



### III. GENERAL DESCRIPTION OF THE ENVIRONMENTAL SETTING

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#### **A. OVERVIEW OF ENVIRONMENTAL SETTING**

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#### **1. LAND USE**

Development Districts 1 and 2 were operated as a Class II Landfill until 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 11-acre portion of the site north of Del Amo Boulevard is a typical urban vacant lot that is undeveloped and fallow. The heavily 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 the Project site consist of a nursery located within an otherwise undeveloped open space utility easement and the Dominguez Hills Golf Course and Practice Range. North of the golf facility is a multi-family apartment complex, located between Main Street and the I-405 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 north of the freeway corridor include the Goodyear Blimp site and the Victoria Golf Course and Park. Main Street, located west of the Project site, 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, 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 Project site. There are also several large tracts of vacant land within this area. Well south of the Project site, Main Street transitions to residential and commercial uses.

The concrete-lined Torrance Lateral Drainage Channel, borders the Project'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 Project site. 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 miles south of the Project site. Uses extending south of the Project site on Avalon Boulevard, at the edge of the Project site, include several car dealerships. The eastern edge of the Project site 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 Sears. Other more outlying uses include housing developments, and industrial/oil facilities. California State University at Dominguez Hills, inclusive of the Home Depot Center, an 85-acre, multi-sport and athletic training facility is located approximately one mile northeast of the Project site.

## **2. VISUAL RESOURCES**

### **a. Aesthetic Character**

The Project site, south of Del Amo Boulevard, is fenced, vacant and covered by predominantly bare soil that becomes green with non-native grasses following winter rains and turns brown by summer. The 11-acre portion of the site north of Del Amo Boulevard is undeveloped and covered with loose soil and tall grass. Existing land uses in the Project area (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 Project site 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 Project site also allows exposure to large visual expanses and a feeling of spaciousness, thereby providing a visual break from surrounding development.

### **b. View Resources**

The Project vicinity does not contain notable features that would typically be considered a view resource, e.g. unique geologic features and natural areas, etc. The Project site 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 five miles southwest of the Project site. More distant features that define the basin are located at some distance (i.e., Santa Monica and San Gabriel Mountains). The features of the Project's visual setting that might shape an appreciation of its visual character are limited to typical urban elements, and are subject to personal interpretation. Two notable man-made features that fit this criteria are located along the I-405 Freeway. Specifically, the Goodyear Blimp, when docked at its port, is a cultural symbol located in an open expanse; and a large fiberglass statue of a man holding a golf club located on the Dominguez Hills Golf Course, a notable example of roadside architecture.

Views of the Project from locations accessible to the public (i.e., public views) are 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 Project site, views of the current ground-level of the Project site are not available, however, if the Project site were developed with higher structures, these would be visible due to the proximity of the freeway. Views of the Project site are also available from the Dominguez Hills Golf Course north of the Project site. The only notable views of the Project site from private locations are associated with the residential units located opposite to the southern and southwestern edges of the Project site. Near views from these locations are dominated by a bermed slope along the edge of the Project site. Distant views over the site may be available from the upper stories of two-story residences. Distant views of the Project site 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 Project site as a relatively small, open space feature within an established urban environment.

#### **c. Shade/Shadow**

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

#### **d. Artificial Light**

The Project site is currently vacant and generates no artificial light. The Project site 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. The larger area has a soft glow that is typical of urban/suburban areas.

### **3. TRANSPORTATION/CIRCULATION**

#### **a. Traffic and Circulation**

The Project site is served by the San Diego (I-405) and Harbor (I-110) Freeways and surface streets, including Del Amo Boulevard, Carson Street, Torrance Boulevard, 213<sup>th</sup> Street, and 190<sup>th</sup> Street in the east-west direction and Avalon Boulevard, Main Street, Figueroa Street, Hamilton Avenue, and Vermont Avenue in the north-south direction. The I-405

Freeway/Avalon Boulevard interchange is located near the southwest corner of the Project site and the I-110/Hamilton Avenue interchange (southbound) and the I-110/Figueroa Street interchange (northbound) are located approximately 0.3 miles southwest of the Project site's Main Street/Del Amo Boulevard intersection. The traffic analysis evaluated the existing traffic conditions at 24 intersections and along 32 freeway segments. Operating conditions were Level of Service (LOS) D, i.e. fair or better, at all locations except for the following. Under existing traffic conditions, four intersections, including the intersections of Hamilton Avenue/Del Amo Boulevard, Hamilton Avenue/I-110 southbound ramps, Avalon Boulevard/I-405 northbound ramps, and Vermont Avenue/Carson Street intersections are operating at an unacceptable LOS E during the afternoon peak hour. At present, segments of the I-110, I-405, I-710, and SR 91 freeways are operating at LOS E or F during the A.M. or P.M. peak hour, or both.

**b. Access**

Main Street, Del Amo Boulevard, and I-405 southbound ramps provide access to the Project site. Development District 3 has direct access to Main Street and Del Amo Boulevard, although no paved driveways or roads currently exist on site. Development Districts 1 and 2 contain two existing paved streets, Stamps Drive and Lenardo Drive. Lenardo Drive intersects Main Street and Stamps Drive intersects Del Amo Boulevard. In the south portion of the Project site, Lenardo Drive currently dead ends within the Project site, short of the I-405/Avalon Boulevard southbound off-ramp. Lenardo Drive also intersects Avalon Boulevard, less than 0.2 miles east of the Project's south boundary.

**c. Public Transportation**

Two transportation agencies, including the City of Carson Circuit Transit System and the Los Angeles County Metropolitan Transportation Authority (MTA) provide bus service in the Project vicinity. The City of Carson Circuit Transit System operates seven of the 11 bus lines accessible from the Project site. The nearest routes to the Project site travel north and south on Avalon Boulevard, with routing east on Del Amo Boulevard from Avalon Boulevard.

**d. Parking**

No parking is needed or provided within the Project site since there are no existing uses. Street parking is generally available along local and major streets in the area.

#### **4. HAZARDS AND HAZARDOUS MATERIALS**

Historically, Development Districts 1 and 2 were used as a Class II landfill from 1959 to 1964. 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 157-acre landfill site 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.

Due to the size and complexity of the former landfill site, 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) 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. 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.

With regard to Development District 3, an initial Phase II investigation was completed because a prior environmental investigation of the site identified the presence of elevated concentrations of VOCs and methane in subsurface soils. During the Phase II investigation, VOCs were identified above detectable levels in the samples collected and analyzed. Methane was detected in five samples at concentrations only at or slightly above the detection limit. The detected metals concentrations found in soil samples were within general background levels with the possible exception of barium. Since the soil-vapor survey findings of the initial Phase II investigation are different from the results of the initial soil vapor survey conducted in 1990, additional Phase II activities have been recommended to further evaluate potential vapor intrusion and worker health and safety concerns.

#### **5. GEOLOGY/SOILS**

##### **a. Soils and Geology Profile**

The Project site is located in the Torrance Plain within the West Coast Basin, a southern portion of the greater Los Angeles Basin. The 550-foot thick San Pedro Formation underlies the area and Project site. Native soils underlying the site consist of alluvial deposits of the Lakewood Formation, which is concealed by overlying alluvium and fill throughout the Project site. Development Districts 1 and 2 previously served as a Class II landfill. The thickness of the waste increases rapidly from approximately 1.75 feet adjacent to the haul roads to more than 60

feet in the interior of the waste cells. The average thickness of the waste is approximately 40 feet in depth. There is no waste beneath the haul roads. Little or no waste underlies the existing dirt road bordering the site immediately north of the Torrance Lateral Channel. A soil cover, ranging from three to 30 feet in thickness occurs across the Project site.

## **b. Earthquake Faults**

Detectable ground shaking at the Project site could be caused by any of five active or potentially active fault zones, including the Newport-Inglewood, San Andreas, Palos Verdes, Whittier, and the Santa Monica fault zones. The Avalon-Compton structural zone, located approximately 2 miles northeast of the Project site, is the only active fault zone in the City of Carson. This fault has had moderate to high seismic activity with earthquakes ranging from magnitude 4.0 to 8.25 on the Richter scale. No known active fault traces are located within the Project site. Potential ground shaking in the South Bay area and the City of Carson is regarded as potentially severe due to the unstable sub-base of sandy soil. The sandy sub-base is capable of producing a rolling motion that causes damage over widespread areas and may hinder the detection of faults.

### **(1) Liquefaction**

A large portion of the Project site is designated by the City General Plan Safety Element as a Liquefaction Hazard Zone, based on a State of California classification. This classification is based on the general alluvial soil type, depth of groundwater tables, and the high seismicity of the area. Liquefaction potential is greatest where the groundwater level is shallow, and loose, fine sand occur within a depth of about 50 feet or less. Although prior geological evaluations determined that liquefaction potential would be low within all three Development Districts, the General Plan Safety Element classification requires that analysis and reporting of liquefaction potential be performed prior to any construction. Potential settlement (not liquefaction) hazards during ground shaking may exist on Development Districts due to underlying refuse layers.

### **(2) Subsidence**

Under existing conditions, local subsidence associated with Development Districts 1 and 2 could occur, since refuse layers would continue to settle, due to the consistency of the refuse and the decomposition of organic matter. In Development District 3, due to the unconsolidated nature and debris content of overlying fills soils, prior geotechnical investigators have concluded that the upper 0.5 to 8.0 feet of the fill and low density natural soils would be subject to settling and are not suitable to provide support for slabs on grade, pavement, and building foundations.

### **(3) Slope Stability/Landslides**

Due to the relative absence of steep slopes on the Project site and in the surrounding area, landslide or slope instability is 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 boundary of the Project site, is concrete-lined and, thus, would not be subject to erosion or slope instability.

## **6. SURFACE WATER QUALITY**

### **a. Water Quality**

In 1991, laboratory tests of surface water runoff samples from Development Districts 1 and 2 determined that contamination is present at the Project site. Of the seven Volatile Organic Compound (VOC) samples collected from four surface water locations, only xylene was detected at one of the collection locations. Semi-Volatile Organic Compounds (SVOCs) were collected from three locations and were found at one sample location. Oil and grease were also detectable. Under the Final Remedial Action Plan (RAP) for the Upper OU, storm water discharges from the site requires a NPDES permit to allow discharge into the storm drain system. Storm water runoff is currently managed under an existing General Industrial NPDES permit, which includes the implementation of a SWPPP. The SWPPP establishes a program for monitoring, testing, and reporting of stormwater quality to determine compliance with the requirements of the NPDES and the efficacy of the selected monitoring treatment. Sampling and testing of surface water runoff, quarterly and during precipitation events, have been on-going for several years. Reported water sampling and testing indicate that the primary storm water pollutant source is sediment from thinly vegetated areas near roads, and residual dirt left on roads by heavy equipment activities. Precipitation was the only discharge source. According to testing results reported in the two most recent Annual Reports, no VOCs, Semi-VOCs, RCRA-listed metals, or oil and grease were detected that exceeded the state's specified limits. Surface water quality from Development District 3 has not been tested. Due to stockpiled fill soils and areas of thin vegetation, the potential for sediments in surface water runoff exists.

### **b. Drainage**

The Project site consists primarily of an expanse of exposed soil and fill materials, with minimal amounts of vegetation to anchor the surface soil. Paved areas consist of Lenardo Drive and Stamps Drive. Due to poorly maintained drainage patterns, a portion of water and sediment transported during episodes of rainfall is contained in small water-trapping depressions. Most flows, however, are toward the existing streets and the existing storm drain system in Lenardo

Drive, and Stamps Drive and, then to the existing system in Del Amo Boulevard and Main Street. In Development District 3, flow is unrestrained over the ground surface (sheet flow) and flows to the north. The majority of this sheetflow percolates into the onsite soils or into the undeveloped land to the north. However, an area in the westerly portion of the site drains into Del Amo Boulevard on the west side of the Dominguez Channel. The local drain system outlets into the Torrance Lateral Channel or the Dominguez Channel. The design capacity of the storm drain system in Main Street and Del Amo Boulevard was engineered by the Los Angeles County Department of Public Works (LACDPW) to serve the future commercial/industrial development of the Project site and is designed on the assumption of 100 percent impermeability, in which all surface water is presumed to enter the existing storm drain systems.

## 7. AIR QUALITY

The Project site is located within the monitoring area for the North Long Beach Monitoring Station, located approximately 6 miles southeast of the Project site. All criteria pollutants are monitored at this station ( $O_3$ , CO,  $NO_x$ ,  $SO_2$ ,  $PM_{10}$  and  $PM_{2.5}$ ). During the 2000 to 2004 reporting period, ozone ( $O_3$ ), and particulate matter ( $PM_{10}$ ) exceeded State of California, but not National Standards. An exceedance of the California one-hour ozone ( $O_3$ ) standard was recorded three days in 2001 and one day in 2003. The California  $PM_{10}$  standard was exceeded between 2 and 12 times annually, with the highest number of exceedances in 2000 and 2001. Particulate matter ( $PM_{2.5}$ ) exceeded the National standard between zero and 4 times annually, with the highest number of exceedances in 2000. Neither the California nor the National Carbon Monoxide (CO), Nitrogen Dioxide ( $NO_2$ ), or sulfur dioxide ( $SO_2$ ) standards were exceeded during the 2000 to 2004 reporting period. The Basin is currently in compliance with California and National standards for Lead (Pb).

In relation to carcinogenic risk, South Coast Air Quality Management District (SCAQMD) studies have determined that the average carcinogenic risk in the Los Angeles Basin is approximately 1,400 in one million. Approximately 70 percent of all carcinogenic risk is attributed to diesel particulate emissions, approximately 20 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 750 in one million.

Land uses in the Project vicinity that are sensitive to poor air quality include detached residences and mobile homes that are located to the south and west of the Project site, the nearest

of which is located approximately 150 feet from the Project boundary. Schools, libraries, religious institutions, hospitals and nursing homes are also sensitive to poor air quality. The nearest school is the Carson Street Elementary School, located approximately one-half mile to the south. No other sensitive uses are located in close proximity to the Project site.

## **8. NOISE**

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 Project are 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 Project site. The predominant noise source within the Project site is roadway noise from the San Diego freeway (I-405), and local roadways such as Main Street, which are located east and west of the Project site, respectively. Measured ambient noise levels at four locations on the Project site perimeter have CNEL values ranging between 67.5 dBA and 73.8 dBA. CNEL levels at the locations near the two neighboring mobile home parks are 72.2 dBA and 73.8 dBA. These noise levels exceed the City of Carson's exterior noise standard limits for sensitive receptors and are 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 56.7 dBA to 67.1 dBA at 50 feet from the roadway right-of-way. The roadway traffic noise levels indicate that all land uses located near the Project site, with the exception of residences south of Torrance Boulevard, are currently exposed to community noise levels above 65 CNEL. A CNEL of approximately 71 dBA occurs at the edge of Del Amo Boulevard along the northern boundary of the Project site 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 considered "conditionally acceptable" based on the City's community noise/land use compatibility criteria.

## **9. PUBLIC SERVICES**

### **a. Fire Protection**

The Consolidated Fire Protection District of Los Angeles County (LACoFD), Battalion 7, Division I of the Central Region, provides fire and emergency medical services to the City of

Carson and the Project site. Six primary fire stations serve the City of Carson, with four of the stations located within City boundaries. A Fire Prevention Office is located at Carson City Hall. Two paramedic units are located within the City and units in surrounding communities provide auxiliary paramedic care. The nearest response unit to the Project site is Fire Station No. 36, located approximately 1.5 miles south of the Project site's Lenardo Drive and Main Street egress point. Other response units in the Project area include Station No. 10 and Station No. 116 at 755 Victoria Street. The latter two stations are located approximately 2.4 miles from the Project site. The LACoFD's "Five-Year Plan" plans identify a proposed station near the I-405/110 Freeway interchange, which would be particularly accessible to the Project's site northerly entrances. According to the City of Carson General Plan (2004), 1,047 medical emergency responses, with an average response time of 4.7 minutes, and 81 fire incidents, with an average response time of 5.0 minutes, occurred in a recent year and represent annual demand on fire services. The average response time for Fire Station No. 36 is less than the Citywide average response time, while the average response time for Fire Station No. 116 is greater than the citywide average. Since staffing at any single fire station remains constant, a major incident, such as a structure fire, would require auxiliary service from additional response units. According to the LACoFD, limited tax revenues have restricted the Fire Department's ability to meet new growth needs.

#### **b. Police Protection**

The Los Angeles County Sheriff's Department, Field Operations Region II, serves the City of Carson and the Project site. The Carson Sheriff's station, located at 21356 South Avalon Boulevard, also provides police services for West Compton, Gardena, Torrance, and Rancho Dominguez. In 2002, the station was staffed by 187 sworn officers and 35 civilian personnel. The service ratio was 2.1 sworn officers per 1,000 residents. According to the Safety Element of the General Plan, a standard of 1.7 sworn officers per 1,000 residents is considered excellent. Thus the level of service provided by the Sheriff's Department in the City of Carson exceeds the General Plan's standard of excellence by 0.40 sworn officers per 1,000 residents. Within a 24-hour time period, approximately 31 patrol cars are on duty over three work shifts throughout the City.

#### **c. Schools**

The Los Angeles Unified School District (LAUSD) provides public schools in the City of Carson. The LAUSD has experienced an increase in enrollment over the last decade, from 636,000 students in the 1994–1995 school year to over 746,000 students in the 2003–2004 school year. Further, the LAUSD has recently implemented a class size reduction program. As part of an effort to create the needed additional space, the LAUSD has implemented multi-track, year-round school calendars at many school sites. At least 30 percent of LAUSD schools are on multi-track year-round schedules to accommodate the heavy enrollment. The three public

schools serving the Project area include Carson Elementary School, Steven M. White Middle School, and Carson Senior High School. These schools are operating below capacity enrollment, though Carson High School enrollment levels are near capacity. Carson Elementary School is on a four-track annual schedule, and the middle school and high school are on single-track schedules.

#### **d. Parks and Recreation**

The City of Carson contains 16 public parks, one county park and two public golf courses. Total public park space is 315 acres. Applied to the City's approximate population of 89,730, the City has a ratio of 3.5 acres of park and recreational space per 1,000 residents. Park and recreational space owned and operated by the City is provided at a rate of 1.72 acre per 1,000 residents. Open space areas in the City of Carson total 599 acre, including public parks, the Victoria Public Golf Course, the Goodyear Blimp Port, and drainage courses and utility transmission corridors. In addition to these facilities, the City has a Joint Use Agreement with the Los Angeles Unified School District (LAUSD) for the use of playfields, tennis courts, and other recreational facilities during off-school hours at Carson High School and Caroldale Elementary School. California State University Dominguez Hills also has 125 acres of planned and existing recreational open space. The City considers closed landfills, such as the Project site, which have not been fully remediated to be temporary open space areas. Twelve parks or recreational facilities are located in proximity to the Project site and would potentially be used by Project residents.

#### **e. Library Services**

The proposed Project is within the service area of the Carson Regional Library, a 33,112 square foot facility, located approximately one mile south of the Project site at 151 East Carson Street. The Carson Library service area includes the southern half of the City and nearby unincorporated areas of the County. Based on 2000 Census data, the current service population for the Library is 98,661. The Library employs 12 full-time staff and 24 part-time staff. The Carson Library has a collection size of 255,389 books, audio and video materials, DVD's, pamphlets, periodicals and government documents. Amenities offered at the Library include public access to the internet and online catalogs, CD-ROM workstations, a Government Services computer, a public meeting room, a Consumer Health Program and Services, a Homework Center, an Adult Literacy Center, pre-school story hours, and a reader's advisory service. Other Los Angeles County libraries within five miles of the site could potentially serve Project residents and include the Victoria Park Library, the Lomita Library and the Gardena Mayme Dear Library.

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## **10. UTILITIES/SERVICE SYSTEMS**

### **a. Water Services**

#### **(1) Water Supply**

The Project site is served by California Water Service Company (CWS), which serves a 35-square-mile area including most of the City of Carson. CWS obtains its water supplies from the Central and West Coast Basins underlying the City of Carson and from purchased imported water. The Central Basin is dependent upon subsurface flows from the San Gabriel Valley, storm runoff, and the injection of imported and recycled water. Groundwater for the West Coast basin originates from subsurface flow from the Central Basin and injection along the seawater barrier system. Virtually all of the major drainage courses flowing through the Central and West Coast Basins have been developed into a comprehensive system of dams, flood control channels, and percolation ponds for artificially recharging the basins. Imported water is purchased from the Metropolitan Water District of Southern California (MWD). CWS has direct MWD service connections and participates in the MWD-sponsored “In-Lieu” Water Programs, whereby water suppliers purchase imported water from MWD at a reduced rate instead of pumping groundwater. Approximately 80 percent of the water supply distributed by CWS is comprised of imported water. CWS estimates that it will have sufficient water supplies to meet annual customer water demand through 2015, under normal precipitation conditions.

#### **(2) Water Infrastructure**

The CWS water infrastructure is a combined network of fire suppression and domestic water pipelines located in City streets. The larger mains range in size from 12 to 42 inches in diameter. Several residential areas have mains less than 6 inches in diameter. These mains provide sufficient flow for both domestic use and fire flow requirements. The Project site is served by a 16-inch main in Del Amo Boulevard and by a 12-inch main in Main Street. Secondary feeds from the two main lines provide service to the interior of the Project site. These could be used to serve the current Project if determined to be appropriate. The on-site water system consists of 12-inch PVC water mains under Stamps and Lenardo Drives. This 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. A backbone reclaimed water system is in place on the north side of the I-405 Freeway and Dominguez Channel that can be used for landscape irrigation, cooling towers, and refineries, as well as street sweeping and toilet flushing. It could be brought down Main Street to serve the Project Site and an adjacent golf course.

## **b. Wastewater Services**

### **(1) Wastewater Treatment**

Wastewater generated on the Project site would be treated at the Joint Water Pollution Control Plant (JWPCP), located at 24501 South Figueroa Street in Carson. The JWPCP provides sewage treatment and disposal for residential, commercial and industrial users within the 17 sanitation districts in Los Angeles County that are participants in the Joint Outfall Agreement. The system consists of six treatment plants, over 1,000 miles of trunk sewer lines, 48 pumping plants, and four submarine outfalls. The JWPCP serves a population of about 3.5 million people and many industries in southern and eastern Los Angeles County. The JWPCP has a design capacity of 385 million gallons per day (mgd) and currently processes an average flow of 324.9 mgd.

### **(2) Wastewater Infrastructure**

The City of Carson is served primarily by 8-inch local lines and one dozen trunk lines, ranging in size from 42 inches to 8 feet in diameter. The Project site would be served by trunk lines located in Del Amo Boulevard and Main Street. The Del Amo Replacement Trunk Sewer, located in Del Amo Boulevard, between Main Street and the I-405 Freeway, is a recently constructed 42-inch diameter replacement sewer line with a design capacity of 10.8 mgd. The Main Street Relief Sewer is a 42-inch diameter line with a design capacity of 20.2 mgd. It conveyed a peak flow of 5.8 mgd when last measured in 2003. There is also an existing local system of lines located within the Project site that was developed in anticipation of the Metro 2000 Project. This system includes lines ranging from eight inches to 18 inches in size.

## **c. Solid Waste**

Solid waste in the City of Carson is collected by Waste Management and EDCO LLC. The City contracts with Waste Management for approximately 96 percent of its commercial/industrial waste and all of its residential waste collection services, including the pickup of sorted recyclable materials. Waste Management collects approximately 70,000 tons of solid waste from residential customers and 153,500 tons of solid waste from commercial and industrial customers per year, a total of roughly 612 tons per day. Waste Management maintains a 10-acre, 5,300-ton capacity transfer station where materials are sorted for disposal or recycling. Recycling materials are sold and green waste is trucked to landfills and is utilized as daily cover. Remaining waste is disposed of at Bradley Landfill in Sun Valley or El Sobrante Landfill in Riverside County. El Sobrante Landfill receives approximately 95 percent of the City's solid waste and, as of June 6, 2001, had a remaining capacity of 3,674,267 cubic yards. Based on this

remaining capacity and a throughput of 10,000 tons per day, the landfill has an expected closure date of January 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 December 31, 2003, the total remaining permitted inert waste capacity in Los Angeles County was estimated to be approximately 69.94 million tons. The City currently operates several solid waste diversion programs, such as composting, source reduction, recycling, waste to energy, and material recovery. On an annual basis, the City has met or exceeded the waste diversion goals set forth in State legislation since it was enacted (i.e., the diversion goal of 50 percent of the City's waste stream). In reporting year 2003, the City had a diversion rate of 68 percent.

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### III. GENERAL DESCRIPTION OF THE ENVIRONMENTAL SETTING

#### B. CUMULATIVE DEVELOPMENT

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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.”<sup>11</sup> The analysis of cumulative impacts need not be as in-depth as what is performed relative to the proposed Project, but instead is to “be guided by the standards of practicality and reasonableness.”<sup>12</sup>

Cumulative impacts are anticipated impacts of the proposed Project along with reasonably foreseeable growth. Reasonably foreseeable growth may be based on either:<sup>13</sup>

- 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 2010. Accordingly, this Draft EIR considers the effects of other proposed development projects that may be constructed between 2005 and 2010. This analysis has utilized a listing of all anticipated related projects based on information that was provided by the City of Carson. Table 9 on pages 117 through 118 presents a listing of the related projects in the Project area. There are 36 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 8 on page 119. The analysis of potential cumulative impacts is addressed in the analysis of each environmental issue included in Section IV, Environmental Impact Analysis, of this Draft EIR.

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<sup>11</sup> *State CEQA Guidelines, 14 California Code of Regulations, § 15355, et seq.*

<sup>12</sup> *Ibid.*, § 15355.

<sup>13</sup> *Ibid.*, § 15130(b)(1).

**Table 9****List of Related Projects**

<b>No.</b>	<b>Project Location</b>	<b>Description</b>	<b>Amount of Development</b>
1	19503 Normandie Avenue	Shopping Center	160,000 sq.ft.
2	Gateway Towne Center	Shopping Center Single-Family Housing Movie Theater	509,666 sq.ft. 38 units 2,000 seats
3	16908 Normandie Avenue	Residential Condos	21 units
4	901 S. Central	Sav-On Retail	24,000 sq.ft.
5	Dominguez Technology Center	Technology Industrial Office	840,997 sq.ft. 693,822 sq.ft. 567,673 sq.ft.
6	Dominguez Hills Village	Childcare	150 children
7	CSUDH Campus	Univ. Student Growth @ 3.9 p.a.	1,479 students
8	CSUDH—University Housing	Single-Family Residential Townhouses	125 units 125 units
9	CSUDH/Home Depot Center Phase II	Hotel Administrative Offices Athletic Performance Ctr. Training Facilities Dormitories	200 rooms 30,000 sq.ft. 30,000 sq.ft. 50,000 sq.ft. 240 beds
10	Prime Wheel Expansion <sup>a</sup>	Warehouse and Office	165,000 sq.ft.
11	South Bay Pavilion	Increase mall sf	225,454 sq.ft.
12	643 E. 223rd Street	Townhouses	40 units
13	1216 E. Carson Street	Detached Condos	7 units
14	21841 Orrick Avenue	Detached Condos	8 units
15	235 E. 235th Street	Detached Condos	11 units
16	630 E. 220th Street	Townhouses	8 units
17	22038 Grace Street	Detached Condos	3 units
18	616 E. Carson Street	Townhouses	100 units
19	430–437 E. Carson Street	Townhouses	98 units
20	21917 S. Figueroa Street	Townhouses	6 units
21	2350 E. 223rd Street	Office	126,400 sq.ft.
22	1249 E. Carson	Church	25,000 sq.ft.
23	132 W. 220th Street	Detached Condos	6 units
24	17120 S. Figueroa Street	Industrial	58,962 sq.ft.
25	1333 E. 223 Street	Car Dealership Expansion	145,000 sq.ft.
26	20320 Avalon Boulevard	Gas Station with Convenience store	6,000 sq.ft.
27	249 E. Gardena Boulevard	Warehousing/Manufacturing	78,408 sq.ft.
28	20700 Avalon Boulevard	24 Hour Fitness	33,000 sq.ft.
29	22005 Main Street	Office/Retail Center	10,205 sq.ft.
30	21914 Dolores Street	Detached Condos	3 units
31	21225 S. Figueroa Street	Church	5,200 sq.ft.

**Table 9 (Continued)****List of Related Projects**

<b>No.</b>	<b>Project Location</b>	<b>Description</b>	<b>Amount of Development</b>
32	21240–21250 Main Street	Strip Commercial	5,620 sq.ft.
33	21915 Dolores Street	Detached Condos	4 units
34	20240 Avalon Boulevard	Commercial Drive-Thru	1,667 sq.ft.
35	418 223rd Street	Attached Condos	6 units
36	17420 Broadway	4-Unit Industrial/Manufacturing Office Buildings	40,000 sq.ft. 10 sq.ft.
<p><sup>a</sup> <i>Traffic Impact Analysis Study for the Prime Wheel Corporation Site Expansion Project, Kaku Associates, April 2004.</i></p> <p><i>Source: List of Related Projects, City of Carson.</i></p>			

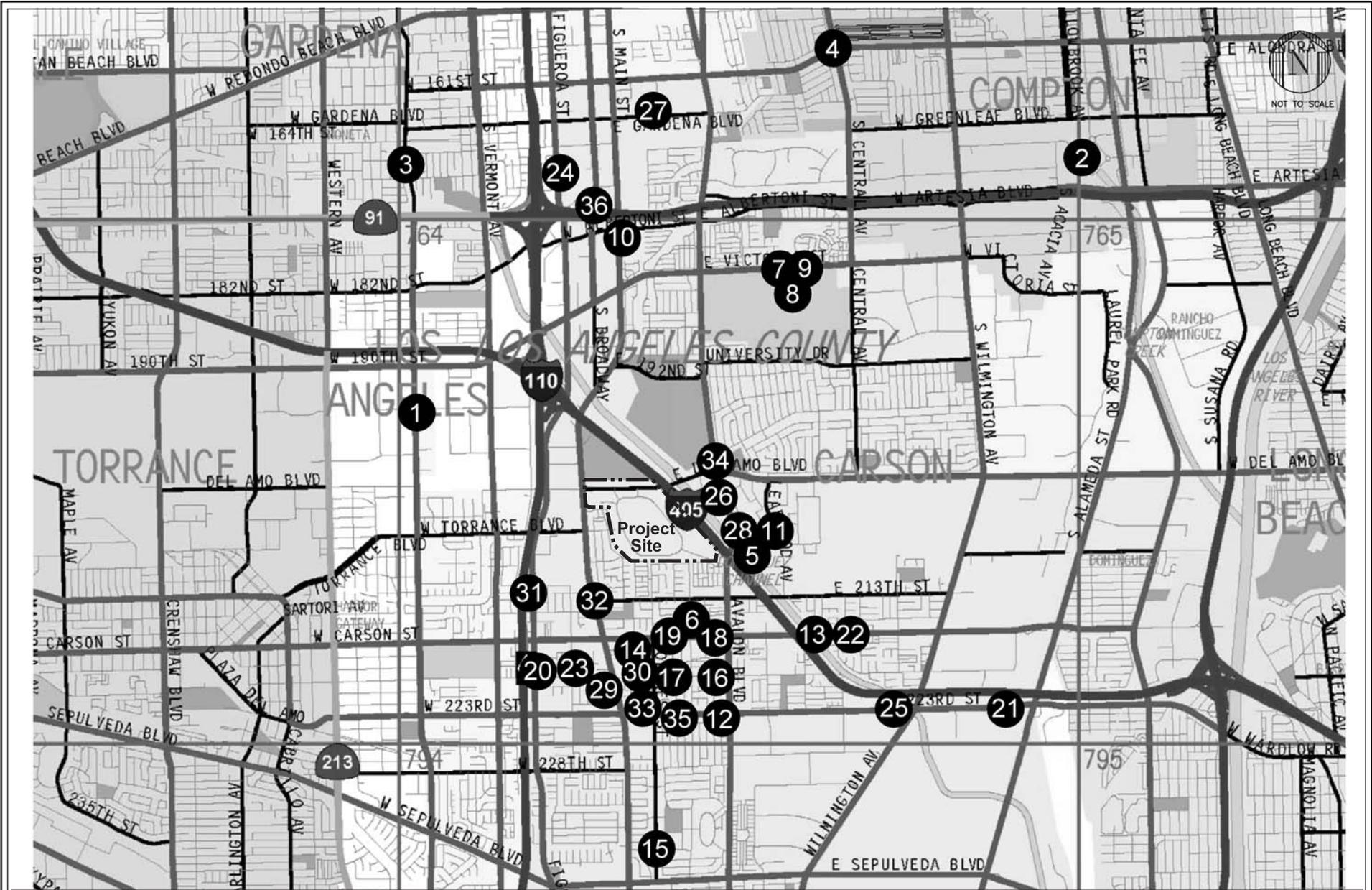


Figure 8  
Approximate Location of Related Projects

Source: KAKU Associates, 2005