construction Noise Variance

As discussed in the FEIR (see FEIR [DEIR pp. 438 and 454]), although noise impacts related to individually driven piles would be less than significant, noise due to the large number of driven piles was determined to be significant and unavoidable. In anticipation of pile driving, the Applicant requested a Variance for construction noise associated with pile driving. On December 13, 2016, the City of Carson Planning Commission approved the request for a Variance for construction noise which will exceed the allowed noise levels at the Carson Reclamation Authority's 157-acre site (the Property) for a period of up to 2 years (December 13, 2018). The approval of the Variance allows pile driving noise levels near the three mobile home parks and the single-family residences to exceed the maximum noise level established by the Noise Ordinance (60 dBA) during pile driving activities, which was previously determined to be a significant and unavoidable impact. The approval and issuance of this Variance does not result in greater impacts than were previously analyzed in the FEIR and all mitigation measures implemented by the FEIR would remain applicable to minimize impacts. As discussed below, the proposed modified Project would not result in greater impacts related to pile driving with respect to the residential uses to the south and west as compared to the approved Project. Further, the proposed modified Project would

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Previously, the Planning Commission granted four 2-year variances on September 23, 2008, June 22, 2010, September 23, 2012, and November 25, 2014.

be subject to all FEIR mitigation measures and would be allowed to exceed the maximum noise level as stipulated in the approved Variance.

c. Existing Local Noise Conditions

As identified within the FEIR and consistent with the approved Project site's existing setting, the predominant noise source within the Property is roadway noise from the Interstate 405 (I-405) Freeway (the San Diego Freeway) and local roadways such as Main Street, which are located east and west of the Property, respectively. Del Amo Boulevard, which separates Development District 3 (DD3) and the Property, is also a predominant noise source. The proposed modified Project does not propose any revisions to DD3, and this area is not a part of the proposed modified Project but will be considered as a related project as appropriate. Traffic on the I-110 Freeway (the Harbor Freeway) and Avalon Boulevard also contribute to existing noise levels at the Property, although to a lesser degree due to the effect of distance and intervening buildings and topography. Other community noise sources include incidental noise from nearby existing commercial uses, and landscaping maintenance activities at nearby residential and commercial uses.

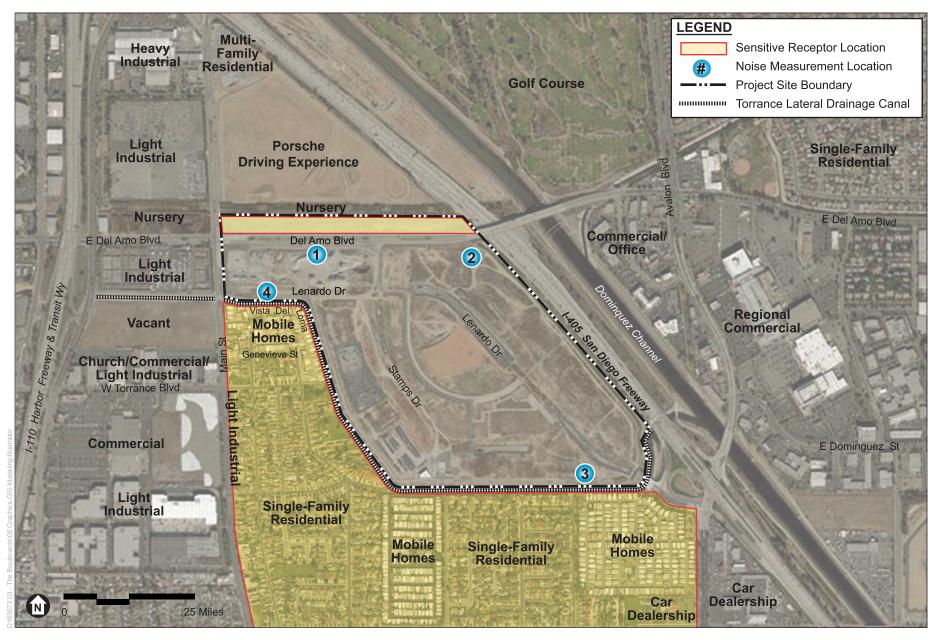
(1) Noise-Sensitive Receptors

Some land uses are considered more sensitive to intrusive noise than others, due to the types of activities typically involved at the receptor location. Specifically, the City of Carson has identified residences, public and private school classrooms, libraries, hospitals, and elderly care facilities as noise-sensitive receptors. As identified in the FEIR, the nearest sensitive residential receptors that may be affected by the proposed modified Project are the one- and two-story detached residences and mobile homes that are located across the Torrance Lateral Channel to the south and west of the Property. A residential use has been approved for DD3, across Del Amo Boulevard from the area of the proposed modified Project. Although this development is a part of the overall approved Project area and, therefore, considered an on-site receptor, potential impacts to this future residential use has been analyzed even though not required by CEQA. The noise-sensitive land uses in the Project area are depicted in **Figure IV.H-1, Noise-Sensitive Receptors and Measurement Locations**.

(1) Ambient Noise Levels

(a) 2017 Ambient Noise Levels

As was done with the FEIR, ambient sound measurements were again conducted around the perimeter of the Property to characterize the existing noise environment in the Property vicinity in August 2017. A combination of short- and long-term ambient sound measurements were conducted between August 3 and August 4, 2017. Ambient sound measurements were conducted at the same four locations around the Property as the 2005 survey used for the FEIR to provide an updated existing noise environment and are also shown in Figure IV.H-1.



SOURCE: Keyhole, 2004 The District at South Bay

Figure IV.H-1
Noise-Sensitive Receptors and Measurement Locations



Sound measurement data are summarized in **Table IV.H-1, Summary of Ambient Noise**Measurement Data (dBA)—Proposed Modified Project Supplement (2017). As shown in

Table IV.H-1, the measured CNEL on the Property was 81.8 dBA at measurement location R2.

CNEL is the average A-weighted noise level during a 24-hour day and is the appropriate unit of measurement to analyze amount noise. This location is relatively close to the I-405 Freeway, and like in 2005, there are currently no noise-sensitive land uses at or near that location. The CNEL at the location near the neighboring mobile home park to the southeast is 57.7 dBA (Location R3 on Figure IV.H-1), an ambient level consistent with the City of Carson's exterior noise standard limits for sensitive receptors (see FEIR Table 45 [DEIR p. 422]) and considered "conditionally acceptable" based on the City's community noise/land use compatibility criteria. The measured ambient noise levels at R1 and R2 measured in 2017 are higher than the measured ambient noise levels at R3 and R4 are lower than the measured ambient noise levels at R3 and R4 in 2005.

To further characterize the updated existing noise environment in the Project area, the noise level from traffic on local roadways was forecasted using the 2017 traffic data included within the proposed modified Project's transportation impact analysis (TIA) (Appendix D, Transportation Impact Analysis, to this SEIR). The FEIR utilized the Federal Highway Administration (FHWA) roadway traffic noise prediction model (RD-177-108), which is no longer recommended by FHWA due to outdated data and limitations with the database. Roadway noise impacts for the proposed modified Project were evaluated using the Caltrans Technical Noise Supplement (TeNS) method based on the roadway traffic volume data provided in the TIA prepared for the proposed modified Project by Fehr & Peers.² Similar to the previously used model, this method allows for the definition of roadway configurations, barrier information (if any), and receiver locations. However, the TeNS method includes advancements in methodology and technology for noise prediction and barrier analysis and design.³ The model determines a predicted noise level through a series of adjustments to a reference sound level. To compute the L_{eq} during the peak hour of traffic, several parameters (such as traffic volumes, roadway geometry, and vehicle speed and mix) were input into the model for each roadway segment analyzed. Table IV.H-2, Calculated Traffic Noise Level for Existing Conditions—Proposed Modified Project Supplement (2017), summarizes the traffic noise modeling results for existing conditions.

² SEIR Appendix D, Fehr & Peers, The District at South Bay Transportation Impact Analysis, September 2017.

³ Federal Highway Administration. Traffic Noise Model. https://www.fhwa.dot.gov/Environment/noise/traffic_noise_model/. Accessed September 2017.

Table IV.H-1
Summary of Ambient Noise Measurement Data (dBA)—Proposed Modified Project Supplement (2017)

		Monitoring Data							
		Distance of	ance of $\begin{tabular}{ l l l l l l l l l l l l l l l l l l l$				ırly L _{eq}		
Location Number ^a	Measurement Location ^a / Representative Receptor ^b	Receptor to Property ^b	Avg.	Min.	Max.	Avg.	Min.	Max.	CNEL
R1	South of Del Amo Blvd/ Residential DD3	125	72.7	66.3	73.2	N/A	N/A	N/A	N/A
R2	Northeast, west of I-405/ No sensitive receptor	N/A	74.3	68.6	78.1	75.3	72.0	78.1	81.8
R3	Southeast portion of Property north of Channel/Mobile homes south of Channel	175	55.2	49.2	63.9	49.6	44.1	53.3	57.7
R4	Northwest portion of Property north of Channel/Mobile homes south and west of Channel	150	58.9	52.6	68.3	N/A	N/A	N/A	N/A

NOTES:

Based on ambient sound measurements conducted from August 3 through August 4, 2017. Noise measurement data is provided in Appendix H, Noise Worksheets, of this SEIR. Short-term daytime measurements were taken at R1 and R4. Therefore, nighttime data is not available for R1 and R4.

SOURCE: ESA, 2017.

^a Noise measurement locations are shown on Figure IV.H-1.

^b Although noise measurements were taken on the Property boundary, measured noise levels are representative of the ambient noise level at nearby receptors.

Table IV.H-2

Calculated Traffic Noise Level for Existing Conditions—Proposed Modified Project Supplement (2017)

	Peak Hour L _{eq} (dBA) Adjacent	8	Existing CNE at Referenced m Roadway Ri	
Roadway Segment	to Right-of-Way	Adjacent	50 feet	100 feet
DEL AMO BOULEVARD				
East of Stamps Drive	72.5	73.7	69.5	67.4
Stamps Drive and S. Main Street	72.5	73.7	69.5	67.4
S. Main Street and Figueroa Street	72.1	73.3	69.0	66.9
SOUTH MAIN STREET				
North of Del Amo Boulevard	69.7	70.9	67.2	65.2
Del Amo Boulevard and Lenardo Drive	70.2	71.4	67.6	65.6
Lenardo Drive and Torrance Boulevard	69.8	71.0	67.5	65.5
Torrance Boulevard and 213th Street	70.0	71.3	67.7	65.8
213th Street and Carson Street	69.7	70.9	67.4	65.4
TORRANCE BOULEVARD				
Figueroa Street and South Main Street	69.1	70.3	66.6	64.6
East of South Main Street	60.8	62.0	57.3	55.1
213TH STREET				
South Main Street and Avalon Boulevard	69.5	70.7	66.0	63.8
West of Avalon Boulevard	68.6	69.9	65.1	62.9
CARSON STREET				
Figueroa Street and South Main Street	68.1	69.3	65.7	63.8
South Main Street and Avalon Boulevard	68.0	69.2	65.8	63.9
Avalon Boulevard and I-405 SB Ramps	72.3	73.5	69.2	67.1
AVALON BOULEVARD				
Del Amo Boulevard and I-405 NB Ramps	72.9	74.2	69.9	67.8
I-405 SB Ramps and 213th Street	72.3	73.5	69.3	67.2
213th Street and Carson Street	71.1	72.4	68.1	66.0
South of Carson Street	70.9	72.1	68.7	66.8

NOTES:

Noise modeling output files and assumptions, which include traffic volumes and vehicular fleet mix, are detailed in SEIR Appendix H.

SOURCE: ESA, 2017.

As shown in Table IV.H-2, the calculated CNEL for the analyzed roadway segments as a result of existing traffic volumes ranged from 57.3 dBA to 69.9 dBA at 50 feet from the roadway right-of-way. These levels are predicted based on surface-street traffic volumes only and are generally lower than the measured noise levels provided in Table IV.H-1. This is due to the fact that the Property is currently undeveloped, therefore, the area receives unshielded noise from I-405 Freeway traffic, which increases the overall noise level experienced by the local community. Nevertheless, the roadway traffic noise levels, shown in Table IV.H-2, indicate that all land uses located near the Property, with the exception of residents south of Torrance Boulevard, are currently exposed to community noise levels above 65 CNEL. As such, these noise levels exceed the City of Carson's exterior noise standard limits for sensitive receptors (see FEIR Table 47 [DEIR p. 426]); and are considered "conditionally acceptable" based on the City's community noise/land use compatibility criteria. According to the roadway noise prediction model, CNEL of approximately 73.7 dBA occurs at the edge of Del Amo Boulevard (between South Main Street and e/o Stamps Drive) along the northern boundary of the Property and 73.5 dBA along Avalon Boulevard (between the I-405 Freeway and 213th Street) adjacent to the existing mobile homes. This CNEL is considered "normally unacceptable;" however, noise levels would be reduced at areas farther away from the edge of these two roadways. When compared to the traffic noise levels in 2005, ranging from 56.7 dBA to 67.1 dBA, 2017 existing traffic noise levels ranging from 57.3 dBA to 69.9 dBA are slightly increased from 2005 likely do to ambient regional growth leading to increases in traffic volumes (see FEIR Table 51 [DEIR p. 431] for calculated traffic noise levels under 2005 conditions).

3. PROJECT IMPACTS

a. Methodology

As discussed in greater detail in Chapter II, Modified Project Description, the purpose of this SEIR is to evaluate the changes considered by the proposed modified Project to the previously approved Project, and to determine whether changes in circumstances surrounding the Property and the approved Project (if any), and new information (if any), require further analysis under CEQA. Specifically, the methodology used is to comparatively analyze the approved Project with the proposed modified Project to determine if (1) substantial changes are proposed in the proposed modified Project that would require major revisions to the FEIR; (2) substantial changes arise in the circumstances of the proposed modified Project's undertaking, requiring major revisions to the FEIR; or (3) new information appears that was not known or available at the time the FEIR was certified. In doing so, the underlying methodology of impacts regarding noise and vibration has been carried forward from the FEIR, and has been updated to reflect the Property's existing condition as well as any changes in regulatory requirements.

This SEIR is using the same type of methodology for the analysis of construction noise, operational noise, and vibration as was used in the FEIR (see FEIR [DEIR pp. 431–433] for

expanded discussion of methodology). The FEIR utilized the FHWA roadway traffic noise prediction model (RD-177-108), which is no longer recommended by FHWA due to outdated data and limitations with the database. Roadway noise impacts for the proposed modified Project were evaluated using the Caltrans TeNS method based on the roadway traffic volume data provided in the TIA prepared for the proposed modified Project by Fehr & Peers. Similar to the previously used model, this method allows for the definition of roadway configurations, barrier information (if any), and receiver locations. However, the TeNS method includes advancements in methodology and technology for noise prediction and barrier analysis and design. Roadway noise attributable to proposed modified Project development was calculated and compared to baseline noise levels that would occur under the "Without Project" condition.

b. Thresholds of Significance

Thresholds of significance have not changed from those used in the FEIR, and remain the same. Significance thresholds for construction and operational noise and vibration are listed below.

(1) Construction Noise

Based on the City of Carson standards discussed above, the proposed modified Project would have a significant impact on noise levels during Project construction if:

- Construction activities lasting 20 days or less would exceed a maximum noise level of:
 - 75 dBA at single-family residential uses and 80 dBA at multi-family residential uses, between the hours of 7:00 a.m. and 8:00 p.m. Monday through Saturday;
 - 60 dBA at single-family residential uses and 64 dBA at multi-family residential uses, between the hours of 8:00 p.m. and 7:00 a.m. on Sunday or a national holiday.
- Construction activities lasting more than 20 days would exceed a maximum noise level of:
 - 65 dBA at single-family residential uses and 70 dBA at multi-family residential uses, between the hours of 7:00 a.m. and 8:00 p.m. Monday through Saturday;
 - 55 dBA at single-family residential uses and 60 dBA at multi-family residential uses, between the hours of 8:00 p.m. and 7:00 a.m. Monday through Saturday or any time on Sunday or a national holiday.

⁴ SEIR Appendix D, Fehr & Peers, The District at South Bay Transportation Impact Analysis, September 2017.

Federal Highway Administration. Traffic Noise Model. https://www.fhwa.dot.gov/Environment/noise/traffic_noise_model/. Accessed September 2017.

(2) Operational Noise

Based on the City of Carson General Plan and the City of Carson Municipal Code standards discussed above and in the FEIR, the proposed modified Project would have a significant impact on noise levels during Project operations if:

- The Project causes the ambient noise level measured at the property line of affected uses to increase by 5 dBA in CNEL within the "normally acceptable" or "conditionally acceptable" category, or by 3 dBA in CNEL to or within the "normally unacceptable" or "clearly unacceptable" category.
- On-site noise sources, other than roadway noise, increase ambient noise by 5 dBA, thus causing a violation of the City Noise Ordinance.

(3) Ground-Borne Vibration

As discussed in the FEIR, the City of Carson does not have adopted policies or standards for construction or operational ground-borne vibration. However, the Federal Transit Authority (FTA) provides a construction equipment vibration damage threshold criterion of 0.20 inch per second (in/s) PPV for fragile buildings (USDOT 1995) and 2.0 in/s PPV for well-engineered structures (Caltrans 1992). Thus, an exceedance of the FTA standard for fragile buildings (conservatively assumed applicable to residential uses south and west of the Torrance Lateral Channel) and well-engineered structures (applicable to the future construction in DD3) was used to determine construction related ground-borne vibration impacts. Therefore, impacts relative to ground-borne vibration would be considered significant if the following were to occur:

- Project construction activities generate ground-borne vibration levels above 0.2 in/s PPV for mobile home residences (e.g., the single-family residential structures located south and west of the Property) and 2.0 in/s PPV for well-engineered structures (e.g., the future residential structures within DD3).
- Project operational activities generate a ground-borne vibration level of 0.01 RMS or higher at any off-site structure.

c. Proposed Modified Project Design Features

The FEIR addressed land use compatibility for siting proposed residential use along Del Amo Boulevard and in close proximity to the I-405 Freeway. In light of *California Building Industry Association v. Bay Area Air Quality Management District (CBIA v. BAAQMD)*, in which the Supreme Court held that "agencies subject to CEQA generally are not required to analyze the impacts of existing environmental conditions on a project's future users or

⁶ As discussed previously, three mobile home parks are located to the southwest of the Property. Mobile home building code requirements are different than standard wood-frame construction. Thus, the more conservative vibration significance threshold for fragile buildings was selected for use in this analysis as was also done for the FEIR.

residents," the impact of surrounding roadways on proposed on-site residential uses has not been, and is not required to be, evaluated in this SEIR.

d. Analysis of Project Impacts

(1) Construction Impacts

(a) Construction Noise

Similar to the FEIR, construction activities would include site preparation, on-site remediation, and site construction. Compared to the FEIR construction schedule (see FEIR [DEIR p. 99]) of approximately 4 years, construction activities for the proposed modified Project are assumed to occur over 32 months with overlapping phases for a conservative analysis. Given the reduction in over 160,000 square feet of commercial uses as compared to the approved Project, overall total construction for the proposed modified Project should likewise be reduced in comparison. As discussed in the FEIR, development of the former landfill site would require Deep Dynamic Compaction (DDC)⁷ activities. As such, site preparation would involve mass grading, DDC, fill and cap installation, grading and the construction of building pads as described in the FEIR (see FEIR [DEIR pp. 434–435]). Although much of this has been subsequently completed as further discussed below, additional DDC activities may be required to consolidate loosely packed soil and landfill waste in locations not previously subject to DDC.

(i) On-Site Construction Noise

a) Deep Dynamic Compaction

Approximately 68 acres of the Property has undergone DDC since certification of the FEIR. DDC may be necessary in other areas. Figure IV.E-1, Deep Dynamic Compaction Areas, shows the areas where DDC has previously been performed. Where DDC may be necessary, DDC must be completed before pile driving can occur. As discussed in the FEIR (see FIER [DEIR p. 437]), a DDC test report was conducted and found that a noise level of up to 65 dBA Leq would be reached at a distance of 500 feet. Noise propagates over distance at a rate of 6 dBA for each doubling of distance. Similarly, noise would increase at a rate of 6 dBA for each halving of distance. Based on this, the noise reference level from one DDC rig is estimated to be 85 dBA Leq at 50 feet.

During previous DDC activities, three compactors and associated dozers were used over a total area of 0.75 acre per day. The area of the Property closest to the off-site property line (the south side of the Torrance Lateral Channel for R3 and R4 and the north side of Del Amo

Deep dynamic compaction is a site preparation method used for compacting and strengthening loose or soft soils to support buildings, roadways, and other heavy construction. The method involves the systematic and repetitive dropping of heavy weights in a pattern designed to remedy poor soil conditions at a proposed building site. Because the energy imparted is considerable, compaction can be achieved at substantial depths below the ground surface.

Boulevard for R1), which is the closest distance at which DDC activities can occur, is 100 feet from R1 and 120 feet from R3 and R4. Assuming that one DDC rig and associated dozer operates at 100 feet from R1 and 120 feet from R3 and R4, noise levels would reach 80 dBA L_{eq} at R1 and 78 dBA L_{eq} at R3 and R4. As summarized in **Table IV.H-3, Unmitigated Construction Noise Levels**, this would result in increases in ambient noise of 8.0 dBA L_{eq} at R1, 22.8 dBA L_{eq} at R3, and 19.2 dBA L_{eq} at R4 (see Section [d] in Table IV.H-3 for mitigated construction noise levels).

Table IV.H-3
Unmitigated Construction Noise Levels

_		Noise Levels, dBA	
On-Site Construction Noise Sources	R1	R3	R4
(a) Existing (Ambient) Noise Level ^a	72.7	55.2	58.9
(b) Unmitigated Construction Noise			
Deep Dynamic Compaction – 1 Rig	80.0	78.0	78.0
Deep Dynamic Compaction – 3 Rigs	82.0	81.0	81.0
Pile Driving	96.0	95.0	95.0
Pile Driving (3 Rigs) & DDC (3 Rigs)	95.0	94.0	94.0
General Construction	83.0	81.0	81.0
(c) Existing + Unmitigated Construction Noise ^b			
Deep Dynamic Compaction – 1 Rig	80.7	78.0	78.1
Deep Dynamic Compaction – 3 Rigs	82.5	81.0	81.0
Pile Driving	96.0	95.0	95.0
Pile Driving (3 Rigs) & DDC (3 Rigs)	95.0	94.0	94.0
General Construction	83.4	81.0	81.0
(d) Difference from Existing Noise Level (c-a)			
Deep Dynamic Compaction – 1 Rig	8.0	22.8	19.2
Deep Dynamic Compaction – 3 Rigs	9.8	25.8	22.1
Pile Driving	23.3	39.8	36.1
Pile Driving (3 Rigs) & DDC (3 Rigs)	22.3	38.8	35.1
General Construction	10.7	25.8	22.1

NOTES:

SOURCE: ESA, 2017.

Assuming three DDC rigs and associated dozers operating simultaneously but located approximately 50 feet from each other measured north to south, DDC activities would result in noise levels of 82 dBA L_{eq} at R1 and 81 dBA L_{eq} at R3 and R4. This would result in increases in

^a Based on ambient noise measurements listed in Table IV.H-1.

b Noise levels are added logarithmically.

ambient noise of 9.8 dBA L_{eq} at R1, 25.8 dBA L_{eq} at R3, and 22.1 dBA L_{eq} at R4, as would be expected under the approved Project.

The proposed modified Project would have a significant impact on noise during DDC activities if noise levels exceed 65 dBA at single-family residential uses and 70 dBA at multiple-family residential uses between the hours of 7:00 a.m. and 8:00 p.m. Noise levels associated with DDC activities would exceed 65 dBA at R3 and R4 and exceed 70 dBA at R1 (see Section [b] in Table IV.H-3 for mitigated construction noise levels). Like the approved Project, potentially significant impacts related to DDC noise levels at R3 and R4 would occur without implementation of mitigation. Because residential uses within DD3 have been recently approved and not analyzed in the FEIR, because DD3 was a part of the approved Project and analysis of project-on-project impact is not required, DDC activities would result in a new potentially significant impact at R1 (DD3).

b) Pile Driving

The FEIR anticipated that pile driving would occur in the southern and western sections of the Property, potentially exposing nearby residences to short-duration, high impulse noise levels (L_{max}) that would exceed CMC limits without the incorporation of mitigation measures. Pile driving activities would generally occur in similar locations as were anticipated for the approved Project.

As shown in the FEIR (see FEIR Table 53 [DEIR p. 438]), pile driving is anticipated to generate average hourly noise levels of up to 99 dBA L_{eq} at a distance of 50 feet. Assuming that up to seven pile drivers would be operational simultaneously at distances from 120 to 420 feet (at increasing distances from receptors of 50 feet) from Receptors R3 and R4 and from distances of 100 to 400 feet from Receptor R1, noise levels could reach 95 dBA L_{eq} and 96 dBA L_{eq}, respectively (see Table IV.H-3), which is consistent with noise levels anticipated in the FEIR (see FEIR [DEIR p. 439]).

The proposed modified Project would also include pile driving within the eastern portion of the Property (Planning Area [PA] 2), which was not directly assessed in the FEIR. However, the closest residences to the south (R3) are located approximately 300 feet from the proposed PA 2. As a result, noise levels reaching R3 and R4 as a result of pile driving activities within PA 2 would be lower than anticipated from pile driving activities occurring within PA 3 analyzed in the FEIR and as discussed above, which is in closer proximity to the residences. The additional pile driving activity within PA 2 would be in close proximity to approved residential uses within DD3. As discussed above, the simultaneous operation of seven pile drivers at various distances from 100 to 400 feet at R1 would generate noise levels up to 96 dBA L_{eq} and would generate noise levels up to 95 dBA L_{eq} at R3 and R4 at various distances from 120 to 420 feet.

Due to approval of a sensitive uses within DD3, the proposed additional pile driving within PA 2 and previously anticipated pile driving within PA 1 would result in a new, not

previously analyzed, impact on the future residential uses within DD3. Noise levels associated with pile driving would result in increases over ambient noise levels greater than 5 dBA (see Section [d] in Table IV.H-3 for mitigated construction noise levels).

The proposed modified Project would have a significant impact on noise during pile driving activities if noise levels exceed 65 dBA at single-family residential uses and 70 dBA at multiple-family residential uses between the hours of 7:00 a.m. and 8:00 p.m. Noise levels associated with pile driving would exceed 65 dBA at R3 and R4 and exceed 70 dBA at R1 (see Section [b] in Table IV.H-3 for mitigated construction noise levels). Like the approved Project, potentially significant impacts related to pile driving noise levels at R3 and R4 would occur without implementation of mitigation. Because residential uses within DD3 have been recently approved and not analyzed in the FEIR, because DD3 was a part of the approved Project and analysis of project-on-project impact is not required, pile driving would result in a new potentially significant impact at R1 (DD3).

c) Concurrent DDC and Pile Driving

DDC must be completed before the active work area can be graded and piles driven. As analyzed above, multiple crews may be working concurrently throughout a specific planning area or across the entire 157-acre Property. Therefore, this SEIR analyzes DDC and pile driving activities occurring concurrently in adjacent work areas. Noise levels experienced from concurrent use of three DDC rigs, three dozers, and three pile drivers at locations between 100 and 200 feet (spaced at distances increasing by 50 feet from each receptor) from R1 would reach 95 dBA Leq and at locations between 120 and 220 feet from R3 and R4 would be 94 dBA Leq. Impacts during concurrent DDC and pile driving occurring within the same 100-foot area would be within the impact levels for pile driving alone. Like the approved Project, these levels would be with respect to R3 and R4. Because residential uses within DD3 have been recently approved and not analyzed in the FEIR, because DD3 was a part of the approved Project and analysis of project-on-project impact is not required, concurrent DDC and pile driving would result in a new potentially significant impact at R1 (DD3).

d) General Construction Noise

As with most construction projects, construction would require the use of a number of pieces of heavy equipment such as impact soil compactors (for DDC operations), pile drivers, bulldozers, backhoes, cranes, loaders, and concrete mixers. In addition, both heavy- and light-duty trucks would be required to deliver construction materials to and export construction debris from each construction site. Although construction activities would be similar to those analyzed in the FEIR, worst-case construction noise has been analyzed for the proposed modified Project. With the exception of pile driving and DDC, composite construction noise (i.e., the noise generated from multiple pieces of construction equipment working concurrently) was estimated using the FHWA's Roadway Construction Noise Model (RCNM), and was based on a maximum concurrent operation

of up to 94 pieces of heavy construction equipment (e.g., cranes, loader, forklift, tractor trailer, welders, etc.), which is considered a worst-case evaluation because the proposed modified Project would typically use less overall equipment concurrently, and as such would generate lower noise levels. In addition, the combined noise levels were estimated assuming that construction activities for the PA 1, PA 2, and PA 3 would overlap.

Based on the existing setting in 2005, there were no sensitive receptors located at locations R1 or R2. Therefore, construction impacts were only analyzed at Receptors R3 and R4. As discussed in the FEIR, the estimated aggregate construction noise levels during the heaviest periods of activity at receptors R3 and R4 was 75.2 dBA and 76.5 dBA (hourly Leq), respectively, during the heaviest periods of construction. This was equivalent to an increase of 11.5 dBA and 6.9 dBA, respectively, over the baseline ambient noise level (Leq). As the worst-case hourly Leq exceeds the ambient noise levels by more than the 5 dBA incremental significance threshold, construction of the approved Project was determined to result in a significant impact to off-site sensitive receptors without the incorporation of mitigation measures.

Similar to 2005 conditions, the nearest sensitive receptors with potential to be disturbed by construction activities currently include the residential areas, consisting of the one-story and two-story detached residences and mobile homes, located to the south (R3) and west (R4) of the Property. A 300-unit residential development located within DD3, which is a part of the overall Project site, has been entitled for construction. Assuming that all heavy-duty construction equipment operates concurrently near the property line, worst-case noise levels could reach up to 83 dBA at Receptor R1 and 81 dBA at Receptors R3 and R4. As construction activities move away from the Project boundary and toward the center of the Property, maximum noise levels reaching the sensitive receptors would diminish considerably.

Because current (2017) ambient noise is approximately 10 dBA lower than it was in 2005, increases in ambient noise due to similar construction activities would be more noticeable. Should anticipated construction noise associated with the proposed modified Project be compared against 2005 ambient noise levels, impacts would be similar to those as analyzed for the approved Project. Similarly, should impacts associated with the approved Project be compared against current (2017) ambient noise levels, impacts would be similar to those as analyzed herein for the proposed modified Project.

As shown in Table IV.H-3, the residences located to the south (R3) and west (R4) of the Property immediately across the Torrance Lateral Channel, would occasionally experience construction noise levels of 81 dBA (hourly Leq), during the heaviest periods of construction. This is equivalent to an increase over ambient conditions of 25.8 dBA and 22.1 dBA at Receptors R3 and R4, respectively. Assuming that approved residences in DD3 (R1) are built and occupied during Project construction, noise levels of 83.0 dBA Leq, an increase of 10.7 dBA over the ambient baseline, would be experienced. As the worst-case hourly Leq exceeds the

ambient noise levels by more than the 5 dBA incremental significance threshold, similar with the approved Project analyzed for R3 and R4, construction of the proposed modified Project would be determined to result in a significant impact to off-Property sensitive receptors without the incorporation of mitigation measures (see Section [d] in Table IV.H-3 for mitigated construction noise levels). Because residential uses had not been approved within DD3 at the time of FEIR certification, impacts at R1 were not analyzed. Therefore, the proposed modified Project would result in a new, not previously analyzed impact related to construction noise at Receptor R1. However, mitigation measures remain applicable as discussed in Section IV.H.4, Mitigation Measures, below.

The proposed modified Project would have a significant impact on noise during construction if construction activities lasting more than 20 days would exceed 65 dBA at single-family residential uses (R3 and R4) and 70 dBA at multiple-family residential uses (R1) between the hours of 7:00 a.m. and 8:00 p.m. General construction activities would result in increases in ambient noise of over 5 dBA and would exceed 65 dBA at R3 and R4 and exceed 70 dBA at R1 (see Section [b] in Table IV.H-3 for mitigated construction noise levels). Like the approved Project, potentially significant impacts related to general construction noise levels at R3 and R4 would occur without implementation of mitigation. Because residential uses within DD3 have been recently approved and not analyzed in the FEIR, because DD3 was a part of the approved Project and analysis of project-on-project impact is not required, pile driving would result in a new potentially significant impact at R1 (DD3).

(ii) Off-Site Construction Noise

Similar to the approved Project, in addition to on-site construction noise, haul trucks, delivery trucks, and construction workers would still require access to the Property throughout the construction duration. While construction workers would arrive from many parts of the region, and thus different directions, haul trucks and delivery trucks would still generally travel to the Property via the I-405 Freeway ramps at Avalon Boulevard (northbound travel) and Main Street (southbound travel), thus avoiding local streets with sensitive receptors. The proposed haul route has not been modified and is anticipated to follow the same route approved for the approved Project. Furthermore, as was contemplated for the approved Project, construction traffic would also not be present during the noise-sensitive late evening and nighttime hours. As such, the proposed modified Project would not result in any new significant off-site construction noise as compared to the approved Project.

(iii) Impacts Due to Implementation of Proposed RAP Design Refinements

Similar to the approved Project, construction activities required to implement the approved RAP would involve rough grading of the Property and the installation of a cap over the waste prism. As discussed above, DDC, rough grading, and membrane installation has occurred on approximately 68 acres of the Property. The FEIR analyzed the impacts of implementing

RAP design refinements including a geomembrane landfill cap instead of a clay cap. Construction of a clay cap would require that 2,000 cubic yards of clay be hauled to the Property per day while the geomembrane cap would not. Therefore, the certified FEIR concluded that impacts associated with off-Property construction noise would be reduced with implementation of the geomembrane cap. The proposed modified Project would also implement a geomembrane cap, consistent with the proposed design refinements proposed and approved as part of the FEIR. As such, the proposed modified Project would not result in any new impacts due to the implementation of proposed RAP design refinements as compared to the approved Project.

(b) Construction Vibration

As discussed in the FEIR (see FEIR [DEIR pp. 440–441]), construction activities that would generate the highest vibration includes pile driving and DDC activities.

(i) DDC

As discussed in the FEIR, DDC may be required in areas not previously compacted. Pursuant to Mitigation Measure H-2 of the FEIR, a DDC Pilot Program was performed in April 2008 by Tetra Tech to observe and review vibration impacts of DDC activities. The testing procedures consisted of dropping increasing weights at increasing heights with concurrent checking of monitored levels so as to ensure that off-site vibration levels do not exceed the 0.2 in/s PPV significance threshold for fragile buildings on the residential side of the Torrance Lateral Channel. Based on review of survey data, it was recommended that the DDC design be altered to minimize the depth of the craters. Subsequent to the pilot test, DDC was performed on approximately 68 acres of the Property from October 13, 2008, through December 11, 2008, and intermittently from May 19, 2009 through September 11, 2009. Pursuant to Mitigation Measure H-3 of the FEIR, continuous vibration monitoring was conducted during DDC activities. Tetra Tech prepared a Deep Dynamic Compaction Report detailing the DDC scope and monitoring results. According to the DDC Report, continuous vibration monitoring allowed the crew to adjust the drop height to reduce vibration levels when the maximum 0.2 in/s PPV significance threshold for fragile structures was approaching. Therefore, the proper methodology to ensure that vibration levels do not exceed 0.2 in/s PPV is already in place. Reducing the drop height when DDC vibration levels reach the 0.2 in/s PPV threshold would still allow DDC to be completed along the Project boundary while ensuring that impacts to vibration-sensitive structures are minimized.

It is anticipated that the proposed modified Project would require DDC activities on additional areas of the Property (see Figure IV.E-1). It is possible that DDC may occur at distances closer to R3 and R4 than compacted before. FEIR Mitigation Measure H-2 requiring a

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⁸ Tetra Tech, Deep Dynamic Compaction Report for The Boulevards at South Bay, April 2012

Pilot Program, although performed in 2008, will remain applicable in order to adequately address groundborne vibration concerns related to DDC in areas closer to R3 and R4. The DDC contractors shall follow the requirements and methodology put forth in Mitigation Measure H-2 at distances nearest the sensitive receptors. With implementation of Mitigation Measures H-2 and H-3, no new impacts would occur.

Assuming the recently approved residential use within DD3 (R1) would be occupied during DDC activities, potential new impacts related to R1 would occur. Because DD3 will consist of new construction, the residential structures would be considered well-engineered. The significance threshold for structural damage for well-engineered structures is 2.0 in/s PPV. DDC activities near boundaries of the Property would not exceed the 2.0 in/s PPV significance threshold for well-engineered structures with continued vibration monitoring as required by Mitigation Measure H-3, and a less than significant short-term vibration impact to DD3 would occur.

(ii) Pile Driving

Impacts related to groundborne vibration would be significant if pile driving activities would result in vibration levels greater than 0.2 in/s PPV at the mobile home residences to the west and south of the Property and 2.0 in/s PPV to future occupied residential uses within DD3. Residential land uses would be located at a sufficient distance (greater than 75 feet) from any potential pile driving activity so that vibration from such activities would be below the peak particle velocity threshold of 2.0 in/s for R1 and 0.2 in/s for R3 and R4. In addition, as discussed in the FEIR, the vibration associated with pile driving would be substantially reduced due to the lower density of material on the Property (i.e., trash with soil cover versus compact soils with rock) and the intervening Torrance Lateral (i.e., impeding transmission of surface waves and higher-amplitude motion from pile driving). Additionally, the piles will be predrilled through the trash layer to an approximate depth of 50 feet below the surface. When native soil is reached at approximately 50 feet below the surface, the piles will be driven approximately 15 to 20 additional feet. Having the piles predrilled and not driven until depths of approximately 50 feet below the surface would reduce ground-borne vibration impacts considerably.

Piles were driven on the Property near the southern boundary, directly across the Torrance Lateral Channel from neighboring mobile homes, and vibration levels were monitored. Vibration levels monitored at the residential side of the channel, approximately 150 feet from the piles, reached vibration levels of up to 0.14 in/s PPV, which is below the 0.2 in/s PPV threshold for fragile structures. As pile driving activities move further away from the Property boundary and toward the center of the Property, vibration levels at sensitive receptors would be reduced. The operation of multiple pile drivers would not result in increased vibration levels experienced

⁹ KFM GeoScience, Pile Driving Vibration Monitoring Report for Landfill Operations Center (LOC), August 30, 2010.

at neighboring receptors. According to information provided by the construction contractor, pile driving cannot occur in close proximity to another vibratory source. Therefore, should multiple pile drivers operate concurrently, the construction crew will arrange the equipment as necessary to ensure efficient and proper installation of the piles. Because vibration levels diminish as the distance to sensitive receptors increases and multiple pile drivers are assumed to be spread out within the site at distances of 50 feet or more, the operation of multiple pile drivers would not result in cumulative vibration impacts.

Due to approval of a sensitive use within DD3, the proposed additional pile driving within PA 2 and previously anticipated pile driving within PA 1 would result in a new, not previously analyzed, because DD3 was a part of the approved Project and analysis of project-on-project impact is not required, impact on the future occupied residential uses within DD3. According to the FEIR (see FEIR [DEIR p. 440]), potential vibration velocities could reach the 0.2 in/s PPV threshold for fragile buildings within 75 feet of the vibration activity. Like the approved Project, the proposed modified Project would not conduct vibratory pile driving for PA 1 or PA 2 within 75 feet of sensitive uses, including DD3. The applicable threshold at DD3, well-engineering structures, is 2.0 in/s PPV; therefore, vibratory pile driving would not occur at distances near enough to result in structural damage within DD3. The parking areas to the north and south of PA 2 would not require piles. Therefore, a majority of the work for PA 2 will occur nearest the I-405 Freeway and not closer to vibration-sensitive buildings than were previously analyzed in the FEIR and not within 75 feet of future occupied residential uses within DD3 (R1). Therefore, impacts related to additional pile driving activities within PA 2 and impacts not previously analyzed for R1 would be less than significant.

In order to ensure that pile driving activities do not exceed the 2.0 in/s PPV threshold at R1 (if DD3 is occupied) and 0.2 in/s PPV threshold at R3 and R4, Mitigation Measure H-3 has been modified to require that vibration monitoring is conducted during pile driving activities. Should vibration levels exceed 2.0 in/s PPV at the north side of Del Amo Boulevard (if DD3 is occupied) or 0.2 in/s PPV at the residential side of the Torrance Lateral Channel, all work shall halt until new parameters are established. Therefore, the proposed modified Project would not result any new significant impacts for construction vibration as compared to the approved Project with modification of mitigation.

(iii) Concurrent DDC and Pile Driving

The FEIR did not discuss the potential for concurrent DDC and pile driving. As discussed above, pile driving cannot occur in close proximity to another vibratory source. Therefore, should DDC and pile driving occur concurrently, the construction crew will arrange the equipment as necessary to ensure efficient and proper installation of the piles. Because vibration levels diminish as the distance to sensitive receptors increases and multiple pile drivers and DDC equipment are assumed to be spread out within the Property at distances of 50 feet or more, the

operation of multiple pieces of vibratory equipment would not result in cumulative vibration impacts. Further, modified Mitigation Measure H-3 requires continued vibration monitoring throughout DDC and pile driving activities to ensure that levels do not exceed the 2.0 in/s PPV threshold at the north side of Del Amo Boulevard (if DD3 is occupied) or the 0.2 in/s PPV threshold at the residential side of the Torrance Lateral Channel for structural damage. Therefore, impacts will be less than significant.

(2) Operational Impacts

(a) Operational Noise (Post-Construction)

(i) Off-Site Roadway Noise

The approved Project was forecasted to generate a maximum of 67,441 additional daily trips. Project-related traffic noise under existing conditions, future (2010) without development of the Project, and future (2010) with development of the Project was analyzed in the FEIR. Project-related traffic was not anticipated to increase traffic noise levels by any significance threshold.

According to the proposed modified Project's TIA, included as Appendix D to this SEIR, and summarized in Section IV.C, Traffic and Circulation, the proposed modified Project is forecasted to generate a maximum of 57,218 additional daily trips, which is a 15 percent reduction compared to the approved Project. Like the approved Project, traffic volumes associated with these proposed modified Project trips would have the potential to increase roadway noise levels on local roadways in and around the Property. **Table IV.H-4, Existing Roadway Traffic Noise Impacts at Representative Noise-Sensitive Locations**, provides the calculated CNEL for analyzed roadway segments for the existing and existing with proposed modified Project scenarios and **Table IV.H-5, Future (2023) Roadway Traffic Noise Impacts at Representative Noise-Sensitive Locations**, provides the calculated CNEL for analyzed roadway segments for the future (2023) without and future (2023) with proposed modified Project scenarios. In addition, the increase attributed to proposed modified Project-generated traffic volumes above existing noise levels is presented.

Table IV.H-4

Existing Roadway Traffic Noise Impacts at Representative Noise-Sensitive Locations

CNEL at 50 feet from Roadway Right-of-Way

	(dBA)	(dBA)	— Project
Roadway Segment	Existing	Existing With Project	Increment ^a
DEL AMO BOULEVARD			
East of Stamps Drive	69.5	70.3	0.8
Stamps Drive to South Main Street	69.5	71.4	1.9
South Main Street to Figueroa Street	69.0	71.2	2.2
SOUTH MAIN STREET			
North of Del Amo Boulevard	67.2	67.8	0.6
Del Amo Boulevard to Leonardo Drive	67.6	68.2	0.6
Leonardo Drive to Torrance Boulevard	67.5	68.7	1.2
Torrance Boulevard to 213th Street	67.7	68.3	0.6
213th Street to Carson Street	67.4	68.1	0.7
LEONARDO DRIVE			
East of South Main Street	b	64.9	b
TORRANCE BOULEVARD			
Figueroa Street and South Main Street	66.6	67.3	0.7
East of South Main Street	57.3	57.3	0.0
213TH STREET			
South Main Street and Avalon Boulevard	66.0	66.0	0.0
West of Avalon Boulevard	65.1	65.5	0.4
CARSON STREET			
Figueroa Street and South Main Street	65.7	66.5	0.8
South Main Street and Avalon Boulevard	65.8	66.3	0.5
Avalon Boulevard and I-405 SB Ramps	69.2	69.5	0.3
AVALON BOULEVARD			
Del Amo Boulevard and I-405 NB Ramps	69.9	70.1	0.2
I-405 SB Ramps and 213th Street	69.3	69.9	0.6
213th Street and Carson Street	68.1	69.3	1.2
South of Carson Street	68.7	68.8	0.1

NOTES:

Exterior 24-hour CNEL noise levels.

SOURCE: ESA, 2017.

^a Increase relative to traffic noise levels comparing existing conditions to existing with development of the proposed modified Project.

b Future intersection due to proposed modified Project development.

Table IV.H-5

Future (2023) Roadway Traffic Noise Impacts at Representative Noise-Sensitive Locations

	CNEL at 50 feet from Roa	Project	
Roadway Segment	Future (2023) No Project	Future (2023) With Project	Increment ^a
DEL AMO BOULEVARD			
East of Stamps Drive	69.7	70.5	0.8
Stamps Drive to South Main Street	69.7	71.6	1.9
South Main Street to Figueroa Street	69.3	71.3	2.0
SOUTH MAIN STREET			
North of Del Amo Boulevard	67.3	68.0	0.7
Del Amo Boulevard to Leonardo Drive	67.8	68.4	0.6
Leonardo Drive to Torrance Boulevard	67.6	68.8	1.2
Torrance Boulevard to 213th Street	67.9	68.5	0.6
213th Street to Carson Street	67.5	68.2	0.7
LEONARDO DRIVE			
East of South Main Street	b	64.9	b
TORRANCE BOULEVARD			
Figueroa Street and South Main Street	66.7	67.4	0.7
East of South Main Street	57.4	57.4	0.0
213TH STREET			
South Main Street and Avalon Boulevard	66.1	66.1	0.0
West of Avalon Boulevard	65.3	65.6	0.3
CARSON STREET			
Figueroa Street and South Main Street	66.1	66.8	0.7
South Main Street and Avalon Boulevard	66.2	66.7	0.5
Avalon Boulevard and I-405 SB Ramps	69.6	69.9	0.3
AVALON BOULEVARD			
Del Amo Boulevard and I-405 NB Ramps	70.1	70.3	0.2
I-405 SB Ramps and 213th Street	69.5	70.1	0.6
213th Street and Carson Street	68.4	69.5	1.1
South of Carson Street	68.9	69.0	0.1

NOTES:

Exterior 24-hour CNEL noise levels.

SOURCE: ESA, 2017.

^a Increase relative to traffic noise levels comparing future (2023) Pre-Project conditions to future (2023) with development of the proposed modified Project.

^b Future intersection due to proposed modified Project development.

As shown in Table IV.H-4 and Table IV.H-5, the greatest proposed modified Project-related traffic noise impact is anticipated to occur along the segments of Del Amo Boulevard, between Stamps Drive and Figueroa Street (1.9 to 2.2 dBA increase in CNEL under existing conditions and 1.9 to 2.0 dBA increase in CNEL under future conditions). Based on the thresholds used in the FEIR, the proposed modified Project would have a significant impact if the proposed modified Project causes the ambient noise level measured at the property line of affected uses to increase by 5 dBA in CNEL within the "normally acceptable" or "conditionally acceptable" category, or by 3 dBA in CNEL to or within the "normally unacceptable" or "clearly unacceptable" category (see FEIR Table 45 [DEIR p. 422]). However, noise level increases above ambient for the proposed modified Project would be less than the 5 dBA and 3 dBA significance thresholds. Thus, the proposed modified Project would not result in any new significant impacts for off-Property roadway noise as compared to the approved Project. No mitigation is required.

(ii) Stationary Point-Source Noise

This section considers potential noise impacts to neighboring noise-sensitive properties related to specific noise sources associated with the operation of the proposed modified Project. Like the approved Project, such potential noise sources include:

- Mechanical equipment rooms (e.g., boiler, chiller, and emergency generator);
- Miscellaneous rooftop mechanical equipment;
- Loading dock and trash/recycling areas;
- Parking facilities, including voices, car alarms, car doors closing etc.; and
- Certain of the on-site uses permitted under the proposed Carson Marketplace Specific Plan (e.g., outdoor theater).

Consistent with the FEIR, a discussion of each of these noise sources is provided below, followed by a discussion of the potential composite noise level increase (due to multiple noise sources) at each sensitive receptor location.

a) Mechanical Equipment

Like the approved Project, proposed modified Project development would include mechanical equipment, which could generate noise levels that are audible at both on- and off-site noise-sensitive locations. As discussed in the FEIR (see FEIR [DEIR pp. 444–445]), this mechanical equipment would include noise control measures and shielding that would ensure that noise levels would not exceed 50 dBA during daytime hours and 45 dBA during nighttime hours at the nearest sensitive receptors. Based on the thresholds established by the FEIR, the operation of onsite mechanical equipment would have a significant impact on noise levels if equipment would increase ambient noise levels by 5 dBA. As shown in Table IV.H-1 and

Table IV.H-2, the existing ambient noise in the Project area is above the typical noise level generated by these pieces of equipment, it is anticipated that the noise level increase, if any, for the proposed modified Project would remain well below the 5 dBA L_{eq} (1-hour) significance threshold, or the 5 dBA CNEL significance threshold for conditionally acceptable noise environments. Therefore, the proposed modified Project would result in substantially the same impact (less than significant) as identified for the FEIR, and would not result any new significant impacts for mechanical equipment noise as compared to the approved Project.

b) Loading Dock and Waste Collection/Recycling Areas

Like the approved Project, the various operations-related activities within the commercial areas in PA 2 and PA 3 (e.g., loading, waste collection, cardboard compaction, etc.) would occur at several different locations within the Property. Based on standard design practices, these activities would occur mainly at the rear of the proposed on-Property structures.

Like the approved Project, and as specified in the SPA, all outdoor loading dock and trash/recycling areas would be fully or partially enclosed, or screened with portions of the building, architectural wing walls, and freestanding walls such that the line-of-sight between these noise sources and the noise-sensitive land uses would be obstructed by blocking the sound transmission path between the loading dock-area noise sources and nearby residential uses. Loading areas would be included within commercial portions of PA 2 and PA 3. Based on a noise survey conducted at a loading dock facility by ESA, loading dock and waste service activities (namely idling trucks and backup alarm beeps) would generate noise levels of approximately 70 dBA Leq at a reference distance of 50 feet from the noisiest portion of the truck (i.e., to the side behind the cab and in line with the engine and exhaust stacks). 10 Based on a noise level source strength of 70 dBA at a reference distance of 50 feet and accounting for barrier-insertion loss by proposed architectural wing walls (minimum 10 dBA insertion loss) and distance attenuation (minimum 6 dBA loss per doubling of distance), loading dock noise would be approximately 54 dBA at 100 feet (R1), 49 dBA at 175 feet (R3), and 50 dBA at 150 feet (R4). Noise levels would not exceed the 5 dBA hourly L_{eq} at 50 feet or the 5 dBA CNEL significance threshold for conditionally acceptable noise environments at the nearest off-site receptor. Therefore, the proposed modified Project would result in substantially the same impact (less than significant) as identified for the FEIR, and would not result any new significant impacts as compared to the approved Project.

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The loading dock facility noise measurements were conducted at a loading dock facility at a Wal-Mart store using the Larson-Davis 820 Precision Integrated Sound Level Meter ("SLM") in May 2003. The Larson-Davis 820 SLM is a Type 1 standard instrument as defined in the American National Standard Institute S1.4. All instruments were calibrated and operated according to the applicable manufacturer specification. The microphone was placed at a height of approximately 5 feet above the local grade.

c) Parking Facility Noise Levels

Like the approved Project, various noise events would also occur within the on-site surface parking lots as well as any covered parking that may be constructed within PA 1, PA 2, and PA 3. Within these parking facilities, the activation of car alarms, sounding of car horns, slamming of car doors, engine revs, and tire squeals would occur periodically. A summary of maximum noise levels contained in FEIR Table 58 (see FEIR [DEIR p. 447]) remains fully relevant as related to typical parking facility noise events. As summarized in FEIR Table 58, a composite noise level of 60 dBA L_{eq} (1-hour) at a reference distance of 50 feet would be typical of a parking facility, which is consistent with that anticipated for the approved Project. Pursuant to Mitigation Measure H-5 implemented by the FEIR, and modified herein, all parking lots shall be located at a minimum distance of 150 feet away from off-Property residential uses to the west and south unless an 8-foot wall is provided, which would remain the case for the proposed modified Project. The composite parking lot noise would be 54 dBA at R1, 49 dBA at R3, and 50 dBA at R4. This would be below the now existing daytime average ambient noise levels of 72.7 dBA, 55.2 dBA, and 58.9 dBA at these locations (see Table IV.H-1), respectively. Therefore, the proposed modified Project would result in substantially the same impact (less than significant) as identified for the FEIR, and would not result any new significant impacts as compared to the approved Project.

d) Noise Intensive Land Uses

Since certification of the FEIR, a landfill gas treatment flare station has been constructed and is operational. The impacts of the treatment flare were assessed by the Addendum to the FEIR, it is part of the approved Project, and no additional assessment for the construction and operation of this existing facility is required by CEQA. However, this SEIR reviewed the treatment flare for informational purposes to add context to the overall noise analysis. As further discussed in the Addendum, the landfill gas treatment flare station is located at the southwest side of the Property, approximately 160 feet from residential uses to the south across the Torrance Lateral Channel. According to the most recent May-June 2017 Monthly Air and Noise Monitoring Report provided by SCS Engineers, 11 average daily (7:00 a.m. to 6:00 p.m.) noise levels ranged from 51.1 dBA to 65.4 dBA, an average of 56.8 dBA, which would be equivalent to 53.4 dBA CNEL, which would be "normally acceptable" conditions for residential uses. Therefore, there is no new significant impact as identified for the FEIR (including the Addendum) related to the treatment flare, continued operation of the landfill gas treatment flare station would continue to result in a less than significant impact, and the proposed modified Project would not result any new significant impacts as compared to the approved Project.

¹¹ SCS Engineers, May–June 2017 Monthly Air and Noise Monitoring Report, June 2017.

(iii) Composite Noise Level Impacts from Proposed Modified Project Operations

The composite noise analysis conducted within the FEIR assumed a conservative maximum composite noise level of 70 dBA at 50 feet, which was based on a steady-state equivalent noise level of the loudest source (loading dock noise) and not on an actual composite of potential on-Property noise sources. An evaluation of noise from all proposed modified Project-related sources (i.e., composite noise level) was conducted to conservatively ascertain the potential maximum Project-related noise level increase that may occur at the noise-sensitive receptor locations included in this analysis. Noise sources considered in the analysis of composite noise include parking-related noise events, mechanical equipment, and loading dock/waste collection area noise events.

The maximum composite noise impacts would generally be expected to occur close to the Property, since, with the exception of the Project's incremental contribution to roadway traffic noise, the proposed modified Project's noise sources would be located on the Property. On-Property stationary noise sources would be located near Receptors R1, R3, and R4. Therefore, composite noise level impacts for R1, R3, and R4 were addressed.

As shown in **Table IV.H-6, Operations Noise Impact Summary**, relative to the existing noise environment, the proposed modified Project is estimated to increase the ambient noise level by 0.1 dBA at R1, 2.5 dBA at R3, and 1.4 dBA at R4, which are less than the significance thresholds of a 5 dBA increase. Composite on-Property noise level increases at all other receptor locations are expected to be less than significant as well, given their distance from the Property and the presence of intervening structures. As such, the composite noise level impact on the nearest sensitive receptors due to the proposed modified Project's future operations would be less than significant, and no mitigation would be required.

(a) Ground-Borne Vibration

Ground-borne vibration in the vicinity of the Property would continue to be generated by vehicular travel on the local roadways. As the proposed modified Project's operations would still not result in any additional long-term ground-borne vibration sources, operation of the proposed modified Project upon completion of its construction would not exceed the 0.01 RMS significance threshold for ground-borne vibration at the neighboring sensitive receptors. As such, the proposed modified Project would result in substantially the same impact (less than significant) as identified for the FEIR, and the proposed modified Project would not result any new significant impacts as compared to the approved Project.

Table IV.H-6
Operations Noise Impact Summary

On-Site Operational Noise Sources	No	ise Levels, dBA			
On-Site Operational Noise Sources	R1	R3	R4		
(A) Existing (Ambient) Noise Level ^a	72.7	55.2	58.9		
Project On-Site Composite Noise Sources					
Fixed Mechanical Equipment	50.0	50.0	50.0		
Loading/Waste Collection	54.0	49.0	50.0		
Parking	54.0	49.0	50.0		
(B) Project Composite Noise Level ^b	57.5	54.1	54.8		
(C) Existing Plus Project Composite Noise Level	72.8	57.7	60.3		
Project Increment (C-A)	0.1	2.5	1.4		
Exceeds Threshold?	No	No	No		

NOTES:

SOURCE: ESA, 2017.

(3) General Plan Consistency

Similar to the approved Project, the proposed modified Project would be consistent with the goals and policies of the General Plan Noise Element, as modified as part of the approved Project.

4. MITIGATION MEASURES

The proposed modified Project is subject to the same mitigation measures implemented by the certified FEIR, listed below. However, Mitigation Measures have been modified to further minimize construction noise impacts.¹²

Mitigation Measure H-1: Prior to the issuance of any grading, excavation, haul route, foundation, or building permits, the Applicant shall provide proof satisfactory to the Building and Safety and Planning Divisions of the Community Development Services Department that all construction documents require contractors to comply with City of Carson Municipal Code Sections 4101(i) and (j), which requires all construction and demolition activities, including pile driving, to occur between 7:00 A.Ma.m. and 8:00 P.Mp.m. Monday through Saturday and that a

^a Based on ambient noise measurements listed in Table IV.H-1.

b Noise levels are added logarithmically.

The mitigation measures below are updated from those set forth in the FEIR. For clarity, the changed text is marked as follows: new text is <u>underlined</u>, and deleted text is shown in strikeout format.

noise management plan for compliance and verification has been prepared by a monitor retained by the Applicant. At a minimum, the plan shall include the following requirements:

1. Noise-generating equipment operated at the Project site Property shall be equipped with effective noise control devices achieve a minimum noise level reduction of 10 dBA lower than the reference noise levels used in this analysis, as listed below, to be verified by submittal of manufacturer specifications, evidence of retrofit (i.e., mufflers, intake silencers, lagging, and/or engine enclosures), or monitoring data. All equipment shall be properly maintained to asensure that no additional noise, due to worn or improperly maintained parts, would be generated.

Equipment Type	Reference Noise Level at 50 Feet (dBA Lmax)	Mitigated Noise Level at 50 Feet (dBA L _{max})
<u>Welder</u>	<u>74</u>	<u>64</u>
<u>Forklift</u>	<u>75</u>	<u>65</u>
Tractor Trailer	<u>76</u>	<u>66</u>
<u>Paver</u>	<u>77</u>	<u>67</u>
Air Compressor	<u>78</u>	<u>68</u>
<u>Loader</u> <u>Concrete Mixer Trucks</u>	<u>79</u>	<u>69</u>
Water Trucks Rollers Trencher	<u>80</u>	<u>70</u>
Excavators Cranes	<u>81</u>	<u>71</u>
<u>Dozer</u>	<u>82</u>	<u>72</u>
<u>Compactor</u>	<u>83</u>	<u>73</u>
<u>Scraper</u>	<u>84</u>	<u>74</u>
<u>Grader</u>	<u>85</u>	<u>75</u>
Concrete Saw Pavement Scarifier	<u>90</u>	<u>80</u>

- 2. Pile drivers used within 1,500 feet of sensitive receptors shall be equipped with noise control techniques (e.g., use of noise attenuation shields or shrouds) having a minimum quieting factor of 10 dBA, or equivalent measures shall be used to result in a minimum reduction of 10 dBA at the source.
- 3. Effective <u>continuous</u> temporary sound barriers (<u>at least 8-foot-tall as measured from the grade upon which the noise-producing equipment are operating) equipped with noise blankets rated to achieve sound level reductions of at <u>least 20 dBA</u> shall be used and relocated, as needed, whenever <u>enclose the</u> active construction activities occur within 150 feet of residential property,</u>

work area to block line-of-site between the construction equipment and the occupied noise-sensitive receptors (i.e., residential uses located on the west and south of the Project site). In the alternative, equivalent measures may be used that will achieve sound level reductions of at least 20 dBA, or such lesser fraction thereof required to reach 65 dBA, at the boundary of occupied residential uses.

- 4. Loading and staging areas must be located on site and away from the most noise-sensitive uses surrounding the site as determined by the of-Building and Safety and Planning Divisions of the Community Development Services Department.
- 5. An approved haul route authorization that avoids noise-sensitive land uses to the maximum extent feasible.
- 6. A construction relations officer shall be designated to serve as a liaison with residents, and a contact telephone number shall be provided to residents.

As discussed, the Applicant conducted a DDC Pilot Program in 2008, and has satisfied and complied with Mitigation Measure H-2. However, because additional DDC activity may be required in areas nearest the residential uses opposite of the Torrance Lateral Channel, the proposed modified Project is subject to Mitigation Measure H-2 and shall conduct an additional Pilot Program to properly determine impacts of DDC in areas nearest the Property boundary.

- **Mitigation Measure H-2:** The Applicant, prior to initiating <u>additional DDC or pile driving-activities</u> on a site-wide basis, shall conduct a <u>DDC pPilot pProgram</u> (Pilot Program). The Pilot Program shall be implemented via the following guidelines:
 - Prior to the initiation of the Pilot Program, the Applicant shall locate vibration monitors at the following locations: (1) along the Project's fenceline opposite the off-site residential uses located to the north (if Development District 3 [DD3] is under vertical construction or constructed at the time DDC activities are initiated), south, and southwest of the Project site Property (i.e., within the Project site Property), and (2) along the far side of the Torrance Lateral Channel and along the north side of Del Amo Boulevard (if DD3 is under vertical construction or constructed at the time DDC activities are initiated) in line with the monitors placed within the Project site Property itself.
 - Continuous monitoring shall be conducted on an ongoing basis during the Pilot Program. All vibration levels measured by the monitors shall be logged with documentation of the measurements provided to the City.
 - Initial DDC drops shall be limited in weight, height, and/or location dictated by calculations which that demonstrate that the potential vibration levels are below the 0.02 inches per second (in/s) PPV threshold limit at the residential side of the Torrance Lateral Channel or the 2.0 in/s PPV threshold limit at DD3 (if DD3 is under vertical construction or constructed at the time DDC activities are initiated).

- Increases in DDC weight, height, and/or location shall incur-occur in small increments, with continuous monitoring to asensure compliance with the 0.02 inches per/second PPV (residential side of Torrance Lateral Channel) and 2.0 in/s PPV (if DD3 is under vertical construction or constructed at the time DDC activities are initiated) threshold limits.
- If vibration levels at any time during the Pilot Program exceed the 0.02 inehes per/second PPV (residential side of Torrance Lateral Channel) or 2.0 in/s PPV (if DD3 is under vertical construction or constructed at the time DDC activities are initiated) threshold levels, DDC or pile driving activity shall immediately stop, until new drop parameters are established that would reduce the vibration levels to less than the 0.02 inehes per/second PPV or 2.0 in/s PPV threshold levels.
- Mitigation Measure H-3: The monitors located on the far side of the Torrance Lateral Channel as part of the Pilot Program shall remain in place throughout the DDC and pile driving phase of Project construction. Continuous vibration monitoring shall be conducted on an ongoing basis during DDC and pile driving activities. All vibration levels measured by the monitors shall be logged with documentation of the measurements provided to the City. If DDC and/or pile driving vibration levels at any time exceed the 0.02 inches per second (in/s) PPV (at the residential side of Torrance Lateral Channel) or 2.0 in/s PPV (at Development District 3 [DD3] if DD3 is under vertical construction or constructed at the time DDC activities are initiated) threshold levels, DDC and/or pile driving activity shall immediately stop, until new drop parameters modified construction methods are established that would reduce the vibration levels to less than the 0.02 inches per second PPV-applicable threshold levels, as defined above.
- Mitigation Measure H-4: A construction and construction-related monitor satisfactory to the Department of Community Development Services General Manager Director (or his/her designee) shall be retained by the Applicant to document compliance with the mitigation measures. Said Monitor's qualifications, identification, address, and telephone number shall be listed in the contracts and shall be placed in the pertinent files of the Department of Community Development Services Department. The Monitor will be required to monitor all construction and construction-related activities on the site Property on a periodic basis; keep all written records, which shall be open for public inspection; and to file monthly reports with the City and appropriate permit granting authorities. In addition:
 - 1. Information shall be provided on a regular weekly basis regarding construction activities and their duration. A Construction Relations Officer shall be established and funded by the Applicant, and approved by the Department of Community Development Services General Manager Director (or his/her designee), to act as a liaison with neighbors and residents concerning on-site construction activity. As part of this mitigation measure, the Applicant shall establish a 24-hour telephone construction hotline, which will be staffed between the hours of 8:00 A.Ma.m. and 5:00 P.Mp.m. on a

- daily Monday through Saturday basis throughout the Project's entire construction period for the purposes of answering questions and resolving disputes with adjacent property owners. The hotline number shall be posted on site the Property.
- 2. The Applicant shall require in all construction and construction-related contracts and subcontracts, provisions requiring compliance with special environmental conditions included in all relevant entitlement approval actions of the City of Carson. Such provisions shall also include retention of the power to effect prompt corrective action by the <u>aApplicant</u>, its representative, or prime contractor, subcontractor, or operator to correct noticed noncompliance.
- 3. During construction, loading and staging areas must be located on_site and away from the most_occupied_noise-sensitive uses surrounding the site Property as determined by the Planning Manager.
- Mitigation Measure H-5: All commercial parking lots near residential areas shall be located a minimum of 150 feet from an off-site residential structure use located to the south and west (across the Torrance Lateral Channel) unless a minimum eight 8-foot-high wall is provided along the property boundary to limit noise levels associated with parking lot activities.
- Mitigation Measure H-6: All parking structures near residential areas shall be located a minimum of 150 feet from an off-site residential structure use located to the south and west (across the Torrance Lateral Channel) unless the exterior wall of the parking structure that faces the off-site residential use is a solid wall or provides acoustical louvers (or equivalent noise reduction measures).
- **Mitigation Measure H-7:** During operation of a building (following construction), truck deliveriesy within 250 feet of an off-siteProperty residential use shall not occur between 10:00 P.Mp.m. and 7:00 A.Ma.m.
- Mitigation Measure H-8: For the residential uses immediately south and north of Del Amo Boulevard, within Development Districts 1 and 3, all exterior walls and floor-ceiling assemblies (unless within a unit) shall be constructed with double-paned glass or an equivalent and in a manner to provide an airborne sound insulation system achieving a Sound Transmission Class of 50 (45 if field tested) as defined in the UBC Standard No. 35-1, 1982 edition. Sign-off by the Department of Development Services General Manager, or his/her designee, is required prior to the issuance of the first building permit. The Applicant, as an alternative, may retain an engineer registered in the State of California with expertise in acoustical engineering, who would submit a signed report for an alternative means of sound insulation satisfactory to the City of Carson which achieves a maximum interior noise of CNEL 45 (residential standard).
- Mitigation Measure H-9: The balconies of the first row of residential units facing Del Amo Boulevard or I-405 Freeway, should any such balconies be constructed,

shall have a solid fence/wall with an appropriate height to reduce the noise received from traffic traveled on the adjacent Boulevard.

Mitigation Measure H-10: If any noise intensive uses (i.e., outdoor theater, passenger station (bus station, rail station, taxi stand), small recycling facility, or commercial uses (outdoor activities, amplified music, outdoor patios, etc)) are proposed within 300 feet of an on-site or off-site residential use, then as part of the site plan review process, a community noise study shall be completed and the study shall demonstrate that the use would not exceed the City of Carson Municipal Code noise standards and/or the standards established in this EIR. 13

5. CUMULATIVE IMPACTS

All of the identified related projects have been considered for the purposes of assessing cumulative noise impacts. The potential for noise impacts to occur are specific to the location of each related project as well as the cumulative traffic on the surrounding roadway network.

a. Construction Noise

Of the 27 related projects that have been identified within the proposed modified Project's study area, there are a number of projects that have not already been built or are currently under construction. Additionally, it is possible that the recently approved residential use within DD3 undergoes construction concurrent with the proposed modified Project. However, DD3 is surrounded by a plant nursery, Porsche experience track, and the I-405 Freeway and as such there are no noise-sensitive land uses located adjacent to DD3 that could be affected by concurrent construction of DD3 and the proposed modified Project. Additionally, noise impact of construction activities for the proposed modified Project and each related project (that has not already been built) would also still be short-term, limited to the duration of construction and would be localized. In addition, it is anticipated that each of the related projects would have to comply with the local noise ordinance, as well as mitigation measures that may be prescribed pursuant to CEQA provisions that require significant impacts to be reduced to the extent feasible, as was also anticipated for the approved Project. However, since noise impacts due to construction of the proposed modified Project would be significant on its own, as was the approved Project, noise impacts due to construction of the proposed modified Project in combination with any of the related projects would also be significant without mitigation.

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¹³ Mitigation Measures H-8, H-9, and H-10 would not apply to on-Property residential uses in light of CBIA v. BAAQMD. New construction off Property would be required to comply with CEQA to assess environmental impacts associated with proposed modified Project activities. As such, these mitigation measures are no longer relevant and do not address an impact as required under CEQA.

b. Long-Term Operations

Each of the 27 related projects that have been identified within the general project vicinity would generate stationary-source and mobile-source noise due to ongoing day-to-day operations. The related projects are of a residential, retail, commercial, office buildings, or institutional nature and these uses are not typically associated with excessive exterior noise generation. However, each project would produce traffic volumes that are capable of generating a roadway noise impact. As discussed previously, traffic volumes from the proposed modified Project and the 27 related projects, combined with ambient traffic growth, were analyzed and shown in Table IV.H-7, Roadway Traffic Noise Future (2023) Cumulative Impacts at **Representative Noise-Sensitive Locations.** Cumulative traffic volumes would result in a maximum increase of 2.3 dBA CNEL along Del Amo Boulevard, between South Main Street and Figueroa Street. As this noise level increase would be below the 5 dBA CNEL significance threshold for "normally acceptable" land uses, roadway noise impacts due to cumulative traffic volumes would be less than significant along segments of Del Amo Boulevard. Furthermore, impacts from Project-related traffic noise along all other local roadway segments with sensitive receptors would be lower than the significance threshold of 3 dBA CNEL for sensitive receptors exposed to or within "normally unacceptable" or "clearly unacceptable" categories and, thus, remain less than significant.

Due to Carson Municipal Code provisions that limit noise from stationary sources such as roof-top mechanical equipment and emergency generators, noise levels would still be less than significant at the property line for each related project. For this reason, on-site noise produced by any related project would not be additive to Project-related noise levels. As such, stationary-source noise impacts attributable to cumulative development would remain less than significant for the proposed modified Project.

6. LEVEL OF SIGNIFICANCE AFTER MITIGATION

In summary, the proposed modified Project would not result in any new significant impacts as compared to the approved Project assessed in the FEIR with the addition of the construction mitigation as set forth above. As compared to the approved Project, the proposed modified Project will not require major revisions to the FEIR because of the involvement of new significant impacts that were not previously evaluated. Specifically, with regard to noise, (1) no substantial changes are proposed in the proposed modified Project that would require major revisions to the FEIR, and (2) no substantial changes arise in the circumstances of the proposed modified Project's undertaking, requiring major revisions to the FEIR.

Table IV.H-7

Roadway Traffic Noise Future (2023) Cumulative Impacts at Representative Noise-Sensitive Locations

CNEL at 50 feet from Roadway Right-of-Way

		- Cumulative	
Roadway Segment	Existing	Future (2023) With Project	Increment ^a
DEL AMO BOULEVARD			
East of Stamps Drive	69.5	70.5	1.0
Stamps Drive to South Main Street	69.5	71.6	2.1
South Main Street to Figueroa Street	69.0	71.3	2.3
SOUTH MAIN STREET			
North of Del Amo Boulevard	67.2	68.0	0.8
Del Amo Boulevard to Leonardo Drive	67.6	68.4	0.8
Leonardo Drive to Torrance Boulevard	67.5	68.8	1.3
Torrance Boulevard to 213th Street	67.7	68.5	0.8
213th Street to Carson Street	67.4	68.2	0.8
LEONARDO DRIVE			
East of South Main Street	b	64.9	c
TORRANCE BOULEVARD			
Figueroa Street and South Main Street	66.6	67.4	0.8
East of South Main Street	57.3	57.4	0.1
213TH STREET			
South Main Street and Avalon Boulevard	66.0	66.1	0.1
West of Avalon Boulevard	65.1	65.6	0.5
CARSON STREET			
Figueroa Street and South Main Street	65.7	66.8	1.1
South Main Street and Avalon Boulevard	65.8	66.7	0.9
Avalon Boulevard and I-405 SB Ramps	69.2	69.9	0.7
AVALON BOULEVARD			
Del Amo Boulevard and I-405 NB Ramps	69.9	70.3	0.4
I-405 SB Ramps and 213th Street	69.3	70.1	0.8
213th Street and Carson Street	68.1	69.5	1.4
South of Carson Street	68.7	69.0	0.3

NOTES:

Exterior 24-hour CNEL noise levels.

SOURCE: ESA, 2017.

^a Increase relative to traffic noise levels comparing existing conditions to future (2023) with development of the proposed modified Project.

^b Future intersection due to proposed modified Project development.

a. Construction

Table IV.H-8, Mitigated Construction Noise Levels, summarizes construction noise levels during DDC, pile driving, and general construction activity. With modification of Mitigation Measure H-1 Part 1 and Part 3, construction noise levels associated with operation of one DDC rig would not result in increases in ambient noise of 5 dBA at any studied receptors (see Section [d] in Table IV.H-8 for mitigated construction noise levels). Noise levels associated with operation of three DDC rigs would not result in increases in ambient noise of 5 dBA or more at R1 or R4 but would result in increases of 6.0 dBA Leq at R3. Additionally, construction noise impacts are considered significant if noise from construction activities only occurring over more than 20 days would exceed 65 dBA at single-family residential uses or 70 dBA at multiple-family residential uses. Mitigated DDC noise levels (see Section [b] in Table IV.H-8 for mitigated construction noise levels) would not exceed 65 dBA at R3 or R4 and would not exceed 70 dBA at R1. However, like the approved Project, noise levels associated with DDC would result in significant and unavoidable increases in ambient noise at nearby residential uses with respect to receptors located across the Torrance Lateral Channel. With respect to DD3, the proposed modified Project would not result in a significant new impact.

Although additional pile driving will take place in PA 2, the proposed modified Project would consist of similar construction activities using similar construction equipment as was anticipated for the approved Project. In addition, the pile driving on PA 2 would be farther away from existing residential uses located south and west of the Torrance Lateral Channel (R3 and R4). With regard to the recently approved residential use within DD3 (R1), pile driving within PA 2 would occur at similar distances to R1 as pile driving activities occurring within PA 1, which was anticipated to occur as part of the approved Project. Impacts to R1 have been analyzed. With implementation of Mitigation Measure H-1, including the modifications to Part 1 and Part 3, construction noise levels associated with pile driving alone and concurrent pile driving/DDC activities would not result in increases in ambient noise of 5 dBA or more at R1, but would result in increases of up to 10.2 dBA L_{eq} and 7.1 dBA L_{eq} at R3 and R4, respectively (see Section [d] in Table IV.H-8 for mitigated construction noise levels). Like the approved Project, impacts related to pile driving noise would be significant and unavoidable, and no new impact would occur. 14 Additionally, noise levels associated with pile driving and concurrent pile driving/DDC activities would not exceed 65 dBA at R3 and R4 would not exceed 70 dBA at R1 (see Section [b] in Table IV.H-8 for mitigated construction noise levels). Therefore, with respect to maximum construction noise levels, pile driving alone and concurrent pile driving/DDC would be less than significant with respect to R3 and R4 and a significant new impact would not occur at R1.

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Note that the Approved Construction Noise Variance (for pile driving noise exceedances) as discussed in Section IV.H.2 would apply to proposed modified Project pile driving exceedances.

Table IV.H-8

Mitigated Construction Noise Levels

		Noise Levels, dBA				
On-Site Construction Noise Sources	R1	R3	R4			
(a) Existing (Ambient) Noise Level ^a	72.7	55.2	58.9			
(b) Mitigated Construction Noise ^b						
Deep Dynamic Compaction – 1 Rig ^c	59.0	57.0	57.0			
Deep Dynamic Compaction – 3 Rigs ^c	61.0	60.0	60.0			
Pile Driving ^d	66.0	65.0	65.0			
Pile Driving (3 Rigs) & DDC (3 Rigs) ^e	67.0	65.0	65.0			
General Construction ^f	53.0	51.0	51.0			
(c) Existing + Mitigated Construction Noise ^g						
Deep Dynamic Compaction – 1 Rig	72.9	59.2	61.1			
Deep Dynamic Compaction – 3 Rigs	73.0	61.2	62.5			
Pile Driving	73.5	65.4	66.0			
Pile Driving (3 Rigs) & DDC (3 Rigs)	73.7	65.4	66.0			
General Construction	72.7	56.6	59.6			
(d) Difference from Existing Noise Level (c-a)						
Deep Dynamic Compaction – 1 Rig	0.2	4.0	2.2			
Deep Dynamic Compaction – 3 Rigs	0.3	6.0	3.6			
Pile Driving	0.8	10.2	7.1			
Pile Driving (3 Rigs) & DDC (3 Rigs)	1.0	10.2	7.1			
General Construction	0.0	1.4	0.7			

NOTES:

SOURCE: ESA, 2017.

With modification of Mitigation Measure H-1 Part 1 and Part 3, noise levels associated with general construction activity would not result in increases in ambient noise of 5 dBA or more at R1, R3, or R4 (see Section [d] in Table IV.H-8 for mitigated construction noise levels). Additionally, general construction noise levels would not exceed 65 dBA at R3 or R4 or 70 dBA

^a Based on ambient noise measurements listed in Table IV.H-1.

^b Unmitigated construction noise level minus reductions achieved through Mitigation Measure H-1

^c 10 dBA reduction on dozers (Mitigation Measure H-1 Part 1); 20 dBA total reduction (Mitigation Measure H-1 Part 3).

^d 30 dBA reduction (Mitigation Measure H-1 Part 2 and Part 3).

^e 10 dBA reduction on dozers and pile drivers (Mitigation Measure H-1 Part 1 and Part 3); 20 dBA reduction (Mitigation Measure H-1 Part 3).

f 30 dBA reduction (Mitigation Measure H-1 Part 1 and Part 3).

^g Noise levels are added logarithmically.

at R1 (see Section [b] in Table IV.H-8 for mitigated construction noise levels). Therefore, general construction noise levels associated with development of the proposed modified Project would not result in any new significant impacts to R3 or R4 as compared to the approved Project. With respect to DD3, the proposed modified Project would not result in a significant new impact.

Vibration impacts associated with DDC operations during Project construction remain less than significant with the implementation of Mitigation Measures H-2 and H-3. As discussed, a DDC pilot program and DDC activities on approximately 68 acres have already occurred on the Property since certification of the FEIR. However, additional DDC may be required in areas that are closer to residential uses across from the Torrance Lateral Channel. Therefore, Mitigation Measure H-2 and H-3 would remain applicable to ensure that additional DDC activities would remain less than significant.

Vibration impacts associated the pile driving operations would, like the approved Project, result in less than significant impacts, even with the addition of pile driving activities within PA 2. Vibration monitoring conducted subsequent to certification of the FEIR along the southern boundary of the Property determined that vibration impacts related to pile driving would not exceed the allowable threshold of 0.2 in/s PPV for structural damage to fragile structures and 2.0 in/s PPV for well-engineered new construction (DD3). Although additional piles within PA 2 would be required, a majority of the work will occur nearest the I-405 Freeway and not closer to vibration-sensitive buildings than were previously analyzed in the FEIR. Therefore, like the approved Project, vibration impacts related to pile driving would be less than significant.

b. Operations

With the implementation of Mitigation Measure H-7, the proposed modified Project would result in substantially the same impact (less than significant with mitigation) as the approved Project. Impacts related to on-Property operational noise and off-Property traffic noise would be less than significant at residential uses to the south and west of the Torrance Lateral Channel (R3 and R4) and to the approved residential units within DD3 (R1). There are no sensitive uses that would be impacted by on-Property operational noise from both the proposed modified Project and the residential development at DD3. Residential uses south of the Torrance Lateral Channel (south of the intersection of Del Amo Boulevard and South Main Street) would be shielded from operational noise from DD3 by intervening structures within PA 1. In addition, the Property would provide noise-attenuation/shielding characteristics from I-405 Freeway traffic noise to the area, particularly for residential uses located south and west of the Property.

Comparison to FEIR Findings: No New Significant Impact or Changes. Previous Mitigation Applies as Modified Herein. No New Mitigation Measure(s) Identified or Required; Inapplicable Mitigation Removed.

.H. Noise			

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IV. ENVIRONMENTAL IMPACT ANALYSIS J. UTILITIES 2. WASTEWATER

1. INTRODUCTION

The following analysis addresses the proposed modified Project's changes and its impacts concerning local and regional wastewater facilities and infrastructure compared to the approved Project assessed in the FEIR, and supplements Section IV.J.2, Wastewater, of the FEIR where there are changes to the regulatory setting. In all other respects, the FEIR analysis remains applicable to the proposed modified Project. This supplemental analysis compares the proposed modified Project to the approved Project to determine if the proposed changes will require major revisions to the FEIR because of the involvement of any new significant impacts as a result of changes to the approved Project, changes in circumstances, or new information that was not previously evaluated. Consistent with the analysis in the FEIR, the wastewater analysis estimates and compares the demand for service to the capacity of the existing and proposed collection, conveyance, and treatment facilities. The analysis concludes that the proposed modified Project would result in similar types of wastewater impacts compared to the approved Project, and like the approved Project, with the application of the mitigation set forth in the FEIR, would result in less than significant project impacts. This analysis further concludes that, as affects wastewater, there are no changes in circumstances arising since the preparation of the FEIR or new information not known at the time the FEIR was prepared requiring further analysis under CEQA. The proposed modified Project would comply with all regulatory requirements. All previously adopted mitigation measures remain applicable and continue to be applied to the proposed modified Project. No new impact, as compared to the approved Project, is identified.

2. ENVIRONMENTAL SETTING

a. Regulatory Framework

(1) Federal

Wastewater treatment before effluent is discharged to Waters of the United States is required by the federal Clean Water Act (CWA), United States Code, Title 33, Sections 1251 et seq.

(2) State

In California, State Water Resources Control Board (SWRCB) is responsible for ensuring the highest reasonable quality of waters of the State, while allocating those waters to achieve the optimum balance of beneficial uses. The 1969 Porter-Cologne Water Quality Control Act,

codified in the California Water Code, authorizes the SWRCB to implement programs to control polluted discharges into State waters. This law essentially implements the requirements of the CWA. Pursuant to this law, the local Regional Water Quality Control Board (RWQCB) is required to establish the wastewater concentrations of a number of specific hazardous substances in treated wastewater discharge. The Los Angeles RWQCB regulates wastewater discharges and water quality in the southern/coastal portions of Los Angeles County, including the Project site.

On May 2, 2006, after approval of the approved Project, SWRCB adopted Statewide General Waste Discharge Requirements (WDRs) and a Monitoring and Reporting Program (Order No. 2006-0003-DWQ) that are specific to sanitary sewer systems. The regulations were in response to growing public concern about the water quality impacts of sanitary sewer overflows (SSOs), particularly those that cause beach closures, adversely affect other bodies of water, or pose serious health and safety or nuisance problems. The requirements are to facilitate proper funding and management of sanitary sewer systems and require that the owners/operators of publicly owned sewer collection system a mile long or greater apply for coverage under the WDRs and develop and implement a system-specific Sewer System Management Plan (SSMP). The SSMPs must include provisions to provide proper and efficient management, operation, and maintenance of sanitary sewer systems, while taking into consideration risk management and cost benefit analysis. In addition, the SSMP must contain a spill response plan that establishes standard procedures for immediate response to an SSO in a manner designed to minimize water quality impacts and potential nuisance conditions. The City of Carson's SSMP was last updated in 2015.

(3) County

As identified within the FEIR and consistent with the Project site's existing setting, the City contracts with the Los Angeles County Public Works Department (LACPWD) to maintain the local sewer lines that run in the street to the trunk sewer lines. Wastewater treatment in the Project area is under the jurisdiction of the Sanitation Districts of Los Angeles County (the Districts), which is part of the Los Angeles County Department of Public Works. As indicated in the FEIR, the Districts own, operate and maintain the large trunk sewer that form the backbone of the regional wastewater conveyance system. The City of Carson continues to contract with the Districts to maintain the trunk sewer lines within the City of Carson. According to the Districts' service area map, the Project site remains located within the jurisdictional boundaries of District No. 8. The Los Angeles County Wastewater Ordinance and Los Angeles County Connection Fee Ordinance and Program discussed in the FEIR also remain in place (see FEIR [DEIR p. 519]).

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Sanitation Districts of Los Angeles (LACSD), Service Area, Maps, and GIS Data, n.d. Available at http://www.lacsd.org/aboutus/gis/default.asp, accessed July 25, 2017.

(4) City of Carson

In compliance with SWRCB adoption of the Statewide General WDRs and a Monitoring and Reporting Program for sanitary sewer systems, the City of Carson prepared its SSMP, updated in 2015, which includes procedures to address SSOs through the implementation of a planned and scheduled maintenance program, respond to and stop SSOs in a timely manner, recover any overflow, and investigate and document the cause. By implementing the procedures contained in this SSMP, the occurrence of SSOs should be minimized to the greatest extent practicable throughout the City's sanitary sewer collection system.

b. Wastewater Infrastructure

The Districts are a partnership of 24 independent special districts that currently serve the wastewater and solid waste management needs of approximately 5.5 million people in Los Angeles County (County). The Districts' service area covers approximately 824 square miles and encompasses 78 cities and unincorporated territory within the County. Within the Districts' service area, there are approximately 9,500 miles of sewers that are owned and operated by the cities and County that are tributary to the Districts' wastewater collection system. The Districts own, operate, and maintain approximately 1,400 miles of sewers, ranging from 8 to 144 inches in diameter, that convey approximately 500 million gallons per day (mgd) of wastewater to 11 wastewater treatment plants. Included in the Districts' wastewater collection system are 48 active pumping plants located throughout the County. The Districts' service area includes wastewater collection systems located within the Joint Outfall System, the Santa Clarita Valley, and the Antelope Valley.²

As is discussed in the FEIR and consistent with the Project site's existing setting, wastewater generated on the Project site would continue to be treated at the Joint Water Pollution Control Plant (JWPCP), located at 24501 South Figueroa Street in Carson. According to the County of Los Angeles General Plan Update Draft EIR, the plant currently occupies approximately 420 acres to the east of the Interstate 110 (I-110 Freeway). The JWPCP is one of the largest wastewater treatment plants in the world and is the largest of the LACSD's wastewater treatment plants.

Based on current information, the facility provides both primary and secondary treatment for approximately 260 mgd of wastewater and has a total permitted capacity of 400 mgd.³ This is a slight increase in capacity and larger decrease in actual processing flow when compared to the information provided in the FEIR which showed 2006 design capacity of 385 mgd and average

² LACSD, Wastewater Collection Systems, n.d. Available at http://www.lacsd.org/wastewater/wwfacilities/wcs.asp, accessed July 25, 2017.

³ LACSD, Joint Water Pollution Control Plant (JWPCP), n.d. Available at http://www.lacsd.org/wastewater/wwwfacilities/jwpcp/default.asp. Accessed August 30, 2017.

daily processing of 324.9 mgd of wastewater.⁴ The reduction in the amount of wastewater going to the JWPCP is a result of water conservation efforts, drought conditions, and the economy.⁵

The FEIR addressed general diameters and locations of trunk lines, as well as the existing district trunk sewers serving the Project site, and remains fully relevant. Refer to FEIR Section IV.J.2.a for additional information. There is an existing local system of sewer lines located within the Project site that was installed in the mid-1980s. This system includes lines ranging from 8 inches to 18 inches in size that may be used, if appropriate, for the proposed modified Project. The internal collection system would connect to the 42-inch trunk sewer in Main Street known as the Main Street Relief Sewer. The wastewater would then be conveyed to the JWPCP for treatment. The Main Street Relief Sewer has a design capacity of 20.2 mgd with a peak flow of 6.2 mgd when last measured in 2008 resulting in a remaining capacity when measured in 2008 of 14.0 mgd.⁶

3. PROJECT IMPACTS

a. Methodology

As discussed in greater detail in Chapter II, Modified Project Description, the purpose of this SEIR is to evaluate the proposed modified Project as compared with the approved Project, and to determine if such changes, changes in circumstances surrounding the Project site (if any) and new information (if any) arising since the approval of the FEIR require further analysis of the proposed modified Project under CEQA. As also discussed in greater detail in Chapter II, the proposed modified Project contains an increase of 50 hotel rooms as compared with the approved Project but a total of approximately 110,292 square feet (sq.ft.) less commercial square footage, and does not propose a change in the maximum number of residential units, as compared to the approved Project analyzed by the FEIR.⁷

Specifically, this section will comparatively analyze the approved Project and the proposed modified Project to determine if (1) substantial changes are proposed in the proposed modified Project, which would require major revisions to the FEIR; (2) substantial changes arise in the circumstances of the proposed modified Project's undertaking, requiring major revisions to the FEIR; or (3) new information of substantial importance has appeared that was not known or available at the time the FEIR was certified. In doing so, the g methodology of impacts regarding

⁴ LACSD, Letter from Ruth I. Frazen Engineering Technician, Planning and Property Management Section, to Mr. Ronald Winkler, Economic Development General Manager, Carson Redevelopment Agency, June 2, 2005.

⁵ JWPCP Citizens Advisory Committee Meeting, Minutes, June 18, 2013.

⁶ County Sanitation Districts of Los Angeles County, File No. 08-00.00-00, letter to RBF Consulting, January 6, 2009.

The Commercial Marketplace would have 143,625 sq.ft. less in the modified Project compared with the approved project but the increase in hotel square footage to accommodate the additional 50 rooms results in an overall reduction in commercial square footage of 110,292 sq.ft.

wastewater has been determined to remain relevant methodology for assessment of impacts and has therefore been carried forward from the FEIR. This section updates the analysis in the FEIR to reflect the Project site's existing condition in 2017 and changes in regulatory requirements arising since certification of the FEIR.

b. Thresholds of Significance

Thresholds of significance utilized by the City have not changed from those used in the FEIR, and remain the same. As set forth in the FEIR, the Project would have a significant wastewater impact if:

- The Project would cause a more than limited increase in wastewater flows at a point where, and a time when, a sewer's capacity is already constrained or that would cause a sewer's capacity to become constrained, or
- The Project's additional wastewater flows would substantially or incrementally exceed the future scheduled capacity of any one treatment plant.

c. Project Design Features

As discussed in the FEIR and consistent with the Project site's existing setting, the proposed modified Project would still provide an on-site sewer system that would connect with the existing trunk sewer lines in Del Amo Boulevard and Main Street. The on-site system would remain able to include use of the existing on-site lines in Street A and Street B, or, if determined to be necessary, may replace these lines with lines better suited to the currently proposed development. The proposed modified Project would also continue to incorporate water conservation methods such as ultralow-flow toilets, low-flow showerheads, low-flow fixtures and water saving appliances, as required by existing regulations. The Specific Plan Amendment (SPA) would still include provisions for the installation of a reclaimed water infrastructure system for irrigation and proposed water features. The on-site system would be connected to West Basin Recycling Facility.

d. Project Impacts

(a) Construction

Construction of the proposed modified Project would be similar to that described in the FEIR. As previously discussed, the proposed modified Project modifications would reduce the overall commercial square footage by 110,292 sq.ft. and construction would remain substantially the same as that studied for the approved Project in the FEIR.

As anticipated in the FEIR, a negligible amount of wastewater would still be generated by construction personnel during construction of the proposed modified Project. Wastewater generation from construction activities is still not anticipated to cause a measurable increase in wastewater flows at a time when a sewer's capacity is already constrained or to cause a sewer's

capacity to become constrained. Additionally, construction is still not anticipated to generate wastewater flows that would substantially or incrementally exceed the future scheduled capacity of any treatment plant by generating flows greater than those anticipated. Thus, the proposed modified Project would not result in any significant impacts as compared to the approved Project, and impacts during construction would remain less than significant.

As also anticipated in the FEIR, the proposed modified Project's on-site wastewater system would continue to be developed during the construction of the Project, subsequent to implementation of the remediation cap and site grading, and prior to the construction of new buildings and may require new tie-ins to the existing sewer lines. If such new connections are required, Project construction would require construction activity within the Del Amo Boulevard and Main Street rights-of-way, which could result in secondary, short-term construction impacts, namely traffic disruptions. Such construction would still require approval of the District and would be carried out in accordance with standard District procedures. The FEIR analysis of Project impacts on traffic includes a discussion of construction impacts, and recommends a Construction Traffic Management Plan Worksite Traffic Control Plan (WTCP) as a mitigation measure (Mitigation Measure C-1). When the proposed modifications to the Project are compared to the approved Project analyzed under the FEIR, there are no new significant impacts or changes, and short-term impacts on traffic due to the construction of the proposed modified Project's sewer line improvements would remain less than significant.

Refer to Section IV.J.2, Wastewater, Section 3.d, Project Impacts, of the FEIR for a full discussion of construction-related impacts related to wastewater and wastewater infrastructure.

(b) Operation

Operation of the proposed modified Project would be similar to that described in the FEIR. The projected daily and annual wastewater generation for the FEIR was 721,113 gallons per day (gpd) and 263.3 million gallons per year. As discussed above, the proposed modified Project would revise the approved Project to include an additional 50 hotel rooms, but even with the hotel room increase would nonetheless reduce the overall scope and square footage of the approved Project by approximately 160,292 sq.ft. **Table IV.J-1, Projected Sewage Generation for Proposed Modified Project**, provides an update of the estimated sewage that would result from the proposed modified Project and updates the analysis provided in Table 70 of the FEIR. As summarized in Table IV.J-1, the proposed modified Project is anticipated to generate 645,348 gpd of wastewater. With the addition of the 300 units on DD3 (considered solely in order to provide a direct comparison with the analysis in the FEIR) the total usage is 692,158 gpd, which is a reduction of 28,955 gpd compared to the 721,113 gpd of wastewater the FEIR determined would be generated for the approved Project. On an annual basis, the proposed modified Project would generate 235.56 million gallons per year, and with the 300 units on DD3, solely for purposes of comparison, 252.6 million gallons per year, which results in a reduction of 12.35 million gallons per year of

wastewater discharge compared to the 235.56 million gallons per year of wastewater the FEIR determined would be generated for the approved Project.

Table IV.J-1
Projected Sewage Generation for Proposed Modified Project

Use	Size	Average Daily Flow (gpd) ^a	Annual Generation (million gal/year) ^b
Residential	1,250 units ^c	195,000	71.18
Regional Retail Commercial	525, 850 sq.ft.	52,585	19.19
Supermarket	90,000	13,500	4.93
Restaurant	100,000 sq.ft.	100,000	36.5
Hotel	350 rooms	43,750	15.97
Commercial Recreation/Entertainment	130,000 sq.ft.	16,250	5.93
Regional Commercial	696,500 sq.ft.	224,273	81.86
Total	_	645,358	235.56

NOTES:

SOURCE: ESA, 2017.

As was anticipated for the approved Project, wastewater would continue to be conveyed to, and treated at, the JWPCP for the proposed modified Project. As indicated above, the JWPCP has a design capacity of 400 mgd and currently processes an average flow of 260 mgd. As noted above, this is an increase in capacity and decrease in processing flow when compared to the 2006 design capacity of 385 mgd and processes an average flow of 324.9 mgd. The FEIR determined that the approved Project's additional waste flow would require the use of 1.2 percent of the remaining 60.1 mgd capacity, and would not cause an exceedance of the available capacity. Given that the wastewater treatment capacity has increased at the JWPCP since 2006, while average flow has decreased, the proposed modified Project would only require the use of 0.50 percent of the remaining 140 mgd capacity (as compared to the 1.2 percent utilization for the approved Project of the remaining 60.1 mgd capacity, as described in the FEIR). As such, the

^a Calculations are provided in Appendix I, Wastewater Calculations.

b Annual generation reflects the Daily Flow x 365 days.

FEIR Table 70 of the includes the 300 units on DD3. These units are not part of the proposed modified Project and are being treated as a related project in this SEIR. For comparative purposes only with FEIR Table 70, these 300 units would generate 46,800 gpd or 17.08 million gallons per year.

⁸ LACSD, Joint Water Pollution Control Plant (JWPCP), n.d. Available at http://www.lacsd.org/wastewater/wwfacilities/jwpcp/default.asp. Accessed August 30, 2017.

proposed modified Project would still not cause an exceedance of the available capacity at the JWPCP.⁹

The FEIR also determined that the approved Project's total 721,113 gpd (or 0.72 million gpd) would be less than the remaining capacity of 14.4 mgd in the District's 42-inch Main Street Relief Sewer, which would only receive a portion of that total. ¹⁰ Subsequently, it has been determined that all wastewater from the proposed modified Project would flow to the Main Street Relief Sewer. The proposed modified Project's total 645,358 gpd (or 0.64 mgd) would be less than the remaining capacity of 14.0 mgd in the District's 42-inch Main Street Relief Sewer. While no known capacity constraints have been identified, capacities need to be verified at the time actual new connections are made. As a matter of course, the District reviews projects at the time building permits are issued and new sewer connection permits requested. As indicated in the FEIR, connections to trunk lines require that the District issue a Trunk Sewer Connection Permit and that connection fees be paid at the time of permit issuance, which fees will be utilized by the District to construct incremental expansions of the sewerage system to accommodate the proposed modified Project in order to mitigate any potential impact of the Project on the existing wastewater system. The proposed modified Project's estimated 645,358 gpd would likewise be subject to District's review at the time building permits are issued and new sewer connection permits are requested and payment of fees would be required and utilized to expand capacity to serve the proposed modified Project. Additionally, as discussed in the FEIR, all expansions of the Districts' facilities are sized and service is phased in a manner that is consistent with the SCAG regional growth forecast and are, therefore, limited to levels associated with the approved growth identified by SCAG. As described in Section IV.A, Land Use and Planning, the proposed modified Project is consistent with SCAG regional forecasts for the South Bay Cities sub-region.

Therefore, like the approved Project, the proposed modified Project is not anticipated to cause a measurable increase in wastewater flows at a point in time where or at a time when a sewer's capacity is already constrained nor would it cause a sewer's capacity to become constrained. As previously described, the proposed modified Project would not substantially or incrementally exceed the future scheduled capacity of any treatment facility as the remaining capacity at the JWPCP has increased since the FEIR was prepared and the proposed modified Project requires less capacity than did the approved Project. Therefore, with the required sewer connection permit and the payment of fees, no significant impacts in relation to infrastructure or regional treatment capacity would occur. As such, when the proposed modifications to the Project are compared to the approved Project analyzed under the FEIR, there are no new significant impacts or changes with the retention of the existing mitigation measures in place.

⁹ This calculation includes the 300 units that are under construction so as to compare the same overall development. Subtracting the wastewater generated by the 300 units still results in about 0.5 percent of the remaining capacity.

As described in the Environmental Setting section above, the Main Street Relief Sewer has a design capacity of 20.2 mgd, and conveyed a peak follow of 5.8 mgd when last measured in 2003.

4. MITIGATION MEASURES

Although development of the proposed modified Project is not anticipated to produce significant impacts to sanitary sewers, the following measures identified in the FEIR would continue to apply to ensure that the increase in sewage generation would result in a less than significant impact:¹¹

- **Mitigation Measure J.2-1:** All required sewer improvements shall be designed and constructed according to the standards of the City of Carson and County of Los Angeles.
- **Mitigation Measure J.2-2:** Fee payment is required prior to the issuance of a permit to connect to district sewer facilities.
- Mitigation Measure J.2-3: The Building and Safety and Planning Divisions of the Community Development Services Department shall review building plans to ensure that water—reducing measures are utilized, as required by Title 24 of the California Administrative Code. These measures include, but are not limited to, water—conserving dishwashers, low-volume toilet tanks, and flow—control devices for faucets.
- Mitigation Measure J.2-4: When available, tThe proposed modified pProject shall include a dual plumbing system designed to utilize use reclaimed water for non-potable uses the irrigation system and for other appropriate purposes such as during construction.

(See FEIR [DEIR pp. 525–526; FEIR p. 63].) When the proposed revisions to the Project are compared to the approved Project analyzed under the FEIR, there are no new significant impacts or changes with the retention of the existing mitigation measures in place. As such, no additional mitigation measures are required.

5. CUMULATIVE IMPACTS

At the time of the issuance of the Notice of Preparation for this SEIR, there were 27 related projects that may be developed within the vicinity of the proposed modified Project, including the 300-unit residential project entitled for construction on DD3 (see Appendix I, Wastewater Calculations). These projects would contribute with the proposed modified Project to the generation of wastewater in the vicinity of the Property. The wastewater generated by these projects unto themselves, as well as in conjunction with the proposed modified Project are shown in **Table IV.J-2**, **Forecast of Cumulative Sewage Generation**. As indicated, the related projects would collectively generate 421,554 gpd of wastewater, or 153.87 million gallons per year. With the proposed modified Project, the total wastewater generation would be

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The mitigation measures below are updated from those set forth in the FEIR. For clarity, the changed text is marked as follows: new text is <u>underlined</u>, and deleted text is shown in strikeout format.

1,066,912 gpd or 389.4 million gallons per year. Similar to the approved Project's cumulative analysis, the current related project development near the proposed modified Project is situated such that the wastewater infrastructure that would support the identified related projects would not utilize the wastewater infrastructure in the Project's vicinity that would be utilized by the proposed modified Project. Thus, cumulative impacts on the local conveyance system would remain less than significant.

Table IV.J-2

Forecast of Cumulative Sewage Generation

		Sewage Generation		
Land Use	Size	Average Daily Flow ^a (gallons per day)	Annual Generation (million gal/year) ^b	
Retail ^c	3,194 sq.ft.	479	0.2	
Residential	1,151 units ^d	224,445	81.9	
Office	167,700 sq.ft.	33,540	12.2	
Light Industrial	815,451 sq.ft.	163,090	59.5	
Park	8.5 acres	_	_	
Total Related Projects		421,554	153.8	
Proposed Modified Project		645,358	235.56	
Total Cumulative Sewage Generation		1,066,912	389.4	

NOTES:

SOURCE: ESA, 2017.

As described in the Environmental Setting section above, the JWPCP has a design capacity of 400 mgd and processes an average flow of 280 mgd. The additional waste flow of the proposed modified Project and the related projects combined would require the use of 0.8 percent of the remaining 120 mgd capacity, and would not cause an exceedance of the available capacity. Thus, cumulative impacts on the wastewater treatment capacity would also remain less than significant.

^a Calculations are provided in Appendix I, Wastewater Calculations.

^b Annual water consumption assumes 365 days of operation a year.

^c Total square footage of the gas station was calculated based on 12 fuel pumps and an assumption of 141 sq.ft. per pump from CalEEMod.

^d As previously noted, the 300 units that have received City approvals and are entitled for construction in DD3 are being treated as a related project. Therefore, these units are included in this line item.

¹² County of Los Angeles, County of Los Angeles General Plan Update Draft EIR, 2014, p. 5.17-2.

In relation to broad growth and demand, all of the related projects would individually require a Trunk Sewer Connection Permit, issued by the Districts for the JWPCP. The Los Angeles County Department of Public Works must first determine if there is allotted sewer capacity available for any project prior to accepting building plans for approval. Therefore, cumulative impacts to the local and regional sewer conveyance and treatment system, from the implementation of the proposed modified Project and the identified related projects are not anticipated to exceed capacities of the local sewer system or treatment facility. As such, cumulative impacts would remain less than significant and the proposed modified Project together with all related projects would not result in any new significant cumulative impacts as compared to the approved Project.

6. LEVEL OF SIGNIFICANCE AFTER MITIGATION

In summary, the proposed modified Project would not result in any new significant impacts as compared to the approved Project assessed in the FEIR. As compared to the approved Project, the proposed Project changes will not require major revisions to the FEIR because of the involvement of new significant impacts that were not previously evaluated. Specifically, with regard to wastewater, (1) no substantial changes are proposed in the proposed modified Project that would require major revisions to the FEIR; (2) no substantial changes arise in the circumstances of the proposed modified Project's undertaking, requiring major revisions to the FEIR; and (3) no new information of substantial importance appears that was not known or available at the time the FEIR was certified. No substantial changes are proposed with regarding to Project design features, construction, or operations. With the implementation of the recommended mitigation measures, any local deficiencies in sewer lines would be identified and remedied and wastewater generation by the proposed modified Project would be reduced. Similar to the approved Project assessed in the FEIR, no significant impact on wastewater conveyances or the capacity of the Joint Water Pollution Control Plant would occur (i.e., the proposed modified Project's impacts are less than significant), and no new or worsening impacts would occur in comparison with the approved Project.

Comparison to FEIR Findings: No New Significant Impact. Previous Mitigation Applies as Modified Herein. No New Mitigation Measure(s) Identified or Required.

IV.J.2. Wastewater			
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IV. ENVIRONMENTAL IMPACT ANALYSIS J. UTILITIES 3. SOLID WASTE

1. INTRODUCTION

The following analysis addresses the proposed modified Project's changes and their impacts to solid waste compared to the approved Project as assessed in the FEIR, and supplements Section IV.J.3, Solid Waste, of the FEIR where there are changes to the regulatory setting. In all other respects, the FEIR analysis remains applicable to the proposed modified Project. This supplemental analysis compares the proposed modified Project to the approved Project to determine if the proposed changes would require major revisions to the FEIR because of the identification of any new significant impacts as a result of changes to the approved Project, changes in circumstances or new information that was not previously evaluated. As was done in the FEIR, this supplemental solid waste analysis addresses the ability of the disposal facilities that serve the City of Carson to accommodate the solid waste generated by the proposed modified Project. Information regarding the various regulations established by the State and the City of Carson directed towards reducing the volume of solid waste requiring landfill disposal are also described. In order to address the potential impacts of the proposed modified Project on solid waste facilities, a forecast of the amount of solid waste that would require landfill disposal during construction and operations of the proposed modified Project is projected. The analysis, which include changes in generation factors for the proposed modified Project (from the FEIR) and a methodology change to per capita generation from 50 percent, still concludes the proposed modified Project would result in similar types of solid waste generation and volumes, compared to the approved Project, and like the approved Project, would result in less than significant Project impacts with the application of the adopted mitigation measures, and that, as affects solid waste, there are no changes in circumstances arising since the preparation of the FEIR or new information not known at the time the FEIR was prepared requiring further analysis under CEQA. All previously adopted mitigation measures remain applicable and continue to be applied to the proposed modified Project. No new impact, as compared to the approved Project, is identified.

2. ENVIRONMENTAL SETTING

a. Regulatory Setting

The State of California has enacted a statewide goal and a number of regulations relative to solid waste since the FEIR. The California Legislature and Governor Brown set an ambitious goal of 75 percent recycling, composting or source reduction of solid waste by 2020. Assembly Bill (AB) 341, which took effect on July 1, 2012, was designed to help meet the Statewide

75 percent goal. AB 341 requires a business, defined to include a commercial or public entity that generates more than 4 cubic yards of commercial solid waste per week or a multifamily residential dwelling of 5 units or more to arrange for recycling services. Such business/residential development must (1) source separate recyclable materials from the solid waste they are discarding, and either self-haul or arrange for separate collection of the recyclables, and (2) subscribe to a service that includes mixed-waste processing that yields diversion results comparable to source separation.

To further support the 75 percent initiative, in October 2014, AB 1826, Commercial and Multi-Family Organics Recycling, was signed into law, which requires that businesses, including multi-family dwellings of five or more units, recycle organic wastes. Organic waste means food waste, green waste, landscape and pruning waste, nonhazardous wood waste, and food-soiled paper waste that is mixed in with food waste. In addition, effective January 1, 2017, the State requires 65 percent diversion of construction waste, which represents an increase in the previous 50 percent requirement. As identified in the FEIR, the Los Angeles County Integrated Waste Management Plan (CIWMP) inclusive of its annual reports, serves as the primary planning documents for the County's waste disposal needs. The 2015 Annual Report, the most recent available report, provides an update to the CIWMP and the Siting Element. The 2015 Annual Report forecasts conditions over the mandated 15-year planning horizon. With each subsequent Annual Report, the 15-year planning horizon is extended by 1 year, thereby providing sufficient lead time to address any future shortfalls in landfill capacity. The 2015 Annual Report concludes that there is adequate landfill capacity for the County for the next 15 years if the following are met: maximize waste reduction and recycling; expand existing landfills; study, promote and develop alternative technologies; expand transfer and processing infrastructure; and out of county disposal options, including waste by rail. The County will continue to develop solid waste management options and alternatives to landfills through the CIWMP and annual reports.

The County is currently in the process of updating the Countywide Siting Element (CSE), which identifies existing and planned solid waste disposal facilities for meeting the County's need and provides goals and strategies for current and future solid waste management. The existing 1997 CSE was approved by CalRecycle in 1998. At the regional level, the Los Angeles County Board of Supervisors on October 21, 2014, adopted the Roadmap to a Sustainable Waste Management Future, establishing a goal to divert 80 percent of solid waste generated in the unincorporated County areas from landfills by 2025, 90 percent by 2035, and 95 percent or more by 2045.

Otherwise, the City has not adopted other programs, regulations, or policies related to solid waste management since the FEIR. Refer to the FEIR for a full discussion on regulatory setting.

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¹ Multi-family dwellings are not required to have a food waste diversion program.

b. Existing Conditions

(1) Solid Waste Collection

As identified within the FEIR and consistent with the existing setting, solid waste generated by the City of Carson is collected by two private waste haulers: Waste Management and EDCO LLC. Waste Management collects residential and commercial waste and EDCO collects commercial waste. The current franchise agreements end in 2018.

Based on CalRecycle data, the City of Carson disposed of 185,359.71 tons of solid waste and transformed 542 tons of solid waste in 2016.² As identified within the FEIR, the solid waste collected by Waste Management is transported to the company's transfer station at 321 West Francisco Street in Carson, where it is sorted. That facility currently has a permitted capacity of 5,300 tpd.³

See Section IV.J.3, Solid Waste, Section 2.b, of the FEIR for a full discussion on solid waste collection.

(2) Solid Waste Disposal

As identified in the FEIR, municipal solid waste is generally disposed of at landfill facilities for non-hazardous, household waste (Class III landfills). The City of Carson does not own or operate any landfills. As anticipated by the FEIR, the Bradley Landfill has reached capacity and is no longer available to receive solid waste from the approved Project. While the FEIR also determined that sufficient capacity would remain in the El Sobrante Landfill, an additional site, the H.M. Holloway Landfill, a former surface mining facility, is available to provide even more capacity. Based on CalRecycle data, the City of Carson disposed of 185,359.71 tons of solid waste and transformed 542 tons of solid waste in 2016.⁴ Approximately 55 percent or 102,152 tons of the solid waste generated in the City were taken to the El Sobrante Landfill located in Riverside County and 26 percent or 47,635 tons were taken to H.M. Holloway Landfill in Kern County. The remaining 35,573 tons were taken to multiple landfills dispersed throughout the region including Antelope Valley Public Landfill, Sunshine Canyon Landfill, and Frank R. Bowerman Sanitary Landfill. The CalRecycle data shows that as of September 2009, El Sobrante Landfill has a remaining capacity of 145,530,000 tons and an expected closure date of

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² CalRecycle, Disposal Reporting System, Jurisdiction by Facility, Disposal during 2016 for Carson.

³ Los Angeles County Department of Public Works, Los Angeles County Integrated Waste Management Plan, 2015 Annual Report, December 2016, Appendix E-4.

⁴ CalRecycle, Disposal Reporting System, Jurisdiction by Facility, Disposal during 2016 for Carson.

January 1, 2045.⁵ As of February 2014, the H.M. Holloway Landfill had a remaining capacity of 7,522,934 tons and an expected closure date of December 1, 2030.

Unclassified (Inert) landfills are defined as facilities that accept materials such as soil, - concrete, asphalt, and other construction and demolition debris. As of 2015, Azusa Land Reclamation is the only permitted Inert Waste Landfill in the County that has a solid waste facility permit. The remaining capacity of this landfill is estimated at 57.56 million tons, or 46.05 million cubic yards. Given the remaining permitted capacity and the average disposal rate of 846 tpd in 2015, this landfill's capacity will be exhausted in 189 years.⁶

As identified within the FEIR and consistent with the proposed modified Project, the construction and demolition debris generated would still be taken either to the downtown Los Angeles diversion facility or sorted on site and then trucked to specialized recycling facilities. The contractors and waste haulers providing services to the proposed modified Project would determine the facility to which the proposed modified Project's construction and demolition debris would be taken. Due to the varying nature of the materials that make up construction and demolition debris (i.e., wood, metal, dirt, concrete, dry wall) they are generally not transported to the same facility.

In addition, several solid waste diversion programs, such as composting, source reduction, recycling, waste to energy, and material recovery, are implemented in the City of Carson. In the past, the City has met or exceeded the waste diversion goals set forth in AB 939 (i.e., the diversion goal of 50 percent of the City's waste stream). In 2007, Senate Bill 1016 changed the diversion goal to a per capita disposal.⁷ [In reporting year 2015, Carson had a population target rate of 19.3 pounds/person/day and the reported annual rate was calculated at 11.4 pounds/person/day while the employment target rate was 37.3 pounds/person/day with a reported annual rate of 19.6 pounds/person/day.]⁸

⁵ The El Sobrante Landfill 2013 Annual Report indicates that as of the end of 2013, the estimated remaining capacity was in excess of 170,000,000 tons.

⁶ Los Angeles County Department of Public Works, Los Angeles County Integrated Waste Management Plan, 2015 Annual Report, December 2016, p. 36.

⁷ CalRecycle, Local Government Central. Electronic Annual Report (EAR). Available at http://www.calrecycle.ca.gov/LGCentral/AnnualReport/Sample/default.htm. Accessed July 26, 2017.

⁸ CalRecycle, Jurisdiction Diversion/Disposal Rate Detail, n.d. Available at http://www.calrecycle.ca.gov/LGCentral/Reports/DiversionProgram/ JurisdictionDiversionDetail.aspx?JurisdictionID=76&Year=2015. Accessed July 26, 2017.

3. IMPACT ANALYSIS

a. Methodology

As discussed in greater detail in Chapter II, Modified Project Description, the purpose of this SEIR is to evaluate the changes considered by the proposed modified Project to the approved Project, and to determine whether changes in circumstances surrounding the proposed modified Project site and the approved Project (if any), and new information (if any), require further analysis under CEQA. Specifically, this section will comparatively analyze the approved Project with the proposed modified Project to determine if (1) substantial changes are proposed in the proposed modified Project that would require major revisions to the FEIR; (2) substantial changes of substantial importance arise in the circumstances of the proposed modified Project's undertaking, requiring major revisions to the FEIR; or (3) new information of substantial importance appears that was not known or available at the time the FEIR was certified. In doing so, the underlying methodology of impacts regarding solid waste has been carried forward from the FEIR, and has been updated to reflect the Project site's existing condition.

b. Thresholds of Significance

Thresholds of significance utilized by the City have not changed from those used in the FEIR. As set forth in the FEIR, the proposed modified Project would have a significant impact if:

- The Project generates solid waste at a level that exceeds the available capacity of the existing and/or planned solid waste facilities (i.e., landfills); and
- The Project conflicts with the solid waste policies and objectives set forth in the Carson Municipal Code, the City's SRRE.

c. Project Impacts

(1) Construction

As with the approved Project, construction and demolition debris would be generated during the construction of the proposed modified Project. The FEIR included residential, neighborhood commercial, regional commercial, commercial recreation/entertainment, restaurant, and hotel uses on a 168-acre site. Specifically, the Carson Marketplace Project consisted of total of 1,550 residential units and 1,995,125 sq.ft. of commercial floor area (including 200,000 sq.ft. for a 300-room hotel). The proposed modified Project would reduce the scope of the approved Project to ultimately consist of no more than 1,250 residential units and 1,834,833 sq.ft. of commercial floor area (including 233,333 sq.ft. for 350 rooms total in two

⁹ As previously noted, 300 units have received City approval and are entitled for construction in DD3. These units are not part of the proposed modified Project, but are being treated as a related project. However, they may be also included in the SEIR from time to time for informational purposes to facilitate comparisons with the FEIR.

hotels). Overall, with these proposed modifications, the square footage and construction would be less but roughly equivalent to that of the approved Project.

Similar to the FEIR, street improvements in conjunction with the installation of domestic water and sewer infrastructure are also planned as part of proposed modified Project construction activities. Portions of the water treatment facility and remediation related improvements have been implemented on site. Should existing roadways be removed, construction debris would consist primarily of asphalt paving. The installation of water and sewer lines would also generate related construction debris. However, as the Project site remains essentially undeveloped, no structures would be demolished during construction of the proposed modified Project. Solid waste associated with the above-listed improvements would still be disposed of at an unclassified landfill accepting inert waste.

Based on an average of 4.34 pounds of construction debris per square foot of commercial or non-residential construction and 4.39 pounds of construction debris per square foot of residential construction, 10 the proposed modified Project would generate a total of approximately 10,828 tons of construction debris. Of the total, approximately 3,982 tons of commercial construction debris would be generated, which is 28 tons less than the approximately 4,010 tons of commercial construction debris as compared to the approved Project assessed in the FEIR. The proposed modified Project would also result in the construction of 1,250 residential units which would generate 6,846 tons of residential construction debris, which is 1,587 tons less than the approximately 8,433 tons of residential construction debris as compared to the approved Project as assessed in the FEIR. 11 Assuming that no construction debris would be recycled, the proposed modified Project's construction, as previously stated, would generate a total amount of 10,828 tons solid waste, which is less than the 12,443 tons of solid waste approved in the FEIR. It is important to note that 300 units have received City approvals and are entitled for construction on the 11 acres north of Del Amo Boulevard (Development District 3 [DD3]). These units are not part of the proposed modified Project, but are being treated as a related project. However, even if the addition of these units were considered as part of project, it would not change the less than significant conclusion relative to solid waste during construction.

In addition, since the preparation of the FEIR, effective January 1, 2017, the State requires 65 percent diversion of construction waste, which represents an increase from the previous requirement of 50 percent. This would result in an increase in diversion with the proposed modified Project as compared to the approved Project. With implementation of the

Generation factor obtained from USEPA, Estimating 2003 Building-Related Construction and Demolition Materials Amounts, March 2009, pp. 8 and 10.

The residential construction debris for the proposed modified Project does not include the 300 units that are currently entitled for construction as these units are considered a related project. If the 300 units were included, it is assumed the amount of residential construction debris would be similar to that of the approved Project.

mandatory diversion of construction and demolition debris, a minimum of 65 percent of the Project-generated construction waste would be diverted, and thus, not be disposed of at landfill facilities. Therefore, the actual total amount of construction debris disposed of at a landfill would be approximately 1,581 tons.

The remaining capacity of the Azusa Landfill is estimated at 57.56 million tons, or 46.05 million cubic yards. Given the remaining permitted capacity and the average disposal rate of 846 tpd in 2015, this landfill has approximately 185 years remaining capacity. As the proposed modified Project construction debris would represent approximately 0.004 percent of remaining inert landfill capacity, impacts attributable to the proposed modified Project's construction debris are also less than significant and less than those originally estimated by the FEIR for the approved Project.

(2) Operation

Operation of the proposed modified Project would be similar to that described in the FEIR. The FEIR estimated the amount of solid waste that would be disposed of during Project operations would be 10,064 tons per year (tpy). As discussed above, the proposed modified Project would modify and reduce the overall scope and square footage commercial uses as compared to the approved Project, but would increase the number of hotel rooms by 50 rooms (from 300 to 350 hotel rooms). Table IV.J-3, Solid Waste Disposal During Proposed **Modified Project Operations**, provides the updated calculations to FEIR Table 72 based on CalRecycle's 2014 Generator-Based Characterization of Commercial Sector Disposal and Diversion in California. Table IV.J-3 provides the solid waste generated as well as the solid waste disposed for the proposed modified Project. As shown in Table IV.J-3, the proposed modified Project is estimated to generate approximately 11,964.34 tpy. In light of the current efforts and mandates to reduce solid waste disposed of in landfills, it is reasonable to assume that diversion would occur. Using the disposal factors, the proposed modified Project is estimated to generate disposal of approximately 10,380.88 tpy. With the addition of the 300 units in DD3 (considered solely in order to provide a direct comparison with the analysis in the FEIR) the total waste generated would be 12,225.34 tpy and disposed of would be 10,602.88 tpy. Comparing the estimated solid waste disposal for the proposed modified Project to the disposal projected for the approved Project, the proposed modified Project's disposal of solid waste would be slightly greater than the approved Project's original estimate of 10,064 tpy. With the inclusion of the 300 units in DD3 (for comparison purposes only) the proposed modified Project would dispose of 538.88 tpy more of solid waste than the approved Project.

¹² Los Angeles County Department of Public Works, Los Angeles County Integrated Waste Management Plan, 2015 Annual Report, December 2016, page 36.

Table IV.J-3
Solid Waste Disposal During Proposed Modified Project Operations

Use Type	Generation Rate (Disposal Rate)	Amount of Development	Employees ^a	Total Generated (Total Disposed) (tons/year)
RESIDENTIAL				
Residential	0.87 tpy/unit ^b (0.74 tpy/unit)	1,250 units ^c	_	1,087.5 tons (925.0)
COMMERCIAL				
Retail	2.41 tpy/employee (2.14 tpy/employee)	1,371,500 sq.ft.	3,501	8,436.19 (7,953.88)
Recreation	3.08 tpy/employee (1.13 tpy/employee)	130,000 sq.ft.	352	1,085.08 (398.10)
Restaurant	2.92 tpy/employee 2.40 tpy/employee)	100,000 sq.ft.	271	791.32 (650.40)
Hotel	2.14 tpy/employee (1.72 tpy/employee)	233,333 sq.ft.	264	564.25 (453.51)
Subtotal Commercial		_	4,604	10,876.84 (10,602.88)
Total				11,964.34 tons/year ^{c d}
Total Using Disposal Factors				10,380.88 tons/year

NOTES:

SOURCE: ESA, 2017.

As identified in the FEIR, in considering the proposed modified Project's contribution to the Countywide waste stream, solid waste generation would constitute a very small fraction of the amount of solid waste generated in Los Angeles County on an annual basis. Specifically, the solid waste generated by the proposed modified Project at buildout would constitute 0.12 percent of the 9.5 million tons of solid waste disposal in Los Angeles County in 2015. Assuming

^a The employee generation factor for commercial uses is taken from the Los Angeles Unified School District, 2014 Developer Fee Justification Study, March 2014. The retail square footage assumes 711,500 sq.ft. regional commercial and 890,000 sq.ft. of general commercial to calculate the number of employees. As a separate rate is not provided for restaurant or recreation uses, the retail factor was used.

^b Based on CalRecycle's 2014 Generator-Based Characterization of Commercial Sector Disposal and Diversion in California, September 10, 2015.

FEIR Table 72 of the includes the 300 units on DD3. These units are not part of the proposed modified Project and are being treated as a related project in this SEIR. For comparative purposes only with FEIR Table 72, these 300 units would generate 261 tons of solid waste but would dispose of 222 tons of solid waste per year. Thus, the proposed modified Project would generate 12,225.34 tons (and dispose of 10,602.88 tons) per year with the 300 residential units.

^d Due to rounding and other methodology considerations, there may be slight variations within the totals for the rates and totals. These are typical, have been accounted for, and do not significantly affect the analysis or conclusion of this section.

diversion of solid waste generated would occur in light of the current efforts and mandates to reduce solid waste disposed of in landfills, the proposed modified Project would constitute 0.10 percent of the 9.5 million tons of solid waste disposal in Los Angeles County in 2015.

Municipal solid waste generated within the City of Carson is primarily disposed of at the El Sobrante Landfill located in Riverside County or H.M. Holloway Landfill in Kern County. The El Sobrante Landfill has a remaining capacity of 145,530,000 tons and a maximum permitted throughput of 16,054 tpd. The anticipated closure date is January 1, 2045. The H.M. Holloway Landfill has a remaining capacity of 7,522,934 cubic yards. Based on this remaining capacity and a maximum permitted throughput of 2,000 tpd, the landfill has an expected closure date of December 1, 2030. Based on the conclusion in the CIWMP 2015 annual report and the remaining capacity in the two primary landfills used to dispose of waste generated in the City of Carson, there is adequate landfill capacity for the County for the next 15 years. Although the proposed modified Project is anticipated to yield slightly more solid waste per year as compared to the approved Project, with the identified measures, and the current record of City and County compliance with the recommended waste reduction and recycling and other regulatory requirements, impacts associated with the proposed modified Project would also be less than significant, as was also concluded in the FEIR for the approved Project.

Through a combination of compliance with state requirements regarding recycling, the limited proportion of Countywide solid waste generation attributable to the proposed modified Project, available capacity within the El Sobrante Landfill and H.M. Holloway Landfill, and the ongoing legally required solid waste planning programs, it is concluded that proposed modified Project operations would have a less than significant impact with regard to landfill disposal capacity. As the proposed modified Project would comply with City-required recycling programs, the proposed modified Project operations would be consistent with the applicable provisions of the SRRE. As such, a less than significant impact would result.

4. MITIGATION MEASURES

The following measures were adopted in the Mitigation Monitoring and Reporting Program, in the FEIR and are thus in effect:¹³

Mitigation Measure J.3-1: All structures constructed or uses established within any part of the proposed-Project site shall be designed to be permanently equipped with clearly marked, durable, source—sorted recycling bins at all times to facilitate the separation and deposit of recyclable materials.

The mitigation measures from the FEIR have been updated to reflect that the approved Project has already been approved. For clarity, the changed text is marked as follows: new text is <u>underlined</u>, and deleted text is shown in strikeout format.

- **Mitigation Measure J.3-2:** Primary collection bins shall be designed to facilitate mechanized collection of such recyclable wastes for transport to on- or off-site recycling facilities.
- Mitigation Measure J.3-3: The Applicant shall coordinate with the City of Carson to continuously maintain in good order for the convenience of patrons, employees, and residents clearly marked, durable, and separate recycling bins on the same lot, or parcel to facilitate the deposit of recyclable or commingled waste metal, cardboard, paper, glass, and plastic therein; maintain accessibility to such bins at all times, for collection of such wastes for transport to on- or off-site recycling plants; and require waste haulers to utilize local or regional material recovery facilities as feasible and appropriate.
- **Mitigation Measure J.3-4:** Any existing on-site roads that are torn up shall be ground on site and recycled into the new road base.
- **Mitigation Measure J.3-5:** Compaction facilities for non-recyclable materials shall be provided in every occupied building greater than 20,000 square feet in size to reduce both the total volume of solid waste produced and the number of trips required for collection, to the extent feasible.
- **Mitigation Measure J.3-6:** All construction debris shall be recycled in a practical, available, accessible manner, to the extent feasible, during the construction phase.

(See FEIR [DEIR p. 63].) When the proposed revisions to the proposed modified Project are compared to the approved Project analyzed under the FEIR, and given there is new information of substantive importance, there are no new significant impacts or changes with the retention of the existing mitigation measures in place. As such, no additional mitigation measures would be required.

5. CUMULATIVE IMPACT

The development of the identified related projects would generate solid waste during construction. As with the proposed modified Project, debris generated by the related projects would be required to be recycled pursuant to the State requirement to divert 65 percent of construction and demolition debris. As described above, Azusa Land Reclamation has capacity estimated at 57.56 million tons, or 46.05 million cubic yards. Given the remaining permitted capacity and the average disposal rate of 846 tpd in 2015, this landfill has capacity for approximately 189 years. ¹⁴ Therefore, given sufficient capacity, cumulative impacts regarding construction debris are concluded to be less than significant.

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Los Angeles County Department of Public Works, Los Angeles County Integrated Waste Management Plan, 2015 Annual Report, December 2016, page 36.

During operations, cumulative solid waste disposal for the cumulative projects (Section III.B) is forecasted to be approximately 3,659.79 tons on an annual basis, as shown in Table IV.J-4, Forecast of Cumulative Waste Disposal with Proposed Modified Project. With the 10,380.88 tons of solid waste disposed of by the proposed modified Project, a total of 14,040.67 tons of solid waste would be disposed of annually. It is anticipated that the proposed modified Project and other related projects would not conflict with solid waste policies and objectives in the City's SRRE or Construction and Demolition Debris Recycling Program. Impacts to solid waste policies and objectives intended to help achieve the statewide goal of 75 percent recycling, composting or source reduction by 2020 from implementation of the proposed modified Project and related projects would not be cumulatively significant. Cumulative annual solid waste disposal, including the approximately 10,380.88 tons of solid waste under the proposed modified Project, represents 0.15 percent of the total 9.5 million tons of solid waste generated in Los Angeles County in 2015. Based on this small percentage as well as the City's recycling programs and ongoing planning efforts at a Countywide level assuring 15 years of landfill capacity on an ongoing basis, cumulative impacts on municipal landfill capacity are concluded to be less than significant.

6. LEVEL OF SIGNIFICANCE AFTER MITIGATION

In summary, the proposed modified Project would result in an increase in solid waste disposal in the City of Carson compared to the approved Project assessed in the FEIR. However, as compared to the approved Project, changes as a result of the proposed modified Project will not require major revisions to the FEIR as no new significant impacts were identified. Specifically, with regard to solid waste (1) no substantial changes are proposed in the proposed modified Project that would require major revisions to the FEIR; (2) no substantial changes arise in the circumstances of the proposed modified Project's undertaking, requiring major revisions to the FEIR; and (3) no new information of substantial importance appears that was not known or available at the time the FEIR was certified. No substantial changes are proposed with regards to solid waste generation, and there is not any other substantive change or information that requires substantial changes to the FEIR with regard to solid waste. The proposed modified Project would not dispose of solid waste at a level that exceeds the available capacity of the existing and/or planned solid waste facilities (i.e., landfills); and is consistent with the solid waste policies and objectives set forth in the Carson Municipal Code and the City's SRRE. Construction of the proposed modified Project would not result in a comparatively substantive increase in inert solid waste generation that would create a need for additional inert solid waste disposal facilities to adequately handle inert waste generated by the proposed modified Project. Thus, constructionrelated waste would still result in a less than significant impact.

Table IV.J-4

Forecast of Cumulative Waste Disposal with Proposed Modified Project

			Waste D	isposal
Land Use	Size	Number of Employees	Disposal Rate (tons/year) ^a	Total Operation
Residential	1,138 du ^b	_	$0.74^{\rm c}$	842.12
Retail	32,400 sq.ft.	88	2.14 ^d	187.90
Office	137,000 sq.ft.	656	1.86 ^e	1,220.59
Light Industrial	815,500 sq.ft.	1,101	$1.28^{\rm f}$	1,409.18
Total Related Projects	_	_	_	3,659.79
Proposed Modified Project	_	_	_	10,380.88 ^g
Total	_	_	_	14,040.67

NOTES:

SOURCE: ESA, 2017.

As compared to the approved Project, solid waste impacts from construction debris would be similar. Operation of the proposed modified Project would result in a disposal of an estimated 10,380.80tons per year (tpy) of Class III solid waste, based on the amount of proposed modified Project development. As the El Sobrante Landfill and H.M. Holloway Landfill have available capacity until 2045 and 2030 years, respectively, it is anticipated that solid waste generated by the proposed modified Project could still be accommodated at the existing facilities. Thus, impacts associated with the proposed modified Project's solid waste generation are concluded to be less than significant. Furthermore, the County via its established planning

^a Based on CalRecycle's 2014 Generator-Based Characterization of Commercial Sector Disposal and Diversion in California, September 10, 2015.

This includes the 300 units that were part of the approved Project. The 300 units would result in the disposal of 222 tons of solid waste per year.

^c CalRecycle per unit disposal rate for multifamily dwellings.

d CalRecycle per employee disposal rate for "Retail Trade – All Other". Retail rates ranged from 1.21 to 2.14.

^e CalRecycle per employee disposal rate for "Services – Professional, Technical, & Financial". Office related rates ranged from 0.32 to 1.86.

^f CalRecycle per employee disposal rate for "Manufacturing – Food & Nondurable Wholesale". Industry related rates ranged from 0.31 to 1.28.

As previously noted, the 300 units that have received City approvals and are entitled for construction in DD3 are being treated as a related project. Therefore, these units are included in this line item and are removed from the proposed modified Project for purposes of the cumulative analysis.

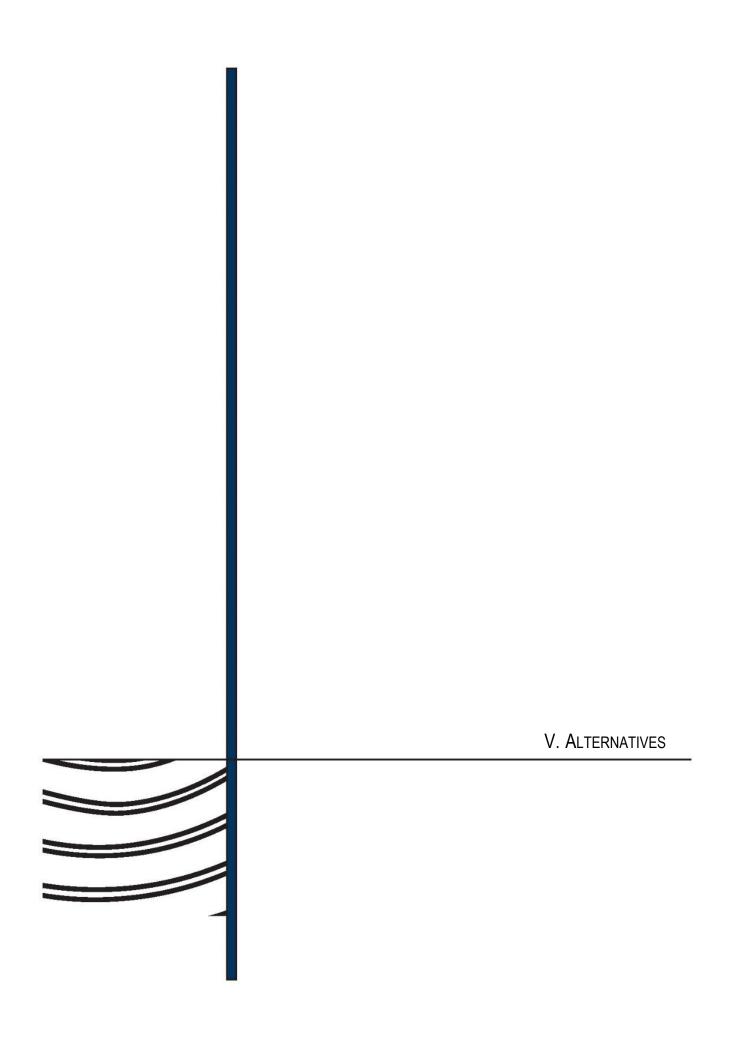
While the FEIR conclusions for impacts of solid waste are consistent with the findings in Table 72, indicating a 10,064 tpy increase in solid waste generation for the approved Project, there is a misprint in summary of conclusions which states an increase of 10 tons per year.

programs has concluded that landfill disposal capacity will still be available for the next 15 years, and in the long term.

The proposed modified Project would not conflict with the solid waste policies and objectives in the SRRE or the Construction and Demolition Debris Recycling Program, therefore impacts relative to adopted solid waste diversion programs and policies would be less than significant.

Comparison to FEIR Findings: No New Significant Impact. Previous Mitigation Applies as Modified Herein. No New Mitigation Measure(s) Identified or Required.

IV.J.3. Solid Waste	
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V. ALTERNATIVES

A. INTRODUCTION

In accordance with CEQA Guidelines Section 15126.6, an EIR must describe and compare a range of reasonable alternatives to a project, or alternative locations for a project, that could feasibly attain most of the basic project objectives but avoid or substantially lessen any significant environmental impacts associated with the project. An EIR must consider a reasonable range of feasible alternatives to facilitate informed decision making and public participation. An EIR need not consider every conceivable alternative to a project and is not required to consider alternatives which are infeasible. The lead agency shall select a range of project alternatives and disclose its reasoning for selecting those alternatives. The selection of such alternatives is governed only by the rule of reason, as described further below.

This SEIR is a supplemental EIR to the approved Project FEIR (City of Carson 2006). Per CEQA Guidelines Section 15163(a), this SEIR need only include the information necessary to make the previous FEIR adequately apply to the proposed modified Project as a modification to the approved Project. Two of the alternatives discussed in the FEIR (Alternative 2, Development per General Plan and Alternative 4, Alternative Site) are no longer relevant in regard to the proposed modified Project given changed environmental baseline and other conditions such as related projects; as such, these previous alternatives are now discussed in Section IV.D, Alternatives Considered but Rejected. Thus, the analysis of alternatives presented herein focuses on the two No Project alternatives (Alternative 1A, No Project – No Development, and Alternative 1B, No Project – Development under Approved Project) and Alternative 2, Reduced Modified Project Alternative.

B. BASIC OBJECTIVES OF THE PROPOSED MODIFIED PROJECT

Table V-1, Comparison of Objectives (reproduced from Table II-1, Comparison of Objectives, in Chapter II, Modified Project Description), provides a comparison of the approved Project's objectives and the proposed modified Project's objectives in compliance with CEQA Guidelines Section 15124(b). The proposed modified Project's basic and fundamental objectives are restated below for reference:

Table V-1

Comparison of Objectives

Approved Project	Proposed Modified Project	Comparison	
Achieve productive reuse of a large brownfield site by approving a project capable of generating the revenue necessary to pay for and effectuate remediation of the environmental conditions on the Project site.	Achieve productive reuse of a large brownfield site by approving a project capable of generating the revenue necessary to pay for and effectuate remediation of the environmental conditions on the Project site.	No change.	
Promote the economic well-being of the Redevelopment Project Area by encouraging the diversification and development of its economic base, and assist in creating both short and long term employment opportunities for the residents of the Redevelopment Project Area and the City.	Promote the economic well-being of the City by encouraging the diversification and development of its economic base, and assist in creating both short and long term employment opportunities for the residents of the City.	Update. Removes references to now-defunct Redevelopment Agencies.	
Maximize shopping and entertainment opportunities to serve the population and maintain a sustainable balance of residential and non-residential uses by approving a mixed-use project that includes entertainment, retail shopping, restaurants, and residential units.	Maximize shopping and entertainment opportunities to serve the population and maintain a sustainable balance of uses by approving a mixed-use project that allows entertainment, retail shopping, restaurants, and residential uses.	Some modification.	
Provide a diversity of both short term and long term employment opportunities for local residents by approving a project that will generate substantial construction work opportunities and long-term jobs in the commercial and hospitality industries.	Provide a diversity of both short term and long term employment opportunities for local residents by approving a project that will generate substantial construction work opportunities and long-term jobs in the commercial and hospitality industries.	No change.	
Improve the housing stock, including affordable housing, by approving a project that includes a substantial residential component with rental and for sale units.	Improve the housing stock by approving a project that includes a substantial residential component.	Update. Removes differentiation between housing types and rental and for sale residential units.	
Provide a signature/gateway project that contributes to the creation of a vibrant urban core for the City, taking advantage of the site's proximity to the San Diego Freeway.	Provide a signature/gateway project that contributes to the creation of a vibrant urban core for the City, taking advantage of the site's proximity to the San Diego Freeway.	No change.	
Stimulate private sector investment in the Project site by implementing a project that is fiscally sound and capable of financing the construction and maintenance of necessary infrastructure improvements.	Stimulate private sector investment in the Project site by implementing a project that is fiscally sound and capable of financing the construction and maintenance of necessary infrastructure improvements.	No change.	

Table V-1
Comparison of Objectives

Approved Project	Proposed Modified Project	Comparison
Develop the Project site in a manner that enhances the attractiveness of the City's freeway corridor and the major arterials that adjoin the Project site.	Develop the Project site in a manner that enhances the attractiveness of the City's freeway corridor and the major arterials that adjoin the Project site.	No change.
Increase revenues to the City by approving a project that provides for a variety of commercial and retail activities with the potential to generate substantial sales and property tax revenue.	Increase revenues to the City by approving a project that provides for a variety of commercial and retail activities with the potential to generate substantial sales and property tax revenue.	No change.
Promote the economic well-being of the Project site by approving a project that is attractive to consumers and residents and that would ensure long-term success of the development.	Promote the economic well-being of the Project site by approving a project that is attractive to consumers and residents and that would ensure long-term success of the development.	No change.
Provide hotel rooms to meet an identified market need, and in so doing serve nearby businesses, community activities, and proposed on-site uses	Provide hotel rooms to meet an identified market need, and in so doing serve nearby businesses, community activities, and proposed on-site uses	No change.
Consistent with other objectives, provide a project design that interfaces with surrounding uses in a manner that provides for a transition between the Project and adjacent areas.	Consistent with other objectives, provide a project design that interfaces with surrounding uses in a manner that provides for a transition between the Project and adjacent areas.	No change.

C. ALTERNATIVES SELECTED FOR THE ANALYSIS

This section focuses on alternatives that might potentially avoid or reduce the significant adverse impacts of the proposed modified Project. As required by the CEQA Guidelines, the FEIR described several reasonable alternatives to the approved Project, and evaluated the environmental impacts associated with each alternative (see FEIR [DEIR pp. 539–598]). The FEIR evaluated four alternatives, including the No Project Alternative (Alternative 1); Development per General Plan Alternative (Alternative 2); Reduced Project Alternative (Alternative 3); and the Alternate Site Alternative (Alternative 4).

Per CEQA Guidelines Section 15163(a), this SEIR need only include the information necessary to make the previous FEIR adequately apply to the proposed modified Project as a modification to the approved Project. In accordance with CEQA Guidelines Section 15163(a), Alternative 1, No Project Alternative, and Alternative 3, Reduced Project Alternative, of the approved Project were determined to still be feasible since the certification of the FEIR.

Alternative 2, Development per General Plan, and Alternative 4, Alternative Site, have been considered but rejected as applicable alternatives for the proposed modified Project. Refer below to Section IV.D, Alternatives Considered but Rejected, for a detailed discussion on why these alternatives were considered infeasible and were rejected from further analysis within this SEIR.

The SEIR will modify Alternatives 1 and 3 of the approved Project to be applicable to the proposed modified Project, to determine what if any, significant unavoidable impacts would be reduced with implementation of the alternative. In addition, the SEIR will also evaluate the environmental impacts associated with each alternative and compare the relative impacts of these alternatives to the proposed modified Project. The analysis of alternatives begins with the two No Project alternatives (Alternative 1A and Alternative 1B). Based on comparative evaluations, estimations are made as to the environmental impacts of each alternative in contrast to those of the proposed modified Project, and whether each alternative could attain the basic Project objectives. The alternatives to the proposed modified Project are summarized in **Table V-2**, **Alternatives Land Use Comparison**, and are as follows.

Table V-2

Alternatives Land Use Comparison

Type of Development	Proposed Modified Project	Alternative 1A: No Project - No Development	Alternative 1B: No Project – Development under Approved Project	Alternative 2: Reduced Modified Project ^a (25 percent Reduction)
Residential	1,250 units	0 units	1,550 units	938 units
Regional Outlet Commercial	696,500 sq.ft.	0 sq.ft.	0 sq.ft.	522,375 sq.ft.
Restaurant	100,000 sq.ft.	0 sq.ft.	81,125 sq.ft.	75,000 sq.ft.
Hotel	350 rooms (233,333 sq.ft.)	0 sq.ft.	300 rooms (200,000 sq.ft.)	263 rooms (175,000 sq.ft.)
Commercial Recreation/Entertainment	130,000 sq.ft.	0 sq.ft.	214,000 sq.ft.	97,500 sq.ft.
Regional Commercial	585,000 sq.ft.	0 sq.ft.	1,370,000 sq.ft.	438,750 sq.ft.
Neighborhood Serving Commercial	90,000 sq.ft.	0 sq.ft.	130,000 sq.ft.	67,500 sq.ft.
Total Commercial (including hotel) Floor Area	1,834,833 sq.ft. ^b	0 sq.ft.	1,995,125 sq.ft.°	1,376,125 sq.ft. ^d

NOTES:

SOURCE: ESA 2017.

^a Similar to the proposed modified Project, Alternative 2 does not include the 300 units in Development District 3 (DD3).

b Assumes 233,333 sq.ft. of hotel floor area.

^c Assumes 200,000 sq.ft. of hotel floor area.

^d Assumes 175,000 sq.ft. of hotel floor area.

1. Alternative 1A: No Project – No Development

The No Project – No Development Alternative (Alternative 1A) assumes that the proposed modified Project would not be developed and that the Property would remain as it is in existing conditions. Since the FEIR, the Property has undergone, and continues to undergo, remediation, capping, and maintenance of the former landfill, consistent with the FEIR. Complete remediation of the existing brownfield portion (the Property), including the capping of existing waste materials at the former landfill site, would occur under Alternative 1A. However, although some pressure for, and interest in, reuse of the site exists, no project would be approved and developed on the Property in the foreseeable future under Alternative 1A. The 300 units entitled for construction on DD3 would be developed. The evaluation of Alternative 1A addresses the requirements of CEQA Guidelines Section 15126.6(3)(1).

2. Alternative 1B: Development under Approved Project

The No Project – Development under Approved Project Alternative (Alternative 1B) assumes that the approved Project analyzed in the FEIR would be developed on the 168-acre Project site. Maximum development on the Project site, as analyzed in the FEIR, would consist of a total of 1,995,125 square feet (sq.ft.) of commercial uses and 1,550 residential units. The 157 acres of the Project site, which is a former landfill site (and referred to as the Property in the proposed modified Project), would continue to undergo remediation, capping, and maintenance and operation consistent with implementation of the Remedial Action Plan (RAP) and the FEIR. A comparison between the Alternative 1B mix of land uses and the proposed modified Project is provided above in Table V-2.

3. Alternative 2: Reduced Modified Project

The Reduced Modified Project Alternative (Alternative 2) assumes that the scale of the proposed modified Project would be reduced through a 25 percent reduction in all proposed land uses (i.e., residential units and commercial floor area). The proportionate mix of commercial and residential uses would be the same as under the proposed modified Project; however, maximum development would consist of 938 residential units and commercial floor area would consist of 1,376,125 sq.ft. The reduction in development under Alternative 2 could be achieved through fewer structures (smaller building footprint) or reduced building heights. The former landfill site would continue to undergo remediation, capping, and maintenance consistent with the FEIR. A comparison between Alternative 2 mix of land uses and the proposed modified Project is provided above in Table V-2.

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Similar to the proposed modified Project, the Reduced Modified Project Alternative does not include the 300 units in DD3.

D. ALTERNATIVES CONSIDERED BUT REJECTED

CEQA Guidelines Section 15126.6(c) state that an EIR shall consider a reasonable range of alternatives to a proposed project and that the EIR should briefly describe the rationale for selecting the alternatives to be discussed. As described in CEQA Guidelines Section 15126.6(c), the reasons for rejecting alternatives from detailed consideration include the following: (i) failure to meet most of the basic project objectives, (ii) infeasibility, or (iii) inability to avoid significant environmental impacts.

In accordance with CEQA Guidelines Section 15126.6(c), the Development per General Plan Alternative (Alternative 3 of the approved Project) was rejected as an infeasible alternative because the previous General Plan land uses that were analyzed under the FEIR (Mixed-Use Business Park) have been superseded by the adoption of the FEIR and Carson Market Place Specific Plan, and subsequently the 2011 The Boulevards at South Bay Specific Plan Amendment (the approved Project).

The Alternative Location Alternative (Alternative 4 of the approved Project) was also rejected as infeasible due to the necessity to split the Project site. The approved Project encompassed the 168-acre Project site as evaluated within the FEIR, while the proposed modified Project only applies to the 157 acres south of Del Amo Boulevard. The City has approved the development of 300 residential units on DD3, which are entitled for construction. Since the proposed modified Project is a modification of the approved Project and the approved Project considered an Alternative Location Alternative for the Project, the FEIR analysis applies here. The FEIR identified the Shell Refinery Site as the selected alternative Project site, which has remained in similar condition as described in the FEIR. However, the City does not own the site and does not currently have the right to develop this site. Thus, it is speculative at this point if this alternative site would be a feasible alternative, especially due to ownership and jurisdictional considerations. In accordance with CEQA Guidelines Section 15145, the City, as the Leady Agency, is not required to further analyze impacts which, after thorough investigation, have been determined to be too speculative for evaluation. Finally, the Alternative Location Alternative would not achieve any of the City's goals and policies as development of the proposed modified Project for redevelopment of a large brownfield site within the City's jurisdiction under this scenario. For these reasons stated above, the Alternative Location Alternative has been rejected as infeasible.

E. ANALYSIS METHODOLOGY

The methodology for the analysis of the alternatives for the proposed modified Project has been carried forward from the FEIR (see FEIR [DEIR pp. 542–543]). However, the methodology has been updated to reflect the changes to the current existing conditions and the previous analyzed alternatives for the approved Project have been refined to make the

alternatives applicable to the proposed modified Project. Each alternative is evaluated in less detail than the proposed modified Project, as presented in Chapter IV, Environmental Impact Analysis, of this SEIR, but in sufficient detail to determine whether environmental impacts of the alternatives after mitigation would be greater, similar, or less than the corresponding impacts of the proposed modified Project, and in sufficient detail to determine whether the proposed modified Project objectives are substantially attained.

F. EVALUATION OF THE ALTERNATIVES

1. Alternative 1A: No Project – No Development

a. Introduction

As summarized from above, the No Project – No Development Alternative (Alternative 1A) assumes that the proposed modified Project would not be developed and that the Property would maintain its existing conditions. Under Alternative 1A, the Project site would continue to undergo remediation, capping, and maintenance of the former landfill, consistent with the FEIR. Complete remediation of the existing brownfield portion of the Project site, including the capping of existing waste materials at the former landfill site, would occur under Alternative 1A. However, although some pressure for, and interest in, reuse of the site exists, no project would be approved and developed in the foreseeable future under Alternative 1A.

b. Analysis of Alternative 1A

(1) Land Use and Planning

Under Alternative 1A, the Property would not be developed with the proposed modified Project, but the approved and certified RAP would continue to be implemented, consistent with the FEIR. Alternative 1A would result in no change to the existing land use and zoning designations or change any existing land use relationships. While this site would remain zoned under the approved Project, Alternative 1A assumes that no development would occur on the Property in the foreseeable future.

(a) Compatibility with Land Use Plans, Polices and Regulations

Under Alternative 1A, the approved and certified RAP would continue until the RAP is completely implemented; no horizontal development would occur on the Project site other than structures to support the RAP (i.e., operations and maintenance buildings, GETS, etc.). Since no development would occur, Alternative 1A would have no direct effect on the City's regulatory framework. However, Alternative 1A would not help to achieve the following City goals: (1) enhancement of the City's economic base, (2) increase new employment opportunities and additional housing units within the City, and (3) provide the development of a signature project

that would maximize the advantages of the site's location and provide an enhanced urban center within the central portion of the City. While Alternative 1A would not help to achieve the City's goals and policies, Alternative 1A would not be inconsistent with any applicable land use plan, policy, or regulation. Impacts related to land use compatibility would be less than significant, similar to the proposed modified Project.

(b) Existing Land Use Patterns

Since the Project site would maintain existing conditions, Alternative 1A would have no impact on the existing land use relationships in the Project vicinity. Alternative 1A, as is the case with the proposed modified Project, would not result in the division, disruption or isolation of an existing established community or neighborhood. Thus, impacts related to the land use patterns would be less than significant under Alternative 1A, which is similar to the proposed modified Project.

(c) Sustainability of Existing Retail Uses

With no development on the Project site, Alternative 1A would not adversely affect the viability of retail uses within the market area, nor contribute to long-term physical disrepair to such buildings. Therefore, the no impact on the sustainability of existing uses would occur as there would be no change from existing conditions. Impacts related to urban decay would be reduced compared to the proposed modified Project. However, as stated in Section IV.A, Land Use and Planning, while the proposed modified Project would have result in an increase in vacancy levels in the short-term, the overall increase in vacancy levels is not considered to be substantial in the long-term and impacts would be less than significant.

(2) Visual Resources

(a) Aesthetic Character

(i) Construction

While Alternative 1A would result in no development on the site, construction activities associated with the approved and certified RAP would continue to be implemented on site. However, the construction activities associated with the approved and certified RAP are consistent with existing condition and with the analysis within the FEIR. The ongoing construction activities associated with the approved and certified RAP would not be continuous but would rather become maintenance activities that would occur to maintain RAP implementation. Further, construction activities associated with the approved and certified RAP would have a less than significant impact due to the limited off-site views of such activities, the common appearance of construction activities in an urban setting, and the lack of contrast of construction activities with any off-site valued resources. Therefore, under Alternative 1A, impacts to aesthetic character during construction of the approved and certified RAP would be

less than significant. As discussed in Section IV.B, Visual Resources, construction of the proposed modified Project would result in a significant and unavoidable impact as development of the Project site would result in the conversion of the undeveloped site to a fully developed site, causing the loss of spaciousness. Thus, Alternative 1A would result in a significant reduction of aesthetic impacts during construction compared to the proposed modified Project.

(ii) Operation

Alternative 1A would not develop the Project site but would continue construction activities associated with the ongoing RAP, as described in the FEIR. Under Alternative 1A, the Project site would remain primarily undeveloped, vacant land with small areas of facilities associated with the RAP and views of the Project site would continue to provide the feeling of spaciousness of a brownfield remediated site within an urban environment. Therefore, while Alternative 1A would continue the development of small-scale facilities on the Project site associated with the RAP operations and maintenance buildings, GETS, etc., the overall aesthetic character of the Project site would remain similar to existing conditions. Therefore, under Alternative 1A, impacts to aesthetic character during operation of the RAP would be less than significant. As discussed in Section IV.B, construction of the proposed modified Project would result in a significant and unavoidable impact as implementation of the proposed modified Project would convert the existing openness of the Project site to a developed appearance with the proposed modified Project. Thus, Alternative 1A would result in a significant reduction of aesthetic impacts during operation compared to the proposed modified Project.

(b) View Resources

As stated in Section IV.B, the Project site itself is not considered a view resource and the Project vicinity does not contain notable features that would typically fall under the heading of view resource. Further, views over the Project site are limited due to intervening development, the flat terrain in the areas surrounding the Project site, and that the Project site sits atop a berm that slopes down to surrounding areas. Therefore, while some construction activities would occur under the ongoing RAP, Alternative 1A would result in an overall reduction of construction and development compared to the proposed modified Project. Thus, Alternative 1A would not affect any view resources on or within the vicinity of the Project site. Impacts to view resources would be less than significant, similar to the impacts identified for the proposed modified Project.

(c) Shade/Shadow

As stated in Section IV.B, the maximum off-site shading that could occur on sunsensitive uses is limited, with the greatest shading potential occurring during winter mornings. Under Alternative 1A, since the Project site would remain primarily undeveloped, the only potential for buildings to cast shade and/or shadow on surrounding sun-sensitive uses would be the operations and maintenance building in the southwest corner of the site (refer to

Figure IV.B-1, Viewpoint Location Map, in Section IV.B) and associated RAP facilities. While small-scale facilities could be developed on-site under the RAP, any potential shade and/or shadow impacts have been previously analyzed within the FEIR and does not require additional environmental review under CEQA. Thus, Alternative 1A would remain similar to existing conditions and impacts would be reduced compared to the proposed modified Project. Impacts would be less than significant, similar to the proposed modified Project.

(d) Artificial Light

Alternative 1A would continue construction activities associated with the ongoing RAP, as described in the FEIR. Under Alternative 1A, the Project site would remain primarily undeveloped, vacant land with facilities associated with the RAP and light conditions at the Project site would remain unchanged from existing conditions. With no change, there would be no lighting impact. This would be a lesser impact than that of the proposed modified Project.

(3) Traffic and Circulation

Under Alternative 1A, traffic conditions would remain similar to existing conditions. Construction activities associated with the ongoing RAP implementation would still occur on site under Alternative 1A. While there would be periodic truck trips associated with the ongoing RAP activities, traffic impacts associated with implementation of the RAP have been previously analyzed and mitigated, where necessary, within the FEIR. However, under Alternative 1A, there would be no operational traffic. Thus, since no development would occur outside the RAP under Alternative 1A, overall construction and operation activities would be significantly reduced compared to the proposed modified Project. Traffic impacts associated with Alternative 1A would be less than significant, which would be significantly reduced compared to the significant and unavoidable impacts identified for the proposed modified Project.

(4) Geology/Soils

(i) Construction

As stated above, Alternative 1A would only include construction activities necessary to complete the remaining efforts of the RAP implementation at the Project site. However, the construction activities associated with implementation of the RAP are part of existing conditions and were analyzed under separate CEQA documentation as discussed in the analysis within the FEIR (see FEIR [DEIR pp. 97–99] for a brief discussion of the RAP). Under Alternative 1A, there would be a significant reduction in other ground disturbing activities as no development would occur. Therefore, under Alternative 1A, impacts during construction would be limited to just the RAP activities and overall would be reduced from the proposed modified Project. Impacts related to geology and soils during construction would be less than significant, similar to the impacts identified for the proposed modified Project.

(ii) Operation

Under Alternative 1A, there would be no development that could become susceptible to adverse effects from the geologic hazards present at the Project site. The RAP implementation would continue to be consistent with the approved RAP, which was analyzed and consistent with the FEIR. Since no development would occur under Alternative 1A, impacts related to geology and soils during operation would be significantly reduced from the proposed modified Project. Similar to the propose modified Project, Alternative 1A would result in less than significant impacts.

(5) Air Quality

While Alternative 1A would result in no development on the Property, construction activities associated with the ongoing RAP would continue on site. However, the construction activities associated with the remediation program are consistent with existing conditions and with the analysis within the FEIR. Further, the ongoing construction activities associated with the RAP would have a less than significant impact due to changes in regulatory requirements regarding construction fleet efficiencies. Therefore, under Alternative 1A, impacts related to regional construction emissions and cancer risk would be less than significant for ongoing remedial activities. Alternative 1A would result in less impacts as compared to the proposed modified Project's less than significant impacts.

Construction and operational significant impacts would not occur under Alternative 1A and, therefore, would not generate air pollutants related to Project construction or operation of the proposed modified Project. There would be no impact under Alternative 1A, whereas the proposed modified Project would have a significant and unavoidable regional construction impact related to ROC emissions and significant and unavoidable regional operation impacts related to ROC, NOx, CO, PM₁₀, and PM_{2.5}.

(6) Noise

While Alternative 1A would result in no development on the Property, construction activities associated with the ongoing remediation program would continue on site. However, the construction activities associated with the remediation program are consistent with existing conditions and with the analysis within the FEIR. The noise from ongoing construction activities associated with the remediation program would have a less than significant impact with incorporation of mitigation previously implemented by the FEIR and ongoing operation of the GCCS and GETS would be less than significant. Therefore, under Alternative 1A, noise impacts related to ongoing remedial construction activities and landfill gas and water treatment would be less than significant, similar to the proposed modified Project. Alternative 1A would result in similar impacts compared to the proposed modified Project.

No development would occur within the Property under Alternative 1A. Consequently, it would not generate any new or increased sources of construction noise or vibration, traffic noise,

or operational noise on the Project site. Impacts would be less than significant, whereas the proposed modified Project would have a significant and unavoidable construction noise impact related to pile driving and DDC activities.

(7) Utilities

(a) Wastewater Services

Under Alternative 1A, no construction or development would occur on site, with the exception of the ongoing activities associated with the RAP, which were previously analyzed and are consistent with the FEIR. Since no construction or development would occur under Alternative 1A, there would be no potential for short- or long-term wastewater generation as the Project site would remain similar to existing conditions. Thus, impacts associated with wastewater generation would be reduced compared to the proposed modified Project. Impacts would be less than significant, similar to the proposed modified Project.

(b) Solid Waste

Under Alternative 1A, no construction or development would occur on site, with the exception of the ongoing activities associated with the RAP, which were previously analyzed and are consistent with the FEIR. Since no construction or development would occur under Alternative 1A, there would be no potential for short- or long-term solid waste generation as the Project site would remain similar to existing conditions. Thus, impacts associated with solid waste generation would be reduced compared to the proposed modified Project. Impacts would be less than significant, similar to the proposed modified Project.

(8) Greenhouse Gas Emissions

While Alternative 1A would result in no development on the Property, construction activities associated with the ongoing remediation program would continue on site. Greenhouse gas emissions related to ongoing construction activities associated with the remediation program were not evaluated in the FEIR. However, the construction activities associated with the remediation program are consistent with existing conditions. Therefore, under Alternative 1A, greenhouse gas emission impacts related to ongoing remedial construction activities and landfill gas and water treatment would be less than significant.

With the exception of the ongoing remediation program occurring on site, construction and operational impacts would not occur under Alternative 1A and, therefore, would not generate greenhouse gas emissions related to Project construction or operation of the proposed modified Project. Impacts would, therefore, be less than those anticipated for the proposed modified Project.

(9) Energy

While Alternative 1A would result in no development on the Property, construction activities associated with the ongoing remediation program would continue on site. Because the remediation program is on-going, continued construction of the remediation program would not result in increases in the consumption of energy compared to existing conditions. Continued operation of the GCCS and GETS would still require electricity and natural gas, but would not require energy to support the proposed modified Project's development. Therefore, under Alternative 1A, impacts related to ongoing remedial construction activities and landfill gas and water treatment would be less than significant, similar to the proposed modified Project. Alternative 1A would result in similar impacts compared to the proposed modified Project.

c. Relationship of Alternative 1A to the Proposed Modified Project Objectives

The No Project – No Development Alternative (Alternative 1A) would continue to implement the RAP as consistent with the FEIR and would meet the basic objective of the proposed modified Project to achieve remediation of the environmental conditions on the Project site. However, Alternative 1A would also not promote the economic success of the City, since it would not redevelop a brownfield that is currently unused and would not contribute to the diversification and development of the economic base of the City. Alternative 1A would not meet the proposed modified Project's objective to maximize shopping and entertainment opportunities or to maintain a sustainable balance of residential and non-residential uses. Alternative 1A would not meet the proposed modified Project objective to provide a diversity of both short-term and long-term employment opportunities for local residents, since it would not generate construction jobs or permanent employment in the commercial and hospitality industries. Alternative 1A would also not meet the basic objective of the proposed modified Project to contribute to the City's stock of housing units. In addition, Alternative 1A would not meet the objective of the proposed modified Project to provide a signature/gateway development that contributes to the creation of a vibrant urban core for the City, while taking advantage of the site's proximity to the Interstate 405 (I-405) Freeway (the San Diego Freeway). While Alternative 1A would avoid the proposed modified Project's significant and unavoidable impacts associated with visual resources, traffic, air quality, and construction noise, Alternative 1A not meet the majority of the proposed modified Project's objectives.

2. Alternative 1B: No Project – Development under Approved Project

a. Introduction

As summarized from above, the No Project – Developed under Approved Project Alternative (Alternative 1B) assumes that the approved Project analyzed in the FEIR would be developed on the 168-acre Project site. Maximum development on the Project site, as analyzed in the FEIR, would consist of a total of 1,995,125 sq.ft. of commercial uses and 1,550 residential

units. The 157 acres of the Project site, which is a former landfill site (and referred to as the Property in the proposed modified Project), would continue to undergo remediation, capping, and maintenance and operation consistent with implementation of the RAP and the FEIR. A comparison between Alternative 1B mix of land uses and the proposed modified Project is provided above in Table V-2.

b. Analysis of Alternative 1B

(1) Land Use and Planning

(a) Compatibility with Land Use Plans, Polices and Regulations

Under Alternative 1B, the approved Project, as analyzed in the FEIR, would be developed on the Project site. Since the City adopted the approved Project in 2006, the approved Specific Plan serves as the existing land use and zoning plan for the Project site. As the existing land use and zoning plan for the Project site, the approved Project has been included in subsequent City plans since 2006, which ensures compatibility among other related land use plans. Further, as stated within the FEIR (see FEIR [DEIR p. 15]), the approved Project would be compatible with all applicable land use plans, policies, and regulations. Similar to Alternative 1A, Alternative 1B would result in no change to the existing land use and zoning designations or change any existing land use relationships. Impacts related to land use compatibility would be less than significant, similar to the proposed modified Project.

(b) Existing Land Use Patterns

Since the City adopted the approved Project in 2006, the approved Specific Plan serves as the existing land use and zoning plan for the Project site. As stated in the FEIR (see FEIR [DEIR p. 165]), development under the approved Project would not result in the division, disruption, or isolation of the Project site. Development under Alternative 1B would be consistent with the City's vision for the Project site as established in the General Plan and approved Specific Plan as well as with surrounding land uses. Implementation of Alternative 1B would not physically divide an established community and impacts would be less than significant, similar to the proposed modified Project.

(c) Sustainability of Existing Retail Uses

As shown in Table II-2, Comparison of Project Land Use Program, the approved Project includes an additional 160,292 sq.ft. of commercial uses compared to the proposed modified Project. As determined in the FEIR (see FEIR [DEIR p. 166]), within specific retail sectors, development under the approved Project is forecasted to have a short-term negative effect upon existing retail uses within the market area served by the approved Project. It is further forecasted that this impact would be alleviated in the mid-term (i.e., by 2020) as the local market grows and matures. While the approved Project would allow for an increased amount of commercial square

footage, impacts on the sustainability of existing uses under Alternative 1B would be less than significant, similar to those of the proposed modified Project.

(2) Visual Resources

(a) Aesthetic Character

(i) Construction

The approved Project consists of a similar development plan as the proposed modified Project, but includes an additional 160,292 sq.ft. of commercial uses. As stated in the FEIR (see FEIR [DEIR p. 205]), the short-term changes in the Project site's aesthetic conditions would not result in substantial impacts due to limited off-site views of construction activities, the common appearance of construction activities in an urban setting, and the lack of contrast of construction activities with any off-site valued resources. Therefore, construction impacts to aesthetic character of the Project site and the surrounding area would be similar under Alternative 1B as the proposed modified Project.

(ii) Operation

Under Alternative 1B, the Project site would be developed with uses similar to those of the proposed modified Project but with an additional 160,292 sq.ft. of commercial uses. As stated in the FEIR (see FEIR [DEIR p. 216]), development of the approved Project would result in the conversion of the undeveloped vacant site to a developed use, causing a loss of spaciousness that contributes to the aesthetic quality of the Project site and its surroundings. Development of the approved Project would result in a permanent change to the aesthetic character of the Project site and impacts would be significant and unavoidable, similar to the proposed modified Project.

(b) View Resources

The Project site is generally degraded and includes stock piles of dirt and some infrastructure improvements which are not visible from public views. The site is not considered a view resource and does not include qualifying unique or natural qualities. Views over the Project site are limited due to intervening development, the flat terrain in the surrounding areas, and the relative height of the berm along the eastern perimeter of the Project site. The two visual resources along the I-405 Freeway—to the east, the Wingfoot Two a rigid frame blimp replacement (when it is in port) and to the north the large statue of the man (now holding a flag)—would remain visible from freeway locations under Alternative 1B. Development under the approved Project would have similar building heights as the proposed modified Project, where any buildings constructed on the Project site would create visual impediments from surrounding viewpoints since the Project site is currently undeveloped. Since no view resources are identified on the Project site, and since view impacts are similar regardless of building

heights, view impacts associated with Alternative 1B would be less than significant, and similar to the proposed modified Project.

(c) Shade/Shadow

As determined in the FEIR (see FEIR [DEIR p. 213]), the maximum off-site shading that could occur on sun-sensitive uses with development of the approved Project would be limited and would occur for less than an hour, which does not exceed the 3-hour significance threshold. Impacts associated with shade and shadow related to development of the approved Project would be less than significant, similar to the proposed modified Project.

(d) Artificial Light

The FEIR determined that the increases in lighting at the Project site with development of the approved Project would not substantially alter the lighting characteristics of the area and would be similar to other developments within the area (see FEIR [DEIR p. 213]). The approved Project would implement lighting standards and shielding to minimize off-site glare and interference with off-site activities. Further, the approved Project would implement mitigation to limit the potential for off-site effects on residential development adjacent to the Project site. Impacts related to artificial light, especially at nighttime, would be less than significant with mitigation incorporated, similar to the proposed modified Project.

(3) Traffic and Circulation

(i) Construction

The FEIR determined that construction of the approved Project would result in less than significant impacts to traffic and circulation with implementation of mitigation, which requires the preparation of a Congestion Management Plan or Worksite Traffic Control Plan and the maintenance of an open sidewalk along one side of Del Amo Boulevard (see FEIR [DEIR p. 266]). Traffic and circulation impacts during construction would be reduced to less than significant with implementation of mitigation, similar to the proposed modified Project.

(ii) Operation

The FEIR concluded that, even after implementation of mitigation, operation of the approved Project would result in a significant and unavoidable impacts at one study intersection, Figueroa Street & I-110 Northbound Ramps during the PM peak hour; three segments of the I-110 Freeway (the Harbor Freeway); and four segments of the I-405 Freeway (see FEIR [DEIR pp. 226–267]). In regards to impacts to intersections, the approved Project under 2006 conditions significantly impacted one intersection while the proposed modified Project would significantly impact seven intersections. However, while the approved Project impacts to intersections would be reduced compared to the proposed modified Project, impacts would remain significant and

unavoidable, similar to the proposed modified Project. A comparison of intersection impacts between the approved Project and the proposed modified Project was also conducted by applying the 2017 state-of-the-practice methodology and approach used in the analysis of the proposed modified Project to the approved Project. The proposed modified Project has the same number of significant impacts and one fewer significant and unavoidable impact compared to the approved Project when analyzed using the same 2017 methodology.

In regards to impacts to freeway segments, the approved Project would significantly impact seven freeway segments while the proposed modified Project significantly impact would eight freeway segments. However, while the approved Project impacts to freeway segments would be slightly reduced compared to the proposed modified Project, impacts would remain significant and unavoidable, similar to the proposed modified Project. The difference in number, degree, and location of significant freeway impacts is a result of changes in background traffic conditions, related project traffic patterns, and roadway and freeway capacity changes. If the approved Project evaluated in the FEIR were analyzed under the current conditions, the Caltrans freeway impacts would be more severe for the approved Project than for the proposed modified Project.

The FEIR determined that the approved Project would result in significant and unavoidable impacts to public transportation as the approved Project would increase ridership by 25 percent. The proposed modified Project would increase transit ridership by approximately 11 percent. Compared to the proposed modified Project, development under the approved Project would result in a greater impact to public transportation as the proposed modified Project is expected to result in less than significant impact to public transportation.

(4) Geology/Soils

(i) Construction

The FEIR concluded that the approved Project would be in compliance with all City and State regulations related to construction and is not expected to expose people or structures to any unstable geologic conditions or seismically related geologic hazards that would result in substantial damage to structures or infrastructure or exposure of people to risk of loss, injury, or death (see FEIR [DEIR p. 333]). Therefore, potential construction impacts related to geology and soils under Alternative 1B would be less than significant, similar to the proposed modified Project.

(ii) Operation

The FEIR concluded that the approved Project would be in compliance with all City and State regulations related to operation and is not expected to expose people or structures to any unstable geologic conditions or seismically related geologic hazards that would result in substantial damage to structures or infrastructure or exposure of people to risk of loss, injury, or death (see

FEIR [DEIR p. 333]). Therefore, potential operation impacts related to geology and soils under Alternative 1B would be less than significant, similar to the proposed modified Project.

(5) Air Quality

(i) Construction

Under Alternative 1B, the approved Project, as analyzed in the FEIR, would be developed. As analyzed on Table IV.G-7, Proposed Modified Project Regional Construction Emissions (Unmitigated) (lbs/day), in Section IV.G, Air Quality, of this SEIR, pollutant emissions and fugitive dust from site preparation and construction activities would be greater under the approved Project as compared to the proposed modified Project. Impacts during maximum conditions, those used for measuring significance, would be greater than the proposed modified Project for ROC, NOX, CO, SOX, and PM10 and would result in significant and unavoidable impacts for all five pollutants while the proposed modified Project would result in less than significant impacts related to NOX, CO, SOX, and PM10. The approved Project includes the 300 residential units within DD3 that are not a part of the proposed modified Project. However, due to the greater maximum commercial floor area allowed under the approved Project than contemplated for the proposed modified Project, total overall construction emissions would be greater.

As discussed in the FEIR (see FEIR [DEIR p. 409]), construction activities associated with the approved Project would result in significant and unavoidable localized PM10 emissions. Localized emissions associated with the proposed modified Project, as analyzed in Section IV.G of this SEIR, would be less than significant. Therefore, Alternative 1B would result in greater impacts.

As discussed in the FEIR (see FEIR [DEIR pp. 387–388]), cancer risk associated with the construction of the approved Project would not result in significant impacts. Likewise, as analyzed in Section IV.G of this SEIR, impacts related to construction cancer risk would be less than significant for the proposed modified Project. However, due to the greater maximum commercial floor area allowed under the approved Project, total diesel particulate matter emissions from equipment would be greater. Therefore, cancer risk impacts associated with the approved Project's construction activities would be greater than the proposed modified Project.

(ii) Operation

Under Alternative 1B, the approved Project, as analyzed in the FEIR, would be developed. As shown in Table IV.G-11, Proposed Modified Project Regional Operational Emissions (Mitigated) (lbs/day), in Section IV.G, regional impacts associated with Alternative 1B, like the proposed modified Project, would be significant and unavoidable for emissions of ROC, NO_X, CO, and PM₁₀. However, regional operational emissions associated with the approved Project would be greater than those anticipated for the proposed modified

Project due to the greater maximum commercial floor area allowed and would result in a greater significant and unavoidable impact.

Localized pollutant operational impacts would be increased compared to the proposed modified Project. Although emissions from stationary sources (landfill gas treatment system and generator) would be the same, the greater allowable commercial floor area would result in a greater number of daily diesel delivery trucks when estimating trucks based on total square footage. Like the proposed modified Project, localized operational impacts would remain less than significant under the approved Project; however, impacts would be greater.

As discussed in the FEIR (see FEIR [DEIR pp. 394–395]), toxic air contaminants from approved Project uses (including commercial, residential, and hotel) were considered to be minimal and impacts to be less than significant. The health risk assessment conducted for the proposed modified Project concluded that, like the approved Project, proposed modified Project operations would not result in significant cancer risk. However, the greater allowable commercial floor area would result in a greater number of daily diesel delivery trucks when estimating trucks based on total square footage, exposing off-site receptors to greater emissions from diesel engines. Impacts would, therefore, be greater than the proposed modified Project.

(6) Noise

Because the type of construction associated with the approved Project would be similar to the proposed modified Project, daily construction-related noise levels experienced both within the Property and the immediate vicinity would be similar to the proposed modified Project and are considered significant.

An increase in commercial land use intensity, when compared to the proposed modified Project, would also result in a slight increase in on-site noise sources such as generators, parking lot activity, and loading activity. Noise levels associated with operational on-site equipment and activity would be similar to the proposed modified Project because similar uses and similar proximity to sensitive noise receptors would occur. The on-site equipment and activity noise levels under Alternative 1B, like the proposed modified Project, are not considered significant during daytime hours. As discussed in Section IV.H, Noise, of this SEIR, the proposed modified Project is expected to generate fewer daily trips than the approved Project. The greater number of trips associated with Alternative 1B would yield an increase in traffic noise in comparison to the proposed modified Project. As with the proposed modified Project, Alternative 1B would result in a less than significant roadway noise impact.

(7) Utilities

(a) Wastewater Services

a) Construction

The FEIR stated that wastewater generation from construction activities associated with the approved Project is not anticipated to cause a measurable increase in wastewater flows at a time when a sewer's capacity is already constrained or that would cause a sewer's capacity to become constrained. Additionally, construction of the approved Project is not anticipated to generate wastewater flows that would substantially or incrementally exceed the future scheduled capacity of any treatment plant by generating flows greater than those anticipated (see FEIR [DEIR p. 523]). Impacts related to wastewater would be less than significant impacts during construction, similar to the proposed modified Project.

b) Operation

The FEIR determined that the approved Project is not anticipated to cause a measurable increase in wastewater flows concurrent in time or at a point when a sewer's capacity is already constrained or that would cause a sewer's capacity to become constrained during peak service (see FEIR [DEIR p. 525]). Impacts related to wastewater would be less than significant impacts during operation, similar to the proposed modified Project.

(b) Solid Waste

a) Construction

The FEIR concluded that construction of the approved Project would not result in an increase in inert solid waste generation that would create a need for additional inert solid waste disposal facilities to adequately handle Project-generated inert waste. Thus, construction-related waste would result in a less than significant impact, similar to the proposed modified Project.

b) Operation

The FEIR stated that operation of the approved Project would generate an estimated increase of 10 tons per year of Class III solid waste, based on the amount of approved Project development. As the El Sobrante Landfill has a remaining capacity of 145,530,000 tons and an expected closure date of January 1, 2045, it is anticipated that solid waste generated by the approved Project could be accommodated at the existing facility. Thus, impacts associated with the approved Project's solid waste generation would be less than significant, similar to the proposed modified Project.

(8) Greenhouse Gas Emissions

Under the approved Project the magnitude of development would be greater than the proposed modified Project, and the total amount of GHG emissions associated with construction activity, operational energy use, and operational trips would also be greater. Like the proposed modified Project, the approved Project would be required to comply with greenhouse gas reductions strategies such as the State Climate Change Scoping Plan, California Green Building Standards Code (CALGreen), SCAG's RTP/SCS, and the City's Energy Efficiency Climate Action Plan (EECAP). Like the proposed modified Project, impacts would be less than significant with implementation of and compliance with greenhouse gas reductions strategies. Because the amount of GHG emissions would be slightly higher due to the increase in water and energy required to support a greater total square footage, impacts would be increased under Alternative 2.

(9) Energy

Under the approved Project the magnitude of development would be increased as compared to the proposed modified Project, thus the total transportation and energy demand associated with construction activity, operational energy use, and operational trips would be increased. Like the proposed modified Project, the approved Project would be required to comply with energy efficiency strategies included in the California Green Building Standards Code (CALGreen), Title 24 Building Energy Efficiency Standards, and the City's Energy Efficiency Climate Action Plan (EECAP). Because Alternative 1B involves greater building square footage, total fuel demand from construction equipment, operational trips, and operational electricity and natural gas usage would be increased. Demand on energy resources would be greater than the proposed modified Project.

c. Relationship of Reduced Modified Project Alternative to the Proposed Modified Project Objectives

The No Project – Development under Approved Project would implement the RAP and develop the Project site as described in the FEIR. Implementation of Alternative 1B would satisfy all of the objectives of the proposed modified Project, including to achieve remediation of the environmental conditions on the Project site. However, the approved Project would result in greater impacts than the proposed modified Project related to public transportation, air quality, traffic noise, GHG emissions, and energy consumption. The approved Project would have similar impacts compared to the proposed modified Project, with the exception of traffic, where the proposed modified Project would result in greater impacts.

3. Alternative 2: Reduced Modified Project

a. Introduction

As summarized from above, the Reduced Modified Project Alternative assumes that the scale of the proposed modified Project would be reduced through a 25 percent reduction in all proposed land uses (i.e., residential units, commercial floor area, and hotel rooms).² The proportionate mix of commercial and residential uses would remain the same as under the proposed modified Project; however, maximum development would consist of 938 residential units and commercial floor area would consist of 1,376,125 sq.ft. The reduction in development under Alternative 2 would be achieved through fewer structures (smaller building footprint) and/or reduced building heights. The former landfill site would continue to undergo remediation, capping, and maintenance consistent with the FEIR (i.e., implementation of the approved RAP). A comparison between Alternative 2 mix of land uses and the proposed modified Project is provided above in Table V-2.

b. Analysis of Alternative 2

(1) Land Use and Planning

Under the Reduce Modified Project Alternative, the scale of development of the proposed modified Project would be reduced by 25 percent. The current RAP would continue to be implemented. Alternative 2 would result in no change to the existing land use but would be rezoned as Specific Plan – District at South Bay, similar to the proposed modified Project.

(a) Compatibility with Land Use Plans, Polices and Regulations

Under the Reduce Modified Project Alternative, the scale of development of the proposed modified Project would be reduced by 25 percent. The current ongoing RAP would continue to be implemented, which is consistent with the FEIR. As stated in Section IV.A, the proposed modified Project would be consistent with the City's General Plan and Zoning Ordinance, SCAG's RTP/SCS, SCAQMD's AQMP, and Metro's CMP. Alternative 2 would achieve the Project objectives to the same extent as the proposed modified Project: (1) achieve productive reuse of a large brownfield site by approving a project capable of generating the revenue necessary to pay for and effectuate remediation of the environmental conditions on the Property site, (2) enhancement of the City's economic base, and (3) increase new employment opportunities and additional housing units within the City. Impacts related to land use compatibility would be similar as the proposed modified Project and would be less than significant.

² Similar to the proposed modified Project, the Reduced Modified Project Alternative does not include the 300 units in DD3.

(b) Existing Land Use Patterns

The Reduced Modified Project would reduce the scale of proposed modified Project development by 25 percent but would retain a similar conceptual site plan. As stated in Section IV.A, surrounding land uses consist of residential uses, light-industrial uses, commercial uses, infrastructure corridors, and vacant land. Similar to the proposed modified Project, Alternative 2 would be considered infill development within an existing urban environment and would provide access throughout the Property to surrounding land uses. Therefore, similar to the proposed modified Project, Alternative 2 would also be consistent with the City's vision for the Property as established in the General Plan and approved Specific Plan as well as with surrounding land uses. Implementation of Alternative 2 would not physically divide an established community and impacts would be less than significant, similar to the proposed modified Project.

(c) Sustainability of Existing Retail Uses

As discussed in Section IV.A, the proposed modified Project is not anticipated to result in short- or long-term impacts to the regional commercial sector but is projected to have a short-term negative effect on the local-serving commercial sector. However, it is forecasted that these short-term effects would be substantially reduced in the long term as household growth continues into the future and impacts would be less than significant. Since Alternative 2 would reduce the amount of commercial uses by approximately 25 percent compared to the proposed modified Project, it is reasonable to assume that effects to the surrounding retail sectors would also be reduced under Alternative 2. Therefore, impacts related to sustainability of existing retail uses would be less than significant, similar to the proposed modified Project.

(2) Visual Resources

(a) Aesthetic Character

(i) Construction

Alternative 2 would require a similar, but reduced scope of construction activities, as the proposed modified Project. However, the height of cranes on site may be reduced if the 25 percent reduction in development is achieved through reducing building heights. As with the proposed modified Project, construction activities associated with Alternative 2 would cause less than significant impacts due to the limited off-site views of construction activities, the common appearance of construction activities in an urban setting, and the lack of contrast of construction activities with any off-site valued resources. Therefore, construction impacts to aesthetic character of the site and the surrounding area would be similar under Alternative 2 as the proposed modified Project.

(ii) Operation

Under Alternative 2, the Property would be entirely developed with uses similar to those of the proposed modified Project but the scale of development (i.e., commercial square footage, residential units, and hotel rooms) would be reduced by 25 percent; the 25 percent reduction would not substantially change the overall appearance of development and the Property would still appear as a mixed-use development amongst a variety of urban land uses within an urban setting under Alternative 2. Similar to the proposed modified Project, development under Alternative 2 would result in the conversion of an undeveloped vacant site to a developed use, causing a loss of spaciousness that contributes to the aesthetic quality of the Project site and its surroundings. Development of the approved Project would result in a permanent change to the aesthetic character of the Project site and impacts would be significant and unavoidable, similar to the proposed modified Project.

While Alternative 2 would slightly reduce the amount of retail activity that would compete with existing development, it could still cause vacancies that could affect the aesthetic appearance at off-site locations. However, such changes in the appearance of off-site locations was concluded to be less than significant with the proposed modified Project. Although Alternative 2 could have incrementally less impact on the aesthetic character of the area than the proposed modified Project, Alternative 2 would not reduce the proposed modified Project's significant and unavoidable aesthetic impact, and the variations in on-site appearance that could occur under Alternative 2 would not be substantial. Therefore, the overall impact of Alternative 2 in relation to the aesthetic character of the Project area would be substantially the same as under the proposed modified Project.

(b) View Resources

The Property is generally degraded and includes stock piles of dirt and some infrastructure improvements which are not visible from public views. The site is not considered a view resource and does not include qualifying unique or natural qualities. Views over the Property are limited due to intervening development, the flat terrain in the surrounding areas, and the relative height of the berm along most of the perimeter of the Property. The two visual resources along the I-405 Freeway—the Wingfoot Two a rigid frame blimp replacement (when it is in port) and the large statue of the man (now holding a flag)—are located north of the Property and would remain visible from freeway locations under Alternative 2. While development under Alternative 2 could have reduced building heights, since the Property is currently undeveloped, any buildings constructed on the Property would create visual impediments from surrounding viewpoints. Since no view resources are identified on the Property, and since view impacts are similar regardless of building heights, view impacts associated with Alternative 2 would be less than significant, similar to the proposed modified Project.

(c) Shade/Shadow

Under Alternative 2, the 25 percent across-the-board reduction in development may be reflected as either a reduction in building density and/or height. Since overall building height or density would be less than under the proposed modified Project, overall shade/shadow impacts would be incrementally less. However, building heights along the along the southern/southwestern edges of the Property, opposite the shade-sensitive residential neighborhood, could be the same as with the proposed modified Project. While Alternative 2 would cause incrementally less shading than the proposed modified Project, the impact of Alternative 2 on shade/shadow would be substantially similar to the proposed modified Project's, since the greatest potential impacts adjacent to off-site sensitive uses could be similar.

(d) Artificial Light

Under Alternative 2, the 25 percent reduction in development could occur as either a reduction in building density and/or height, and/or as potential changes in the locations of buildings. All sources of artificial light, including digital signs, would be in the same location and at the same intensity as included for the proposed modified Project. New lighting for all new development under Alternative 2 would be constrained by CALGreen requirements that would limit spill of light off site, and Specific Plan controls, together with Caltrans requirements, would eliminate potential glare in residential areas of the city and potential adverse effects of glare on drivers. Therefore, light and glare impacts of Alternative 2 would be essentially the same as the light and glare impacts of the proposed modified Project.

(3) Traffic and Circulation

(i) Construction

Given the similar nature and scale of Alternative 2 and the proposed modified Project, it is expected that the construction impacts to traffic and circulation from Alternative 2 would be of similar and for a similar duration as compared to the proposed modified Project.

(ii) Operation

Alternative 2 is projected to generate 2,112 trips during the weekday morning peak hour, 3,331 trips during the afternoon peak hour, and approximately 44,360 weekday daily trips. Compared to the proposed modified Project, Alternative 2 is projected to generate approximately 24 percent fewer trips during the morning peak hour, 22 percent fewer trips during the afternoon peak hour, and 22 percent fewer daily trips. The same intersection impact methodology used to evaluate the proposed modified Project was used to evaluate intersection impacts under Existing plus Project and Future plus Project traffic scenarios. Additional detail on trip generation and LOS analysis is provided in Appendix D, Transportation Impact Analysis.

a) Existing plus Alternative 2 Impacts

The Alternative 2 intersection impact analysis identified the following eight significant intersection impacts for the Existing plus Alternative 2 analysis:

- 3. Main Street & I-405 southbound on-ramp (P.M. peak hour)
- 5. Vermont Avenue & Del Amo Boulevard (A.M. and P.M. peak hours)
- 7. Figueroa Street & Del Amo Boulevard (P.M. peak hour)
- 8. Main Street & Del Amo Boulevard (P.M. peak hour)
- 10. Avalon Boulevard & Del Amo Boulevard (A.M. and P.M. peak hours)
- 12. Figueroa Street & I-110 northbound ramps (A.M. and P.M. peak hours)
- 23. Figueroa Street & Carson Street (A.M. and P.M. peak hours)
- 25. Avalon Boulevard & Carson Street (P.M. peak hour)

This is two fewer significant intersection impacts than identified for the modified proposed Project. Significant Existing plus Alternative 2 intersection impacts would no longer occur at the following two locations:

- 20. Main Street & 213th Street (P.M. peak hour)
- 22. Vermont Avenue & Carson Street (A.M. and P.M. peak hours)

b) Future plus Alternative 2 Impacts

The Alternative 2 intersection impact analysis identified the following nine significant intersection impacts for the Future plus Alternative 2 analysis:

- 3. Main Street & I-405 southbound on-ramp (P.M. peak hour)
- 5. Vermont Avenue & Del Amo Boulevard (A.M. and P.M. peak hours)
- 7. Figueroa Street & Del Amo Boulevard (A.M. and P.M. peak hours)
- 8. Main Street & Del Amo Boulevard (P.M. peak hour)
- 10. Avalon Boulevard & Del Amo Boulevard (A.M. and P.M. peak hours)
- 12. Figueroa Street & I-110 northbound ramps (A.M. and P.M. peak hours)
- 20. Main Street & 213th Street (P.M. peak hour)
- 22. Vermont Avenue & Carson Street (A.M. and P.M. peak hours)
- 25. Avalon Boulevard & Carson Street (A.M. and P.M. peak hours)

This is one fewer significant intersection impact than identified for the proposed modified Project. A significant Future plus Alternative 2 intersection impact would no longer occur at the following location under Alternative 2:

15. Figueroa Street & Torrance Boulevard (P.M. peak hour)

c) Mitigation

After applying the same mitigation measures identified for the proposed modified Project to the significantly impacted intersections under Alternative 2, significant and unavoidable impacts would remain at all the intersections that both the proposed modified Project and Alternative 2 share. The locations of Alternative 2 significant and unavoidable impacts, and the reason for the impact determination, are as follows:

- 3. Main Street & I-405 SB On-Ramp (Caltrans jurisdiction)
- 5. Vermont Avenue & Del Amo Boulevard (Los Angeles County & City of Los Angeles jurisdictions)
- 7. Hamilton Avenue & Del Amo Boulevard (mitigation does not fully mitigate and would require removing median)
- 8. Main Street & Del Amo Boulevard (mitigation would require removing median and acquisition of private land)
- 10. Avalon Boulevard & Del Amo Boulevard (mitigation would require removing median)
- 12. Figueroa Street & I-110 NB Ramps (Los Angeles County & Caltrans jurisdictions)
- 22. Vermont Avenue & Carson Street (Los Angeles County jurisdiction)

Significant impacts are anticipated to the regional freeway and public transit systems under Alternative 2, but would be less severe as compared to the proposed modified Project. However, City determinations of infeasibility also apply to Alternative 2, resulting in significant and unavoidable impact determinations. No ramp queuing impacts are expected.

(4) Geology/Soils

(i) Construction

Under Alternative 2, construction activities in general would be reduced but may not necessarily result in a reduction in disturbances to site soils. If the reduction in development is achieved through reducing building heights, then the area disturbed would likely be very similar to the proposed modified Project. Nevertheless, the same regulatory requirements related to reducing erosion potential or loss of topsoil would apply to Alternative 2 similar to the proposed modified Project, and there would be no substantive change in RAP implementation. However, because the ongoing RAP implementation would continue, the as under either the No Project Alternative or the proposed modified Project is, therefore, consistent with the FEIR it is not considered further in this analysis. Therefore, the potential construction impacts related to geology and soils under Alternative 2 would be similar to the proposed modified Project and would also be less than significant.

(ii) Operation

Alternative 2 would require a reduction in the scale of development on site, which could be achieved through reduced building heights or number of buildings. The reduction would theoretically reduction the amount of development that could be subject to the geotechnical hazards on site. However, all development would still be required to adhere to building code requirements to ensure that all proposed structures can withstand anticipated hazards such as groundshaking, liquefaction and settlement. Therefore, impacts could be reduced compared to the proposed modified Project, but impacts would still be less than significant.

(5) Air Quality

(i) Construction

The amount of site preparation under Alternative 2 compared to the proposed modified Project³ would remain the same since the remediation of the former landfill site, including capping of waste materials and coverage of the former landfill site by impervious concrete foundations, parking lots, and streets would be the same as under the proposed modified Project. Under Alternative 2, the proposed modified Project would be reduced through a 25 percent reduction in residential units and commercial floor area. As a result, construction activities would be proportionally reduced by approximately the same amount. However, pollutant emissions and fugitive dust from site preparation and construction activities would be similar on a daily basis. Impacts during maximum daily conditions, those used for measuring significance, would be similar to those of the proposed modified Project for NO_X, CO, SO_X, PM₁₀, and PM_{2.5} and would be less than significant. Because the total square footage constructed would be reduced, regional ROC emissions would be reduced as shown in **Table V-3**, **Reduced Modified Project Maximum Regional Construction Emissions**. Although regional ROC emissions would be reduced, impacts under Alternative 2, like the approved Project and proposed modified Project, would remain significant and unavoidable.

Localized pollutant construction impacts would also be the same as the proposed modified Project (see Table IV.G-8, The District Localized Construction Emissions [Unmitigated] [lbs/day]) as the analysis utilizes the maximum year for threshold comparison. The maximum year during remedial construction is identical for both the proposed modified Project and Alternative 2. Therefore, localized construction impacts would remain less than significant under Alternative 2.

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³ All calculations used in this analysis are presented in SEIR Appendix G, Air Quality Data.

Table V-3

Reduced Modified Project Maximum Regional Construction Emissions

	ROC	NOx	CO	SO_X	PM ₁₀ ^b	$PM_{2.5}^{b}$
MAXIMUM DAILY EMISSIONS						
Year 1	20	99	668	1	57	20
Year 2	29	99	327	1	18	6
Year 3	142	94	219	<1	18	6
Maximum Daily ^a	142	99	668	1	57	20
SCAQMD Daily Significance Threshold	75	100	550	150	150	55
Significant?	Yes	No	Yes	No	No	No
Proposed Modified Project	183	99	668	1	57	20
Difference (Alt 2 minus Proposed)	(41)	0	0	0	0	0

NOTES:

Emission quantities are rounded to "whole number" values. As such, the "total" values presented herein may be one unit more or less than actual values. Exact values (i.e., non-rounded) are provided in the CalEEMod model printout sheets and/or calculation worksheets that are presented in SEIR Appendix G, Air Quality Calculations.

SOURCE: ESA 2017.

Cancer risk associated with the proposed modified Project would not result in any significant impacts as analyzed in Section IV.G of this SEIR. Alternative 2 would likewise not have any localized impacts, and would potentially result in reduced toxics emissions due to the reduced construction effort (reduced duration) required to develop the lower intensity associated with Alternative 2.

(ii) Operation

With the proposed reductions in Project uses, the operational impacts associated with daily on-road traffic from Alternative 2 would be reduced by approximately 22 percent, with a commensurate decrease in air emissions. In addition, with a reduction in non-residential square footage, the number of daily delivery trucks would likely be reduced. Impacts from stationary uses would be reduced by 25 percent; however, impacts from these uses comprise a very small portion of the overall operations emissions. The landfill gas and groundwater treatment systems would continue to operate.

 $^{^{}a}$ PM₁₀ emission estimates are based on compliance with SCAQMD Rule 403 requirements for fugitive dust suppression, which require that no visible dust be present beyond the site boundaries.

On-site and off-site maximum emissions represent the maximum emissions that may occur throughout the duration of the Project and, therefore, may not occur at the same time. Maximum on-site and off-site emissions may not add up to total emissions.

As discussed in Section IV.G, regional impacts associated with the proposed modified Project would be significant and unavoidable for emissions of ROC, NOx, CO, SOx, PM₁₀, and PM_{2.5} during build out. **Table V-4, Reduced Modified Project Regional Operational Emissions**, summarizes the total operational emissions during build out. Although maximum construction emissions would be reduced under Alternative 2, the reductions would not be sufficient to avoid the significant regional air quality impacts associated with the proposed modified Project. Impacts would remain significant and unavoidable.

Table V-4

Reduced Modified Project Regional Operational Emissions

	ROC	NOx	CO	SOx	PM ₁₀	PM _{2.5}
MAXIMUM DAILY EMISSIONS						
Area	55	1	77	<1	<1	<1
Energy	1	11	7	<1	1	1
Mobile	86	404	1,120	4	280	77
Stationary ^a	5	14	27	4	7	7
Total Reduced Project	146	430	1,231	7	289	85
SCAQMD Significance Threshold	55	55	550	150	150	55
Significant?	Yes	Yes	Yes	No	Yes	Yes
Proposed Modified Project	191	559	1,622	9	382	111
Difference (The District minus Proposed)	(44)	(129)	(391)	(1)	(94)	(26)

SOURCE: ESA, 2017.

NOTES:

Emission quantities are rounded to "whole number" values. As such, the "total" values presented herein may be one unit more or less than actual values. Exact values (i.e., non-rounded) are provided in the CalEEMod model printout sheets and/or calculation worksheets that are presented in SEIR Appendix G.

As discussed in Section IV.G, regional impacts associated with the proposed modified Project would be significant and unavoidable for emissions of ROC, NOx, CO, SOx, PM₁₀, and PM_{2.5} during concurrent construction and operational emissions. The construction schedule for the proposed modified Project assumes that PA 1 would be constructed after PA 2 and PA 3. For the sake of comparison, and as a worst-case analysis, Alternative 2 (like the proposed modified Project) is assumed to construct PA 1 while PA 2 and PA 3 are occupied and operational, causing an overlap in emissions. **Table V-5, Mitigated Reduced Modified Project Concurrent Operation and Construction Emissions**, summarizes the total worst-case emissions during overlapping construction and operations. Although maximum construction (ROC) and operational emissions would be reduced under Alternative 2, the reductions would not be

^a Emissions due to Stationary Sources are from the operation of the on-site flare system.

sufficient to avoid the significant regional air quality impacts associated with the proposed modified Project. Impacts would remain significant and unavoidable.

Table V-5

Mitigated Reduced Modified Project Concurrent Operation and Construction Emissions

Emission Source	ROC	NOx	CO	SOx	PM ₁₀	PM _{2.5}	
COMBINED REDUCED PROJECT AND PROPOSED RAP DESIGN REFINEMENTS							
Operation Emissions	113	380	1,021	7	255	75	
On-Site Construction Emissions	43	32	172	<1	11	3	
Total	156	411	1,194	7	265	79	
SCAQMD Construction Significance Threshold	55	55	550	150	150	55	
Significant?	Yes	Yes	Yes	No	Yes	Yes	
Proposed Modified Project	201	509	1,512	8	348	102	
Difference (Alt 2 minus Proposed)	(45)	(98)	(318)	(1)	(83)	(23)	

NOTE:

Emission quantities are rounded to "whole number" values. As such, the "total" values presented herein may be one unit more or less than actual values. Exact values (i.e., non-rounded) are provided in the CalEEMod model printout sheets and/or calculation worksheets that are presented in SEIR Appendix G.

SOURCE: ESA, 2017.

As shown in **Table V-6, Reduced Modified Project Localized Operational Emissions**, localized pollutant operational impacts would be reduced compared to the proposed modified Project. Although emissions from stationary sources (landfill gas treatment system and generator) would be the same, the reduction in commercial square footage would result in the reduction in daily diesel delivery trucks. Like the proposed modified Project, localized operational impacts would remain less than significant under Alternative 2.

Cancer risk associated with operation of the proposed modified Project would not result in any significant impacts. Alternative 2 would likewise not have any localized impacts and would potentially have fewer impacts due to fewer on-site delivery trucks.

(1) Noise

Because the type of construction associated with Alternative 2 would be similar to the proposed modified Project, maximum daily construction-related noise levels experienced both within the Property and the immediate vicinity would be similar to the proposed modified Project and are considered significant. However, the overall intensity of general construction activities may be reduced since Alternative 2 reduces the amount of developed uses by 25 percent.

Table V-6

Reduced Modified Project Localized Operational Emissions

	NOx	CO	PM_{10}^{b}	PM _{2.5} ^b
MAXIMUM DAILY EMISSIONS (SCREENING ANALYSIS)		(lbs/day)		
Area Source	1	77	<1	<1
Energy	11	7	1	1
Mobile ^a	4	11	3	1
Stationary Source ^b	14	27	7	7
Maximum Daily	30	122	11	9
SCAQMD Daily Significance Threshold ^c	68	1,530	4	2
Potentially Significant?	No	No	Yes	Yes
MAXIMUM DAILY EMISSIONS (REFINED ANALYSIS)			μg	/m³
Maximum Daily			1.8	1.5
Threshold			2.5	2.5
Significant?			No	No
Proposed Modified Project	35	154	1.9	1.6
Difference (Alt 2 minus Proposed)	(5)	(32)	(0.1)	(0.1)

NOTES:

Emission quantities are rounded to "whole number" values. As such, the "total" values presented herein may be one unit more or less than actual values. Exact values (i.e., non-rounded) are provided in the CalEEMod model printout sheets and/or calculation worksheets that are presented in SEIR Appendix G.

SOURCE: ESA, 2017.

A reduction in land use intensity would also result in a slight reduction in on-site noise sources such as generators, parking lot activity, and loading activity. Noise levels associated with operational on-site equipment and activity would be similar to the proposed modified Project because the same uses and similar proximity to sensitive noise receptors would occur. The on-site equipment and activity noise levels associated with the proposed modified Project are not considered significant and would be similar to Alternative 2. An expected reduction of 22 percent in daily traffic volumes associated with Alternative 2 would yield a slight reduction in comparison to traffic noise associated with the proposed modified Project. As with the proposed modified Project, Alternative 2 would result in a less than significant roadway noise impact.

^a Mobile sources represent a conservative estimate of 1 percent of all mobile emissions occurring on site.

b Stationary sources represent emissions from the operation of both flares.

^c Significance thresholds are based on SCAQMD screening levels for SRA 4 and assuming 5 acres of disturbance daily with sensitive receptors are within 25 meters of the site.

(2) Utilities

(a) Wastewater Services

a) Construction

Under Alternative 2, the scale of development of the proposed modified Project would be reduced by 25 percent, where construction activities would also be reduced by 25 percent. Similar to the proposed modified Project and No Project Alternative, ongoing activities associated with the RAP would still occur under Alternative 2; however, the RAP was previously analyzed and are consistent with the FEIR and is not considered further in this analysis. Since construction activities would be reduced by approximately 25 percent compared to the proposed modified Project, wastewater generation during construction would also be reduced by approximately 25 percent compared to the proposed modified Project. Since construction of the proposed modified Project is not anticipated to generate wastewater flows that would substantially or incrementally exceed the future scheduled capacity of any treatment plant, Alternative 2 is also anticipated to not exceed the capacity of any existing or future wastewater facility. Impacts would be less than significant impacts during construction, similar to the proposed modified Project.

b) Operation

Under the Reduce Modified Project Alternative, the scale of development would be reduced by 25 percent compared to the proposed modified Project. It is reasonable to assume that the reduction in development under Alternative 2 would also reduce long-term wastewater generation by 25 percent compared to the proposed modified Project. Since operational impacts identified for the proposed modified Project were determined to be less than significant, operational impacts for Alternative 2 would also be less than significant as impacts.

(b) Solid Waste

a) Construction

Under Alternative 2, the scale of development of the proposed modified Project would be reduced by 25 percent, where construction activities would also be reduced by 25 percent. Similar to the proposed modified Project and No Project Alternative, ongoing implementation operations and maintenance activities associated with the RAP would still occur under Alternative 2. Because the approved and certified RAP is not being modified and was previously analyzed and its findings consistent with the FEIR and is not considered further in this analysis. Since construction activities would be reduced by approximately 25 percent compared to the proposed modified Project, it is reasonable to assume that solid waste generation during construction would also be reduce be approximately 25 percent compared to the proposed modified Project. Since adequate landfill capacity was identified for solid waste generated during

construction of the proposed modified Project, it is reasonable to assume that there would be adequate landfill capacity for the Reduced Modified Project Alternative as well. Therefore, construction impacts associated with solid waste would be less than significant, similar to the proposed modified Project.

b) Operation

Under the Reduce Modified Project Alternative, the scale of development would be reduced by 25 percent compared to the proposed modified Project. It is reasonable to assume that the reduction in development under Alternative 2 would also reduce long-term solid waste generation by 25 percent compared to the proposed modified Project. Similar to the proposed modified Project, the Reduce Modified Project Alternative would also be required to comply with State, County, and City requirements regarding recycling and the ongoing legally required solid waste planning programs. Further, similar to the proposed modified Project, Alternative 2 would represent a limited proportion of Countywide solid waste generation, which could be accommodated by available capacity within the El Sobrante Landfill and H.M. Holloway Landfill. Therefore, operational impacts would be reduced compared to the proposed modified Project and would be less than significant, similar to the proposed modified Project.

(3) Greenhouse Gas Emissions

Because the magnitude of development would be reduced, the total amount of GHG emissions associated with construction activity, operational energy use, and operational trips would be reduced. Like the proposed modified Project, the reduced modified Project would be required to comply with greenhouse gas reductions strategies such as the State Climate Change Scoping Plan, California Green Building Standards Code (CALGreen), SCAG's RTP/SCS, and the City's Energy Efficiency Climate Action Plan (EECAP). Like the proposed modified Project, impacts would be less than significant with implementation of and compliance with greenhouse gas reductions strategies. Because the amount of GHG emissions would be slightly lower due to the decrease in water and energy required to support less total square footage, impacts would be decreased under Alternative 2.

(4) Energy

Because the magnitude of development would be reduced, the total transportation and energy demand associated with construction activity, operational energy use, and operational trips would be reduced. Like the proposed modified Project, the reduced modified Project would be required to comply with energy efficiency strategies included in the California Green Building Standards Code (CALGreen), Title 24 Building Energy Efficiency Standards, and the City's Energy Efficiency Climate Action Plan (EECAP). Because Alternative 2 involves fewer building square footage, total fuel demand from construction equipment, operational trips, and operational electricity and natural gas usage would be reduced. Demand on energy resources

would be less than the proposed modified Project. Like the proposed modified Project, impacts on energy resources would be less than significant. Because Alternative 2 involves less overall building square footage, total fuel demand from construction equipment, operational trips, and operational electricity and natural gas usage would be decreased. Demand on energy resources would be less than the proposed modified Project.

c. Relationship of Reduced Modified Project Alternative to the Proposed Modified Project Objectives

Alternative 2 would continue to implement the RAP as consistent with the FEIR and assumes that the scale of the proposed modified Project would be reduced through a 25 percent reduction in all proposed land uses (i.e., residential units, commercial floor area, and hotel rooms). While Alternative 2 would meet the majority of the proposed modified Project objectives, Alternative 2 would not meet the basic proposed modified Project objectives with regard to the reuse of a large brownfield site by generating the revenue necessary to pay for, and effectuate remediation of, the environmental conditions on the Project site. Specifically, the 25 percent reduction in land uses would not achieve the same level of productive reuse of a large brownfield site as the proposed modified Project by approving a project capable of generating the revenue necessary to pay for and effectuate remediation of the environmental conditions on the Project site as the proportional financial burden would be greater than Alternative 2 and may make remediation infeasible. In addition, while Alternative 2 would also promote the economic well-being of the Project area by diversifying and increasing the area's economic base, since this alternative would have 25 percent fewer residential units and commercial floor area, it would not meet the objective to maximize work opportunities and shopping and entertainment opportunities to the same extent as the proposed modified Project. In providing a mix of regional and neighborhood commercial uses, hotel, restaurants, and residential uses, Alternative 2 would most likely meet the proposed modified Project's objective to provide a signature/gateway development that contributes to the creation of a vibrant urban core for the City. However, since Alternative 2 would reduce all uses by 25 percent, it would not provide the same level of pedestrian traffic or vibrancy as the proposed modified Project. Further, while implementation of Alternative 2 would result in slightly reduced environmental effects compared to the proposed modified Project, impacts would be similar as the proposed modified Project.

G. ENVIRONMENTALLY SUPERIOR ALTERNATIVE

An EIR must identify the environmentally superior alternative. Alternative 1A, No Project – No Development, would be environmentally superior to the proposed modified Project based on the minimization or avoidance of physical environmental impacts; however, Alternative 1A does not meet the majority of the Project objectives. In addition, CEQA Guidelines (Section 15126.6(c)) require that, if the environmentally superior alternative is the No

Project Alternative – No Development, the EIR shall also identify an environmentally superior alternative among the other alternatives.

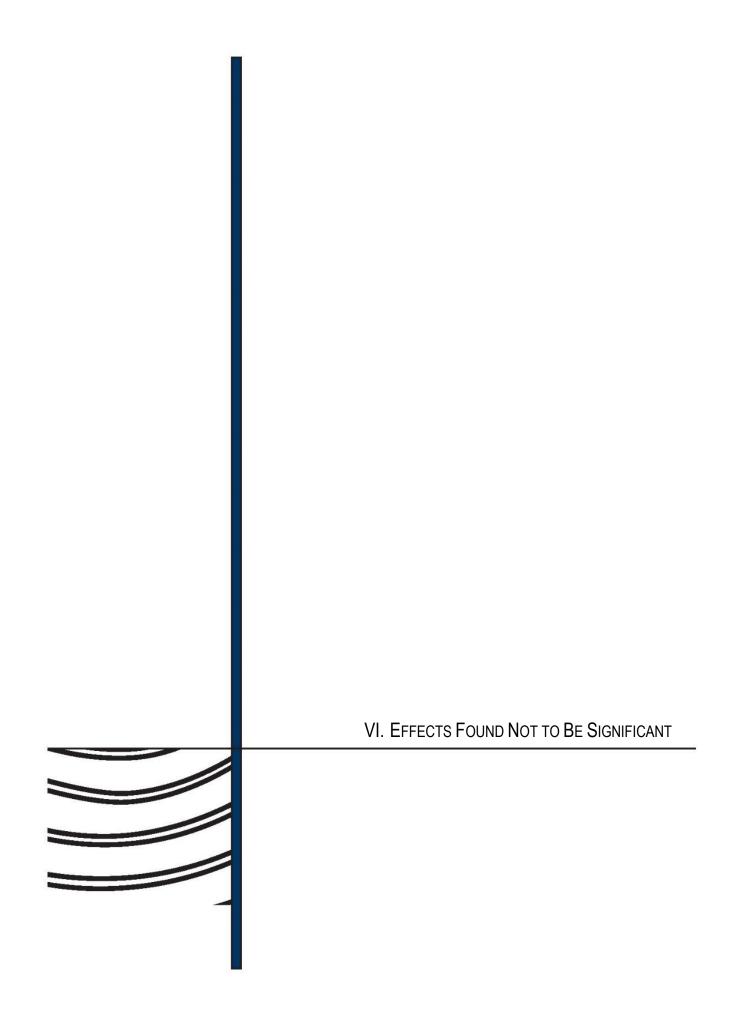
A summary comparison of the potential impacts associated with the alternatives and the proposed modified Project is provided in **Table V-7**, **Summary Comparison of Proposed Modified Project Alternatives Impacts**. Based on this comparison, Alternative 2, Reduced Modified Project Alternative, is the environmentally superior alternative as Alternative 2 would slightly reduce environmental effects compared to the proposed modified Project. However, Alternative 2 would not allow the City to achieve the most productive reuse of a large brownfield site by approving a project capable of generating the revenue necessary to pay for and effectuate remediation of the environmental conditions on the Project site. In addition, Alternative 2 would not meet the objective to maximize work opportunities and shopping and entertainment opportunities to the same extent as the proposed modified Project. Further, since Alternative 2 would reduce all uses by 25 percent, it would not provide the same level of pedestrian traffic or vibrancy as the proposed modified Project.

Table V-7
Summary Comparison of Proposed Modified Project Alternatives Impacts

Environmental Topic Area	Proposed Modified Project	Alternative 1A: No Project – No Development	Alternative 1B: No Project – Development under Approved Project	Alternative 2: Reduced Modified Project (25 percent Reduction)
Land Use and Planning:				
 Land Use Compatibility 	LTS	=	=	=
 Land Use Patterns 	LTS	=	=	=
 Sustainability of Existing Uses 	LTS	=	=	=
Visual Resources:				
 Aesthetic Character 	SU	_	=	=
- Views	LTS	_	=	=
Shade/Shadow	LTS	_	=	=
 Artificial Light 	LTS	_	=	=
Traffic and Circulation	SU	_	=	=
Geology and Soils	LTS	=	=	=
Air Quality	SU	_	+	_
Noise	SU	_	+	_
Wastewater	LTS	_	=	=
Solid Waste	LTS	_	=	=
Greenhouse Gas Emissions	LTS	_	+	-
Energy	LTS	_	+	_

V. Alternatives		

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VI. EFFECTS FOUND NOT TO BE SIGNIFICANT

The section provides a discussion for issue areas that are not included in Chapter IV, Environmental Impact Analysis, of this SEIR. This section is prepared in accordance with CEQA Guidelines Section 15128, which requires that an EIR contain a brief discussion stating the reasons why various possible significant effects of a project were determined not to be significant and are, therefore, not discussed in detail in the EIR. In addition, there are some issue areas for which no change in circumstances, no new information of substantial importance or no change as a result of the proposed modified Project relative to the approved Project have occurred since the FEIR was certified. Under such circumstances, no further analysis is warranted in this SEIR. In accordance with the CEQA Guidelines, this section sets forth the basis for the determination as to each impact area and threshold listed below that detailed analysis is not required and supports the conclusion in each case that the listed environmental issues were determined either to have no impact or not to pose a significant impact. The thresholds provided are the most recent questions included in the CEQA Guidelines Appendix G and the alphabetical identifier matches that in the checklist.

Under the FEIR, a Mitigation Monitoring and Reporting Program (MMRP) was established for the approved Project. As to each environmental issue area listed below, those mitigation measures established in the MMRP that remain relevant to the proposed modified Project to reduce potentially significant impacts to a less than significant level are listed below and continue to remain in effect for the proposed modified Project. Certain additions and modifications to those mitigations measures are also listed below and, as modified or added, are also applicable to the proposed modified Project to reduce potentially significant impacts to a less than significant level. With implementation of the mitigation measures listed below, each of the following impacts would be reduced to a less than significant level.

A. AESTHETICS

- a) Have a substantial adverse effect on a scenic vista?
- b) Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

The Property, which is located in an urbanized area, is a former landfill that is currently undergoing remediation. The area in the vicinity of the Property still does not contain notable features that would be considered unique geologic features or scenic resources located near a scenic highway, and does not have any scenic vistas. While the Property continues to be adjacent to the Interstate 405 (I-405) Freeway (the San Diego Freeway), that portion of the freeway is not designated as a state scenic highway. As such, the proposed modified Project would not

substantially damage any scenic resources within a state scenic highway. No significant impacts would occur, and no mitigation measures would be necessary.

Comparison to FEIR (Initial Study and Draft EIR) Findings as to the Above Listed Aesthetics/Visual Resources Thresholds: No New Significant Impact or Changes. No Mitigation Previously Applied. No New Mitigation Measure(s) Identified. Impacts Would Be Less than Significant.

B. 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 non-agricultural use?
- b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?
- c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?
- d) Result in the loss of forest land or conversion of forest land to non-forest use?
- e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?

The Property remains a former landfill located within a heavily developed area of the City of Carson and has not previously supported agricultural uses. No agricultural uses or related operations are present on the Property and the Property is not shown on maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency. In addition, the Property is not zoned for agricultural uses nor is the Property under a Williamson Act contract. Therefore, no impact on the conversion farmland or agricultural resources would occur.

With regard to forest land, according to the City of Carson's General Plan, there are still no parcels designated as forest land or timberland (City of Carson 2004) within the Property. Therefore, implementation of the proposed modified Project would not conflict with existing zoning or cause the rezone of forestland or timberland within the City. No mitigation measures are necessary, as there would be no impacts.

Comparison to FEIR (Initial Study) Findings: No New Significant Impacts. No Mitigation Previously Applied. No Impacts.

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http://www.conservation.ca.gov/dlrp/fmmp/Pages/LosAngeles.aspx accessed September 5, 2017.

C. AIR QUALITY

Would the Project:

e) Create objectionable odors affecting a substantial number of people?

During construction, as with the approved Project, the proposed modified Project is anticipated to generate odors that are typical of construction projects and would be temporary in nature and would not result in significant impacts. The proposed modified Project would develop uses that are the same as those of the approved Project and would include commercial (regional and local retail) uses, restaurants, hotel and residential development. These same types of uses would have substantially the same types of impacts as would be associated with the approved Project. According to the SCAQMD CEQA Air Quality Handbook, land uses associated with odors typically include agricultural uses, wastewater treatment plants, food processing plants, chemical plants, composting, refineries, landfills, dairies, and fiberglass molding. The proposed modified Project, like the approved Project, would not involve elements related to these types of uses as the former landfill has been closed for over 50 years and remediation is proceeding per the RAP. While there is a potential for odors to occur, compliance with industry standard odor control practices and mitigation measures included in the approved Project MMRP, which are carried forward into this SEIR, relative to odors, would continue to limit potential objectionable odor impacts to a less than significant level. Since impacts related to objectionable odors associated with the proposed modified Project would be substantially similar to those of the approved Project, no new mitigation measures would be required and impacts would be less than significant with implementation of the following FEIR mitigation measures.

Mitigation Measure G-8: The Applicant shall comply with SCAQMD Rule 402 to reduce potential nuisance impacts due to odors from construction activities.

Mitigation Measure G-14: Land uses on the Property shall be limited to those that do not emit high levels of potentially toxic contaminants or odors.

Comparison to FEIR Findings (Initial Study) as to Above Listed Air Quality Thresholds: No New Significant Impacts. Previous Mitigation Applied and No New Mitigation Measure(s) Identified. With Implementation of Mitigation Measures G-8 and G-14, Impacts Would Be Less than Significant.

D. 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 Game or U.S. Fish and Wildlife Service?

The approved Project remains located in an urbanized setting and uses surrounding the site include the I-405 Freeway, Del Amo Boulevard, beyond which is a nursery and the Porsche Driving Experience, residential development, light industrial uses, and vacant/underdeveloped lots. The Property consists of the 157-acre former landfill site (i.e., not including DD3) that is currently undergoing remediation activities. The Property has been completely disturbed and no vegetation or habitat is present to support candidate, sensitive, or special-status species and the FEIR identified no impacts with respect to this threshold. As the Property remains in its prior state (with minor remedial construction undertaken), the proposed modified Project would not constitute a substantial direct or indirect modification or removal of habitat for candidate, sensitive, or special-status species, and no significant impact would occur.

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 Game or U.S. Fish and Wildlife Service?

The Property still is not in or adjacent to any riparian area and is not identified in the City of Carson General Plan as a natural, conservation or open space resource. The FEIR identified no impacts with respect to this threshold and likewise, the proposed modified Project would not affect riparian habitat or natural communities, and no significant impact would occur.

c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

The FEIR identified no impacts with respect to this threshold and Property still does not contain natural hydrologic features or federally protected wetlands as defined by Clean Water Act Section 404. Thus, the proposed modified Project would not result in an adverse effect on any federally protected wetlands or potentially federally protected wetlands. No significant impact to riparian habitat or other sensitive natural communities would occur.

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?

The FEIR identified no impacts with respect to this threshold and the Property still is a former landfill that is currently undergoing remediation. The Property does not function as a wildlife

corridor and no bodies or courses of water exist to provide habitat for fish. Thus, the proposed modified Project would not interfere with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, nor would it impede the use of native wildlife nursery sites, and no significant impact would occur.

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

The FEIR identified no impacts with respect to this threshold. The Property still does not contain any notable natural features or protected biological resources and would not conflict with any local policies or ordinances protecting biological resources, including a tree preservation policy or ordinance, same as the approved Project. No significant impact would occur.

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?

As described in the FEIR, no adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan applies to the Property and the FEIR identified no impacts with respect to this threshold. Since approval of the approved Project, there has been no adoption of any of the foregoing with respect to the Property and therefore, the proposed modified Project would also not conflict with any Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan adopted subsequent to the approval of the approved Project. No significant impact would occur.

Comparison to FEIR Findings (Initial Study): No New Significant Impacts. No Mitigation Previously Applied. No New Mitigation Measure(s) Identified. Impacts Would Be Less than Significant.

E. CULTURAL RESOURCES

Would the Project:

a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?

The FEIR concluded that the Property does not contain any extant buildings, structures, objects, sites, or districts with any historical associations or significance necessary for California Register eligibility and as such would have less than significant impacts on historical resources. Since the proposed modified Project would be developed within the Property and there are no historical resources on the Property, the proposed modified Project would also result in less than significant impact to historical resources.

b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?

As indicated in the FEIR, since the Property is a former landfill site, there is no potential for the site to yield archaeological resources and impacts would be less than significant. Since the proposed modified Project would be developed within the Property, there would still be no potential for subsurface archaeological resources to be present, and impacts would be less than significant.

c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

As indicated in the FEIR, the Property has been disturbed in the past due to its use as a former landfill. Therefore, there is no potential to encounter unknown paleontological resources. Since the proposed modified Project would be developed within the Property, there would still be no potential to encounter paleontological resources, and impacts would be less than significant.

d) Disturb any human remains, including those interred outside of dedicated cemeteries?

As indicated in the FEIR, the Property has been disturbed in the past due to its use as a former landfill. Therefore, there is no potential to encounter buried human remains. Since the proposed modified Project would be developed within the Property, there would still be no potential for to encounter buried human remains, and impacts would be less than significant.

Comparison to FEIR Findings (Initial Study): No New Significant Impacts. No Mitigation Previously Applied. No New Mitigation Measure(s) Identified. Impacts Would Be Less than Significant.

F. GEOLOGY AND SOILS

Would the Project:

a.iv) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving: Landslides?

The Property as well as the surrounding area is still relatively flat and does not contain any steep slopes. Therefore, the potential for landslides or slope instability is considered low. Thus, the proposed modified Project would not expose people or structures to risk of loss, injury, or death associated with landslides, and impacts would be less than significant.

b) Result in substantial soil erosion or the loss of topsoil?

As discussed in the FEIR, although the proposed modified Project, as would the approved Project, results in construction over a large area, development of the landfill site would be highly regulated by the RAP which would preclude impacts from soil erosion and would be subject to

additional regulations that address soil erosion through the construction period. Thus, the proposed modified Project would not result in substantial soil erosion or loss of topsoil, and impacts would be less than significant.

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?

As discussed in the FEIR, the DTSC approved RAP anticipated development of the former landfill site with urban development. As such the RAP takes into accounting underlying geologic conditions on the Property that could potentially compromise the RAP implementation. As these impacts have been taken into account in the RAP, development of the Property would not be adversely affected by unstable geologic conditions, and no significant impacts would occur.

d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?

The proposed modified Project, as true with the approved Project, would be required to adhere to the Carson Municipal Code which incorporates, by reference, Los Angeles County Code, Title 26, including site preparation standards which would address potential expansive soils that may be present at the site. In general, the use of engineered fill is used to minimize the effects of any potentially expansive soils. Therefore, no impact would occur related to expansive soils.

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?

The Property is located within an urbanized area that is currently served by existing sewer systems. The proposed modified Project would tie into the existing sewer lines and would not involve the use of septic tanks. Therefore, no impact regarding soils supporting the use of septic tanks or alternative wastewater disposal systems would occur.

Comparison to FEIR Findings (Initial Study) as to Above Listed Geology and Soils Thresholds: No New Significant Impacts. No Mitigation Previously Applied. No New Mitigation Measure(s) Identified. Impacts Would Be Less than Significant.

G. HAZARDS AND HAZARDOUS MATERIALS

Would the Project's construction or operation:

- a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?
- b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

- c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?
- 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 create a significant hazard to the public or the environment?

The proposed modified Project contains the same general land uses and associated operations as the approved Project and would have similar impacts. The FEIR determined that the approved Project would not result in a significant impact with regard to hazardous and hazardous materials and that removal of hazardous materials, if required, would be limited, would occur in accordance with all regulations and would be hauled over designated routes to avoid routing within 0.25 mile of an existing or proposed school. In addition, mitigation measures were provided to ensure that any revisions to the RAP would be approved by DTSC.

The following mitigation measures were included in the approved Project MMRP to ensure that any revisions to the RAP are approved by DTSC and that access to the necessary areas or monitoring programs required in the RAPs would be provided although no significant hazards impact was determined. While it will also result in a less than significant impact, the proposed modified Project would implement these mitigation measures subject to the following revisions:²

- **Mitigation Measure D-1:** To the extent the Applicant desires to refine or modify requirements in the RAP, the Applicant shall provide documentation to the City indicating DTSC approval of such refinements or modifications <u>prior to</u> commencement of construction.
- Mitigation Measure D-2: The Applicant shall provide documentation to the City indicating DTSC shall permit the any proposed residential uses in Development District 1 prior to issuance of any permits for such residential development in Development District 1 a building permit for residential development.
- Mitigation Measure D-3: The Applicant shall provide documentation to the City indicating both on- and off-site risks associated with RAP construction have been evaluated to the satisfaction of the DTSC, and at a minimum, perimeter air monitoring shall be completed for dust, particulates, and constituents determined to be Constituents of Concern (COCs). Should the air monitoring indicate any violations of air quality as defined in the RAP, then construction activities causing the exceedance shall cease until modifications have been implemented to remedy the exceedances.
- **Mitigation Measure D-4:** The Applicant shall provide to the City, documentation indicating that (1) a post remediation cell-specific risk assessment has been

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² The mitigation measures below are updated from those set forth in the FEIR. For clarity, the changed text is marked as follows: new text is <u>underlined</u>, and deleted text is shown in strikeout format.

prepared by the Applicant and approved by DTSC; demonstrating that the risk of exposure for occupancy of that cell is within acceptable levels to DTSC and (2) DTSC has certified approved a remedial action completion report documenting that the remedial systems are properly functioning prior to issuance of a Certificate of Occupancy.

Mitigation Measure D-5: The Applicant shall provide documentation to the City indicating that applicable remedial systems and monitoring plans, including the location of the flare and treatment facility are in accordance with applicable SCAQMD regulations.³

A 2008 Oil/Water Well Investigation Report performed by Arcadis identified the possibility that at least two potentially abandoned oil wells and at least two water wells may have been located on the Property prior to its use as a landfill, but these wells could not be located. To ensure that mitigation and closure of such wells would be carried out if such wells are discovered, new Mitigation Measure D-6 is added.

Mitigation Measure D-6: The Applicant's construction contractor shall incorporate the contingency plan recommended under the July 9, 2008, Oil/Water Well

Investigation report by Arcadis into construction specifications. The contingency plan shall be physically on site during any earthwork activities and implemented in the event that a previously unknown well is encountered at the Property.

Comparison to FEIR Findings as to Above Listed Hazardous Materials Thresholds: No New Significant Impact or Changes. One Mitigation Measure Deleted as No Longer Applicable, Remaining Previous Mitigation Measures Applied with Certain Modifications, and One New Mitigation Measure Identified. With Implementation of Mitigation Measures D-1 through D-4 and new Mitigation Measure D-6, Impacts Would Be Less than Significant.

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?

The closest public airport to the Property remains the Compton Airport, which is located approximately 3.25 miles to the north. Therefore, development of the proposed modified Project would not occur within 2 miles of a public or public use airport and would not result in a safety hazard for people residing or working in the vicinity of the Project Site. Thus, the proposed modified Project would not pose a safety hazard for people working or residing on the Property from public airport related hazards, and no impact would occur.

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³ Mitigation Measure D-5 no longer applies as the flare and treatment facility have already been constructed.

f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?

The Property still is located approximately 0.4 mile south of the port for the Goodyear Blimp, which is now Wingfoot Two, a rigid frame blimp replacement. However, operation of the proposed modified Project, which is substantially the same as the approved Project, would not interfere with blimp operations and would not result in a safety hazard for people working and residing in or around the Property. Thus, no significant impact would occur relative to private airstrips.

g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

The City of Carson has adopted a Multi-Hazard Functional Plan (1996) for emergency response within the City and also complies with the Los Angeles County Emergency Management Plan. These plans address all required issues pertaining to emergency response requirements, including but not limited to, provision of shelter and meeting locations, communications operations, and travel routing. The proposed modified Project, the same as the approved Project, would be required to comply with both the City's Multi-Hazard Functional Plan and the Los Angeles County Emergency Management Plan to ensure that the proposed modified Project would not interfere with an adopted emergency response or evacuation plan. Further, the proposed modified Project would include on-site circulation improvements that would enhance access within and adjacent to the Property. Therefore, impacts would be less than significant related to emergency access.

h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?

The FEIR concluded that there is no impact with respect to this threshold as the Property is located within an urbanized area and there are no adjacent wildland areas. This remains the case for the proposed modified Project. Based on the California Department of Forestry and Fire Protection (CAL FIRE) Fire Hazard Severity Zones Map for Los Angeles County, the City of Carson is categorized as Non-VHFHSZ or an area outside of the Very High Fire Hazard Severity Zones (adopted November 7, 2007 by Cal Fire). Therefore, the Project would not create or expose people or structures to a risk of loss, injury, or death involving wildland fires, and no impact would occur.

Comparison to FEIR (Initial Study) Findings for Above Listed Hazardous Materials Thresholds: No New Significant Impacts. No Mitigation Previously Applied. No New Mitigation Measures Identified. Impacts Would Be Less Than Significant.

H. HYDROLOGY AND WATER QUALITY

Would the Project:

- a) Violate any water quality standards or waste discharge requirements?
- f) Otherwise substantially degrade water quality?

The proposed modified Project would be required to adhere to the NPDES General Construction Permit as would the approved Project. The changes under the proposed modified Project would have no substantive difference in terms of the BMPs that would be implemented to reduce potential water quality adverse effects. Rather, likely BMPs would be even more stringent with the newer version of the General Construction Permit that has been updated since certification of the FEIR. Once constructed, the proposed elements of the proposed modified Project would still be required to adhere to the drainage control requirements for the City as also discussed in the FEIR.⁴ All proposed elements of the proposed modified Project would be subject to the drainage control requirements of the 2009 Standard Urban Stormwater Mitigation Plan (SUSMP) permit requirements and the City's Storm Water Pollution Control Measures for New Development Projects.⁵ The SUSMP permit requirements were approved in 2009 and therefore represent newer regulatory requirements than those discussed and analyzed in the FEIR. Discharges associated with the groundwater treatment program are permitted under the Los Angeles County Sanitization Industrial Wastewater Discharge Permit. All groundwater treatment effluent is required to adhere to discharge requirements of the Groundwater Extraction and Treatment System (GETS) permit. Therefore, considering that the proposed changes in the details of the site improvements are consistent with the stormwater drainage approach and the more stringent regulatory requirements that have occurred since the FEIR, the proposed modified Project would not result in a substantial impact relative to water quality or water quality standards.

While Mitigation Measures F-1 was provided in the FEIR to address surface water quality issues, the mitigation measure was specific to DD3 and, therefore, does not pertain to the proposed modified Project. Thus, Mitigation Measure F-1 is not provided above.

Note that the NPDES MS4 regional permit has since been adopted in 2012. However, this permit focuses on requiring LID drainage control requirements that encourage on-site infiltration of stormwater which, due to the presence of the landfill cap, is not feasible at the site. As a result, the City approved that future development at the Project site is subject to the 2009 SUSMP and not the 2012 NPDES MS4 permit requirements.

b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?

As with the approved Project, the proposed modified Project would not require the use of groundwater at the Property since potable water would be supplied from sources that do not involve the portions of the aquifers underlying the Property. The Property still contains a former landfill. As such, no direct access to groundwater on the approved Project site is available the Property. Therefore, the water needs of the proposed modified Project would not substantially deplete groundwater supplies. Any increase of impervious area resulting from the proposed modified Project could marginally reduce percolation, which could result in a reduction in groundwater recharge; however, the extent to which local groundwater supplies would be depleted would be limited.

Additionally, the proposed modified Project would have substantially the same water usage as the approved Project. To the extent this usage comes from groundwater from off-site sources, impacts on groundwater depletion would likewise be substantially the same (less than significant), and an adequate water supply remains available. As such, impacts related to substantially depleting groundwater supplies or interfering substantially with groundwater recharge associated with the proposed modified Project would be substantially similar to those of the approved Project, and no mitigation measures would be required.

- c) Substantially alter the existing drainage pattern of a site or area through the alteration of the course of a stream or river, or by other means, in a manner that would result in substantial erosion or siltation on- or offsite?
- d) Substantially alter the existing drainage pattern of a site or area through the alteration of the course of a stream or river, or by other means, substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or offsite?

The Property remains located in an urban area which features designed drainage systems that connect the City's urban stormwater drainage infrastructure. The Property and the surrounding area do not feature any stream or river; therefore, no stream or river course would be altered with implementation of the proposed modified Project. Therefore, any alterations to existing drainage patterns, should they occur, are not of a sufficient magnitude so as to result in substantial erosion or siltation on- or off-site. In addition, the proposed modified Project would have to comply with the City's drainage control requirements and the 2009 SUSMP to address stormwater. With compliance with applicable regulations, impacts to water quality due to an alteration of the drainage pattern would be less than significant.

Similar to that discussed in the FEIR, the proposed modified Project would introduce new impervious surfaces to the Property. The RAP requires an impermeable landfill cap across the Property. Therefore, just as was the case analyzed in the FEIR, the proposed modified Project would be required to implement drainage control features in accordance with the City's drainage control regulations. In addition, the proposed modified Project is required to implement the 2009 SUSMP requirements. Therefore, there is no substantive change in development between the proposed modified Project and the approved Project, new regulations (2009 SUSMP requirements) would apply, and there would be no new impact.

e) 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?

As noted above, the proposed modified Project would introduce new impervious surfaces to the Property similar to that described in the FEIR. The RAP requires an impermeable landfill cap across the Property. Therefore, just as was the case analyzed in the FEIR, the proposed modified Project would be required to implement drainage control features in accordance with the City's drainage control regulations as well as 2009 SUSMP requirements. In addition, the proposed modified Project is required to implement the 2009 SUSMP requirements. Therefore, there is no substantive change in development between the proposed modified Project and the approved Project, new regulations (2009 SUSMP requirements) would apply, and there would be no new impact.

- g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?
- h) Place within a 100-year flood hazard area structures that would impede or redirect flood flows?

As identified in the Safety Element of the City of Carson General Plan, no portion of the Property is designated as being located within a 100-year flood plain as mapped on federal Flood Hazard Boundary or Flood Insurance Rate Maps or any other flood hazard delineation map. Therefore, no impacts related to hazards associated with flooding would occur.

i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?

The Property is not located within close proximity to a dam or levee. Based on the topography of the Property and surrounding area, there is not a significant risk for flooding. The proposed modified Project would not expose people or structures to flooding as a result of failure of a dam or levee. Therefore, no significant impact relative to this issue would occur.

j) Expose people or structures to a significant risk of loss, injury or death involving inundation by seiche, tsunami, or mudflow?

A seiche is an oscillation of a body of water in an enclosed or semi-enclosed basin, such as a reservoir, harbor, lake, or storage tank. A tsunami is a great sea wave, commonly referred to as a tidal wave, produced by a substantial undersea disturbance such as tectonic displacement of the sea floor associated with larger, shallow earthquake. Mudflows result from the downslope movement of soil and/or rock under the influence of gravity.

The Property is still located in an urbanized area with relatively flat topography approximately 6.5 miles east of the Pacific Ocean. In addition, the Property is not located within close proximity to an enclosed body of water. Therefore, the proposed modified Project would not expose people to the risk of tsunami, seiche, or mudflows, and no significant impact would occur.

Comparison to FEIR Findings (Initial Study): No New Significant Impact or Changes. No Mitigation Previously Applied. No New Mitigation Measure(s) Identified. Impacts Would Be Less than Significant.

I. LAND USE AND PLANNING

Would the Project:

c) Conflict with any applicable habitat conservation plan or natural community conservation plan?

The Property is still not located within an areas subject to any habitat conservation plans or natural community conservation plans and, as such, would not conflict with any plans of that nature. Therefore, no impact relative to habitat conservation plans or natural community conservation plans would occur.

Comparison to FEIR Findings (Initial Study) as to Above Listed Land Use Threshold: No New Significant Impacts. No Mitigation Previously Applied. No New Mitigation Measure(s) Identified. Impacts Would Be Less than Significant.

J. MINERAL RESOURCES

Would the Project:

- a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?
- 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?

The only major known mineral resource in the City of Carson is oil and some gas, both of which may only be accessed by drilling and pumping. The City is located within the expansive

Dominguez and Wilmington Oil Fields, which extend through several cities in the South Bay region of the Los Angeles Basin. There is no drilling activity within the Property or in the immediate vicinity. If future drilling is proposed in the vicinity of the Property, drilling activities could occur directly or diagonally at other locations. Thus, the proposed modified Project would not cause a loss of access to the resource, and no significant impact to mineral resources would occur.

Comparison to FEIR Findings (Initial Study): No New Significant Impacts. No Mitigation Previously Applied. No New Mitigation Measure(s) Identified. Impacts Would Be Less than Significant.

K. NOISE

Would the Project:

e) For a project located within an airport land use plan area, or, where such a plan has not been adopted, in an area within two miles of a public airport or public use airport, would the project expose people residing or working in the area to excessive noise levels?

The proposed modified Project is not located within an airport land use plan area. Additionally, the closest airport is the Compton Airport, located approximately 3.25 miles north of the Property. Thus, the proposed modified Project would not expose people residing or working in the area to excessive noise levels.

f) For a project located in the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?

The nearest private airstrip is the port for Wingfoot Two a rigid frame blimp replacement airstrip operations facility, located approximately 0.5 mile northeast of the Property to the east of the I-405 Freeway. As the blimp does not generate loud airport noise, the continuing operations of the private airstrip would not expose people residing or living on the Property to excessive noise levels.

Comparison to FEIR (Initial Study) Findings as to the Above Listed Noise Threshold: No New Significant Impacts. No Mitigation Previously Applied. No New Mitigation Measure(s) Identified. Impacts Would Be Less than Significant.

L. POPULATION AND HOUSING

Would the Project:

a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

The proposed modified Project would allow for approximately 1,250 residential units and a total of 1,834,833 square feet (sq.ft.) of commercial uses, including 350 rooms in two hotels, on the Property. Compared to the approved Project, the proposed modified Project would result in an additional 50 hotel rooms and an overall reduction of 160,292 sq.ft. of commercial floor area.

The proposed modified Project could support a population increase of approximately 4,550 persons, and would be within Southern California Association of Governments' (SCAG) forecasted short- and long-term growth within the South Bay Cities Subregion. The proposed modified Project is considered an infill development, would not result in the extension of roads or other infrastructure, and does not exceed SCAG projected growth.

b/c) Displace substantial numbers of existing housing units, necessitating the construction of replacement housing elsewhere?

Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?

The Property is still currently undeveloped and does not contain any residential development. The Property was formerly used as a landfill and cleanup of the landfill is currently underway. Therefore, the proposed modified Project would not displace existing housing or persons necessitating the construction of replacement housing, and no impact would occur.

Comparison to FEIR Findings (Initial Study): No New Significant Impact or Changes. No Mitigation Previously Applied. No New Mitigation Measure(s) Identified. Impacts Would Be Less than Significant.

M. PUBLIC SERVICES

Cal.App.4th 833, significant impacts under CEQA consist of adverse changes in any of the physical conditions within the area of a project, and potential impacts on public safety services are not an environmental impact that CEQA requires a project applicant to mitigate: "[T]he obligation to provide adequate fire and emergency medical services is the responsibility of the City (Cal. Const., art. XIII, § 35, subd. (a)(2) ["The protection of the public safety is the first responsibility of local government and local officials have an obligation to give priority to the provision of adequate public safety services."]). The need for additional fire protection services is not an environmental impact that CEQA requires a project proponent to mitigate."

Would the Project:

a.i) Fire Protection?

Fire protection service will still be provided to the Property by the Los Angeles County Fire Department (LACoFD), as was the approved Project. During construction, with the implementation of code-required safety features, any additional demand on fire services that would occur would not exceed the current capabilities of the LACoFD, and impacts during construction of the proposed modified Project would be less than significant.

During operation, the occupancy of the new buildings would increase the demand for LACoFD staffing, equipment, and facilities, same as for the approved Project. The proposed modified Project would reduce the amount of commercial square footage and would increase by 50 the number of hotel rooms as compared to the approved Project. The proposed modified Project would allow 1,250 residential units. Fire Station No. 36 is the current closest station to the Property and, therefore, is likely to provide first response for emergency incidents. Emergency access would be provided via all of the proposed access points. Like the approved Project, the proposed modified Project's potentially significant demand on existing fire service facilities would be reduced to a less than significant level through the implementation of all applicable fire code regulations regarding site access, fire hydrant spacing, water-storage, building materials, construction standards, and fire flow. While the approved Project was required to pay a fair-share contribution for new fire facilities, LACoFD has not identified or requested such a contribution for facilities. As such, a fair-share contribution is not required for the proposed modified Project and Mitigation Measure I.1-13 is deleted. However, with occupancy of the proposed modified Project, it would generate annually recurring revenue to the Los Angeles County General Fund in the form of taxes and other miscellaneous charges (e.g., sales tax, property tax, etc.). A portion of such revenue, including direct assessments that are received by the LACoFD, would be used to address costs associated with demand for LACoFD operations and staffing.

The following mitigation measures are included in the approved Project MMRP to ensure that all applicable fire code regulations, mandatory fee payments and recommended fire safety measures. Mitigation Measures I.1-1 through I.1-12 are incorporated into this SEIR. Mitigation Measures I.1-14 through I.1-18 have been added within this SEIR as they are applicable to the proposed modified Project and would further reduce impacts related to fire services. With the implementation of the mitigation measures, impacts to fire services would be less than significant.

Mitigation Measure I.1-1: Prior to construction, the Applicant shall submit buildings plans to the Los Angeles County Fire Department (LACoFD) for review. Based on such plan check, any additional fire safety recommendations shall be implemented to the satisfaction of the LACoFD.

- **Mitigation Measure I.1-2:** The Applicant shall provide adequate ingress/egress access points for emergency response to the satisfaction of the LACoFD.
- **Mitigation Measure I.1-3:** The Applicant shall comply with all applicable fire code and ordinance requirements for construction, access, water mains, fire flows, and fire hydrants as required by the LACoFD.
- Mitigation Measure I.1-4: Every building shall be accessible to Fire Department apparatus by way of access roadways, with an all-weather surface of not less than the width prescribed by the LACoFD. The roadway shall extend to within 150 feet of all portions of exterior building walls when measured by an unobstructed route around the exterior of the building.
- **Mitigation Measure I.1-5:** Requirements for access, fire flows, and hydrants, shall be addressed during the City's subdivision tentative map stage.
- **Mitigation Measure I.1-6:** Fire sprinkler systems shall be installed in all residential and commercial occupancies to the satisfaction of the LACoFD.
- Mitigation Measure I.1-7: The Applicant shall <u>asen</u>sure that adequate water pressure is available to meet Code-required fire flow. Based on the size of the buildings, proximity of other structures, and construction type, a maximum fire flow up to <u>5,0004,000</u> gallons per minute (gpm) at 20 pounds per square inch (psi) residual pressure for up to a four-hour duration may be required.
- **Mitigation Measure I.1-8:** Fire hydrant spacing shall be 300 feet and shall meet the following requirements:
 - No portion of a lot's frontage shall be more than 200 feet via vehicular access from a properly spaced fire hydrant;
 - No portion of a building shall exceed 400 feet via vehicular access from a properly spaced fire hydrant;
 - Additional hydrants shall be required if spacing exceeds specified distances;
 - When a cul-de-sac depth exceeds 200 feet on a commercial street, hydrants shall be required at the corner and mid-block;
 - A cul-de-sac shall not be more than 500 feet in length, when serving land zoned for commercial use; and
 - Turning radii in a commercial zone shall not be less than 32 feet. The measurement shall be determined at the centerline of the road. A turning area shall be provided for all driveways exceeding 150 feet in length at the end of all cul-ede-sacs, to the satisfaction of the LACoFD.
- **Mitigation Measure I.1-9:** All on_site driveways and roadways shall provide a minimum unobstructed (clear-to-sky) width of 28 feet. The on_site driveways shall be within 150 feet of all portions of the exterior walls of the first story of any building. The centerline of the access driveway shall be located parallel to, and within 30 feet

- of, an exterior wall on one side of the proposed structure <u>or otherwise in accordance with the City Fire Code</u>.
- **Mitigation Measure I.1-10:** All on-site driveways shall provide a minimum unobstructed, (clear-to-sky) width of 28 feet. Driveway width shall be increased under the following conditions:
 - If parallel parking is allowed on one side of the access roadway/driveway, the roadway width shall be 34 feet; and
 - If parallel parking is allowed on both sides of the access roadway/driveway, the roadway width shall be 36 feet in a residential area or 42 feet in a commercial area.
- Mitigation Measure I.1-11: The entrance to any street or driveway with parking restrictions shall be posted with LACoFD-approved signs stating "NO PARKING FIRE LANE" in 3-inch-high letters, at intermittent distances of 150 feet. Any access-way that is less than 34 feet in width shall be labeled "Fire Lane" on the final tract map and final building plans.
- **Mitigation Measure I.1-12:** The following standards apply to the Project's residential component only:
 - A cul-de-sac shall be a minimum of 34 feet in width and shall not be more than 700 feet in length;
 - The length of the cul-de-sac may be increased to 1,000 feet if a minimum 36-foot-wide roadway is provided; and
 - An LACoFD-approved turning radius shall be provided at the terminus of all residential cul-de-sacs.
- Mitigation Measure I.1-13: The Applicant shall pay a fair share contribution for the improvement of fire service facilities and equipment that is required to off-set impacts of the Project, as determined by the County of Los Angeles Fire Department and the City of Carson.⁶
- <u>Mitigation Measure I.1-14:</u> All access devices and gates shall meet the following requirements:
 - Any single-gated opening used for ingress and egress shall be a minimum of 26 feet clear-to-sky;
 - Any divided gate opening (when each gate is used for a single direction of travel, i.e., ingress or egress) shall be a minimum width of 20 feet clear to sky;
 - Gates and/or control devices shall be positioned a minimum of 50 feet from a public right-of-way and shall be provided with a turnaround having a minimum of 32 feet of turning radius. If an intercom system is used, the

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⁶ See LACoFD correspondence dated August 31, 2017 (in SEIR Appendix A).

- 50 feet shall be measured from the right-of-way to the intercom control device;
- All limited access devices shall be of a type approved by LACoFD; and
- Gate plans shall be submitted to LACoFD prior to installation. These plans shall show all locations, widths, and details of the proposed gates.
- Mitigation Measure I.1-15: All proposals for traffic calming measures (speed humps/bumps/cushions, traffic circles, roundabouts, etc.) shall be submitted to LACoFD for review prior to implementation.
- Mitigation Measure I.1-16: Provide three sets of alternate route (detour) plans with a tentative schedule of planned closures prior to the beginning of construction. Complete architectural/structural plans are not necessary.
- Mitigation Measure I.1-17: Any temporary bridges shall be designed, constructed, and maintained to support a live load of at least 70,000 pounds. A minimum vertical clearance of 13'6" shall be required throughout construction.
- <u>Mitigation Measure I.1-18:</u> Disruptions to water services shall be coordinated with <u>LACoFD</u>, and alternate water sources shall be provided for fire protection during such disruptions.

Comparison to FEIR Findings: No New Significant Impact or Changes. One Mitigation Measure deleted as no longer applicable, remaining Previously Mitigation Measures Applied with Certain Modifications; New Mitigation Added. With Implementation of Mitigation Measures I.1-1 through I.1-18, Impacts Would Be Less than Significant.

a.ii) Police Protection?

The Property is still located within the jurisdiction of the Los Angeles County Sheriff's Department (Sheriff's Department). More specifically, the City of Carson, including the Property, is still served by the Carson Sheriff Station located at 21356 South Avalon.

During construction, a chain-link fence would continue to secure the perimeter of the Property, and the developer would provide security as needed in accordance with standard practices in the area and as required by the City throughout the construction period of the proposed modified Project as with the approved Project. With implementation of a Construction Management Plan and coordination between the proposed modified Project's construction managers and the Sheriff's Department (see Mitigation Measure C-1), the potential impact of construction on emergency access would be reduced to a less than significant level.

Like the approved Project, the proposed modified Project would increase the demand for police services such that significant impacts to existing service ratios may occur. However, the proposed modified Project would not substantially deviate from the approved Project, and in the case of commercial land uses, the overall square footage has decreased as compared to the

approved Project. As such, the same mitigation measures would likewise reduce impacts to less than significant and are carried forward and applied to the proposed modified Project as updated, as follows: the following mitigation measures are included in the approved Project MMRP and are incorporated into this SEIR. Further, a new mitigation measure has been added to this SEIR as it is applicable to the proposed modified Project, but was not applicable to the approved Project, and would further reduce impacts to police services. With the implementation of the mitigation measures, impacts to police services would be less than significant.⁷

- Mitigation Measure I.2-1: The Applicant shall provide private security services within the areas of Districts 1, Planning Areas 2, and 3 that are occupied by commercial development. On-site security services shall maintain an ongoing dialogue with the Sheriff's Department so as to maximize the value of the security service that are provided.
- Mitigation Measure I.2-2: The Applicant shall incorporate into the Project design a Community Safety Center space for a Sheriff's substation for use by the Project's private security force and the Los Angeles County Sheriff's Department. It shall include the following features at a minimum: a front desk/reception area, a community meeting room, work space for law enforcement and public safety personnel, a video monitoring console, and restrooms. The Center shall be staffed by either a Sheriff's Department Community Services Officer or by personnel approved by the Sheriff's Department.
- **Mitigation Measure I.2-3:** The Applicant shall install video cameras throughout the commercial development within Districts 1, Planning Areas 2, and 3 with a digitally recorded feed to the Community Safety Center substation that is also accessible via the internet at the Carson Sheriff's Station.
- **Mitigation Measure I.2-4:** The Applicant shall develop jointly with the Sheriff's Department a community policing plan, subject to final review and approval by the Sheriff's Department.
- Mitigation Measure I.2-5: The Applicant shall <u>confer with the Sheriff's Department</u>
 and, if private security is not sufficient, shall fund Deputy Sheriffs on an overtime basis to augment security during peak periods, as jointly determined by the Applicant or its successor, and the Sheriff's Department.
- **Mitigation Measure I.2-6:** The management of the entertainment venues located within the Project site shall notify the Sheriff's Station in advance of planned activities (i.e., movie schedules).

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⁷ The mitigation measures below are updated from those set forth in the FEIR. For clarity, the changed text is marked as follows: new text is <u>underlined</u>, and deleted text is shown in strikeout format.

Mitigation Measure I.2-7: The Sheriff's Department Crime Prevention Unit shall be contacted for advice on crime prevention programs that could be incorporated into the proposed <u>modified Project</u>, including Neighborhood Watch.

Mitigation Measure I.2-8: Applicant(s) for Planning Areas 1, 2, and 3 shall pay a fair-share contribution for Sheriff department services, facilities, and equipment that is required to offset the impacts of the proposed modified Project, as determined by the City of Carson after consultation with the Sheriff's Department.

Comparison to FEIR Findings: No New Significant Impacts. Previous Mitigation Applied with Certain Modifications; New Mitigation Added. With Implementation of Mitigation Measures I.2-1 through I.1-8, Impacts Would Be Less than Significant.

a.iii) Schools?

As with the approved Project, the proposed modified Project would generate students that would be within the boundaries of the Carson Street Elementary School, Stephen M. White Middle School, and Carson High School. The increase in students would result in potentially significant impacts to Los Angeles Unified School District (LAUSD) schools. However, pursuant to California Government Code Section 65995, the Applicant would be required to pay fees in accordance with Senate Bill 50. Payment of such fees is intended for the general purpose of addressing the construction of new school facilities, whether schools serving the project in question are at capacity of not and, pursuant to Section 65995(h), payment of such fees is deemed full mitigation of a project's development impacts. With payment of the required fees, the proposed modified Project would result in a less than significant impact to schools.

Comparison to FEIR Findings: No New Significant Impacts. No Mitigation Previously Applied. No New Mitigation Measure(s) Identified. Impacts Would Be Less than Significant.

a.iv) Parks?

There are 16 public parks, one county park, and one public golf course totaling 315 acres in the City of Carson. The City's 2010 Census population was 91,714 people, as compared to 89,730 residents reported in the 2000 Census. The City evaluates parks based on the ratio of park acreage per residents as residents are deemed most likely to utilize area parks. As a result of the increase in population, the current park ratio in the City is 3.4 acres per 1,000 residents, which is a reduction from 3.5 acres per 1,000 residents reported in the FEIR. Park and recreational space owned and operated by the City is provided at a rate of 1.68 acre per 1,000 residents, reduced

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⁸ Government Code Section 65995(h) states in part: "The payment or satisfaction of a fee ...specified in Section 65995 ... are hereby deemed to be full and complete mitigation of the impacts of any legislative or adjudicative act, or both, involving, but not limited to, the planning, use, or development of real property ... on the provision of adequate school facilities.

from 1.72 acres per 1,000 residents. Public schools with on-site recreational facilities total 546.1 acres, 349.2 acres of which are within the California State University Dominguez Hills campus. In addition, the City has a Joint Use Agreement with LAUSD for the use of playfields, tennis courts, and other recreational facilities during off-school hours at Carson High School and Caroldale Elementary School.

The City of Carson has identified the following 11 parks that are located in proximity to the Property and, thus, would potentially be used by Project residents: (1) Anderson Park, (2) Calas Park, (3) Carson Community Center, (4) Carson Park and Pool, (5) Del Amo Park, (6) Hemingway Park, (7) Mills Park, (8) Scott Park, (9) Veterans Park and Sports Complex, (10) Victoria Golf Course, and (11) Victoria Park. For the proposed modified Project, which includes 1,250 residential units, ¹⁰ in accordance with City of Carson Municipal Code Section 9207.19, Parks and Recreational Facilities, the proposed modified Project would be required to dedicate 10.31 acres of land based on the multiple-family dwelling type consisting of five or more units, which requires 0.00825 acre per dwelling unit. ¹¹ The proposed modified Project proposes to meet the currently adopted requirements of Section 9207.19 through the provision of park space, on-site improvements, and/or, the payment of in-lieu fees. Therefore, the proposed modified Project would be consistent with Municipal Code requirements and, thus, would have a less than significant impact with regard to the provision of park space.

With regard to private open space, while the proposed modified Project would reduce the private open space and would provide less private open space than that required by the Municipal Code, the proposed modified Project proposes to include other amenities that would serve residents, e.g. health clubs on the ground floor of the multi-family apartment buildings. To ensure that the intent of the Municipal Code is met with regard to the provision of private open space, a Mitigation Measure I.4-2 addresses this potentially significant impact. While the Applicant has proposed various features to contribute to meeting the common open space requirement, the amount of such space has not been determined at this time. As a significant impact could occur regarding the provision of common open space, Mitigation Measure I.4-3 requires that the common open-space standard be met to ensure that impacts will be less than significant.

Like the approved Project, the proposed modified Project would increase the demand for parks and recreation services among new residents in the City. The following mitigation measures are included in the approved Project MMRP and are also incorporated into this SEIR.

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⁹ Assumes City of Carson population of 91,714 based on 2010 Census data.

¹⁰ The approved Project included 1,550 residential units. However, 300 units have been entitled for construction by the City at DD3. The proposed modified Project would include 1,250 residential units (or the remainder of the residential units contained in the approved Project).

¹¹ 1,250 proposed modified Project dwelling units multiplied by 0.00825 acre per unit as required by Section 9207.19 of the City's Municipal Code.

The first measure addresses impacts on public recreation facilities. Although a significant impact on public recreation facilities is not anticipated, Mitigation Measure I.4-1 ensures that the proposed modified Project's contribution to parks and recreation facilities meets the City's Quimby requirements which are applicable to residential uses only. The other two mitigation measures address private and common open space requirements within the proposed modified Project for residential uses. With the implementation of the mitigation measures, impacts to parks and recreation would be less than significant.

- **Mitigation Measure I.4-1:** Residential uses of tThe Project shall provide park and recreation facilities pursuant to Section 9207.19, equivalent to three3 acres per 1,000 population, that would be met through the provision of park space, on-site improvements, and/or, the payment of in-lieu fees.
- **Mitigation Measure I.4-2:** Residential uses of tThe Project shall meet the intent of Municipal Code Sections 9128.54 and 9128.15 through the provision of private open space as defined therein and/or the provision of additional amenities that meet the recreational needs of Project residents, e.g., health clubs.
- Mitigation Measure I.4-3: Public open space for residential uses of tThe Project shall meet the requirements of Municipal Code Section 9126.28 by demonstrating that the Project's common open space area meets the 40% standard established therein.be calculated on a per-unit basis:
 - For PA 1:
 - Studio and 1-Bedroom Units: a minimum of 150 sq.ft. per unit
 - 2-Bedroom Units: a minimum of 220 sq.ft. per unit
 - 3+-Bedroom Units: a minimum of 250 sq.ft. per unit
 - All with a minimum dimension of 15 feet in any direction
 - For DD3:
 - All Units: a minimum of 300 sq.ft. per unit with a minimum dimension of 15 feet in any direction

Comparison to FEIR Findings: No New Significant Impacts. Previous Mitigation Applied with Certain Modifications. No New Mitigation Measure(s) Identified. With Implementation of Mitigation Measures I.4-1 through I.4-3, Impacts Would Be Less than Significant.

a.v) Other Public Facilities?

The proposed modified Project is within the service area of the Carson Regional Library (Carson Library), a 33,112 sq.ft. facility, located approximately 1.5 miles south of the Project

site at 151 East Carson Street.¹² The Carson Library service area includes the southern half of the City and nearby unincorporated areas of the County. Library demand is primarily based on residential population. The proposed modified Project would allow 1,250 residential units, and would reduce commercial development and increase the number of hotel rooms. Thus, impacts would remain similar as under the approved Project. As with the approved Project, the proposed modified Project could have significant impacts on the County Library system. The County Library system utilizes developer fees to mitigate impacts within the unincorporated areas of Los Angeles County. As such, the following mitigation measure is included in the approved Project MMRP and is thereby incorporated into this SEIR. With implementation of the mitigation measure, impacts to libraries would be less than significant.

Mitigation Measure I.5-1: The Applicants for residential uses shall pay a fair-share contribution for the improvement of library facilities that are required to off-set impacts of the Project, subject to approval of the County of Los Angeles Public Library.

Comparison to FEIR Findings: No New Significant Impacts. Previous Mitigation Applied with Certain Modifications. No New Mitigation Measure(s) Identified. With Implementation of Mitigation Measures I.4-1 through I.4-3, Impacts Would Be Less than Significant.

N. 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 facilities would occur or be accelerated?
- b) Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?

As indicated above under question M.a.iv, Parks, as with the approved Project, the proposed modified Project proposes to meet the currently adopted requirements of Section 9207.19 through the provision of park space, on-site improvements, and/or the payment of in-lieu fees. Therefore, the proposed modified Project would have a less than significant impact with regard to the provision of park space. The proposed modified Project would also not increase the use of recreational facilities such that substantial physical deterioration of the facilities would occur. In addition, with the implementation of the mitigation measures relative to parks, the proposed modified Project would still not require the construction or expansion of recreation facilities that might have an adverse physical effect on the environment. As such,

¹² http://www.colapublib.org/libs/carson/. Accessed September 7, 2017.

impacts regarding recreation would be less than significant. Refer to the discussion under Question M.a.iv, Parks, above, for more detail.

Comparison to FEIR Findings (Initial Study): No New Significant Impacts. No Mitigation Previously Applied. No New Mitigation Measure(s) Identified. Impacts Would Be Less than Significant.

O. TRANSPORTATION AND TRAFFIC

Would the Project:

c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?

Due to the type of uses and height of structures proposed under the proposed modified Project, as with the approved Project, the proposed modified Project would not result in a change in air traffic patterns or create a safety risk. No significant impact would occur.

d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

There are still no existing hazardous design features, such as sharp curves or dangerous intersections, on-site or within the vicinity of the Property. The site plan for the proposed modified Project is similar to that of the approved Project. The site design does not include the creation of any such design hazards or include any uses that are incompatible with normal traffic operations. Impacts related to traffic hazards or incompatible uses would be less than significant.

e) Result in inadequate emergency access?

The proposed modified Project would not significantly impact the City's adopted emergency response plan/emergency plan and would include roadways and access features in order to meet the requirements of the Los Angeles County Fire Department (see Mitigation Measure I.1-2). The proposed modified Project would still adhere to the requirements of the applicable Fire Code. The following mitigation measure is included in the approved Project MMRP and is thereby incorporated into this SEIR. With implementation of the mitigation measure, impacts to emergency access would be less than significant.

Mitigation Measure I.1-2: The Applicant shall provide adequate ingress/egress access points for emergency response to the satisfaction of the LACoFD.

Comparison to FEIR Findings (Initial Study) as to Above Listed Transportation and Traffic Threshold: No New Significant Impacts. Previous Mitigation Applied. No New Mitigation Measure(s) Identified. With Implementation of Mitigation Measure I.1-2, Impacts Would Be Less than Significant.

P. UTILITIES AND SERVICE SYSTEMS

Would the Project:

b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

With regard to water facilities, as indicated in the FEIR, the Project site is served by a 16-inch concrete lined and coated main along Del Amo Boulevard and by a 12-inch main in Main Street. There are also secondary feeds from the two main lines that provide service into the interior of the Property and that could be used to serve the proposed modified Project if determined to be appropriate for the uses and requirements of the development program. Within the Property, the water system consists of 12 inch PVC water mains buried under Street A and Street B, the existing on-site access roads within PA 1, PA 2, and PA 3. This backbone distribution of mains and fire hydrants was engineered for future commercial/industrial uses and was approved by the Los Angeles County Department of Public Works.

There is a backbone reclaimed water system in place on the northern side of the I-405 Freeway and Dominguez Channel, which is operated by the West Basin Municipal Water District (WBMWD). The WBMWD currently implements a program for water recycling in the South Bay area. Recycled water can be used for landscape irrigation, cooling towers, and refineries, as well as street sweeping and toilet flushing.

Therefore, as with the approved Project the proposed modified Project would not create a significant impact relative to the existing conveyance system. Therefore, the proposed modified Project would result in a less than significant impact with regard to water conveyance systems as well as fire flow with the incorporation of the mitigation measure below. The following mitigation measure is included in the approved Project MMRP to ensure sufficient fire flow exists for the proposed modified Project and is thereby incorporated into this SEIR. With the implementation of the mitigation measure, impacts to water facilities would be less than significant.

Mitigation Measure J.1-8: Water lines and hydrants shall be sized and located so as to meet the fire flow requirements established by the Los Angeles County Fire Department.

For a discussion regarding wastewater facilities, see Section IV.J.2, Wastewater, of this SEIR.

Comparison to FEIR for Above Listed Water Infrastructure Threshold: No New Significant Impacts. Previous Mitigation Applied with Certain Modifications. No New Mitigation Measure(s) Identified. With Implementation of Mitigation Measures I.4-1 through I.4-3, Impacts Would Be Less than Significant.

d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?

Water service in the City of Carson is provided by the California Water Service Company (Cal Water) and the Southern California Water Company (SCWC). The Property is served by Cal Water, which serves a 35-square-mile area including most of the City of Carson. Water supplies for Cal Water are from two principal sources: local groundwater and purchased imported water.

In accordance with the requirements of Senate Bill 610 and California Water Code Section 10912(a), Cal Water, as the designated water supplier, prepared a Water Supply Assessment (WSA) to assess whether the projected water demands for the approved Project could be met by its projected water supply. The WSA determined the projected water demand for the approved Project and then compared that demand with the projected water supply for the Dominguez District for a 20-year period from 2005 to 2025 under normal, single-dry—year, and multiple-dry-year conditions. The WSA determined that Cal Water did have adequate water supplies to meet the projected demands of the approved Project in addition to those of its existing customers and other anticipated future water users in the Dominguez District for the 20-year period under all conditions.

The proposed modified Project contains similar land uses and would result in a decrease of commercial square footage and an increase of 50 hotel rooms. The overall number of residential units would remain the same. Since a WSA was prepared for the approved Project, California Water Code Section 10910(h) is the applicable standard by which to determine if further analysis of water supply and demand is required in connection with the proposed modified Project. A technical memorandum is provided in Appendix K, Water Supply Memorandum, of this SEIR that provides an analysis of California Water Code Section 10910(h) to confirm whether demand and generation rates have been adequately addressed by the WSA and have not substantially increased due to project modifications; that there are no changes in circumstances or conditions that substantially affect the ability of Cal Water to provide a sufficient supply of water to the proposed modified Project; and that there is no significant new information that would affect the analysis and conclusions in the water supply assessment and applicable water management plans.

The analysis conducted used the same use factors as those used in the WSA for the approved Project. Using the same use factors as the approved Project, the proposed modified Project is projected to require a total estimated daily water demand of 629,445 gpd and a total estimated annual demand of 705 afy. When compared to the approved Project, the proposed

¹³ The approved Project would provide 1,550 residential units while the proposed modified Project would provide 1,250 units. However, the difference of 300 units are those units that have received entitlements at DD3. Thus, overall there is no change in the number of residential units.

modified Project would result in a decrease of 166,025 gpd and 187 afy. Moreover, it is anticipated that overall demand for water by the proposed modified Project would be even further reduced by water savings from intervening developments in water conservation technology and features, which are now prominent in project design with compliance with CALGreen Code, and which were not available when the WSA projections were originally prepared.

However, for purposes of comparison with the WSA, it is necessary to account for the 300 units on DD3, which were included in the WSA analysis as part of the approved Project. The 300 units were determined in the WSA to have a water demand of 60,900 gpd, or 68 afy. When these units are added to the proposed modified Project for comparative purposes with the 2006 FEIR, the proposed modified Project and the DD3 300-unit development together would result in a total estimated daily water demand of 690,345 gpd and a total estimated annual demand of 773 afy, which is a decrease of 105,125 gpd and 119 afy as compared with the water demand established in the WSA.

Further, the regional commercial square footage amount of 696,500 sq.ft. used for PA 2, which is based on gross building area (GBA), establishes the demand of the outlet project utilizing GBA square footage in order to provide a more conservative approach of assessing water consumption. However, based on the current program and design for the Regional Commercial outlets, approximately 115,480 sq.ft. attributed to the GBA will not be "occupied" in the traditional sense of assessing water demand (much like sidewalks are not included), as that space is associated with walkways, corridors, etc., that have been included in the GBA. Other commercial portions of the proposed modified Project are proposed to utilize a more traditional retail format in which gross leasable area (GLA) and GBA are the same.

Therefore, it is likely more appropriate to utilize GLA for the retail regional commercial uses on PA 2 only. Applying the same use factor to GLA as was used for GBA for that development would result in a reduction of water demand of 63,912 gpd in average use, or a reduction of an additional 72 afy. If this standard is utilized, even taking into account the additional 300 residential units in DD3, the actual water demand of the proposed modified Project would be even a greater decrease as compared to that of the approved Project.¹⁴

Moreover, it is anticipated that overall demand for water by the proposed modified Project would be further reduced by water savings from intervening developments in water conservation technology and features, which are now prominent in project design with compliance with CALGreen Code, and which were not available when the WSA projections were originally prepared. According to the 2015 UWMP for the Dominguez District Table 4-6,

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Even if the mix of uses is slightly different than that shown on Table II of Appendix K, Water Supply Memorandum, the overall water usage would still be similar to, or less than, the approved Project.

following new building codes, including CALGreen, and standards, future passive savings range from 21 afy in 2015 to 1,220 afy in 2040. As more development and redevelopment occurs under more water-saving codes and standards, overall demand for water in the Dominguez District, including the proposed modified Project, could be further reduced.

Therefore, the proposed modified Project would require less water than previously projected for the approved Project. Thus, the proposed modified Project would not result in a substantial increase in water demand compared to the approved Project – in fact a decrease in water demand – and the proposed modified Project would not trigger the necessity to prepare a new WSA under California Water Code Section 10910(h). Impacts related to water demand for the proposed modified Project would be less than significant.

The projected water demand and supply rates within the 2015 UWMP for the Dominguez District prepared by Cal Water were reviewed. Since the 2015 UWMP accounted for the land use types of the approved Project and has indicated that the Dominguez District has an adequate projected water supply to cover the projected water demand until 2040, and the proposed modified Project would result in a decrease in water demand compared with the approved Project, there is reasonable basis to conclude that there is adequate water supply to serve the proposed modified Project. Further, the proposed modified Project would not cause a substantial change in circumstance or conditions which would affect Cal Water's ability to provide adequate water supply to its service area. Thus, the proposed modified Project would not trigger the necessity to prepare a new WSA analysis under California Water Code Section 10910(h).

Based on the analysis provided in the memorandum contained in Appendix K, the proposed modified Project would not cause any of the changes established in California Water Code Section 10910(h), which require a new WSA to be prepared. Therefore, the WSA prepared for the approved Project remains a valid assessment of the water supplies and water demands for the proposed modified Project. Impacts with regard to water supply would be less than significant.

As with the approved Project, although development of the proposed modified Project is not anticipated to result in significant impacts to water supply services, the following mitigation measures, which are included in the approved Project MMRP and thereby incorporated into this SEIR would ensure that water resources would be conserved to the extent feasible.

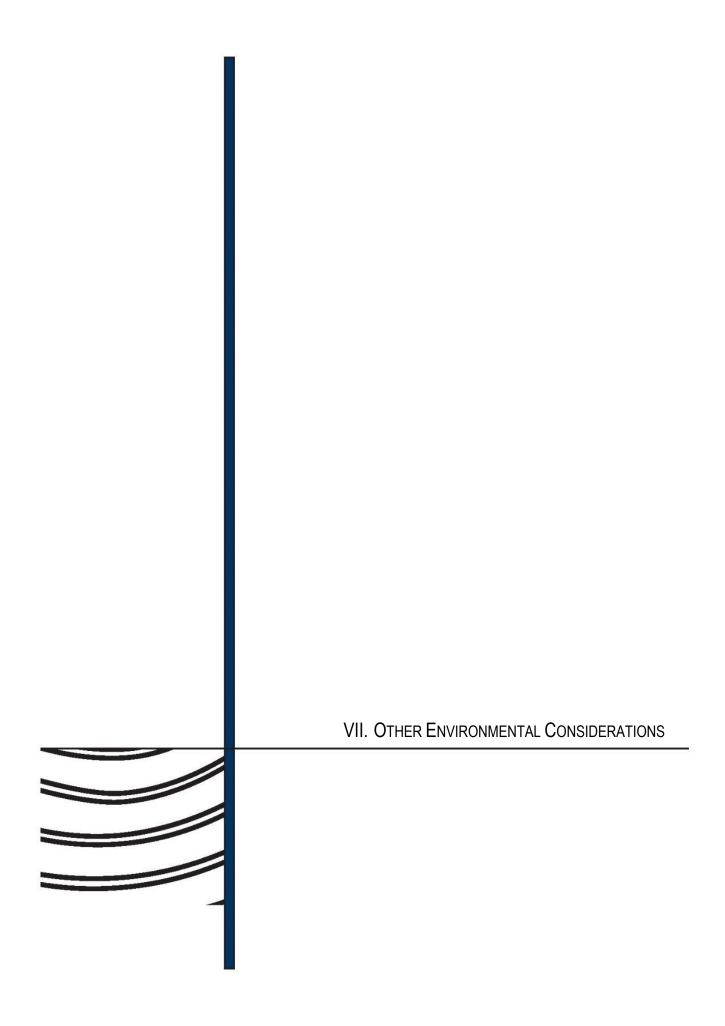
Mitigation Measure J.1-1: The Building Department and the Planning Division shall review building plans to ensure that water-<u>reducing measures are utilized</u>, as required by Title 20 and Title 24 of the California Administrative Code. These measures include, but are not limited to, water conserving dishwashers, low-volume toilet tanks, and flow control devices for faucets.

Mitigation Measure J.1-2: The Project shall comply with the City's landscape ordinance, "A Water Efficient Landscape Ordinance," as required by the State Water Conservation Landscape Act.

- **Mitigation Measure J.1-3:** The Applicant shall provide reclaimed water for the Project's non-potable water needs, if feasible.
- **Mitigation Measure J.1-4:** Landscaping of the <u>Project site Property</u> shall utilize xeriscape (low-maintenance, drought-resistant) plantings.
- **Mitigation Measure J.1-5:** Automatic irrigation systems shall be set to <u>ie</u>nsure irrigation during early morning or evening hours to minimize water loss due to evaporation. Sprinklers must be reset to water less in cooler months and during rainfall season so that water is not wasted on excessive landscape irrigation.
- **Mitigation Measure J.1-6:** The Project shall be designed to recycle all water used in cooling systems to the maximum extent possible.
- **Mitigation Measure J.1-7:** To the maximum extent feasible, reclaimed water shall be used during the grading and construction phase of the Project for the following activities: (1) dust control, (2) soil compaction, and (3) concrete mixing.

Comparison to FEIR Findings for Above Listed Water Supply Threshold: No New Significant Impacts. Previous Mitigation Applied. No New Mitigation Measure(s) Identified. With Implementation of Mitigation Measures J.1-1 through J.1-7, Impacts Would Be Less than Significant.

VI. Effects Found Not to Be Signi	ficant	
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VII. OTHER ENVIRONMENTAL CONSIDERATIONS

A. SIGNIFICANT UNAVOIDABLE IMPACTS

1. Visual Resources

The FEIR identified a significant impact related to the loss and conversion of the existing openness of the Project site to a developed appearance with the approved Project (see FEIR [DEIR p. 194]). The FEIR identified this change as having the greatest effect for travelers along Del Amo Boulevard, which is a public view corridor traveled by a large number of people. DD3 is also substantially vacant at this time. Therefore, development of DD3 to the north of Del Amo Boulevard will, cumulatively with development of the currently undeveloped Property to the south of Del Amo Boulevard, result in the same significant and unavoidable impacts related to the conversion of the appearance of the Project site as described in the FEIR.

2. Traffic and Circulation

The proposed modified Project would result in one fewer significant impact and six additional significant and unavoidable impacts compared to the approved Project. The difference in number, degree, and location of significant impacts identified for the approved Project compared to the analysis for the proposed modified Project, is a result of changes in background traffic conditions, related project traffic patterns, roadway and freeway capacity changes, as well as differences in analysis methodology. The difference in the number of significant and unavoidable impacts is a result of differences in analysis methodology and changes in City of Carson policy and design standards.

The proposed modified Project has the same number of significant impacts and one fewer significant and unavoidable impact compared to the approved Project when analyzed using the same 2017 methodology. The difference in number, degree, and location of significant impacts identified between the proposed modified Project and the approved Project analyzed with the 2017 state-of-practice methodology is a result of differences in the Project Description.

3. Air Quality

The proposed modified Project would result in similar types of air quality impacts compared to the approved Project, and like the approved Project, would result in significant and unavoidable regional construction emissions related to reactive organic compound (ROC) and carbon monoxide (CO) and regional operational impacts with respect to ROC, nitrogen oxides (NOx), CO, and respirable particulate matter (PM₁₀). Worst-case emissions associated with

concurrent PA 2 and PA 3 operations and PA 1 construction would, like the approved Project, result in significant and unavoidable emissions of ROC, NOx, CO, and PM₁₀. Emissions of PM_{2.5} are in excess of current SCAQMD thresholds for build-out operational and concurrent construction and operations and would result in a significant regional impact arising from a newly assessed regulatory requirement. Applying SCAQMD's methodology to the PM₁₀ results of the FEIR, PM_{2.5} regional emissions from the approved Project would be in excess of the thresholds if current PM_{2.5} thresholds had been promulgated and applied in 2006. Therefore, PM_{2.5} impacts for the proposed modified Project are substantially the same as for the approved Project if PM_{2.5} had been regulated in 2006 and would be significant and unavoidable.

4. Noise

Like the approved Project, noise levels associated with DDC would result in significant and unavoidable increases in ambient noise at nearby residential uses with respect to receptors located across the Torrance Lateral Channel. With respect to DD3, the proposed modified Project would not result in a significant new impact. A variance has been issued by the City to allow pile driving noise levels to exceed the maximum noise level established by the Noise Ordinance and is renewed every 2 years. Nonetheless, like the approved Project, impacts related to pile driving noise would be significant and unavoidable, and no new impact would occur.

5. Secondary Impacts

In addition to the Project's direct significant impacts, implementation of the Project's mitigation measure would have impacts at off-site locations. These impacts are discussed below. As indicated, implementation of the off-site mitigation measures would have significant impacts during construction and operations.

B. SIGNIFICANT IRREVERSIBLE IMPACTS

CEQA Guidelines Section 15126.2(c) requires that an EIR evaluate significant irreversible environmental changes that would be caused by implementation of a proposed project to ensure that such changes are justified. Irreversible changes include the use of nonrenewable resources during the construction and operation of a project to such a degree that the use of the resource thereafter becomes unlikely. A significant environmental change can result from a primary and/or secondary impact that generally commits future generations to similar uses. Irreversible environmental change can also result from environmental accidents associated with a project. Like the approved Project, construction of the proposed modified Project would require the use of nonrenewable resources, such as wood, the raw materials in steel, metals such as copper and lead, aggregate materials used in concrete and asphalt such as sand and stone, water, petrochemical construction materials such as plastic, and petroleum based construction materials. In addition, fossil fuels used to power construction vehicles would also be consumed.

Like the approved Project, operation of the proposed modified Project would also involve the ongoing consumption of nonrenewable resources, such as electricity, petroleum-based fuels, fossil fuels, and water, which are commonly consumed in the existing surrounding urban environment. Energy resources would be used for heating and cooling of buildings, lighting, and transporting of patrons to and from the Project site. Operation of the proposed modified Project would occur in accordance with California Code of Regulations Title 24, Part 6, and Building Standards Code Title 24, Part 11 (commonly referred to as CALGreen Code), which set forth conservation practices that would limit the amount of energy consumed by the proposed modified Project. Nonetheless, the use of such resources would continue to represent a long-term commitment of essentially nonrenewable resources. Operation of the proposed modified Project would also result in an increased commitment of public maintenance services such as waste disposal and treatment as well as an increased commitment of the infrastructure that serves the Project site.

The commitment of the nonrenewable resources required for the construction and operation of the proposed modified Project would continue to limit the availability of these resources and future development of the Project site with other uses during the life of the proposed modified Project. However, due to the prior use of the major portion of the Project site as a landfill and the presence of hazardous materials in its underlying soils, postponement of the use of the Property to a future time would not provide remediation of the Property or ensure a better future use. In addition, the use of such resources as building materials and energy for operation would be of a relatively small scale in relation to the proposed modified Project's fulfillment of DTSC remediation goals and the City's development goals for the area. As such, the use of such resources would not be considered significant. Further, the limited use of potentially hazardous materials contained in typical cleaning agents and pesticides for landscaping, would occur on the site. Such materials would be used, handled, stored, and disposed of in accordance with applicable government regulations and standards, which would serve to protect against a significant and irreversible environmental change resulting from the accidental release of hazardous materials.

C. GROWTH-INDUCING IMPACTS

CEQA Sections 15126(d) and 15126.2(d) require that an EIR discuss the ways in which a project could foster economic or population growth or the construction of additional housing, either directly or indirectly, in the surrounding environment. Growth can be induced or fostered in several general ways listed as follows:

- Direct growth associated with a project;
- Creation of demand not satisfied within a project;
- Creation of surplus infrastructure capacity not utilized by a project; and
- Creation of capacity by an agency not required by a project.

Examples of growth-inducement are the removal of obstacles to population growth, such as the expansion of a major wastewater treatment plant that would allow more development in a service area, or construction of new roads and highways that would provide access to areas that were previously inaccessible. In addition, some projects may encourage and facilitate other activities that could significantly affect the environment, such as creating the demand for goods and services not previously available in an area. Relative to the proposed modified Project, each of these general categories is described under separate subtitles below.

1. Direct Growth Associated with the Proposed Modified Project

The proposed land uses, related facilities and the respective populations that would directly utilize them represent an increment of direct on-site growth. The proposed modified Project would allow for approximately 1,250 residential units (not including the 300 units entitled for construction in Development District 3 [DD3]), and a total of 1,834,833 square feet of commercial uses, including 350 rooms in two hotels, on the 157-acre Project site. The proposed modified Project could support a population increase of approximately 4,550 persons, ¹ and would be within Southern California Association of Governments' (SCAG) forecasted shortand long-term growth within the South Bay Cities Subregion (subregion). The proposed modified Project's growth would be consistent with SCAG Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) goals and objectives. As the approved Project was certified in 2006, the growth anticipated from the approved Project has been incorporated into subsequent SCAG RTP/SCS growth projections. Therefore, the proposed modified Project would result in a decrease in population growth and anticipated employment growth compared to the approved Project and would be consistent with SCAG's growth projections for the city between 2020 and 2040. Further, the Project site is an in-fill project within a larger metropolitan area. Its development would serve growth that is ongoing and anticipated in the Southern California area and the subregion in particular.

In addition, the 2014–2021 Housing Element of the City's General Plan stated that the City's population in 2010 was 91,714 residents and projected the population to increase to 97,500 in 2020 the increase would be approximately 5,786 residents, which represents a 6.3 percent increase in population for the City. Further the population is projected to increase to 160,000 residents in 2035 (City of Carson 2014). Assuming the worst case scenario of full buildout of the proposed modified Project by 2020, the additional 4,550 residents generated by the proposed modified Project would represent 4.6 percent of the total City's forecasted population growth by 2020. Assuming the long-term scenario of full operation of the proposed modified Project by 2035, the additional 4,550 residents generated by the proposed modified

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Population increase was calculated by multiplying the number of residential units by the City of Carson average household size for 2015, which was 3.64 persons $(1,250 \text{ units } x \ 3.64 = 4,550 \text{ residents})$ (US Census Bureau 2015).

Project would represent 2.8 percent of the total City's forecasted population growth by 2035. Therefore, the proposed modified Project would not substantially increase the city's population between 2020 and 2035.

This increment of direct growth has been the subject of each of the analyses of proposed modified Project's impacts upon the various environmental categories presented in Chapter IV, Environmental Impact Analysis, of this Draft Supplemental EIR (SEIR). This SEIR analyzed potential impacts associated with implementation of the proposed modified Project on or from land use, traffic and circulation, visual resources, hazards and hazardous materials, geology and soils, surface water quality, air quality, noise, parks and recreation, wastewater, and solid waste. Further, the Chapter IV analyses identify other related project growth that is already occurring within the Project vicinity due to ongoing growth in the area, including the 300 units entitled for construction in DD3, and accounted for the cumulative effects of these projects on the environment in conjunction with the proposed modified Project.

Therefore, the impacts of direct growth on the physical environment is accounted for in Chapter IV of this SEIR; and the direct growth attributable to the proposed modified Project would not be classified as induced growth beyond expected levels in the region or the subregion.

2. Creation of Demand Not Satisfied within the Proposed Modified Project

Like the approved Project, the proposed modified Project's resident and employee populations may produce demand for goods, services or facilities not directly provided or satisfied within the proposed modified Project. At the same time, a portion of the demand for housing in the City could be accommodated by the proposed modified Project's residential component. The Project site is surrounded by a broad urban area, which currently provides a range of goods and services. The larger area provides a complex network of housing, employment and commercial opportunities. Parts of the on-site resident and employee populations are expected to seek employment and housing, respectively, in areas surrounding the Project site and at greater distance, just as existing off-site residents and employees should be expected to seek employment or housing within the Project site.

Further, both the residential and the commercial components are consistent with SCAG's subregional projections, and would help to absorb existing demand, rather than create new demand. The potential effects of the proposed modified Project on commercial development in the area has been addressed in the Urban Decay Retail Market Impact Analysis for the District at South Bay, which is an updated study based on the Carson Marketplace, City of Carson, Retail Impact Study prepared for the FEIR. The RIA is included in Appendix B, Urban Decay Retail Market Impact Analysis, of this SEIR. The RIA concluded that implementation of the proposed modified Project is not anticipated to result in short- or long-term impacts to the regional commercial sector but is projected to have a short-term negative effect on the local serving

commercial sector. However, it is forecasted that these effects would be substantially reduced through the long-term as household growth continues into the future. Therefore, it can be concluded that the proposed modified Project would tend to be a disincentive to some of the growth of new retail activity rather than inspire it.

The need for new housing in the region has been documented in the City's 2014-2021 Housing Element, which is consistent with SCAG's regional housing needs assessment for the City. As discussed above, the proposed modified Project housing and population are within the SCAG forecasts for the City. Further, compared to the FEIR, employment opportunities between 2005 and 2015 increased in the subregion but have slightly decreased within the City. The subregion ratio of jobs to housing in 2005 was 1.4 and has increased to 1.79 in 2015. The subregion's ratio had increased by 0.39 in the 10-year period. However, for the City, the 2005 ratio was 3.43 and decreased to 2.98 in 2015, which represents a 0.45 decrease over the 10-year period. While the jobs to housing ratio has decreased for the city, the demand for additional housing will occur through the future.

Therefore, the mix of proposed modified Project uses and generated residential, employment, and commercial population would not be considered growth inducing. The proposed modified Project would not provide uses that are not otherwise already occurring in the area as part of the overall anticipated growth pattern, but rather provide a mixed-use development that provides for some demand to be met internally, and the proposed modified Project would absorb, and therefore minimally reduce anticipated demand, rather than create new demand.

Like the approved Project, the proposed modified Project would also cause an increase in the demand for public services that could indirectly induce off-site growth in service facilities, if the existing supply of such public services in the area were not adequate to provide for the proposed modified Project's residents and employees. Service agencies in the area are already providing, subject to mandates and funding, improvements in services to meet the needs of ongoing, anticipated growth. These improvements can often require the provision of new physical facilities whose development can have impacts on the physical environment. The proposed modified Project's large scale and unique operating characteristics (e.g., large number of residential units, large public visitor/shopping areas, etc.) would cause the proposed modified Project to be a contributor to the growing demand for public services.

3. Creation of Surplus Infrastructure Capacity Not Utilized by the Proposed Modified Project

The area surrounding the Project site is currently developed with water, wastewater, power, natural gas, telephone, and transportation infrastructure. As discussed in Section IV.J.2, Wastewater, and Section IV.J.3, Solid Waste, the proposed modified Project's demand wastewater and solid waste services would be met through existing facilities and/or improvements otherwise

planned to meet regional growth. However, at the time site plans for the proposed modified Project are submitted to the utility providers, additional facilities may be required, e.g., additional off-site water lines, or an electrical substation. The provision of new utilities in an efficient manner would likely require sizing of improvements to meet the needs beyond any single project. Further, mitigation measures recommended for the proposed modified Project's in Section IV.C, Traffic and Circulation, are required to address the proposed modified Project's traffic impacts.

Implementation of those mitigation measures would add additional lanes and turning movements at the impacted intersections. Such improvements increase roadway capacity. As this capacity may be greater than that needed to offset the proposed modified Project's impacts at that particular intersection, the capacity that is in excess of what is need to address the proposed modified Project's impacts may be considered growth inducing as increases in traffic can occur through the intersection without degrading the intersection's level of service, depending on the increase. To the extent that these utility and transportation improvements would serve additional development in the Project area, beyond that required by the proposed modified Project, the excess capacity could potentially be considered growth inducing.

However, as noted in the discussion of services above, such excess capacity would add small incremental improvements to an existing system, which would accommodate a small amount of additional growth that is otherwise ongoing, and anticipated. Furthermore, the new infrastructure that would be implemented for the proposed modified Project would occur within the existing infrastructure network. It would not open new areas for development, whose development is only precluded by the need for an expanded infrastructure network. Thus, improvements to infrastructures systems would, therefore, support small increments of additional growth, that would occur over the near-term horizon.

4. Creation of Capacity by an Agency Not Required by the Proposed Modified Project

Like the approved Project, in considering the infrastructure needs of the proposed modified Project, public agencies could increase infrastructure capacity under their jurisdictions beyond that required by the proposed modified Project in order to achieve economies of scale. Such agencies may look longer term, and beyond the services required by the proposed modified Project, or needs otherwise described above. According to the discretion of the public agencies, new facilities, which would be sized larger than the requirements of the proposed modified Project, may be intended to provide more efficient service to existing users, in which case, such construction would not be considered growth-inducing. On the contrary, public agencies may also choose to create additional capacity in infrastructure in anticipation of future growth, in which case, such development would be growth-inducing. However, as described in Section IV.J.2 and Chapter VI, Effects Found Not to Be Significant, it is not anticipated that the public service agencies would seek to create additional capacity, beyond that required for currently anticipated growth.

5. Conclusions Regarding Growth Inducing Impacts

As discussed above, the proposed modified Project is a modification of an already approved Project and is, thus, a component of anticipated, ongoing regional growth. Further, the proposed modified Project does not include features that would notably cause new growth not otherwise anticipated that would cause substantial increases in population above that which was part of the previously approved Project. While the proposed modified Project would consist of a mix of uses that would be attractive for potential future residents as well as retail, restaurant, and entertainment uses, the proposed modified Project would also capture a large portion of the existing demand for such uses in the area. No additional capacity in existing service and utility systems beyond that stated in the FEIR would be required by the proposed modified Project. Therefore, these impacts would not be substantial in nature and thus, are concluded to be less than significant.

D. POTENTIAL SECONDARY EFFECTS

1. Introduction

CEQA Guidelines Section 15126.4(a)(1)(D) requires that, "If a mitigation measure would cause one or more significant effects in addition to those that would be caused by the project as proposed, the effects of the mitigation measure shall be discussed but in less detail than the significant effects of the project as proposed." Therefore, the following analysis is provided to identify the extent of potential secondary, off-site impacts associated with the proposed modified Project.

Most of the proposed modified Project mitigation measures are intended to address the environmental impacts of proposed development within the Project site in a manner that would reduce the level of impacts. These measures have been discussed, and their effects on the proposed modified Project impacts have been noted in the analyses for each of the environmental topics in Chapter IV of this SEIR. These measures would have no off-site effects other than reducing the impact they were aimed at.

However, some mitigation measures clearly identify the need for off-site improvements, and some mitigation measures create a condition under which additional off-site improvements could occur. Mitigation Measures C-9, C-10.1, and C-14 require roadway improvements at 3 intersections in the Project area. The affected intersections would be:

- Figueroa Street and Torrance Boulevard
- Main Street and 213th Street
- Avalon Boulevard and Carson Street

In addition, there are several mitigation measures that establish requirements that could lead to off-site improvements that would have secondary impacts on the physical environment. Specifically, Mitigation Measure I.4-1 requires the residential Applicant to meet park and recreation requirements sufficient to meet a standard of 3 acres per 1,000 population that could be met through the provision of on-site space, on-site improvements and/or the payment of inlieu fees. If in-lieu fees are paid, they may be used for the purchase of new parks or the construction of additional facilities at existing parks. Mitigation Measure I.5-1 requires the payment of library fees in order for facilities to be expanded to meet Project needs. Mitigation Measures J.1-3 (regarding water service), J.1-8 (regarding fire flow), J.2-2 (regarding waste water), and J.2-4 (regarding reclaimed water) address the provision of utility lines to the Project site. Specific off-site improvements have not been identified at this time, but may be required upon final site plan review. Further, it is expected that off-site work would be required to connect to the infrastructure main lines in the Project area, especially in regard to a tie-in to the existing recycled water system infrastructure.

All of the mitigation measures identified above can be grouped into four categories of off-site improvements for the purposes of analyzing their potential impacts. The four categories are as follows: (1) intersection improvements, (2) provision of the new Avalon Boulevard ramps to the I-405 freeway, (3) public service facilities, and (4) utility improvements.

2. Off-Site Impacts

a. Transportation

To facilitate an understanding of the potential impacts of the proposed modified Project's traffic mitigation measures, the following is a restatement of the feasible intersection mitigation measures set forth in Section IV.C:

- Mitigation Measure C-9, Figueroa Street and Torrance Boulevard (Intersection No. 15), would require conversion of the northbound through/right-turn lane to a through lane and a right-turn lane, with the Applicant to pay a fair-share contribution for the improvement. This improvement is feasible within the existing right-of-way and would require restriping and the removal of approximately eight on-street parking spaces.
- Mitigation Measure C-10.1, Main Street and 213th Street (Intersection No. 20), would require conversion of the westbound left/right-turn lane to a left-turn lane and a right-turn lane. This improvement is feasible within the existing right-of-way and would require restriping and the removal of approximately eight on-street parking spaces.
- Mitigation Measure C-14, Avalon Boulevard and Carson Street (Intersection No. 25), would require conversion of the southbound through/right-turn lane to a dedicated right-turn lane, and conversion of the northbound through/right-turn lane to a dedicated right-turn lane. These improvements are feasible within the existing right-of-way and would require restriping the northbound and southbound right-turn lanes and restriping the three receiving lanes to provide only two receiving lanes.

Implementation of these mitigation measures would require minor construction activities at each of the mitigated intersections identified above. Proposed improvements would consist of re-striping of roadways that would involve removal of the old striping by sandblasting, if necessary, and then provision of new striping. This work would be done at the near surface, without a need for deep excavation.

The intersection improvements identified above would offer enhanced traffic flows and would otherwise operate under the same general conditions that occurred prior to implementation of the improvements. The air quality and noise analyses presented in Chapter IV of this SEIR address the potential impacts at those locations where potential impacts are most likely to occur. As such, no further analysis is required. Through compliance with existing regulations, all other potential impacts associated with long-term operations of these improvements are addressed and result in less than significant impacts. However, construction of these intersection improvements would have short-term construction impacts on several of the environmental issues that are analyzed in Chapter IV of this SEIR. Foremost among these topics are air quality and noise. To the extent that these intersection improvements occur concurrent with peak or near peak on-site construction activity, the construction of these intersection improvements would incrementally add to the proposed modified Project's significant impact on regional air quality emissions. Localized air quality impacts are not anticipated to be significant since the magnitude and location of the construction of these intersection improvements would not be of a sufficient magnitude to cause or contribute to the approved modified Project's impacts. To the extent that sensitive noise receptors are located within proximity of these intersection improvements, the construction of these improvements may cause significant short-term noise impacts.

Construction of these improvements would also have impacts on traffic at the indicated intersections. For example, in some cases the construction of the intersection improvements would disrupt intersection operations and/or create congestion. However, such impact would be short-term and mitigated via standard, work management procedures for reducing travel impacts during construction; and would therefore be less than significant. Disruptions to traffic flows could also cause impacts on emergency access for fire and police services. Such disruptions would also be short term and reduced through the implementation of the work management procedures. These impacts would also be further reduced through coordination with the service providers; and again would be less than significant.

Construction impacts associated with the physical changes at the intersections would be limited. Impacts on geology/soils, hydrology, and hazards would be addressed through compliance with regulations that control construction activities that maintain the integrity of the infrastructure and protect the public. Likewise, if utilities should require relocation at any of the indicated intersections, standard engineering practices would be followed. Compliance with existing regulations and standard construction practices would avoid significant impacts relative to this group of environmental issues.

Construction impacts on the remaining environmental issues analyzed in this EIR would be minor, and less than significant. Specifically, there would be no impacts on land use or public services, i.e., schools, libraries, parks, police or fire services, except in regard to emergency access, as discussed above. Changes to the aesthetic setting during the construction of these improvements would be apparent due to equipment and debris, but not cause a substantial change in aesthetic conditions, and again would be of short duration. Thus, impacts with regard to this set of issues would also be less than significant.

3. Off-Site Impacts of New Public Service Facilities

Like the approved Project, Mitigation Measures I.4-1 and I.5-1 require the residential Applicant to fund its fair share of public service improvements. Such funding could result in the construction of new park space, or additional facilities at an existing park or additional facilities at the Carson Library. Any such infrastructure improvements would become projects of the implementing agencies. It is also anticipated that these improvements would be developed per standard design guidelines of those agencies; and would likely be subject to CEQA review. For the purposes of this analysis, at this time it is unknown how or where these improvements might occur. However, there is a potential for the location of such facilities adjacent to sensitive populations, such as residential areas or schools. Provided below is an overview of the impacts that could occur with the addition of new public service facilities.

a. Potential Park and Library Improvements

Similar to the approved Project evaluation, development of park and recreation facilities, as well as libraries, are typically considered neighborhood amenities and encouraged in land use planning, as important community resources. By providing open space and landscaping, parks offer relief from development, and are typically considered attractive environmental features. Structural facilities, when they are present within park sites, are typically elements of a larger site, and are integrated into the site design. Libraries tend to be conservative in their design and would not detract from the aesthetics of their surroundings. Therefore, the impacts of new park and library facilities on aesthetics would be less than significant. Vehicle trips associated with these facilities generally occur during non-peak travel periods. Furthermore, these vehicle trips are accounted for in the trip generation rates for the Project's residential uses and thus would not generate traffic impacts beyond those identified in Section IV.C of this SEIR. Therefore, these uses would not cause significant impacts beyond those associated with the proposed modified Project. New park and library facilities would also be developed in accordance with all engineering, building and safety standards to avoid potential hazards and to reduce geotechnical and hydrology impacts to less than significant levels. As these facilities would not generate traffic volumes greater than those identified in Chapter IV of this SEIR, regional air quality impacts associated with the operations of these facilities would be less than significant. Local air quality impacts for the Project are less than significant, as would be the local air impacts

associated with the park and library trips. Libraries by their nature tend to sensitive to noise, so it is not anticipated that there would be operational noise impacts due to potentially expanded library facilities. However, noise from park facilities could result in a significant impact if there are sensitive uses located in close proximity to the new park facilities. However, it is anticipated that such impacts would be addressed via the design of the facilities. Notwithstanding, it is conservatively concluded that the creation of new off-site park facilities, should such facilities be actually constructed, could result in significant noise impacts if the new park facilities are located immediately adjacent to sensitive uses. Impacts of parks on and libraries on public services are less then significant as both types of improvements offer direct enhancements to the quality of public services, although they may result in incremental, and less than significant impacts with regard to increased demand for police and fire protection services. Utility services for parks and libraries would be provided in accordance with standard practices and with the implementation of standard mitigation measures, impacts would be reduced to less than significant levels.

Construction impacts for park and library facilities would be limited to those that would be expected with the typical development of such uses. To the extent that construction occurs in proximity to sensitive receptors, significant impacts relative to noise could occur. To the extent construction occurs concurrent with the Project, regional air quality emissions would be slightly increased over the significant levels noted for the Project. However, localized air quality impacts are not anticipated to be significant since the magnitude and location of the construction (including earthwork) would not be of sufficient magnitude to cause or contribute to the Project's impacts. Other construction impacts (i.e., geotechnical, hydrology, hazardous materials, etc.) would be reduced to less than significant levels via compliance with applicable regulations.

b. Off-Site Impacts of Utility Connections

Like the approved Project, Mitigation Measures J.1-3 (regarding water service), J.1-8 (regarding fire flow), J.2-2 (regarding waste water), and J.2-4 (regarding reclaimed water) address the provision of utility lines to the Property. These measures require site plan review and final identification of connections to the existing infrastructure network in the Project vicinity. Depending on final design, it may be necessary to add new infrastructure connections to the water and sewer lines located in Main Street and Del Amo Boulevard. Upon final review additional line improvements may be required. Further, the Property may connect to a reclaimed water system.

Like the approved Project, the implementation of connections between the Property and these off-site utility lines would involve minor, short-term construction activities. It would require trenching in the streets, making the connections, backfilling of the trenches, and repaving the roadways. If other line work is required, although not currently expected, the construction

process would be similar, but more extensive street paving could be required. Some roadway trenching would also be required along Del Amo Boulevard adjacent to the Property.

Impacts of all of these activities would be similar to those described for the intersections above. Upon completion of construction activities, roadways would be restored to their former operating characteristics. During construction, temporary, short-term construction impacts on air quality, noise, and transportation would result from the surficial excavation, shallow trenching, and paving activities. These impacts would occur from construction activity within the roadways, and the operations of heavy equipment such as backhoes and jackhammers. The impacts would be typical of such activities encountered regularly in urban areas and would be of extremely short duration

Similar to the approved Project, here may be additional impacts associated with connecting the Property to the existing reclaimed water system. Within the Project vicinity, the reclaimed water system currently extends to the Blimp site. Thus, the line would need to be extended southward along Main Street and easterly on Del Amo Boulevard before it would connect to the Project site. A design for this extension has not been completed. As such, impacts with the extension of this line to the property would be the same as those described above.

E. CEQA ISSUES NOT PREVIOUSLY ANALYZED BUT INCLUDED BASED ON NEW REGULATIONS

1. Introduction

The FEIR for the approved Project was certified before the requirement to analyze the potential environmental impacts of greenhouse gas (GHG) emissions (CEQA Guidelines) and energy was more recently added to the CEQA Guidelines and through decisions in recent case law. As such, the proposed modifications to the approved Project are not required to be assessed for new impacts related to greenhouse gas emissions. [See Citizens Against Airport Pollution v. City of San Jose (2014) 227 Cal.App.4th 788 (CAAP); Citizens for Responsible Equitable Environmental Development v. City of San Diego (2011) 196 Cal.App.4th 515 (CREED)]. Although not mandated, the City has voluntarily chosen to go beyond the requirements of CEQA, and has performed a quantitative assessment of the proposed modifications of the proposed modified Project. The quantitative assessments for GHG emissions and energy have been provided for informational purposes below.

2. Greenhouse Gas Emissions

A requirement that the potential environmental impact of GHG emissions be analyzed was recently added to the CEQA Guidelines as follows:

"Effective March 18, 2010, the Guidelines were amended to address greenhouse gas emissions. (Guidelines, § 15064.4.) The amendment confirms that lead

agencies retain the discretion to determine the significance of greenhouse gas emissions and should 'make a good-faith effort, based to the extent possible on scientific and factual data, to describe, calculate or estimate the amount of greenhouse gas emissions resulting from a project.' (Guidelines, § 15064.4(a).)" (CREED, supra, 197 Cal.App.4th at p. 336; see Rialto Citizens for Responsible Growth v. City of Rialto (2012) 208 Cal.App.4th 899, 940.)

Thus, the CEQA Guidelines did not require analysis of greenhouse gas emissions at the time the FEIR for the approved Project was certified.

However, the potential environmental impact of greenhouse gas emissions has been known since the 1970s. "In the late 1970's, the Federal Government began devoting serious attention to the possibility that carbon dioxide emissions associated with human activity could provoke climate change. In 1978, Congress enacted the National Climate Program Act, 92 Stat. 601, which required the President to establish a program to "assist the Nation and the world to understand and respond to natural and man-induced climate processes and their implications," [citation]. ...' [Citation.]" (CAAP, supra, 227 Cal.App.4th at p. 807, quoting CREED, supra, 196 Cal.App.4th at p. 531, quoting *Massachusetts v. EPA* [2007] 549 U.S. 497, 507–508, 127 S.Ct. 1438, 167 L.Ed.2d 248).

Moreover, as one appellate court has noted, "In 2002, information about the potential impacts of GHGs [(greenhouse gases)] was widely known. The United Nations Framework Convention on Climate Change was established in 1992. The regulation of greenhouse gas emissions to reduce climate change impacts was extensively debated and analyzed throughout the early 1990s. The studies and analyses of this issue resulted in the adoption of the Kyoto Protocol in 1997. In the early and mid-2000s, GHG's and climate change were extensively discussed and analyzed in California. In 2000, SB 1771 established the California Climate Action Registry for the recordation of greenhouse gas emissions to provide information about potential environmental impacts." (CAAP, supra, 227 Cal.App.4th at p. 807, quoting *Concerned Dublin Citizens v. City of Dublin* (2013) 214 Cal.App.4th 1301, 1319 (Concerned Citizens).

Thus, information about the potential environmental impact of GHG emissions was known or could have been known at the time the FEIR for the approved Project was certified. Since the potential environmental impact of greenhouse gas emissions does not constitute new information within the meaning of Public Resources Code Section 21166(c), the City is not required to analyze greenhouse gas emissions (see CAAP, supra, 227 Cal.App.4th at p. 807; CREED, supra, at p. 532 [use of addendum upheld; SEIR was not required because information on the effect of greenhouse gas emissions was known before approval of the 1994 FEIR]; see also Concerned Citizens, supra, 214 Cal.App.4th at p. 1320 [new guidelines on greenhouse gas emissions did not require a SEIR where potential effects of greenhouse gases could have been addressed when EIR certified in 2002]).

Although not required by CEQA, this section analyzes Project-related GHG emissions by determining the consistency of the proposed modified Project with applicable regulations, plans, and policies to reduce GHG emissions.

Amendments to CEQA Guidelines Section 15064.4 were adopted to assist lead agencies in determining the significance of the impacts of GHG emissions. Consistent with existing CEQA practice, Section 15064.4 gives lead agencies the discretion to determine whether to assess those emissions quantitatively or qualitatively. If a qualitative analysis is used, in addition to quantification, this section recommends certain qualitative factors that may be used in the determination of significance (i.e., extent to which the Project may increase or reduce GHG emissions compared to the existing environment; whether the Project exceeds an applicable significance threshold; and extent to which the Project complies with regulations or requirements adopted to implement a reduction or mitigation of GHGs). The amendments do not establish a threshold of significance; rather, lead agencies are granted discretion to establish significance thresholds for their respective jurisdictions, including looking to thresholds developed by other public agencies, or suggested by other experts, such as the California Air Pollution Control Officers Association (CAPCOA), so long as any threshold chosen is supported by substantial evidence (see Section 15064.7(c)). The California Natural Resources Agency has also clarified that the CEQA Guidelines amendments focus on the effects of GHG emissions as cumulative impacts, and that they should be analyzed in the context of CEQA's requirements for cumulative impact analysis (see Section 15064(h)(3)) (CNRA 2009) (Cynthia Bryant 2009).

The California Air Resources Board (CARB), South Coast Air Quality Management District (SCAQMD), and the City of Carson have not adopted qualitative or quantitative project-level significance thresholds for GHG impacts that would be applicable to the proposed modified Project. The Governor's Office of Planning and Research (OPR) released a technical advisory on CEQA and climate change that provided some guidance on assessing the significance of GHG emissions, and states that "lead agencies may undertake a project-by-project analysis, consistent with available guidance and current CEQA practice," and that while "climate change is ultimately a cumulative impact, not every individual project that emits GHGs must necessarily be found to contribute to a significant cumulative impact on the environment" (OPR 2008). Furthermore, the technical advisory states that "CEQA authorizes reliance on previously approved plans and mitigation programs that have adequately analyzed and mitigated GHG emissions to a less than significant level as a means to avoid or substantially reduce the cumulative impact of a project" (OPR 2008).

Per CEQA Guidelines Section 15064(h)(3), a project's incremental contribution to a cumulative impact can be found not cumulatively considerable if the project would comply with an approved plan or mitigation program that provides specific requirements that will avoid or substantially lessen the cumulative problem within the geographic area of the project (14 CCR Section 15064(h)(3)). To qualify, such a plan or program must be specified in law or adopted by

the public agency with jurisdiction over the affected resources through a public review process to implement, interpret, or make specific the law enforced or administered by the public agency (14 CCR Section 15064(h)(3)). Examples of such programs include a "water quality control plan, air quality attainment or maintenance plan, integrated waste management plan, habitat conservation plan, natural community conservation plan, [and] plans or regulations for the reduction of greenhouse gas emissions" (14 CCR Section 15064(h)(3)). Thus, CEQA Guidelines Section 15064(h)(3) allows a lead agency to make a finding of non-significance for GHG emissions if a project complies with a program and/or other regulatory schemes to reduce GHG emissions.²

In the absence of any adopted, quantitative threshold, the proposed modified Project would not have a significant effect on the environment if the proposed modified Project is found to be consistent with the applicable regulatory plans and policies to reduce GHG emissions, including the emissions reduction measures discussed within CARB's Climate Change Scoping Plan, CALGreen Code, Southern California Association of Government's (SCAG's) 2016 RTP/SCS, and City of Carson Energy Efficiency Climate Action Plan (EECAP) energy efficiency goals and strategies. The Carson City Council approved the Energy Efficiency Chapter of the City's Climate Action Plan (City Council Resolution No. 15-111) on October 7, 2015. Therefore, the EECAP is an applicable plan with specific requirements that will avoid or substantially lessen greenhouse gas emissions.

The California Energy Commission adopted CALGreen (Part 11 of Title 24, Building Energy Efficiency Standards) to "improve public health, safety and general welfare by enhancing the design and construction of buildings through the use of building concepts having a positive environmental impact and encouraging sustainable construction practices in the following categories: (1) Planning and design; (2) Energy efficiency; (3) Water efficiency and conservation; (4) Material conservation and resource efficiency; and (5) Environmental air

²

See, for example, San Joaquin Valley Air Pollution Control District (SJVAPCD), CEQA Determinations of Significance for Projects Subject to ARB's GHG Cap-and-Trade Regulation, APR-2025 (June 25, 2014), in which the SJVAPCD "determined that GHG emissions increases that are covered under ABR's Cap-and-Trade regulation cannot constitute significant increases under CEQA ..." Furthermore, the SCAQMD has taken this position in CEQA documents it has produced as a lead agency. The SCAQMD has prepared three Negative Declarations and one Draft Environmental Impact Report that demonstrate the SCAQMD has applied its 10,000 MT CO2e/year significance threshold in such a way that GHG emissions covered by the Cap-and-Trade Program do not constitute emissions that must be measured against the threshold. See SCAQMD, Final Negative Declaration for Ultramar Inc. Wilmington Refinery Cogeneration Project, SHC No. 2012041014 (October 2014); SCAQMD Final Negative Declaration for Phillips 99 Los Angeles Refinery Carson Plant—Crude Oil Storage Capacity Project, SCH No. 2013091029 (December 2014); SCAQMD Final Mitigated Negative Declaration for Toxic Air Contaminant Reduction for Compliance with SCAQMD Rules 1420.1 and 1402 at the Exide Technologies Facility in Vernon, CA, SCH No. 2014101040 (December 2014); and SCAQMD Final Environmental Impact Report for the Breitburn Santa Fe Springs Blocks 400/700 Upgrade Project, SCH No. 2014121014 (August 2015).

quality." (CBSC 2010) CALGreen was most recently updated in 2016, taking effect on January 1, 2017 (CBSC 2017). The proposed modified Project would comply with CALGreen requirements including, but not limited to, installation of ENERGY STAR® compliant appliances to the greatest extent feasible, installation of solar, electric or lower-nitrogen oxides gas-fired water heaters, and installation of water-efficient irrigation systems. Additionally, CALGreen requires designated parking spaces for carpool or alternative fueled vehicles, longand short-term bike parking, and installation of electrical conduit for future electric vehicle charging parking spaces.

SCAG adopted the 2016–2040 RTP/SCS applicable to the region, which outlines SCAG's plan for integrating the transportation network and related strategies with an overall land use pattern that responds to projected growth, housing needs, changing demographics, and transportation demands. The SCS focuses the majority of new housing and job growth in highquality transit areas and other opportunity areas in existing main streets, downtowns, and commercial corridors, resulting in an improved jobs-housing balance and more opportunity for transit-oriented development and demonstrates a reduction in per capita GHG emissions. The proposed modified Project would be consistent with and support the goals of the 2016 RTP/SCS, which seeks improved access and mobility by placing "destinations closer together, thereby decreasing the time and cost of traveling between them" (SCAG 2016). According to SCAG, giving people more transportation choices and providing greater opportunities for biking and walking reduces the number of people who drive alone and encourages people to use alternative modes of travel (SCAG 2016). Consistent with SCAG's 2016 RTP/SCS alignment of transportation, land use, and housing strategies, the proposed modified Project would accommodate projected increases in travel demand by implementing smart land use strategies. The Los Angeles Metropolitan Transit Authority (Metro) operates Bus Routes 246 and 45 along Avalon Boulevard and Bus Route 205 along Del Amo Boulevard east of Avalon Boulevard. The Specific Plan Amendment (SPA) requires that the proposed modified Project be designed to allow for at least four bus stops to service the Site by Metro, with bus pull-outs on Leonardo Drive. The proposed modified Project includes retail, entertainment, and residential uses, providing a greater jobs/house balance and bringing retail and entertainment destinations to a location within close proximity to existing residential uses with access to alternative forms of transportation. This would promote greater opportunities for biking, walking, and the use of transit within the area. Table VII-1, Consistency with Applicable 2016–2040 SCAG RTP/SCS Actions and Strategies, outlines the proposed modified Project's consistency with applicable actions and goals of the 2016–2040 SCAG RTP/SCS.

Table VII-1

Consistency with Applicable 2016–2040 SCAG RTP/SCS Actions and Strategies

Actions and Strategies	Responsible Party(ies)	Consistency Analysis
LAND USE ACTIONS AND STRATEGIE	E <u>S</u>	
Encourage the use of range-limited battery electric and other alternative fueled vehicles through policies and programs, such as, but not limited to, neighborhood oriented development, complete streets, and Electric (and other alternative fuel) Vehicle Supply Equipment in public parking lots.	Local Jurisdictions, COGs, SCAG, CTCs	Consistent. While the use of alternative-fueled vehicles is beyond the direct control or influence of the proposed modified Project, the proposed modified Project would not impact the City's or SCAG's ability to encourage the use of alternative-fueled vehicles through various policies and programs. Specifically, the proposed modified Project would support a land use pattern that provides increased opportunity of use of alternative transportation modes. Additionally, the proposed modified Project would encourage the use of alternative-fueled vehicles by providing for the installation of the conduit and panel capacity to accommodate future electric vehicle charging stations.
Support projects, programs, and policies that support active and healthy community environments that encourage safe walking, bicycling, and physical activity by children, including, but not limited to development of complete streets, school siting policies, joint use agreements, and bicycle and pedestrian safety education.	Local Jurisdictions, SCAG	Consistent. The proposed modified Project would promote walking and bicycling paths within its boundaries. It would also connect to the surrounding commercial and recreational areas. The proposed modified Project would locate hotel, retail, outlets, residential, and restaurant uses within an area that has public transit, and employment opportunities, restaurants and entertainment all within walking distance.
Collaborate with the region's public health professionals to enhance how SCAG addresses public health issues in its regional planning, programming, and project development activities.	SCAG, State, Local Jurisdictions	Consistent. The proposed modified Project would not impair the City's, SCAG's, or the State's ability to collaborate with the region's public health professionals regarding the integration of public health issues in regional planning. The proposed modified Project would also incorporate measures to reduce air pollutant emissions, minimize hazards, and ensure water quality. As an example, the proposed modified Project would comply with fugitive dust control measures included in SCAQMD Rule 403. As a result, the proposed modified Project would have less than significant localized air quality impacts.

Table VII-1

Consistency with Applicable 2016–2040 SCAG RTP/SCS Actions and Strategies

Actions and Strategies	Responsible Party(ies)	Consistency Analysis
Update local zoning codes, General Plans, and other regulatory policies to promote a more balanced mix of residential, commercial, industrial, recreational and institutional uses located to provide options and to contribute to the resiliency and vitality of neighborhoods and districts.	Local Jurisdictions	Consistent. The proposed modified Project would support this action/strategy by creating a mixed-use infill development comprising complementary uses that offer employment and other community-serving opportunities. The proposed modified Project supports the development of complete communities by co-locating complementary commercial/restaurant, residential, and hotel land uses in close proximity to existing off-site residential uses.
Support projects, programs, policies and regulations that encourage the development of complete communities, which includes a diversity of housing choices and educational opportunities, jobs for a variety of skills and education, recreation and culture, and a full-range of shopping, entertainment and services all within a relatively short distance.	Local Jurisdictions, SCAG	Consistent. The proposed modified Project supports the development of complete communities by co-locating complementary commercial/restaurant, residential, and hotel land uses in close proximity to existing off-site residential uses, being located within 0.25 mile of off-site residential uses. The increases in land use diversity and mix of uses on the proposed modified Project site would reduce vehicle trips and VMT by encouraging walking and non-automotive forms of transportation, which would result in corresponding reductions in transportation-related emissions.
Pursue joint development opportunities to encourage the development of housing and-mixed-use projects around existing and planned rail stations or along high-frequency bus corridors, in transit-oriented development areas, and in neighborhood-serving commercial areas.	Local Jurisdictions, CTCs	Consistent. The location of the proposed modified Project, served by Metro bus lines; the regional freeway system; bicycle lanes; and an established pedestrian grid; would maximize mobility and the accessibility to the Project site. The SPA requires that the proposed modified Project be designed to accommodate transit stops within the Site. Additionally, the proposed modified Project would provide distinctive sidewalks, landscaping, wayfinding signage, neighborhood-serving commercial uses, and outdoor activity to attract and serve patrons, visitors, and neighborhood residents.
Consider developing healthy community or active design guidelines that promote physical activity and improved health.	Local Jurisdictions	Consistent. The proposed modified Project would promote walking and bicycling paths within its boundaries. It would also connect to the surrounding commercial and recreational areas. The proposed modified Project would locate hotel, retail, residential, and restaurant uses within an area that has public transit, and employment opportunities, restaurants and entertainment all within walking distance.

Table VII-1 Consistency with Applicable 2016–2040 SCAG RTP/SCS Actions and Strategies

Actions and Strategies	Responsible Party(ies)	Consistency Analysis
Create incentives for local jurisdictions and agencies that support land use policies and housing options that achieve the goals of SB 375.	State, SCAG	Consistent. The proposed modified Project would be consistent with the goals of SB 375, including the goal to reduce VMT and the corresponding emission of GHGs. The proposed modified Project has many TOD features, such as co-locating complementary commercial/restaurant, residential, and hotel land uses in close proximity to existing off-site residential uses, being located within 0.25 mile of off-site residential uses, and by providing additional transit stops within the proposed modified Project boundary. The increases in land use diversity and mix of uses on the proposed modified Project site would reduce vehicle trips and VMT by encouraging walking and non-automotive forms of transportation, which would result in corresponding reductions in transportation-related emissions.

TRANSPORTATION NETWORK ACTIONS AND STRATEGIES

Prioritize transportation investments to support compact infill development that includes a mix of land uses, housing options, Jurisdictions and open/park space, where appropriate, to maximize the benefits for existing communities, especially vulnerable populations, and to minimize any negative impacts.

Explore and implement innovative strategies and projects that enhance mobility and air quality, including those that increase the walkability of communities and accessibility to transit via non-auto modes, including

electric vehicles (NEVs) or other alternative

walking, bicycling, and neighborhood

fueled vehicles.

SCAG, CTCs, Local

Consistent. The proposed modified Project site is an infill location close to jobs, off-site housing, and entertainment uses and in close proximity to existing and future public transit stops, which would result in reduced VMT, as compared to a project of similar size and land uses at a location without close and walkable access to off-site destinations and public transit stops. The proximity of the proposed modified Project to alternative transit modes, including regional bus lines, would support the region's transportation investment and the sustainability of the regional transportation system.

Consistent. The proposed modified Project would promote walking and bicycling paths within its boundaries. It would also connect to the surrounding commercial and recreational areas. The proposed modified Project would locate hotel, retail, residential, and restaurant uses within an area that has public transit, and employment opportunities, restaurants and entertainment all within walking distance. Further, the proposed modified Project would promote the use of electric vehicles by providing electric vehicle charging stations.

Table VII-1

Consistency with Applicable 2016–2040 SCAG RTP/SCS Actions and Strategies

Responsible

Actions and Strategies	Party(ies)	Consistency Analysis
Collaborate with local jurisdictions to plan and develop residential and employment development around current and planned transit stations and neighborhood commercial centers.	SCAG, CTCs, Local Jurisdictions	Consistent. The proposed modified Project would intensify development in an area directly served by multiple bus lines. Furthermore, the proposed modified Project would provide retail, restaurant, outlets, hotel, and residential use in an area with pedestrian access to a range of entertainment and employment opportunities.
Collaborate with local jurisdictions to provide a network of local community circulators that serve new TOD, HQTAs, and neighborhood commercial centers providing an incentive for residents and employees to make trips on transit.	SCAG, CTCs, Local Jurisdictions	Consistent. The proposed modified Project has many TOD features, such as co-locating complementary commercial/restaurant, residential, and hotel land uses in close to proximity to existing off-site residential uses, being located within 0.25 mile of off-site residential uses, and being located in an area served by frequent transit within 0.25 mile of the Project site. The increases in land use diversity and mix of uses on the Project site would reduce vehicle trips and VMT by encouraging walking and non-automotive forms of transportation, which would result in corresponding reductions in transportation-related emissions. The proposed modified Project would provide additional transit stops within the Project boundary. Further, the proposed modified Project would provide distinctive sidewalks, landscaping, wayfinding signage, ground-floor retail uses, and outdoor activity areas to attract and accommodate patrons, visitors, and neighborhood residents.
Continue to support the California Interregional Blueprint as a plan that links statewide transportation goals and regional transportation and land use goals to produce a unified transportation strategy.	SCAG	Consistent. The proposed modified Project would support transportation goals via development of a mix-use commercial/restaurant, residential, and hotel in close proximity to existing off-site residential uses and transit.
TRANSPORTATION DEMAND MANAG	SEMENT (TDM) ACTIONS AND STRATEGIES
Examine major projects and strategies that reduce congestion and emissions and optimize the productivity and overall performance of the transportation system.	SCAG	Consistent. The proposed modified Project would support transportation goals via development of a mix-use commercial/restaurant, residential, and hotel in close proximity to existing off-site residential uses and transit. The proposed modified Project would also include electric vehicle charging stations and bike racks that would contribute to the reduction in emissions.

Table VII-1

Consistency with Applicable 2016–2040 SCAG RTP/SCS Actions and Strategies

Actions and Strategies	Responsible Party(ies)	Consistency Analysis
Encourage the implementation of a Complete Streets policy that meets the needs of all users of the streets, roads and highways-including bicyclists, children, persons with disabilities, motorists, neighborhood electric vehicle (NEVs) users, movers of commercial goods, pedestrians, users of public transportation and seniors-for safe and convenient travel in a manner that is suitable to the suburban an urban contexts within the region.	Local Jurisdictions, COGs, SCAG, CTCs	Consistent. The proposed modified Project is proposed on an infill location and would incorporate pedestrian pathways that would connect to the existing sidewalk network. The proposed modified Project would include installation of the conduit and panel capacity to accommodate future electric vehicle charging stations. The proposed modified Project would provide bicycle parking spaces and facilities.
Support work-based programs that encourage emission reduction strategies and incentivize active transportation commuting or ride-share modes.	SCAG, Local Jurisdictions	Consistent. The proposed modified Project is proposed on an infill location and would incorporate pedestrian pathways that would connect to the existing sidewalk network. The proposed modified Project would include installation of the conduit and panel capacity to accommodate future electric vehicle charging stations. The proposed modified Project would provide bicycle parking spaces and facilities.
Develop infrastructure plans and educational programs to promote active transportation options and other alternative fueled vehicles, such as neighborhood electric vehicles (NEVs), and consider collaboration with local public health departments, walking/biking coalitions, and/or Safe Routes to School initiatives, which may already have components of such educational programs in place.	Local Jurisdictions	Consistent. The proposed modified Project is proposed on an infill location and would incorporate pedestrian pathways that would connect to the existing sidewalk network. The proposed modified Project would include installation of the conduit and panel capacity to accommodate future electric vehicle charging stations. The proposed modified Project would provide bicycle parking spaces and facilities.
Encourage the development of telecommuting programs by employers through review and revision of policies that may discourage alternative work options.	Local Jurisdictions, CRCs	Consistent. Due to the nature of proposed modified Project land uses (commercial, outlets, retail, hotel), telecommuting would not be feasible. However, the proposed modified Project would not impact or conflict with the City's ability to encourage telecommuting.
Emphasize active transportation and alternative fueled vehicle projects as part of complying with the Complete Streets Act (AB 1358).	SCAG, Local Jurisdictions	Consistent. The proposed modified Project is proposed on an infill location and would incorporate pedestrian pathways that would connect to the existing sidewalk network. The proposed modified Project would include installation of the conduit and panel capacity to accommodate future electric vehicle charging stations. The proposed modified Project would provide bicycle parking spaces and facilities.

Table VII-1 Consistency with Applicable 2016–2040 SCAG RTP/SCS Actions and Strategies

Actions and Strategies	Responsible Party(ies)	Consistency Analysis
TRANSPORTATION SYSTEM MANAGE	EMENT (TSM)	ACTIONS AND STRATEGIES
Work with relevant state and local transportation authorities to increase the efficiency of the existing transportation system.	SCAG, Local Jurisdictions	Consistent. The proximity of the proposed modified Project to alternative transit modes, including regional bus lines, and the inclusion of additional transit stops within the Project boundary would support the region's transportation investment and the sustainability of the regional transportation system.
CLEAN VEHICLE TECHNOLOGY ACT	TIONS AND ST	RATEGIES
Support subregional strategies to develop infrastructure and supportive land uses to accelerate fleet conversion to electric or other near zero-emission technologies. The activities committed in the two subregions (Western Riverside COG and South Bay Cities COG) are put forward as best practices that others can adopt in the future (see Vehicle Technology appendix, for more information).	SCAG, Local Jurisdictions	Consistent. As discussed above, while the use of alternative-fueled vehicles is beyond the direct control or influence of the proposed modified Project, the proposed modified Project would not impact the City's or SCAG's ability to encourage the use of alternative-fueled vehicles through various policies and programs. Specifically, the proposed modified Project would support a land use pattern that provides increased opportunity of use of alternative transportation modes. Additionally, the proposed modified Project would encourage the use of alternative-fueled vehicles by providing for the installation of the conduit and panel capacity to accommodate future electric vehicle charging stations.

Through the City's Energy Efficiency Climate Action Plan (EECAP), the City of Carson has established goals and strategies that would reduce GHG emissions. The EECAP reduction measures primarily focus on ways to reduce energy as energy usage accounted for 70 percent of all City GHG emissions in 2012. Residents emit more GHGs from natural gas consumption than electricity consumption. However, residential and commercial/industrial energy use is declining, with the exception of residential electricity use. Therefore, as outlined in the EECAP, the City plans on focusing on increasing energy efficiency and reducing GHG emissions from energy to meet attainment goals. In addition to EECAP energy efficiency goals, utility providers (such as Southern California Edison [SCE]) are required to provide 50 percent of their electricity supply from renewable sources by the year 2030, further reducing the demand on nonrenewable sources. As discussed above, the proposed modified Project would comply with CALGreen energy efficiency requirements, which would be consistent with EECAP goals for increasing energy and water use efficiency in new residential and commercial developments, as discussed below under Energy.

The State Climate Change Scoping Plan includes projected statewide emissions and the level of reductions necessary to achieve reduction targets. In 2016, the California State Legislature adopted Senate Bill (SB) 32 and its companion bill Assembly Bill (AB) 197; both were signed by Governor Brown. SB 32 and AB 197 amends establishes a new climate pollution reduction target of 40 percent below 1990 levels by 2030 and includes provisions to ensure that the benefits of state climate policies reach into disadvantaged communities. According to the 2017 Scoping Plan Update (scheduled for consideration for adoption by CARB in late June 2017; however, CARB has postponed this to an undetermined future date [CARB 2017]), reductions needed to achieve the 2030 target are expected to be achieved by targeting specific emission sectors, including those sectors that are not directly controlled or influenced by the proposed modified Project, but nonetheless contribute to Project-related GHG emissions. The 2017 Scoping Plan Update also calls for the doubling of the energy efficiency savings, including demand-response flexibility for 10 percent of residential and commercial electric space heating, water heating, air conditioning and refrigeration. The strategy is in the process of being designed specifically to accommodate existing residential and commercial uses under the California Energy Commission's (CEC's) Existing Building Energy Efficiency Action Plan (CEC 2016). This strategy requires the CEC in collaboration with the CPUC to establish the framework for the energy savings target setting. The CEC has proposed a schedule for establishing this framework and target setting by November 2017, which will outline the necessary actions that will need to occur in future years, including workforce education and training institutions engaging with the building industry, mapping industry priorities for efficiency to major occupations that will provide services, identifying workforce competency gaps, and quantifying the work needed to build a workforce to implement high-quality efficiency projects at scale (CEC 2016). Even though these studies did not provide an exact regulatory and technological roadmap to achieve the 2030 and 2050 goals, they demonstrated that various combinations of policies could allow the statewide emissions level to remain very low through 2050, suggesting that the combination of new technologies and other regulations not analyzed in the study could allow the State to meet the 2030 and 2050 targets.³ **Table VII-2**,

Proposed Modified Project Consistency with Applicable Greenhouse Gas Reduction

Energy + Environmental Economics (E3), Summary of the California State Agencies' PATHWAYS Project: Long-Term Greenhouse Gas Reduction Scenarios, April 2015; Greenblatt, Jeffrey, "Modeling California Impacts on Greenhouse Gas Emissions," Energy Policy, Vol. 78, pages 158-172. The California Air Resources Board, California Energy Commission, California Public Utilities Commission, and the California Independent System Operator engaged E3 to evaluate the feasibility and cost of a range of potential 2030 targets along the way to the state's goal of reducing GHG emissions to 80% below 1990 levels by 2050. With input from the agencies, E3 developed scenarios that explore the potential pace at which emission reductions can be achieved as well as the mix of technologies and practices deployed. E3 conducted the analysis using its California PATHWAYS model. Enhanced specifically for this study, the model encompasses the entire California economy with detailed representations of the buildings, industry, transportation, and electricity sectors.

Strategies, contains a list of statewide GHG emission reduction strategies and describes the proposed modified Project's consistency.

Table VII-2

Proposed Modified Project Consistency with Applicable Greenhouse Gas Reduction Strategies

Source	Category/Description	Consistency Analysis
AB 1493 (Pavley Regulations)	Reduces greenhouse gas emissions in new passenger vehicles from model year 2012–2016 (Phase I) and model year 2017–2025 (Phase II). Also reduces gasoline consumption to a rate of 31 percent of 1990 gasoline consumption (and associated GHG emissions) by 2020.	Consistent. The proposed modified Project would be consistent with this regulation and would not conflict with implementation of the vehicle emissions standards.
SB 1368	Establishes an emissions performance standard for power plants within the State of California.	Consistent. The proposed modified Project would be consistent with this regulation and would not conflict with implementation of the emissions standards for power plants.
Low Carbon Fuel Standard	Establishes protocols for measuring life-cycle carbon intensity of transportation fuels and helps to establish use of alternative fuels.	Consistent. The proposed modified Project would be consistent with this regulation and would not conflict with implementation of the transportation fuel standards.
California Green Building Standards Code Requirements	All bathroom exhaust fans shall be ENERGY STAR compliant.	Consistent. The proposed modified Project would meet or exceed the energy standards in the Title 24 Building Energy Efficiency Standards.
	HVAC Systems will be designed to meet ASHRAE standards.	Consistent. The proposed modified Project would utilize energy efficient equipment and would meet or exceed the energy standards in ASHRAE 90.1-2013, Appendix G and the Title 24 Building Energy Efficiency Standards.
	Energy commissioning shall be performed for buildings larger than 10,000 square feet.	Consistent. The proposed modified Project would meet this requirement as part of its compliance with the CALGreen Code.
	Refrigerants used in newly installed HVAC systems shall not contain any CFCs.	Consistent. The proposed modified Project would meet this requirement as part of its compliance with the CALGreen Code.
	Parking spaces shall be designed for carpool or alternative fueled vehicles. Up to 8 percent of total parking spaces will be designed for such vehicles.	Consistent. The proposed modified Project would meet this requirement as part of its compliance with the CALGreen Code.
	Long-term and short-term bike parking shall be provided for up to 5 percent of vehicle trips.	Consistent. The proposed modified Project would meet this requirement as part of its compliance with the CALGreen Code.

Table VII-2

Proposed Modified Project Consistency with Applicable Greenhouse Gas Reduction Strategies

Source	Category/Description	Consistency Analysis
	Indoor water usage must be reduced by 20% compared to current California Building Code Standards for maximum flow.	Consistent. The proposed modified Project would meet this requirement as part of its compliance with the CALGreen Code by using low-flow water fixtures.
	All irrigation controllers must be installed with weather sensing or soil moisture sensors.	Consistent. The proposed modified Project would meet this requirement as part of its compliance with the CALGreen Code and would use water efficient techniques, such as drip irrigation.
	Wastewater usage shall be reduced by 20 percent compared to current California Building Standards.	Consistent. The proposed modified Project would meet or exceed this requirement as part of its compliance with the CALGreen Code.
	Requires a minimum of 65 percent recycle or reuse of nonhazardous construction and demolition debris.	Consistent. The proposed modified Project would meet or exceed this requirement as part of its compliance with the CALGreen Code.
	Requires documentation of types of waste recycled, diverted or reused.	Consistent. The proposed modified Project would meet this requirement as part of its compliance with the CALGreen Code.
	Requires use of low VOC coatings consistent with AQMD Rule 1168.	Consistent. The proposed modified Project would be consistent with this regulation and would meet or exceed the low VOC coating requirements.
	100 percent of vegetation, rocks, soils from land clearing shall be reused or recycled. Requires installation of electrical conduit for future uses of electric vehicle charging parking	Consistent. The proposed modified Project would meet this requirement as part of its compliance with the CALGreen Code.
	spaces up to 6% of total parking spaces.	Consistent. The proposed modified Project would meet this requirement as part of its compliance with the CALGreen Code.

SOURCE: ESA, 2017.

As discussed above, the proposed modified Project would be consistent with emissions reduction strategies and would not conflict with any applicable plan, policy, regulation or recommendation to reduce GHG emissions. Therefore, through implementation of required greenhouse gas emissions reduction strategies, the proposed modified Project would be

consistent with and would not hinder the ability of the State to achieve emissions reduction targets. A potential new impact related to greenhouse gas emissions has been identified because applicable significance criterion/thresholds did not exist when the FEIR analysis was conducted. As discussed above, the proposed modified Project would be consistent with and would not hinder the ability of the State to achieve emissions reduction strategies. Therefore, this new impact under new criterion/thresholds would be less than significant.

3. Energy

a. Introduction

CEQA Guidelines Section 21100(b)(3) requires that an EIR include a detailed statement setting forth mitigation measures proposed to minimize a project's significant effects on the environment, including, but not limited to, measures to reduce the wasteful, inefficient, and unnecessary consumption of energy. CEQA Guidelines Appendix F states that, in order to ensure that energy implications are considered in project decisions, the potential energy implications of a project shall be considered in an EIR, to the extent relevant and applicable to the project. Appendix F further states that a project's energy consumption and proposed conservation measures may be addressed, as relevant and applicable, in the Project Description, Environmental Setting, and Impact Analysis portions of technical sections, as well as through mitigation measures and alternatives.

In accordance with the intent of CEQA Guidelines Appendix F, which requires an EIR to include a discussion of the potential energy impacts of a proposed project with an emphasis on avoiding or reducing inefficient, wasteful, and unnecessary consumption of energy, this SEIR includes relevant information and analyses that address the energy implications of the proposed modified Project. This section represents a summary of the proposed modified Project's anticipated energy needs, impacts, and conservation measures. As is discussed further below, the proposed modified Project would incorporate green building measures pursuant to CALGreen code, Project Design Features included in the SPA, and land use characteristics that would reduce vehicle miles traveled (increased density, location efficiency, increased land use diversity and mixed uses, increased destination accessibility, increased transit accessibility, improved design of development, and pedestrian network improvements). Information found herein, as well as other aspects of the proposed modified Project's energy implications, are discussed in greater detail elsewhere in this SEIR, including in Section IV.G, Air Quality, and Appendix A, Notice of Preparation (NOP), Initial Study, Scoping Meeting Materials, and NOP Comments, of this SEIR.

b. Proposed Modified Project Consistency with Plans, Policies, or Regulations

The proposed modified Project would be designed in a manner that is consistent with relevant energy conservation plans designed to encourage development that results in the efficient use of energy resources. The proposed modified Project would be developed under regulations,

standards, and guidelines established in the SPA. The proposed modified Project would use the same Project Design Features as the FEIR, except for the changes detailed within Chapter II, Modified Project Description, of this SEIR. The strategies included in the SPA, in addition to the requirements of Title 24, that are specific to energy conservation include:

- Use of light-colored roofing materials to reflect heat and reduce cooling requirements in residential and retail buildings. Energy Star-labeled roofing materials are encouraged.
- Installation of Energy Star®-labeled appliances (e.g., water heaters) to the greatest feasible extent. Solar, electric (efficiency rating of at least 0.92) or lower-nitrogen oxides (as defined by the Air Quality Management District) gas-fired water heaters are strongly encouraged.
- Participation in programs offered by or sponsored by local utilities such as:
 - California Energy Star New Homes Program
 - Residential Property Development Program
 - California Home Energy Efficiency Rating System (CHEERS) Program
 - Savings by Design Program
- Development of a recycling program for residential and commercial uses to recycle paper, glass, plastic and other by-products of business or residential activities.
- Each development should provide electric vehicle charging spaces, complete with
 associated charging equipment, consistent with the requirements of the County of Los
 Angeles Green Building Standards Code. In addition, for any given project, stalls
 shall be provided with prewiring for electric charging stations. The number of these
 additional spaces with prewiring shall be equal to the minimum number of electric
 vehicle charging spaces required for the said project. Future load demands shall be
 taken into account for the prewired spaces.

As a result, the proposed modified Project would implement Project Design Features for energy conservation consistent with the SPA, as well as Project Design Features that potentially go beyond those specified by regulation such as Title 24. Therefore, the proposed modified Project would be consistent with the City's applicable plans for conserving energy and impacts would be less than significant.

c. Energy Standards

The proposed modified Project would utilize construction contractors who demonstrate compliance with applicable CARB regulations restricting the idling of heavy-duty diesel motor vehicles and governing the accelerated retrofitting, repowering, or replacement of heavy duty diesel on- and off-road equipment. CARB has adopted an Airborne Toxic Control Measure to limit heavy-duty diesel motor vehicle idling in order to reduce public exposure to diesel particulate matter and other toxic air contaminants. The measure prohibits diesel-fueled

commercial vehicles greater than 10,000 pounds from idling for more than 5 minutes at any given time. While intended to reduce construction emissions, compliance with the above antidling and emissions regulations would also result in energy savings from the use of more fuel efficient engines. According to the CARB staff report that was prepared at the time the antidling Airborne Toxic Control Measure was being proposed for adoption in late 2004/early 2005, the regulation was estimated to reduce non-essential idling and associated emissions of diesel particulate matter and nitrogen oxide (NOx) emissions by 64 and 78 percent respectively in analysis year 2009 (CARB 2004). These reductions in emissions are directly attributable to overall reduced idling times and the resultant reduced fuel consumption.

CARB has also adopted emission standards for off-road diesel construction equipment of greater than 25 hp. The emissions standards are referred to as "tiers" with Tier 4 being the most stringent (i.e., less polluting). The requirements are phased in, with full implementation for large and medium fleets by 2023 and for small fleets by 2028.

The daily operation of the proposed modified Project would generate demand for electricity, natural gas, and water supply, as well as generating wastewater requiring conveyance, treatment, and disposal off site. The proposed modified Project would comply with or exceed the applicable provisions of Title 24 and the CALGreen Code in affect at the time of building permit issuance. According to the CEC, the Title 24 (2016) standards use 5 percent less energy for lighting, heating, cooling, ventilation, and water heating than the prior Title 24 (2013) standards for non-residential uses (CEC 2015). As specified in SPA Section 6.11, the proposed modified Project would be designed to include numerous energy and waste reduction features that would allow the proposed modified Project to comply with and exceed the Title 24 standards and achieve greater energy savings than required by state regulations. With respect to operational transportation-related fuel usage, the proposed modified Project would support statewide efforts to improve transportation energy efficiency and reduce transportation energy consumption with respect to private automobiles. The proposed modified Project itself would co-locate complementary hotel, retail, restaurant, entertainment, and residential land uses on the site in close proximity to existing off-site commercial, residential, and retail destinations and in close proximity to existing public transit stops, which would result in reduced vehicle trips and VMT. The proposed modified Project would be consistent with and support the goals and benefits of the SCAG 2016 RTP/SCS, which seeks improved access and mobility by placing "destinations closer together, thereby decreasing the time and cost of traveling between them" (SCAG 2016).

Therefore, construction and operation of the proposed modified Project would be consistent with State and federal energy standards and would be designed to include numerous energy and waste saving features as well as waste reduction features that would potentially achieve greater energy savings than required. The proposed modified Project would also be sited in a transportation-efficient location and achieve reductions in VMT from private automobiles traveling to and from the site consistent with the 2016 RTP/SCS. As a result, impacts would be less than significant.

d. Energy Demand

(1) Construction

The proposed modified Project consists of three planning areas (PAs). Remedial and construction activities in each of the PAs would consist of overlapping activities. Construction could commence as early as 2018, pending proposed modified Project approval and SEIR certification, with full buildout and occupancy of the proposed modified Project anticipated by 2020. Construction energy consumption would result primarily from transportation fuels (e.g., diesel and gasoline) used for haul trucks, heavy-duty construction equipment, and construction workers traveling to and from the site. Construction activities can vary substantially from day to day, depending on the specific type of construction activity and the number of workers and vendors traveling to the site. This analysis considers these factors and provides the estimated maximum construction energy consumption for the purposes of evaluating the associated impacts on energy resources.

Energy use during construction is forecasted by assuming a conservative estimate of construction activities (i.e., maximum daily equipment usage levels). The energy usage required for proposed modified Project construction has been estimated based on the number and type of construction equipment that would be used during proposed modified Project construction, the extent that various equipment is utilized in terms of equipment operating hours or miles driven, and the estimated duration of construction activities. Energy for construction worker commuting trips has been estimated based on the predicted number of workers for the various phases of construction and the estimated VMT. The assessment also includes a discussion of the proposed modified Project's compliance with relevant energy-related regulatory measures and proposed modified Project Design Features included in the SPA that would minimize the amount of energy usage during construction. These measures are also discussed in Section IV.G.

(a) Electricity

Like the approved Project, electrical power would be consumed to construct the proposed modified Project. The demand would be supplied from existing electrical services at the Project site. Overall, construction activities would require minimal electricity consumption and would not be expected to have any adverse impact on available electricity supplies and infrastructure. The City's noise ordinance generally restricts construction noise during nighttime hours (see Carson Municipal Code [CMC] Section 5502(c) as well as Section IV.H, Noise, of this SEIR) and nighttime construction activities are not proposed, which would minimize the need for nighttime lighting. Therefore, impacts on electricity supply and infrastructure associated with short-term construction activities would be less than significant.

(b) Natural Gas

Natural gas is not expected to be consumed in any substantial quantities during construction of the proposed modified Project. Therefore, proposed modified Project impacts on energy and gas associated with construction activities would be less than significant.

(c) Transportation Energy

Like the approved Project, the construction equipment would likely be diesel-fueled (with the exception of construction worker commute vehicles, which would primarily be gasolinefueled). For the purposes of this assessment, it is conservatively assumed heavy-duty construction equipment and haul trucks would be diesel-fueled. This represents a worst-case scenario intended to represent the maximum potential energy use during construction. The estimated fuel usage for off-road equipment is based on the number and type of equipment that would be used during construction activities, hour usage estimates, the total duration of construction activities, and hourly equipment fuel consumption factors from the CARB off-road vehicle (OFFROAD) emissions model. On-road equipment would include trucks to haul material to and from the Project site, vendor trucks to deliver supplies necessary for Project construction, and fuel used for worker commute trips. The estimated fuel usage for on-road trucks is based on the engineering estimates that form the basis of the construction-related impact analyses and fuel consumption information from the CARB on-road vehicle emissions model, EMFAC2014. Both OFFROAD and EMFAC are incorporated into the California Emissions Estimator Model (CalEEMod), which is a state-approved emissions model used for the proposed modified Project's air quality and GHG emissions assessment. The number of construction workers that would be required would vary based on the phase of construction and activity taking place. The transportation fuel required by construction workers to travel to and from the Project site would depend on the total number of worker trips estimated for the duration of construction activity. The estimated fuel usage for construction worker commutes is based on the estimated number of workers for different phases of construction, the average distance that the workers would travel on local and regional roadways from CalEEMod, and emissions factors in the EMFAC2014 model. A summary of the annual fuel consumption during construction of the proposed modified Project is provided in Table VII-3, Proposed Modified Project Construction Fuel Usage. As shown in Table VII-3, on- and off-road vehicles would consume an estimated annual average of 372,293 gallons of diesel fuel for each year of proposed modified Project construction. Compliance with the anti-idling regulation and the use of cleaner construction equipment would reduce the proposed modified Project's annual average diesel fuel usage by approximately 10,806 gallons for each year of proposed modified Project construction.

Table VII-3 **Proposed Modified Project Construction Fuel Usage**

Source	Diesel Fuel per Year (gallons)	Gasoline Fuel per Year (gallons)
CONSTRUCTION		
Heavy-Duty Construction Equipment	375,932	
Haul Trucks	_	_
Vendor Trucks	65,594	
Worker Trips	_	35,611
Annual Average (approximately up to a 3-year construction duration)	441,526	35,611
Estimated Project Fuel Savings from Construction Measures (Annual)	10,230 (Anti-Idling Air Toxics Control Measure)	_

As discussed previously, construction of the proposed modified Project would utilize fuel efficient equipment consistent with State and federal regulations, and would comply with State measures to reduce the inefficient, wasteful, and unnecessary consumption of energy. While these regulations are intended to reduce construction emissions, compliance with the above antiidling and emissions regulations would also result in energy savings from the use of more fuelefficient engines. Compliance with anti-idling regulations would result in fuel savings that would otherwise have been consumed in the absence of these measures, as shown in Table VII-3.

In addition, the proposed modified Project would implement a recycling and waste management plan, as outlined in the SPA (Section 5.4.4) to recycle mixed construction debris in a practical, accessible manner, to the extent feasible, during the construction phase. Implementation of the construction waste management plan would reduce truck trips to landfills, which are typically located some distance away from City centers, and increase the amount of waste recovered (e.g., recycled, reused, etc.) at material recovery facilities, thereby further reducing transportation fuel consumption.

Based on the available data, construction would utilize energy for necessary on-site activities and to transport construction materials and demolition debris to and from the site. As discussed above, idling restrictions and the use of cleaner, energy-efficient equipment would result in less fuel combustion and energy consumption and thus minimize the proposed modified Project's construction-related energy use. Therefore, construction of the proposed modified Project would not result in the wasteful, inefficient, and unnecessary consumption of energy.

Additionally, due to improvements in efficiency for construction vehicles, the proposed modified Project would require less construction fuel in comparison to the approved Project.

(2) Operation

Like the approved project, operation of the proposed modified Project would require energy in the form of electricity and natural gas for building heating, cooling, cooking, lighting, water demand and wastewater treatment, consumer electronics, and other energy needs, and transportation-fuels, primarily gasoline, for vehicles traveling to and from the site.

The energy usage required for proposed modified Project operations and routine and incidental maintenance activities is estimated based on the increase in energy demand from the new buildings. The energy usage takes into account building energy standards pursuant to the Title 24 Building Standards Code and CALGreen Code. Energy for transportation from employees, patrons, and residents to the site is estimated based on the predicted number of trips to and from the site and the estimated VMT. The SPA requires that electric vehicle charging stations be located throughout the SPA area. The SPA and the Carson Municipal Code requires the installation of bike racks throughout the development. Energy usage from water demand (e.g., electricity used to supply, convey, treat, and distribute and natural gas used for building heating and cooking) is estimated based on the increased demand from the new buildings and facilities. Due to the reduction in overall non-residential square footage and current more stringent energy efficiency requirements (such as Title 24) compared to what was in effect during FEIR certification, the proposed modified Project is expected to consume less electricity and natural gas as compared to the approved Project. Additionally, the proposed modified Project would result in fewer daily trips than the approved Project. Considering fewer trips combined with more stringent fuel efficiency standards, the proposed modified Project is expected to consume less transportation fuel as compared to the approved Project.

Natural gas and electricity is currently required for the operation of a landfill gas (LFG) treatment flare system on site. The flare system (gas collection and control system [GCCS]) requires electricity and utilizes natural gas to augment the direct combustion of LFG. Natural gas required for the system has been estimated based on actual usage information. Actual electricity usage includes the GCCS and groundwater treatment systems. The assessment also includes a discussion of the proposed modified Project's compliance with relevant energy-related regulations and land use transportation characteristics that would minimize the amount of energy usage during operations. These measures are also discussed in Chapter II; Section IV.A, Land Use and Planning; Section IV.C; and Section IV.G of this SEIR.

Building energy use factors, water demand factors, and vehicle trip lengths from CalEEMod are used to estimate building energy use and VMT. The estimated fuel economy for vehicles is based on fuel consumption factors from the CARB EMFAC emissions model. As discussed above, EMFAC is incorporated into CalEEMod, which is a state-approved emissions

model used for the proposed modified Project's air quality and GHG emissions assessment. Therefore, this energy assessment is consistent with the modeling approach used for other environmental analyses in the EIR and consistent with general CEQA standards. The proposed modified Project's estimated energy demands were then analyzed relative to SCE's and SoCalGas's existing and planned energy supplies in the proposed modified Project buildout year to determine if these two energy utility companies would be able to meet the proposed modified Project's energy demands.

(a) Electricity

Like the approved Project, the proposed modified Project will increase the demand for electricity resources including for water supply, conveyance, distribution, and treatment as compared to existing conditions. The proposed modified Project's estimated net operational electricity demand, including from water demand, is provided in **Table VII-4**, **Proposed Modified Project Operational Energy Usage**. As shown in Table VII-4, the proposed modified Project would result in a projected consumption of electricity totaling approximately 39.1 million kWh per year. Existing on-site activities include a landfill gas treatment and groundwater treatment systems but is primarily vacant. To provide a worst-case analysis estimated proposed modified Project energy consumption is assumed to be 100 percent net new with no discounts taken for existing on-site activities.

As discussed previously, the proposed modified Project would comply with or exceed the applicable provisions of Title 24 and the CALGreen Code in effect at the time of building permit issuance. As specified in the SPA, the proposed modified Project would be designed to include numerous energy and waste saving features as well as waste reduction features that would allow the proposed modified Project to comply with and potentially exceed the Title 24 standards and achieve greater energy savings than required by state regulations. As such, the proposed modified Project would minimize energy demand overall and in contrast to the approved Project. Therefore, with the incorporation of these features, operation of the proposed modified Project would not result in the wasteful, inefficient, and unnecessary consumption of electricity.

A GCCS and groundwater treatment system are currently operating on the Project site. The treatment systems currently utilize electricity. During the period of January 2017 through July 2017, the peak electricity usage was 972 kWh per day in January 2017, which equates to 0.35 million kWh annual. Based on actual electricity usage data, monthly electricity usage has been declining. As a conservative analysis, it is assumed that continued operation of the GCCS and groundwater treatment system would require a peak of 972 kWh per day, or 0.35 million kWh annually.

Table VII-4
Proposed Modified Project Operational Energy Usage

Source	Natural Gas per Year (million kBtu)	Electricity per Year (million kWh)	Diesel Fuel per Year (gallons) ^a	Gasoline Fuel per Year (gallons) ^a
<u>OPERATIONS</u>				
Building Electricity, Natural Gas, On-road vehicles	44.54	35.51	844,114	7,265,064
Water (electricity to treat and transport water) ^b	_	3.27	_	_
Landfill Gas and Groundwater Treatment	9.4	0.35	_	_
Emergency Generator	_	_	4,661	_
Fuel Savings	_	_	_	$(138,063)^d$
Total	53.94	39.71	848,775	7,126,969

NOTES:

SOURCE: ESA, 2017; refer to SEIR Appendix L, Energy Calculations.

For the 2016 fiscal year, SCE had an annual electric sale to customers of approximately 85,977 million kWh (SCE 2016). The proposed modified Project represents approximately 0.045 percent of the SCE network sales for 2016. Thus, the impacts related to electrical supply and infrastructure capacity would be less than significant.

(b) Natural Gas

Like the approved Project, the proposed modified Project would increase the demand for natural gas resources. The proposed modified Project's estimated operational natural gas demand is provided in Table VII-4. As shown in Table VII-4, operations of the proposed land uses are projected to generate an annual demand for natural gas totaling approximately 44.5 million kBtu. Natural gas savings from design features cannot readily be quantified due to unavailability of specific data.

As would be the case with electricity, the proposed modified Project would comply with or exceed the applicable provisions of Title 24 and the CALGreen Code in effect at the time of building permit issuance to minimize natural gas demand. As specified in the SPA, the proposed

^a Proposed modified Project gasoline and diesel are calculated based on the estimated VMT and fuel consumption factors from EMFAC2014. Electricity and natural gas are calculated in Section IV.G, Air Quality, of this SEIR using CalEEMod (includes water-related electricity for conveyance and treatment).

^b Electricity for water supply, treatment, distribution, and wastewater treatment.

^c Natural gas savings from design measures cannot readily be quantified due to unavailability of specific data.

d Gasoline savings include bike rack and electric vehicle reductions.

modified Project would be designed to include numerous energy saving features as well as waste reduction features that would allow the proposed modified Project to comply with and potentially exceed the Title 24 standards and achieve greater energy savings than required by State regulations. As such, the proposed modified Project would minimize energy demand overall and in contrast to the approved Project. Therefore, with the incorporation of these features, operation of the proposed modified Project would not result in the wasteful, inefficient, and unnecessary consumption of natural gas.

As anticipated by the FEIR, a landfill gas treatment flare system is currently operating on the Project site. The flare system utilizes natural gas to augment the direct combustion of LFG, with the amount dependent on the quality of extracted landfill gas. During the period of January 2017 through July 2017, the peak natural gas usage was 258 therms per day, which equates to 25,800 kBtu. Usage of flare may be discontinued at a later date and the treatment of LFG accomplished through activated carbon. Once the flare is discontinued, the use of natural gas to augment the system would cease. However, as a conservative analysis, it is assumed that continued landfill gas treatment would require 25,800 kBtu of natural gas per day, or 9.4 million kBtu annually.

Operations of the proposed land uses and the continued operation of the landfill gas treatment system would result in a total annual natural gas demand of 53.9 million kBtu. According to SoCalGas data, natural gas sales have been relatively stable over the past three years with a slight increase from 287 billion cubic feet in 2014 to 294 billion cubic feet in 2016. Based on the proposed modified Project's estimated natural gas consumption as shown in Table VII-4, the proposed modified Project would account for approximately 0.018 percent of SoCalGas' 2016 sales by the proposed modified Project's buildout year. Therefore, it is anticipated that SoCalGas' existing and planned natural gas supplies would be sufficient to support the proposed modified Project's demand for natural gas. Therefore, impacts related to natural gas would be less than significant.

(c) Transportation Energy

Like the approved Project, the proposed modified Project would increase demand for transportation energy. The proposed modified Project's estimated operational transportation fuel demand is provided in Table VII-4. As discussed previously, the proposed modified Project would support statewide efforts to improve transportation energy efficiency and reduce transportation energy consumption with respect to private automobiles. By locating hotel, retail, restaurant, entertainment, outlets, and residential land uses at an infill location in close proximity to existing off-site commercial, residential, and retail destinations and in close proximity to existing public transit stops, the proposed modified Project would minimize vehicle trips and VMT. The proposed modified Project would be consistent with and support the goals and benefits of the SCAG 2016 RTP/SCS, which seeks improved access and mobility by placing

"destinations closer together, thereby decreasing the time and cost of traveling between them" (SCAG 2016). The proposed modified Project would also include the installation of electric vehicle supply equipment (EVSE) at three locations at the Project site, pursuant to the CALGreen Code. According to the EMFAC2014 model, electric vehicles are predicted to account for approximately 1.2 percent of passenger vehicles in 2020 in the region. Pursuant to Carson Municipal Code Section 9165.3(C), bike racks shall be provided to accommodate 4 bicycles for the first 50,000 square feet and 1 bicycle for each additional 50,000 square feet of nonresidential development. This equates to 40 secure bicycle spaces. According to CAPCOA, providing bicycle parking in non-residential projects would provide a reduction in VMT of 0.625 percent (CAPCOA 2010). The estimated potential fuel savings from EVSE and bicycle parking is provided in Table VII-4.

The SPA also includes a recycling and waste management plan that would incorporate recycling sorting bins and require compacting materials to reduce waste truck trips. As such the proposed modified Project would minimize solid waste generation thereby reducing transportation fuel needed to transport waste to a landfill, although the fuel savings from reduced waste haul trips is not quantified.

Given the substantial evidence presented above, the proposed modified Project would minimize operational transportation fuel demand consistent with State and City goals. Therefore, operation of the proposed modified Project would not result in the wasteful, inefficient, and unnecessary consumption of transportation fuel and impacts would be less than significant.

e. Energy Infrastructure

SCE is the electricity utility provider for the City. The annual electricity sale to customers for the 2016 fiscal year is provided in **Table VII-5**, **Proposed Modified Project Energy Usage and State and Regional Energy Supply**. SoCalGas is the natural gas utility provider for the region. The annual natural gas sale to customers in 2015 is provided in Table VII-5. Transportation fuel consumption data is available from the USEIA. The gasoline and diesel fuel consumption for transportation uses in California in 2015 is provided in Table VII-5. It is conservatively assumed heavy-duty construction equipment and haul trucks would be dieselfueled. This also represents a worst-case scenario intended to represent the maximum potential energy use during construction.

The proposed modified Project's estimated energy and transportation fuel demand are also provided in Table VII-5. To put the proposed modified Project's energy and transportation fuel demand into perspective, the values are compared to the energy sales from regional providers and state transportation fuel supplies. As shown, the proposed modified Project would represent a very small fraction of the energy sales from regional providers and state transportation fuel supplies.

Table VII-5

Proposed Modified Project Energy Usage and State and Regional Energy Supply

Source	Natural Gas per Year (million kBtu)	Electricity per Year (million kWh)	Diesel Fuel per Year (gallons)	Gasoline Fuel per Year (gallons)
SoCal Gas (2016) ^a / SCE (2016) ^b	304,290	85,977	_	_
State of California (Transportation Sector) (2015) ^{c, d}	_	_	3,400,000,000	14,400,000,000
CONSTRUCTION				
Heavy-Duty Construction Equipment	_	_	375,932	_
Haul Trucks	_	_	_	_
Vendor Trucks	_	_	65,594	_
Worker Trips	_	_	_	35,611
Annual Average (approximately up to a 3-year construction duration)	_	_	441,526	35,611
Percent of State (Transportation Sector)	_	_	0.013%	0.0002%
<u>OPERATIONS</u>				
Building Electricity, Natural Gas, and On-Road Vehicles	44.54	35.51	844,114	7,265,064
Water (electricity to treat and transport water) ^f	_	3.27	_	_
Landfill Gas and Groundwater Treatment	9.4	0.35	_	_
Emergency Generator	_	_	4,661	_
Fuel Savings	_		_	(138,095)
Total	53.94	39.71	848,775	7,126,969
Percent of SoCal Gas/SCE	0.018%	0.045%		
Percent of State (Transportation Sector)			0.025%	0.051%

NOTES:

SOURCE: ESA, 2017; refer to SEIR Appendix L, Energy Calculations.

While construction of the proposed modified Project would result in a temporary fuel demand, according to the USEIA's International Energy Outlook 2016, the global supply of

^a Sempra Energy 2017. Converted from 294 billion cubic feet and a conversion factor of 1,035 Btu per cubic foot based on USEIA data (see: USEIA 2017b).

^b SCE 2016.

c USIEA 2017c

^d USIEA 2017d

Proposed modified Project gasoline and diesel are calculated based on the estimated VMT and fuel consumption factors from EMFAC2014. Electricity and natural gas are calculated using CalEEMod (includes water-related electricity for conveyance and treatment).

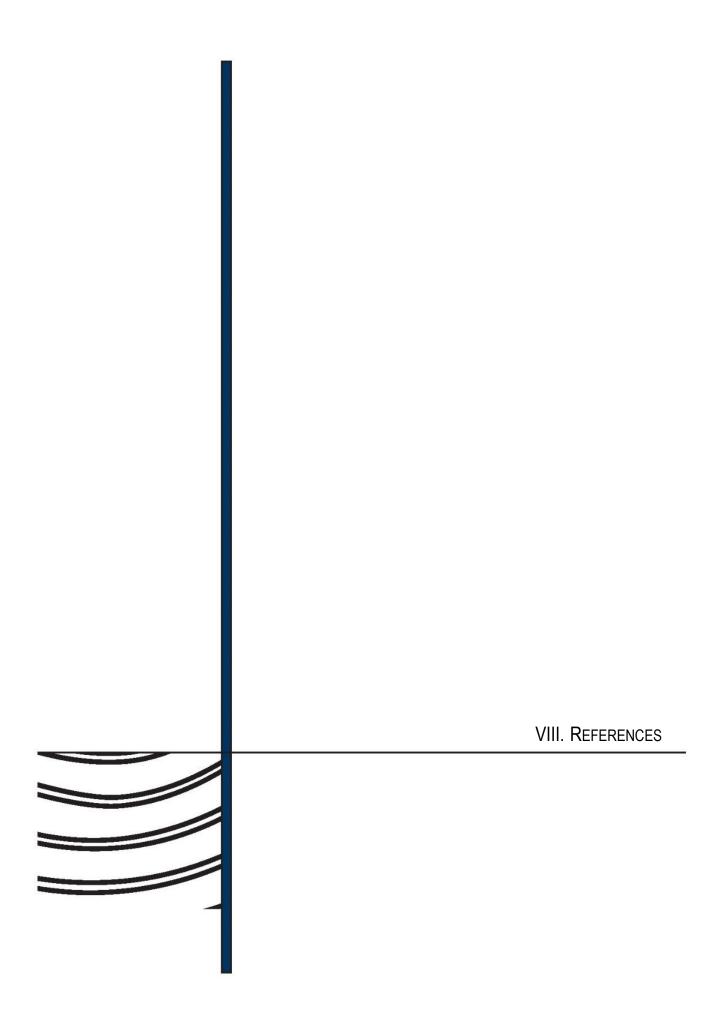
f Electricity for water supply, treatment, distribution, and wastewater treatment.

crude oil, other liquid hydrocarbons, and biofuels is expected to be adequate to meet the world's demand for liquid fuels through 2040 (USEIA 2016). As of December 31, 2015, California had approximately 2,333 million barrels (approximately 98.0 trillion gallons) of crude oil left in the state's reserves (USIEA 2017a). Energy demands during the construction of the proposed modified Project would not represent a substantial fraction of the available energy supply in terms of equipment and transportation fuels and would not substantially affect existing local and regional supply and capacity for the future. Furthermore, construction of the proposed modified Project would use equipment that would be consistent with the energy standards applicable to construction equipment including limiting idling fuel consumption and using contractors that comply with applicable CARB regulatory standards that affect energy efficiency. Thus, construction of the proposed modified Project would not conflict with energy standards applicable to heavy-duty construction equipment and associated on-road trucks and vehicles. Because proposed modified Project construction would entail energy demands largely associated with equipment and transportation fuels, construction of the proposed modified Project would not increase demands on the electric power network during peak and base period demand periods. As a result, construction energy impacts on supplies and infrastructure would be less than significant.

The proposed modified Project would comply with or exceed the applicable provisions of the Title 24 standards and the CALGreen Code in effect at the time of building permit issuance. Examples of energy measures in the Title 24 standards and the CALGreen Code include energy efficiency metrics and performance standards for appliances, space-conditioning equipment (i.e., heating, ventilation and air conditioning [HVAC]), water heating systems, windows and doors, insulation, lighting, and roofing materials; indoor and outdoor water use efficiency and conservation performance metrics; and requirements to provide solar-ready buildings with a minimum solar zone area (solar zone is defined as a section of the roof designated and reserved for the future installation of a solar electric or solar thermal system). As previously discussed, the latest version of the Title 24 (2016) standards results in approximately 5 percent less energy demand for non-residential lighting, heating, cooling, ventilation, and water heating as compared to the prior Title 24 (2013) standards. SCE and SoCalGas update all load forecasts for electricity and natural gas services every year. Load growth forecasts for this area are determined using load growth projection tools that use a number of sources of data including past peak loading, population, development characteristics, and temperature history information. SoCalGas and the CEC forecast future demand, as outlined in the California Gas Report and the California Energy Demand Updated Forecast (2017–2027), respectively (CG&EU 2016) (CEC 2017). The proposed modified Project's electricity and natural gas usage is expected to represent a small fraction of SCE's and SoCalGas' energy use (approximately 0.018 percent and 0.045 percent, respectively) and would therefore not constitute a discernible increase in the utilities' energy demands. Based on the required load forecast projections by CEC for the SCE service area and SoCalGas, these utilities would be expected to meet the proposed modified Project's demand,

which is less than the approved Project, on electricity and natural gas services and supply and infrastructure impacts would be less than significant.

With respect to operational transportation-related fuel usage, the proposed modified Project would support statewide efforts to improve transportation energy efficiency. The proposed modified Project itself would co-locate complementary hotel, retail, restaurant, entertainment, outlets, and residential land uses on the site. The proposed modified Project would also be located near major transit facilities, including the MTA bus Routes 446, 447, and 205. Additionally, the proposed modified Project would incorporate at least four bus pull-outs that would connect to the existing MTA bus routes. The proximity to transit and existing off-site uses would reduce vehicle trips and VMT by encouraging walking and non-automotive forms of transportation, which would result in corresponding reductions in transportation-related fuel demand. The proposed modified Project would also include the installation of EVSE in three locations on the Project site, pursuant to the CALGreen Code. Alternative-fueled, electric, and hybrid vehicles, to the extent these types of vehicles would be utilized by passengers, would reduce the proposed modified Project's consumption of gasoline and diesel. According to the EMFAC2014 model, electric vehicles are predicted to account for approximately 1.2 percent of passenger vehicles in 2020 in the region. Nonetheless, electric vehicles would translate to a fuel savings as shown in Table VII-4. Plug-in electric vehicles would generally obtain battery power from utility-provided electricity, which are required to provide an increasing share of electricity from renewable sources (i.e., 33 percent by 2020 and 50 percent by 2030) under the State's Renewables Portfolio Standard. Therefore, while plug-in electric vehicles would replace traditional transportation fuels (i.e., gasoline) with utility provided electricity, the electricity would be provided by an increasing share of renewable sources resulting in an overall reduction in energy resource consumption. As discussed above, according to the USEIA's International Energy Outlook 2016, the global supply of crude oil, other liquid hydrocarbons, and biofuels is expected to be adequate to meet the world's demand for liquid fuels through 2040 (USIEA 2016). As the proposed modified Project would incorporate characteristics and measures that would reduce transportation fuel usage, the proposed modified Project energy impacts on transportation fuel supplies and infrastructure would be less than significant.



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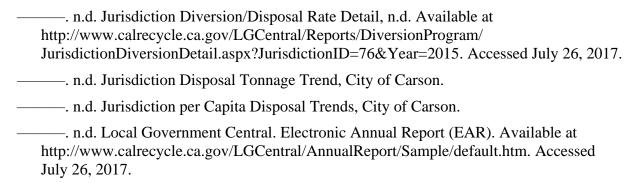
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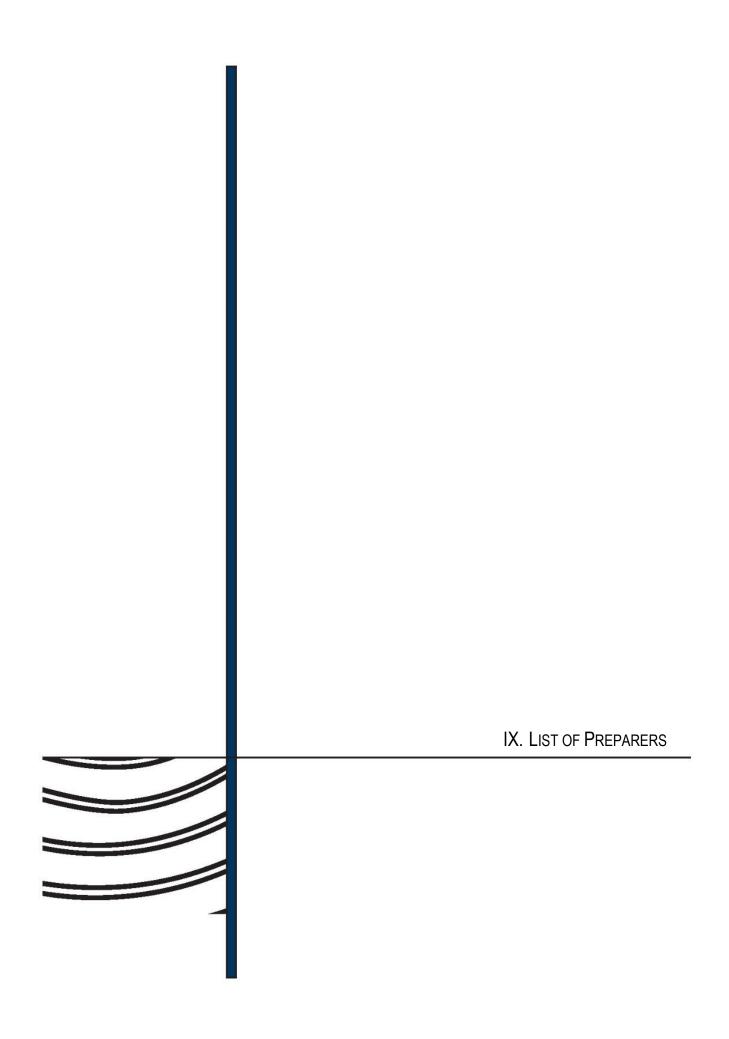
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VIII. References	
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