

Public Review Draft

Carson Revitalization Project Specific Plan



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Submitted to:

City of Carson
701 East Carson Street
Carson, California 90745

Submitted by:

Equilon Enterprises LLC dba Shell Oil
Products US and Shell Oil Company
20945 South Wilmington Avenue
Carson, California 90810

Prepared by:

AECOM
999 West Town & Country Road
Orange, California 92868



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Introduction and Context



The Specific Plan provides a blueprint for future development.

Role of the Specific Plan

The Carson Revitalization Project Specific Plan establishes land use designations and policy for the Specific Plan area. The City of Carson General Plan is the master land use document for the City and the Specific Plan is required to be consistent with the policies of the General Plan. The Specific Plan provides a bridge between the Carson General Plan and individual development applications in the Specific Plan area, applying—and adding greater specificity to—the policies and concepts of the General Plan in that land area. The Specific Plan provides a complete blueprint for development of the Plan Area, including the following:

- a description of proposed land uses,
- policies and standards to support the plan,
- infrastructure needed to support the plan, and
- implementation and administrative processes needed for plan development.

The Specific Plan has been crafted to be consistent with overall community goals as expressed in the General Plan. The Specific Plan identifies land uses, as well as development standards and design guidelines, which will apply to all development within the Plan Area. The Specific Plan essentially becomes the planning and zoning document for the Plan Area and supersedes any conflicting requirements of the City of Carson Zoning Code.



Where standards are not specified in the Specific Plan the City of Carson Zoning Code will apply.

Goals and Objectives

The primary goals of the Carson Revitalization Project are to (1) enhance the function and value of the existing Shell Carson Distribution Facility as a vital element of the region's industrial and energy infrastructure, and (2) promote revitalization by making available certain underutilized property for other beneficial uses. To do this, a balanced, comprehensive revitalization plan has been developed in cooperation with the City of Carson and is proposed to achieve the following objectives:

- Expand the capacity of the Distribution Facility to meet regional and energy demand;
- Revitalize currently underutilized portions of the property;
- Provide local public benefits in the form of increased employment and tax revenues;
- Utilize planning and site design techniques to minimize environmental impacts;
- Coordinate the revitalization program with the existing on-site remediation program; and
- Incorporate sustainable environmental and economic features

To achieve these objectives, the Project was designed to do the following:

- Define a Specific Plan to maximize the productivity of the site through comprehensive revitalization activities expected to occur over 20 plus years,
- Balance land use, circulation, and site design elements of the Specific Plan to enhance the Project's physical interface with the community,
- Continue to serve regional demand for fuel distribution by providing for the phased expansion of the distribution capacity,
- Address City interest in accommodating compatible municipal use of a portion of the site,
- Provide business park and light industrial development opportunities that would allow for various office, manufacturing, and other employment uses that create jobs for the community.

The goals of this Project build upon the goals, objectives and policies of the City General Plan.

Figure 1-1: Plan Area



Regulatory Authority and Compliance

Specific Plans are authorized and described in California Government Code §65450 et seq. As set forth in the Government Code, Specific Plans are required to contain the following information:

- The distribution, location, and extent of the use of land, including open space, within the area covered by the plan.
- The proposed distribution, location, extent, and intensity of major components of public and private transportation, sewer, water, drainage, solid waste disposal, energy, and other essential facilities to be located within the plan area and needed to support the proposed land uses.
- Standards and criteria by which development will proceed, as well as the standards for the conservation, development, and utilization of natural resources.
- A program of implementation measures, including regulations, programs, public works projects, and financing measures necessary to carry out the plan.
- A statement of the relationship of the Specific Plan to the applicable General Plan.

Severability

If any section, subsection, sentence, clause or phrase of this Chapter is for any reason held invalid by a court of competent jurisdiction, such decision shall not affect the validity of any other portion of the Chapter, it being the intent hereof that each section, subsection, sentence, clause and phrase hereof would have been adopted irrespective of the fact that any one (1) or more section, subsection, sentence, clause or phrase be declared invalid. (Ord. 74-306, § 1)

Topics Addressed by the Specific Plan

The Specific Plan process involved planning, environmental, financial, and engineering analysis; coordination with the City of Carson, public comment and contribution; developing a document that will guide the future development of the Specific Plan area; and subsequent implementation measures recommended by the Specific Plan. The Specific Plan addresses the following topics:

- Description of the planning process
- Legal authority and relationship of the Specific
- Plan to other regulating documents
- Plan Area setting
- Specific Plan goals
- Land use classification and program
- Site access and circulation
- Description of the distribution and revitalization areas
- Development standards and design guidelines
- Description of the infrastructure and public services required to support the Specific Plan uses
- Financial strategy
- Administration and implementation of the Specific Plan
- Consistency with General Plan

Land Use Element

Prior to this Specific Plan becoming effective, the City of Carson General Plan land use designations for the Specific Plan area included Heavy Industrial, Light Industrial, and Business Park (**Figure 1-2**).

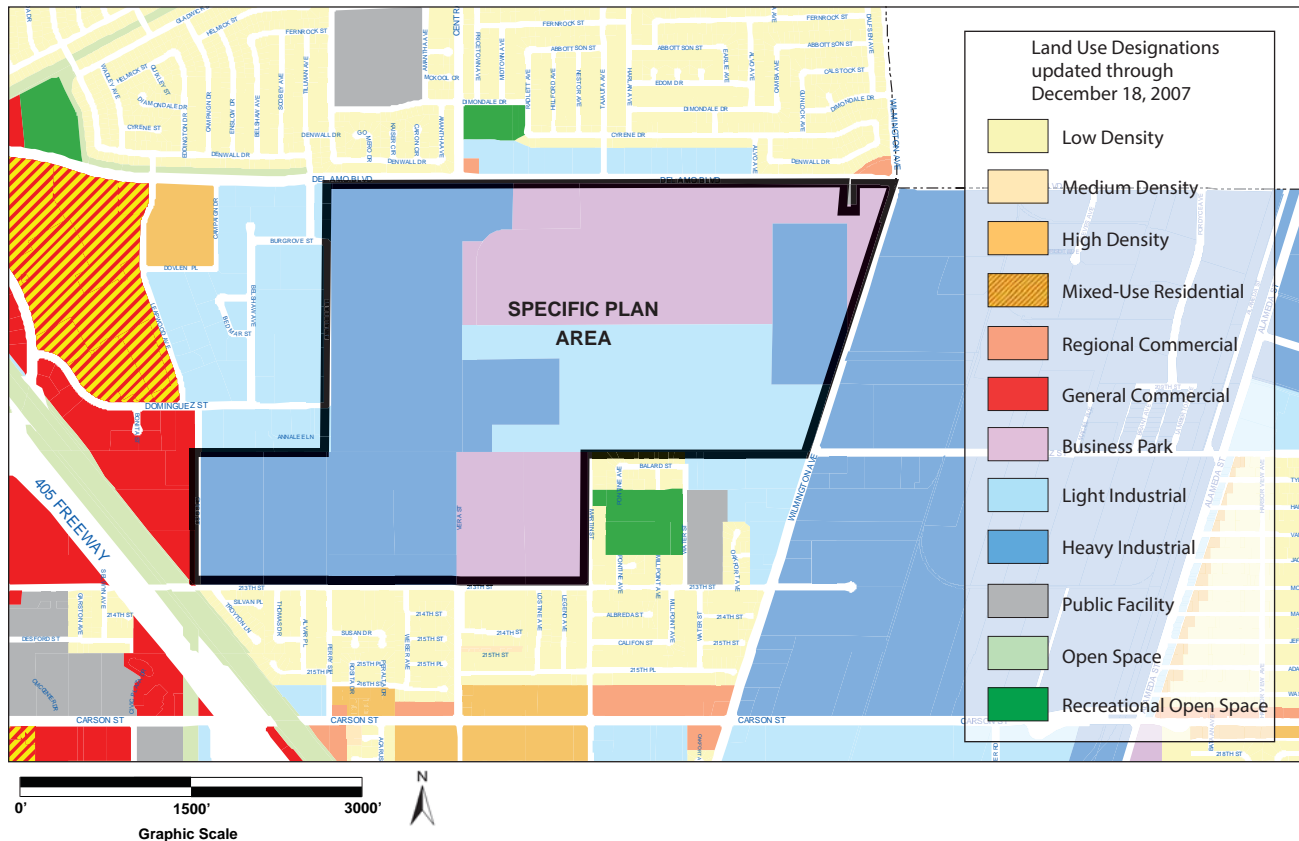
- The City's Heavy Industrial designation is intended to provide for the full range of industrial uses that are acceptable within the community, but whose operations are more intensive and may have hazardous

characteristics. Floor Area Ratio (FAR) is the gross floor area of a building(s) on a lot divided by the area of the lot. Permitted FARs are expected to average between 0.5 and 0.7, with a maximum of 1.0.

- The City's Light Industrial designation is intended to provide for a wide variety of industrial uses and to limit those involving hazardous effects, and typically includes uses such as manufacturing, research and development, wholesaling, and warehousing, with limited supportive retail and services. Permitted FARs are expected to average approximately 0.42, with a maximum of 0.5.
- The City's Business Park designation is intended to provide an attractive, high quality industrial/business park primarily for offices, light manufacturing and assembly, and research and development. Permitted FARs are expected to average approximately 0.42, with a maximum of 0.5.

As compared to the prior General Plan land use designations (**Figure 1-2**), modifications have been made to provide enhanced buffer areas adjacent to the existing residential areas and configure the land uses in coordination with a well organized access and circulation system. A General Plan Amendment has been approved to revise the General Plan Land Use Map (**Figure 8-1**) so there is consistency with the Specific Plan land uses.

Figure 1-2: General Plan Map – Pre Specific Plan Adoption





Additionally, the City of Carson General Plan includes policies that encourage and support the reuse of brownfield sites (LU-1), encourages support services as part of industrial/commercial development (LU 1M-5.6), and promotes the use of buffers between more intensive industrial and residential uses (LU 7.3). The Specific Plan includes policies and standards which specifically further these City goals.

Economic Element

The Specific Plan's mixture of various types of industrial and commercial uses, including retail uses, helps the City achieve its goals for fiscal strength and stability, business promotion, and employment opportunities identified in the Economic Development Element. Both the industrial uses and the proposed business park and commercial uses provide employment opportunities for members of the community, as well as shopping opportunities for nearby employees and residents.

Transportation and Infrastructure Element

The layout of the Specific Plan land uses and circulation system direct truck traffic to the designated truck route system leading to I-710 (TI-1) and also minimizes the intrusion of traffic on local streets through residential neighborhoods (TI 3).

Housing Element

As per the intent of the General Plan Land Use Element, no residential areas are specified in the Specific Plan area. Therefore, the Housing Element does not apply to the Specific Plan.

Safety Element

The Specific Plan area is not located within any identified hazard areas such as the 100-year flood plain or specific fault locations; however, it is subject to liquefaction, like much of the City of Carson. The Specific Plan will be consistent with the applicable policies of the Safety Element, such as compliance with building code and seismic design standards, maintaining and improving levels of storm drain service, providing adequate emergency ingress and egress, and maintaining ongoing relationships with emergency response agencies.



Noise Element

The Specific Plan area is located within a 60 dBA noise contour associated with surrounding roadways and the Southern Pacific Railroad. No portion of the Specific Plan area is located within a noise contour of any airport. The Specific Plan and associated Environmental Impact Report identify the measures necessary to ensure that sensitive receptors in the Plan Area are not negatively impacted by noise from surrounding roadways and the Southern Pacific Railroad beyond those thresholds established in the City's General Plan.

Open Space and Conservation Element

The Specific Plan is consistent with the goals and policies of the City of Carson General Plan Open Space and Conservation Element. As discussed in greater detail in Section 2.0 – Land Use Plan, the Specific Plan will provide open space areas, swales, and buffers that exceed the requirements as described in the City's General Plan. The Specific Plan includes in Section 5 – Design Guidelines, standards for the design of perimeter areas and landscaping, as well as the incorporation of drought tolerant landscaping, to meet or exceed the policies described in the General Plan.

Parks, Recreation and Human Services Element

The Specific Plan allows, in certain portions of the Plan Area, consideration of parks and recreation facilities. This is consistent with the City of Carson General Plan which identifies a goal to increase and improve parks, recreational, and cultural facilities.

Air Quality Element

The Specific Plan and associated Environmental Impact Report identify the measures necessary to ensure that redevelopment is consistent with the policies established in the City's General Plan.

Compliance with Carson Zoning Code

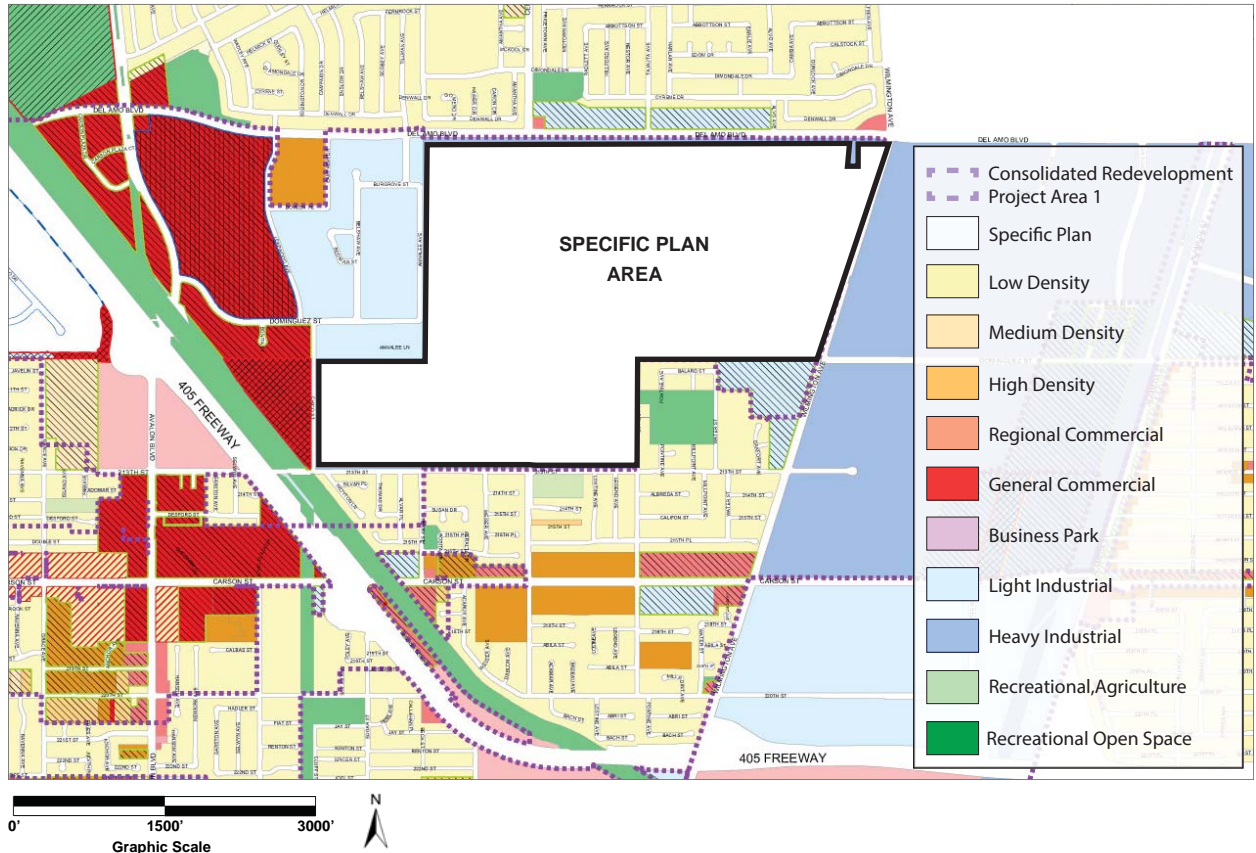
The Zoning Code is one of the most important tools for implementing the General Plan, identifying allowable land uses, allowable intensity of use, and development and performance standards applicable to specific areas of the City. The Carson Zoning Code regulates the development and redevelopment of properties in the City.

Prior to the Specific Plan becoming effective, the existing zoning designation of the entire Specific Plan area was MH – Manufacturing Heavy, according to the December 2006 Zoning Map. The General Plan Existing Land Use Map, Exhibit LU-1, for the Specific Plan area was MH – Manufacturing, Heavy. The Specific Plan area has been zoned to a Specific Plan land use designation (**Figure 1-3**) with the following specific land use designations:

- Distribution Facility
- Revitalization Area

The land use designations are discussed in further detail within Section 2. The Specific Plan identifies development standards that are different from current Zoning Code requirements where it is necessary to achieve General Plan intent, and by extension, Specific Plan goals for the Plan Area. If the

Figure 1-3: Zoning Map



Specific Plan development standards do not address a particular issue, City staff will rely on the Zoning Code and other existing City land use standards in reviewing future development proposals within the Specific Plan area.

Compliance with CEQA

The Specific Plan is a project, as defined by the California Environmental Quality Act (CEQA), and is subject to environmental review and documentation as specified in CEQA. CEQA requires that lead agencies disclose and consider the environmental consequences of projects for which they have discretionary authority prior to taking action on approval. CEQA also requires that lead agencies (either local or State government agencies) avoid significant environmental impacts wherever feasible, and mitigate impacts to less-than-significant levels wherever feasible. An environmental impact report (EIR) is the appropriate document to address the impacts of the Specific Plan. The City has directed the preparation of an EIR, the certification of which is required prior to approval of the Specific Plan.

Though environmental issues are addressed in certain sections of this Specific Plan, readers are directed to the Specific Plan EIR and supporting documentation for a more thorough evaluation of environmental impacts of Specific Plan implementation.

Summary of Specific Plan Preparation Process

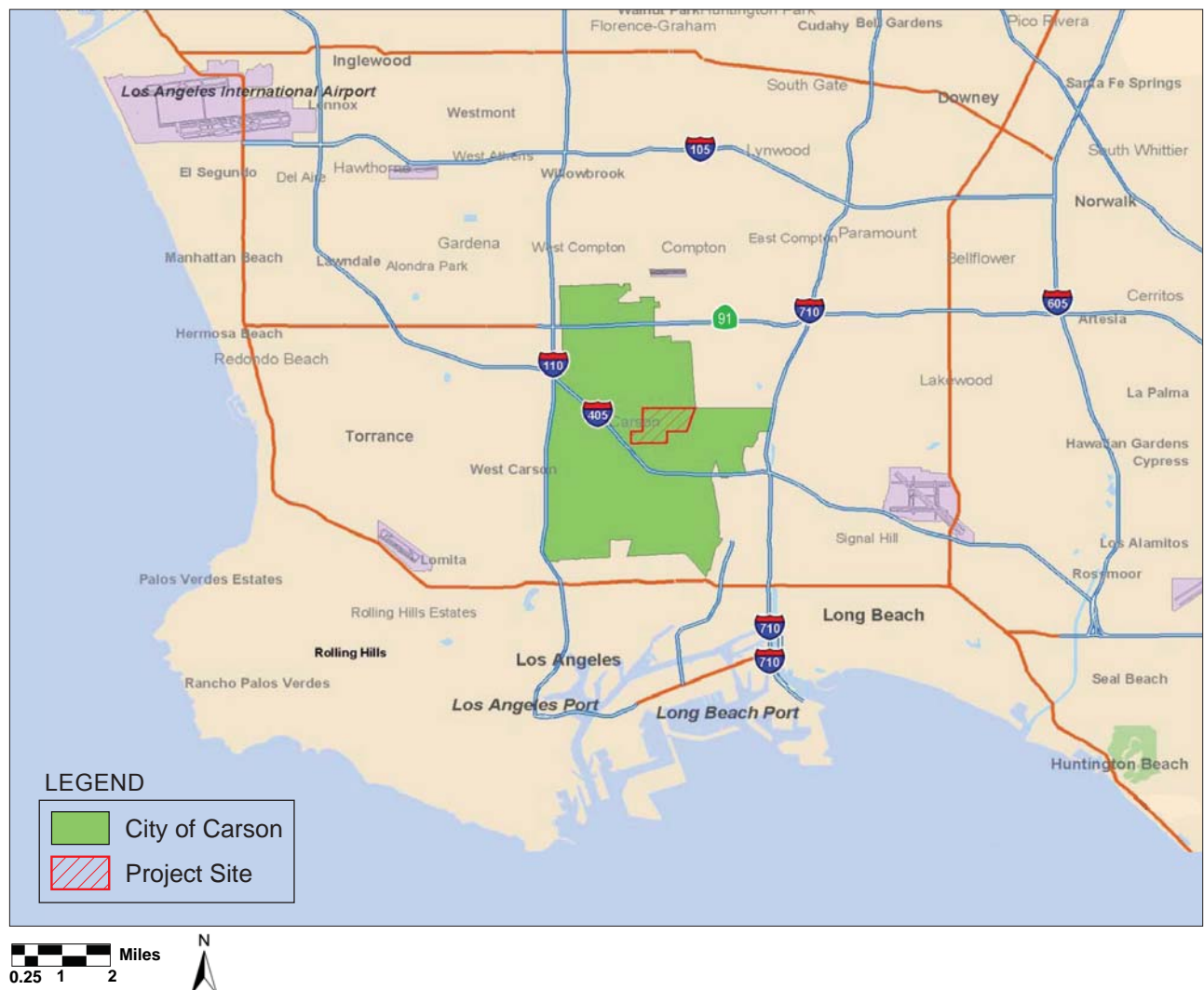
The overall layout of the Specific Plan area has emerged over several years of study and evaluation of the site, which have focused on achieving a balance of three physical planning objectives. One objective of the Specific Plan required detailed analysis and projections of the anticipated growth in demand for the fuel distribution business and the facilities that would be necessary to serve that expanded business. This also included the most efficient and appropriate location for such facilities. A second objective was to determine potential areas that could be made available for development for other private commercial uses or by the City, how these areas could be configured into viable development parcels, and depending on the status of ongoing remediation activities, when they could be developed. A third objective was to identify locations of new distribution and revitalization uses that would be most compatible with the surrounding residential neighborhoods and commercial development. This included concepts to relocate existing facilities and site new facilities so as to create buffers between industrial and residential uses and to create new development opportunities at key, accessible locations.

The Specific Plan preparation process involved a synthesis of concepts developed in response to these three objectives. It also was informed and refined by responses to Specific Plan concepts from the City, local community, and regulatory agencies.

Specific Plan Area Setting

The Carson Revitalization Project Specific Plan area is located within the central portion of the City of Carson approximately 10 miles north of the Port of Long Beach and 16 miles southeast of Los Angeles International Airport (LAX). It is approximately 1.6 miles west of the Long Beach Freeway (I-710) and a similar distance 1.6 miles east of the Harbor Freeway (SR-110). The San Diego Freeway (I-405) is to the south and the Artesia Freeway (SR-91) is approximately 2 miles to the north. This is illustrated in **Figure 1-4**, Regional Location Map. The site is also within an industrial development corridor that extends north from the Port of Long Beach. The key transportation facilities serving that corridor are the Long Beach Freeway and the Alameda Corridor, a 20-mile-long rail cargo expressway linking the ports of Long Beach and Los Angeles to the transcontinental rail network near downtown Los Angeles. The Long Beach Freeway/Alameda Corridor and the industrial land uses along that corridor are illustrated in **Figure 1-5**, Regional Land Use Map.

Figure 1-4: Regional Location Map

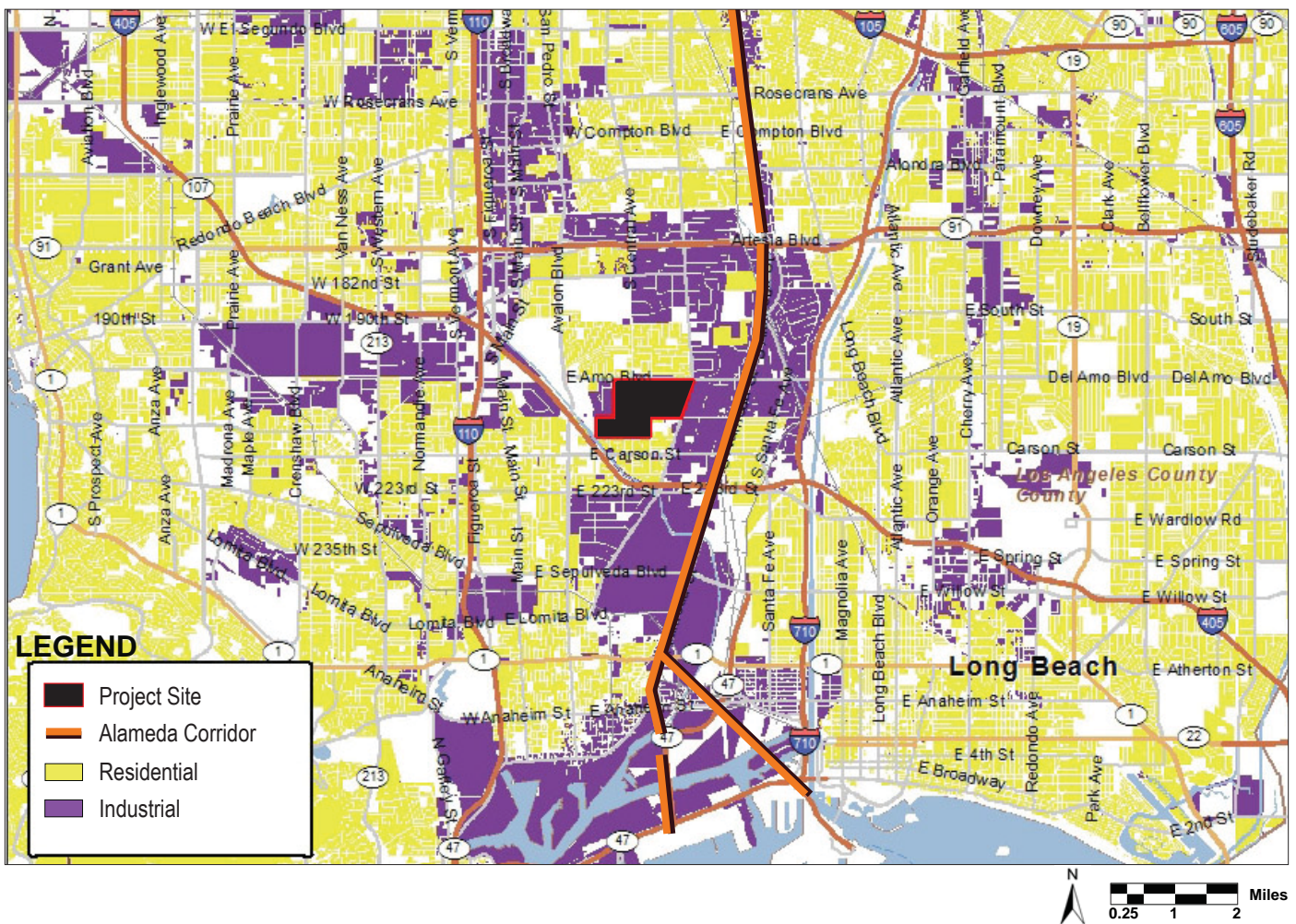


The 448-acre Plan Area is bounded by Del Amo Boulevard on the north, Wilmington Avenue and Martin Street on the east, Annalee Avenue and Chico Street on the west, and 213th Street and the residential and industrial areas east of Martin Street on the south (**Figure 1-6**).

The area of Carson in which the Plan Area lies includes a mix of industrial, residential, and other uses. Industrial uses are generally located immediately to the east and west of the site, with more extensive industrial uses also located further north and south of the site within the Alameda Corridor. Additionally, residential uses are located directly to the north and south, with a park and elementary school south and east of the site, just north of 213th Street.

The Project applicant is Equilon Enterprises LLC dba Shell Oil Products US and Shell Oil Company (collectively, "Shell").

Figure 1-5: Regional Land Use Map



Shell Carson Distribution Facility

Southern California is one of the larger motor fuel markets in the world. Currently most of this fuel is refined from crude oil into various fuel products. California does produce some crude oil, which is used to produce fuel for the local market. However, most crude oil and finished fuel products are imported from outside California. Oil and fuel products arrive in Southern California through marine terminals primarily at the Ports of Los Angeles and Long Beach, and also via railroad and pipeline. Such products include nonrenewable fuels such as petroleum-based products and, increasingly, renewable fuels such as ethanol.



Oil and fuel products arrive by pipeline and through marine terminals.



Renewable fuels, such as corn based ethanol, are produced in the Midwestern United States.



Ethanol is transported from the Midwest by railroad to Lomita Terminal.



Ethanol is transferred by pipeline to storage tanks.



Ethanol and petroleum products loading racks.



Ethanol tanker truck to wholesale user.

The regional fuel infrastructure system distributes both crude oil and various finished fuel products to a wide variety of locations. Crude oil from California and elsewhere is transported to six regional refineries located in the Los Angeles area. These refineries produce a variety of products, which are then typically moved by pipeline to distribution centers. These centers, such as the Shell Carson Distribution Facility, are for temporary storage and subsequent transport by pipeline and trucks to wholesale users, retail outlets (such as a local service station), and airports for jet fuel. Also imported are finished products that have no need for further processing at a refinery and are moved by pipeline directly to a distribution center. This fuel infrastructure system is foundational support for the operation of 17.4 million¹ vehicles in Southern California.

The Shell Carson Distribution Facility is no longer a producer of fuel products; no refining of crude oil occurs on-site. It is a storage and distribution facility that enables products refined elsewhere to be delivered to the market. This is particularly true for renewable fuels.

Ethanol is currently transported by railroad to an unloading facility in Lomita, California. A pipeline connects the Lomita facility to the Shell Carson Distribution Facility. Ethanol also is transported to and from the Mormon Island Marine Terminal. A pipeline connects the Terminal to the Distribution Facility. Ethanol is then transported by tanker truck to area facilities that blend the ethanol into gasoline to meet state and federal requirements and deliver it to retailers.

¹ California Statistical Abstract 2007.



Fuel wholesaler delivery to service station.



Retail sale to customer.

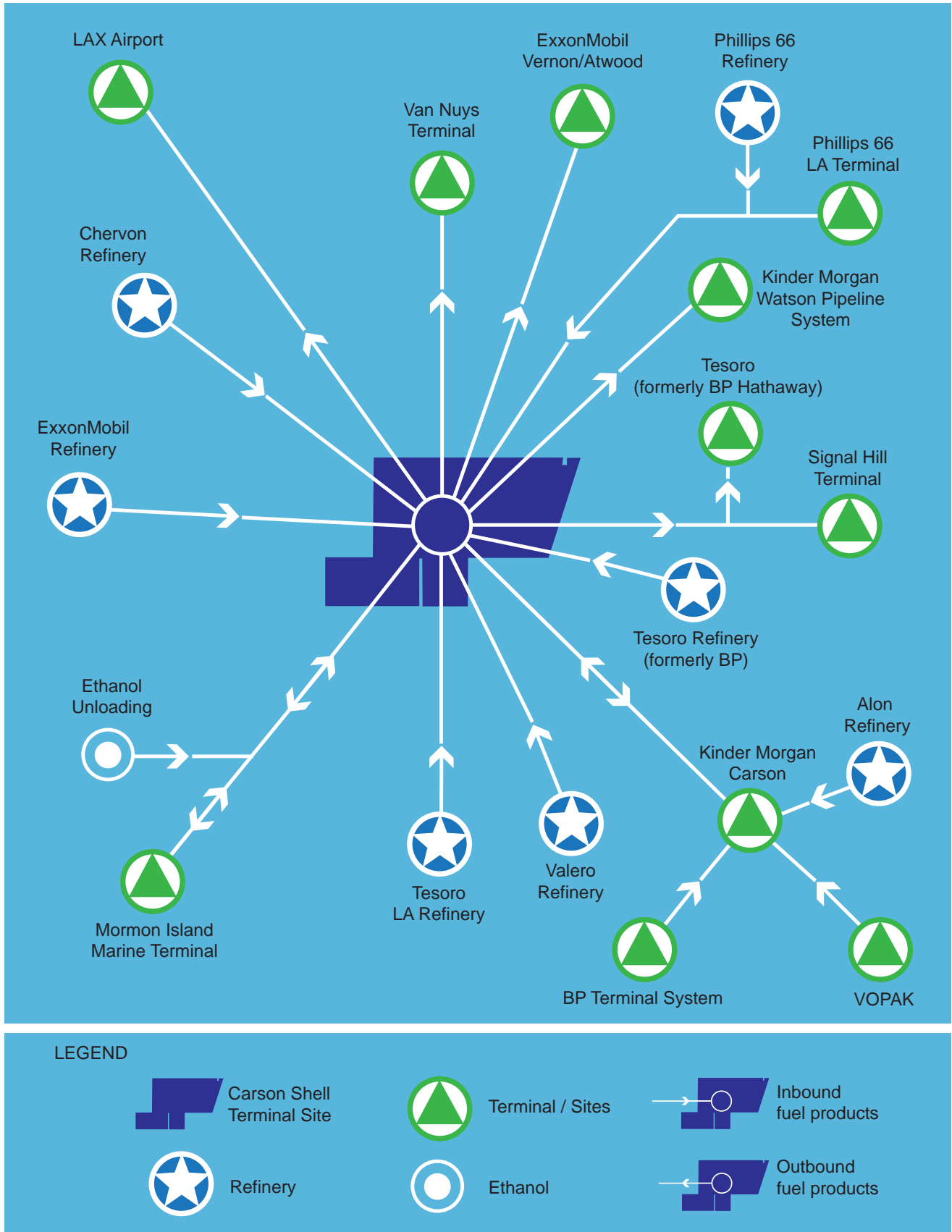
The Shell Carson Distribution Facility demonstrates operational reliability and efficiency in the regional distribution of finished fuel products, primarily due to five key characteristics (**Figure 1-8**):

1. Proximity to the Ports of Los Angeles and Long Beach and pipeline connections to the Mormon Island Marine Terminal,
2. Pipeline connections with all six Los Angeles area refineries,
3. Proximity to and connections with the intrastate and interstate pipeline distribution systems. With this interconnection, the Shell Carson Distribution Facility is one of the largest distributors of its customers' finished petroleum products to the intrastate pipeline system serving Southern California,
4. Direct jet fuel pipeline connection to LAX, and
5. Direct pipeline connection with the ethanol unit train unloading facility at Kinder Morgan Lomita rail terminal and to the ethanol unloading facility at the Mormon Island Marine Terminal.



A direct pipeline from the Shell Carson Distribution Facility provides LAX with jet fuel.

Figure 1-6: Relation to Regional Fuel Facilities



2 Land Use



Introduction

This section sets forth the land use framework for the area subject to the Carson Revitalization Project Specific Plan (Project). The overall goals, policies, land use configuration, permitted land uses and prohibitions, and guidelines for the Specific Plan area (Plan Area) are established herein. In addition, an overview of land use issues is provided. Details regarding circulation, standards, site planning, and building design are contained within the following sections of this document:

- **Section 3—Circulation**, identifies the plan for access, circulation, and streets.
- **Section 4—Development Standards**, identifies the development standards and standards for the East and West Distribution Facility and the Revitalization Areas.
- **Section 5—Design Guidelines**, sets the guidelines for landscape elements, buffers, streetscape, site design, architecture, and sustainability features within the Plan Area.



Relationship to Zoning Code

The current zoning for the existing Plan Area is Heavy Manufacturing. With the adoption of the Specific Plan, the Plan Area will be rezoned to Specific Plan. This will permit the land uses identified and described in this document. These land uses will be subject to the development standards also described in this document. The Specific Plan builds on the intent of the existing General Plan and the City of Carson Redevelopment Area 1 Plan. The Specific Plan provides for the development of the existing Distribution Facility and delineates six Revitalization Areas available for development with a mix of complementary land uses within the Plan Area.

Existing Conditions

The 448-acre Plan Area is located at 20945 South Wilmington Avenue in the City of Carson. Historically, the Plan Area has been used for a petroleum refinery, a chemical plant, chemical plant operations, product storage tanks, facility offices and maintenance facilities. Beginning in the early 1990s, the petroleum refinery complex, which had been operating in the Plan Area in various forms since the 1920s, was dismantled. The chemical plant, which was built in the 1930s, was dismantled in 1982. The Plan Area is currently being used for bulk petroleum and ethanol product storage and distribution, as well as related office support facilities. The total existing facilities occupy approximately 255 acres. The remaining 193 acres are the location of the former refinery in the northern and northeastern portions of the Plan Area and a 40-acre area once used for agricultural purposes in the southern portion. The detailed breakdown of the acreage by use is included in **Table 2-1**.



Table 2-1: Land Use Program

Land Use	Existing Site		Specific Plan				
			West Distribution Facility	East Distribution Facility	Distribution Support Function	Total	
	Acres	%	Acres	Acres	Acres	Acres	%
DISTRIBUTION FACILITY							
Product Storage Tanks/Tank Service Roads	155.0	34.6%	195.2	13.1		208.3	46.5
Loading Lanes and Staging Area	11.2	2.5%	10.6	4.5		15.1	3.4
Control Facility/Manifold/Substation	12.4	2.8%	12.3			12.3	2.7
Offices/Maintenance Buildings	17.7	4.0%	14.2			14.2	3.2
Distribution Warehouse	8.6	1.9%		8.6		8.6	1.9
Subtotal	204.9	45.7%	232.3	26.2		258.5	57.7
DISTRIBUTION FACILITY INFRASTRUCTURE/SUPPORT USES							
Storm Water Basins	16.7	3.7%			25.4	25.4	5.7
Recovered Water Basins	0.9	0.2%	0.9			0.9	0.2
Railroad Yard	11.6	2.6%		11.5		11.5	2.6
Vera Street R.O.W.	1.5	0.3%				0.0	0.0
Storage/Laydown (various locations within "undeveloped areas" shown in Figure 2-1)	10.0	2.2%	10.3			10.3	2.3
Primary Internal Circulation	9.3	2.1%			11.6	11.6	2.6
Overall Open Space Buffers and Setbacks	0.0	0.0%			5.4	5.4	1.2
Subtotal	50.0	11.8%	11.2	11.5	42.4	65.1	14.5
Distribution Facility Uses Total	254.9	56.9%	243.5	37.7	42.4	323.6	72.2
REVITALIZATION AREAS							
Area 1 – Industrial/Commercial	0.0	0.0%				12.3	2.7
Area 2 – Utility/Limited Commercial	0.0	0.0%				13.3	3.0
Area 3 – Community Retail	0.0	0.0%				8.8	2.0
Area 4 – City of Carson Municipal Services Yard	0.0	0.0%				14.3	3.2
Areas 5 & 6 – Industrial	0.0	0.0%				59.6	13.3
Subtotal	0.0	0.0%				108.3	24.2
REVITALIZATION AREA INFRASTRUCTURE/SUPPORT							
Storm Water Basins	0.0	0.0%				5.8	1.3
Overall Open Space and Setbacks	0.0	0.0%				2.7	0.6
Public Access Roads (Tajauta & Dominguez extensions)	0.0	0.0%				7.2	1.6
Fire Station	0.0	0.0%				0.3	0.1
Subtotal	0.0	0.0%				16.0	3.6
Revitalization Uses Total	0.0	0.0%				124.3	27.8
Underutilized/Undeveloped Uses Total	193.0	43.1				0.0	0.0
Total Specific Plan Area	447.9	100%				447.9	100.0

Note: The Specific Plan area (including the Vera Street R.O.W.) is a total of 447.9 acres.

The Plan Area is located approximately 1 mile west of the Alameda Corridor, a 20-mile railroad expressline that connects the ports of Long Beach and Los Angeles to the transcontinental railway network. It is about 10 miles north of Long Beach and Los Angeles ports and 16 miles southeast of Los Angeles international Airport (LAX). Regional vehicular access is provided to the Plan Area via Interstate 405 to the southwest, and State Route 91 to the north; however, it should be noted that per the Shell Carson Distribution Facility's Conditional Use Permit with the City of Carson, all large product vehicles are mandated to exit the Plan Area to Wilmington Avenue heading north to Del Amo Boulevard and then east to the Alameda corridor, avoiding residential areas. The Plan Area is generally bordered by Del Amo Boulevard to the north and Wilmington Avenue to the east, 213th Street to the south, and Chico Street or Annalee Avenue to the west.

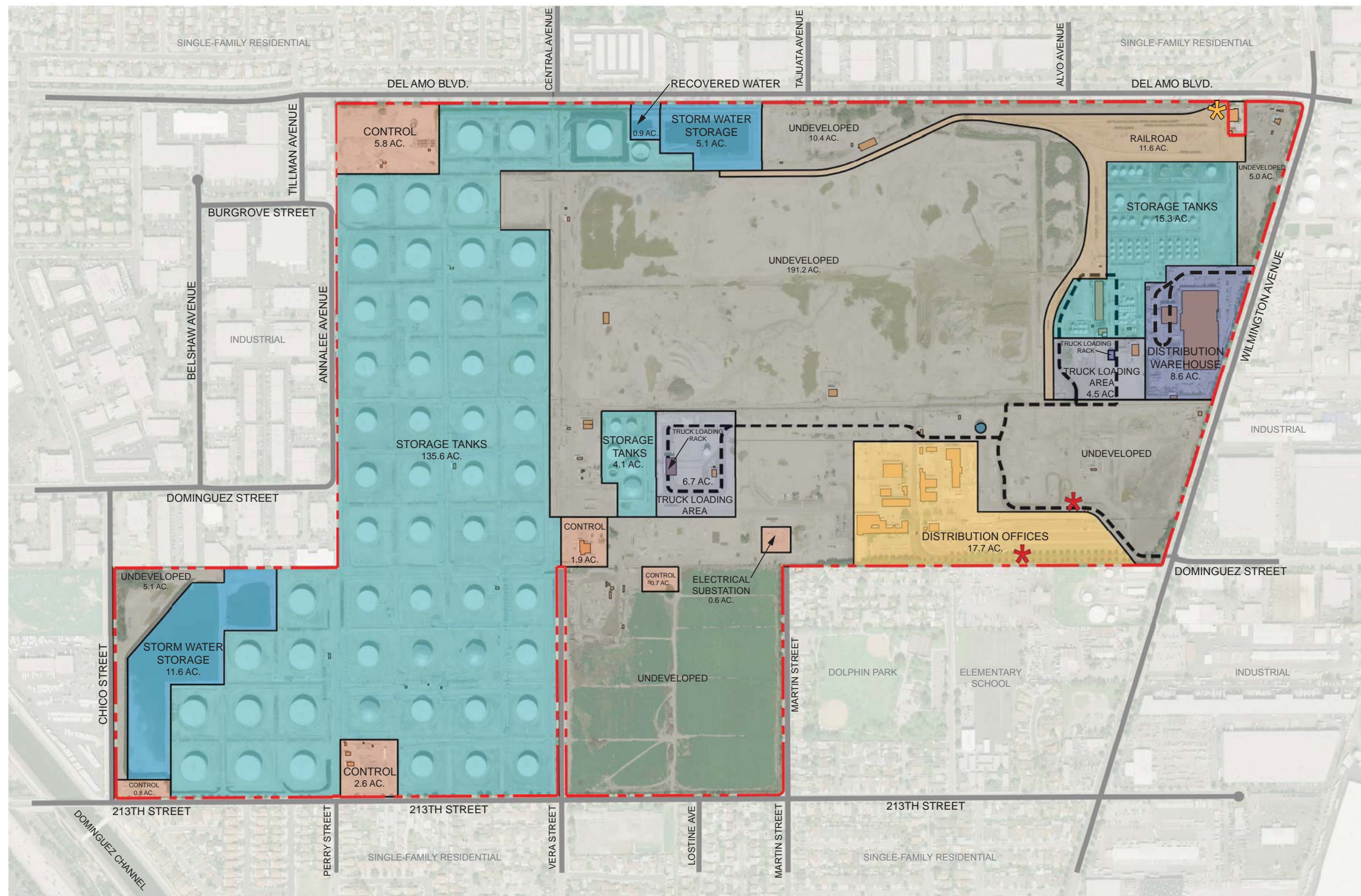
The area of Carson in which the Plan Area lies is primarily and historically industrial, but also includes a mix of residential and other uses. Industrial uses are generally located immediately to the east and west of the Plan Area, with more extensive industrial uses also located further north and south within the Alameda Corridor. Additionally, several residential neighborhoods are located directly to the north and south, Mills Park is located to the north of the Plan Area off Central Avenue. Dolphin Park and Del Amo Elementary School are located to the south and east, just north of 213th Street.

Current land uses within the Plan Area are illustrated in **Figure 2-1 Existing Conditions**. In general, the approximate acreage of each existing land use within the 448-acre Plan Area is as follows:

- 155.0 acres of product storage tanks and associated containment dikes,
- 11.2 acres of truck loading lanes and associated circulation,
- 17.7 acres of offices and maintenance facilities,
- 8.6 acres of distribution warehouse,
- 12.4 acres of electrical substation and pipeline control facilities and manifolds,
- 50.0 acres of Distribution Facility infrastructure/support uses, and
- 193.0 acres of mostly vacant land, including land in the north and northeastern portions of the Plan Area, land that was formerly associated with the petroleum refinery, and, in various locations, underutilized areas of different sizes and configurations.



Carson Revitalization Project



LEGEND

EXISTING CONDITIONS

- Storage Tanks and Ancillary Facilities
- Truck Loading Area
- Pipeline Control and Utility Facilities
- Shell Offices, Maintenance, and Parking
- Storm Water Storage
- Distribution Warehouse
- Railroad
- Buildings
- Undeveloped
- * Distribution Facility Security Gate
- * Railroad Access Gate
- Truck Route
- Property Boundary

FIGURE 2-1

Existing Land Uses



Specific Plan Map

The Specific Plan builds on the land use designations and policy direction contained in the General Plan, resulting in a complete description or “blueprint” of the allowable land uses and infrastructure necessary to support and serve these land uses. In addition, the Specific Plan contains policies, development standards, and design guidelines that address in detail a variety of key issues associated with the development.

The Specific Plan is shaped by the land use goals described in Section 1, Introduction and Context. The intent of the land use goals is to maintain and efficiently expand the capacity of the Distribution Facility in particular areas toward the interior of the property while opening up select areas around the perimeter of the Plan Area for revitalization development. The mix of additional land uses are complementary to the large Distribution Facility use in the Plan Area. The Specific Plan is illustrated in **Figure 2-2** Specific Plan Map. In some locations, the Revitalization Areas function as an aesthetic enhancement between the Distribution Facility and adjacent uses. The Plan Area also contains various types of open space along the perimeter to provide a transition to adjacent land uses. The locations of these open spaces are delineated on **Figure 2-2** and the details of the design of the landscaping are included in Section 5, Design Guidelines.

The Specific Plan Map depicts the Plan Area divided into four major areas, as follows.

West Distribution Facility

This area is located in the western half of the property and includes the existing storage tanks and all of the proposed new storage tanks and loading lanes. Other facilities include the network of existing and new piping, pumps and control facilities which are necessary to receive the petroleum-based and other products arriving by pipeline, allocate those products to individual storage tanks, and distribute those products to other locations by either trucks loaded at the lanes or by pipeline.

The Specific Plan retains all the existing functions of the West Distribution Facility and enables development of thirty (30) new storage tanks and four (4) new loading lanes to serve the energy needs of customers throughout the local and regional area. The West Distribution Facility is connected directly to Wilmington Avenue via a new Truck Driveway (**Figure 2-3**) extending through the eastern portion of the Plan Area. This Truck Driveway is only for vehicles authorized by the Distribution Facility. This direct access route connects the East and West Distribution Facility to Wilmington Avenue, the designated truck route.



East Distribution Facility

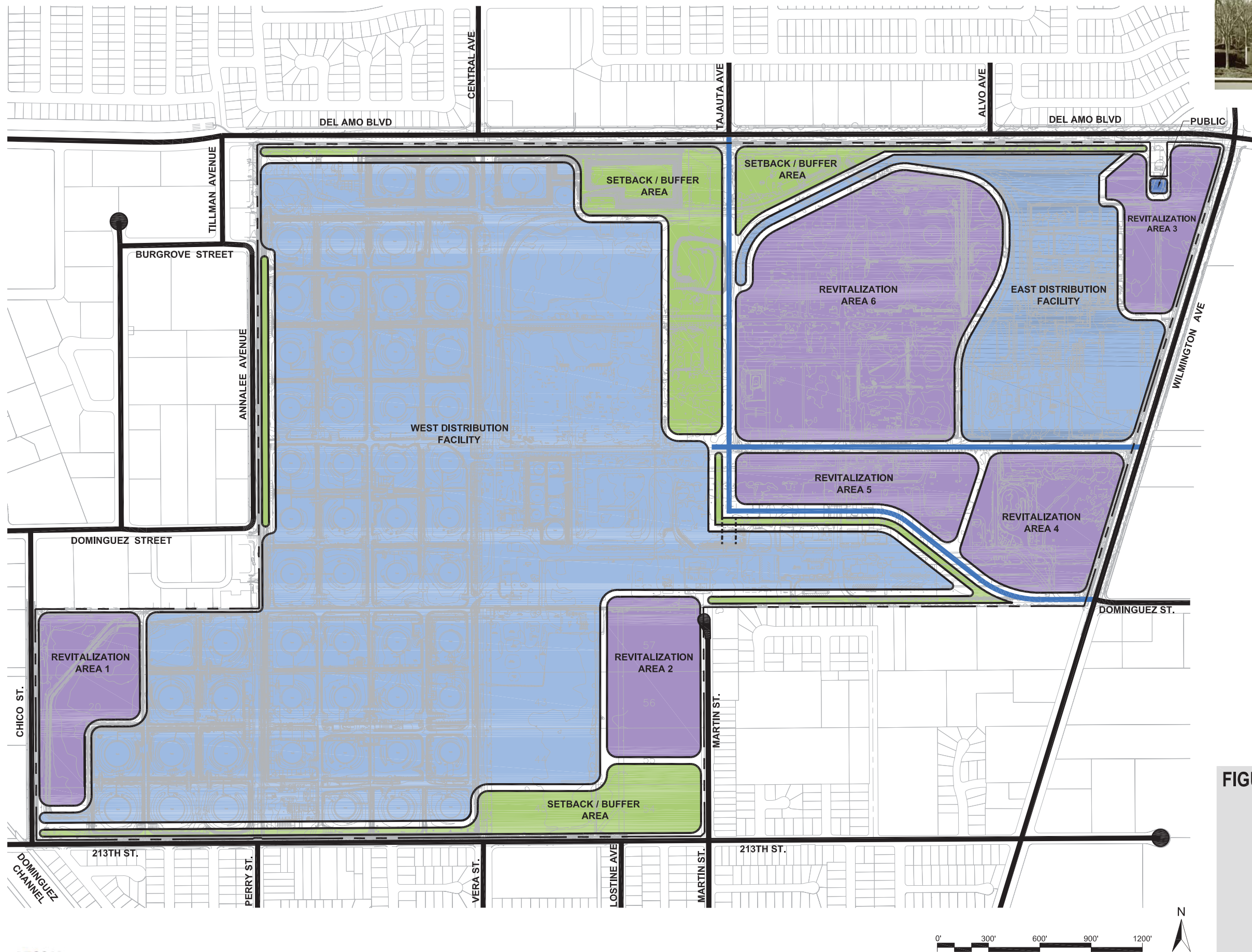
This area is located in the eastern portion of the Plan Area and includes an existing railroad yard, storage tanks, four (4) separate truck racks with nine (9) lanes, rail and truck unloading stations, and a chemical packaging and distribution warehouse. Of the nine (9) lanes, three are in the Packaging and Distribution Warehouse (**Figure 2-5**) and will remain in service with their current level of unloading activity. Three lanes to the west in the Truck Loading Lane Area will be in service. Three additional lanes in that area are currently not in service and due to contemporary fuel loading equipment and efficiency are not planned to be in service in the future.

Other facilities in the East Distribution Facility include a network of piping, pumps, and control facilities necessary to receive petroleum-based products and chemicals arriving by railroad, truck or pipeline, allocate those products to individual storage tanks, and transfer the products to the warehouse where they are packaged for distribution to wholesale and retail customers.

The Specific Plan retains all the existing functions of the East Distribution Facility and does not propose to increase the general capacity of the facility. Minor changes to existing facilities may be required as part of normal adjustments to business operations. A portion of the existing East Distribution Facility is proposed to be allocated to the adjacent Revitalization Area 3 in order to expand and better configure that site for retail development. This would require one existing storage tank within the East Distribution Facility be removed or relocated in order to accommodate the proposed configuration of Revitalization Area 3.



Carson Revitalization Project



LEGEND

- Distribution Facility
- Revitalization Areas 1 - 6
- Public
- Buffer Area
- Primary On-Site Access Circulation
- Primary Off-Site Circulation

FIGURE 2-2

Specific Plan Map

Carson Distribution Facility Truck Loading and Operations Standards

Carson Revitalization Project

The tanker truck loading facilities associated with the Carson Revitalization Project are the four additional truck loading lanes to be built within the West Distribution Facility. In addition it includes the increased use of the three existing loading lanes in the East Distribution Facility. The maximum throughput of an individual loading lane is estimated to be approximately 92 trucks/day. Therefore, with the construction of the 4 lanes, the truck throughput at the West Distribution Facility will increase by 368 trucks/day (92 trucks/day x 4 new lanes = 368 trucks). In the East Distribution Facility one of the existing lanes currently loads an average of 7 trucks/day, so the throughput increase for this lane would be 85 trucks/day. The other two lanes are not currently used so the increase for each of those two lanes would be 92 trucks/lane/day. Thus, for the Carson Revitalization Project, the truck throughput at the East Distribution Facility will increase by 269 new trucks ((85 trucks/day + (2 lanes x 92 trucks/day = 269 trucks/day)). This is summarized in **Table 2.2** below.

Table 2-2: Carson Revitalization Project

Location	Maximum Trucks Per Day	Maximum Trucks Daily Average Per Year
West Distribution Facility	368	368
East Distribution Facility	269	269
Total	637	637

Existing Carson Terminal Design Overlay Review and E-10 Project

The existing Carson Terminal Design Overlay Review (DOR 764-01) covers the existing ethanol loading facilities. On June 25, 2002, the Planning Commission approved Conditional Use Permit No. 522-01 for the Lomita rail transfer facility approximately 2.7 miles south of the Carson Distribution Facility and recommended approval to the Redevelopment Agency of Design Overlay Review No. 764-01 for the truck loading facility and platform located at 20945 S. Wilmington Avenue. On September 17, 2002 the Redevelopment Agency approved Design Overlay Review No. 764-01. Since the approval of Modification No. 1 to DOR No. 764-01, the Carson Redevelopment Agency has dissolved. As such, the Planning Commission assumed responsibility for DOR. The DOR established various construction and operational conditions of approval including the maximum of 150 new trucks per day and the route those new trucks were to take from I 710, SR 91, and I 405 to ingress and egress the Carson Distribution Facility.

On June 20, 2006, a modification was approved to DOR 764-01 allowing the total trucks subject to the DOR to increase from 150 to 180 per day with a maximum daily average per month of 150.

On December 20, 2012, the South Coast Air Quality Management District (SCAQMD) certified the Environmental Impact Report and approved the separate project designated the “E-10 Project”. That project included conversion of existing tanks to ethanol, a new storage tank, load rack operations building expansion, and a new truck loading lane located adjacent to the existing two truck loading lanes; both tank and loading lane will be located in the West Distribution Facility. The approved E-10 Project included a maximum for the new lane and the existing two lanes of 276 trucks/day (3 lanes x 92 trucks/lane/day = 276 trucks/day)

On May 28, 2013, a second modification was approved to DOR 764-01 allowing the total trucks subject to the DOR 764-01 to increase from 180 per day to 210 per day with a maximum daily average per year of 195 trucks, which replaced the maximum daily average per month requirement. This approval, following the approval of the E-10 Project, began the process of increasing the utilization of the 3 lanes to the estimated maximum throughput of 276 trucks/day.

Truck Loading and Operations Standards

The following conditions apply to the operation of the truck loading lanes associated with the Carson Revitalization Project as well as the truck loading lanes currently covered by DOR 764-01. The applicable conditions of DOR 764-01 going forward are included in the conditions below and, with the approval of the Specific Plan; DOR 764-01 will be replaced by the Specific Plan. The applicable regulatory document for tanker truck loading and operations throughout the 448 acre project site will become the Specific Plan.

1. All tanker trucks going to and from the West Distribution Facility and all new tanker trucks going to and from the East Distribution Facility shall use the following truck route:
 - a. Wilmington Avenue between the new truck driveway and Del Amo Boulevard.
 - b. Del Amo Boulevard between Wilmington Avenue and Alameda Street.
 - c. Del Amo Boulevard between Alameda Street and the Long Beach Freeway (I 710), or Alameda Street between Del Amo Boulevard and the Artesia Freeway (SR 91), or Alameda Street between Del Amo Boulevard and the San Diego Freeway (I 405).
2. The maximum tanker trucks associated with the Carson Revitalization Project and the maximum tanker trucks for the existing two lanes plus the third lane associated with the E-10 project are summarized in **Table 2.3**. This is the maximum total tanker trucks allowed for the Carson Distribution Facility.

Table 2-3: Maximum Trucks for Carson Distribution Facility

Location	Maximum Trucks Per Day	Maximum Trucks Daily Average Per Year
Carson Revitalization Project	637	637
Existing Lanes and E-10	276	276
Total	913	913

Shell shall submit a monthly report to the City on the number of trucks ingressing and egressing these loading lanes demonstrating conformance with this limit on trucks.

Shell shall submit a quarterly audit report on the compliance of trucks using the designated truck route.

Buffer/Setback Areas

These areas totaling approximately 39.0 acres are typically located along the perimeter of the Plan Area although some occur between interior use areas. Generally, these locations are currently either undeveloped or improved with facilities that can be feasibly relocated or reconstructed to accommodate a buffer. The width of the buffer/setback areas ranges from approximately 10 feet to 300 feet or more. Due to existing Plan Area facilities abutting property lines in some locations, the buffering may be limited to the provision of a screening fence.

The Specific Plan buffer areas will be improved with landscaping whereas setback areas will contain some specific beneficial use e.g., storm water detention basins or swales. Both of these areas will be consistent with the goal of establishing a zone free of major industrial infrastructure, except where infeasible, around much of the West and East Distribution Facility, along the perimeter roadways of the Plan Area and along adjacent non-industrial land uses. Landscaping within some buffers will enhance the visual quality of the Plan Area perimeter to the extent feasible. Buffers may also be used as appropriate, for screening certain portions of the Revitalization Areas.

Revitalization Areas 1 through 6

These six areas totaling 108.3 acres are located near the edges of the Plan Area or in the interior along the future extensions of Tajauta Avenue and Dominguez Street. They are generally located on land that is vacant, underutilized, or improved with distribution facilities that are proposed to be relocated as part of the implementation of the Specific Plan. These Revitalization Areas are proposed to be developed with a variety of uses different from the West and East Distribution Facility land use. Proposed



uses include Retail, Commercial, Industrial, Utility and Public use. The Specific Plan includes individual use limitations and design standards for each of these six Revitalization Areas.

Land Use Plan

The realization of a mix of complementary land uses within the Plan Area will contribute considerably to the further economic development of the City. By efficiently consolidating the operational areas of the Distribution Facility, a significant quantity of land that is currently underutilized is made available for development. This creates the opportunity to provide the six Revitalization Areas of the Specific Plan. The diversification of land uses within the Plan Area is illustrated in **Figure 2-3** Land Use and Circulation Plan, which delineates the location and the physical layout of the following development areas proposed for the Plan Area.

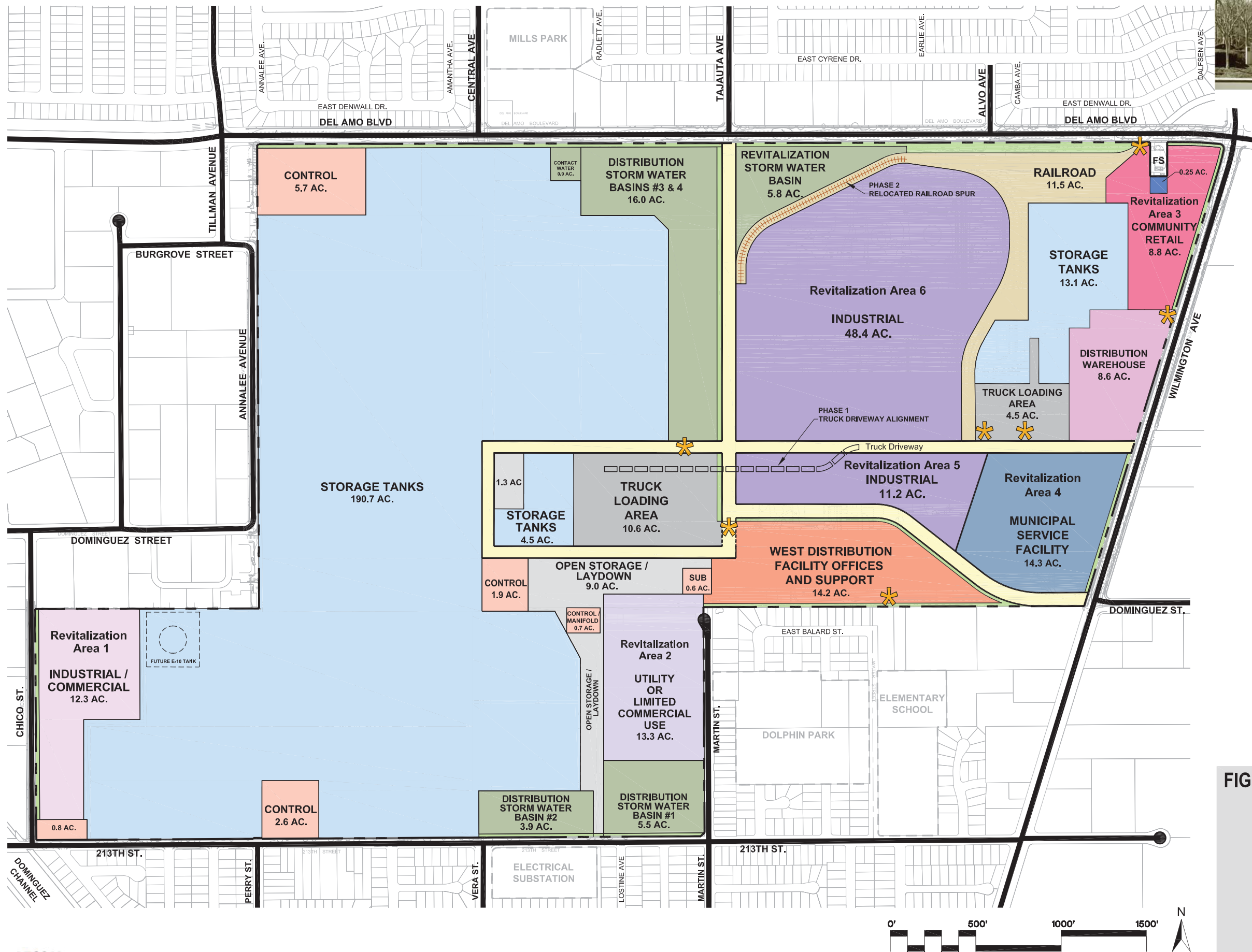
Distribution Facility Use Areas

The plan for the Distribution Facility is summarized as follows, with a detailed description of allowable uses provided later in this section:

- A. Addition of up to thirty (30) additional product storage tanks. These tanks will be added at three locations within the West Distribution Facility:
 - Eight (8) additional tanks will be located on approximately 15 acres in the south-central area of the site, north of 213th Street and east of the existing tank farm.
 - Twenty-one (21) additional tanks will be located on approximately 36 acres in the north-central area of the site south of Del Amo Boulevard and east of the existing tank farm.
 - One (1) tank will be located on approximately 1.5 acres in the central portion of the site adjacent to the loading lanes.
- B. Addition of up to four (4) lanes in the West Distribution Facility. Truck lanes are typically used to load petroleum, ethanol, and other byproducts associated with the Distribution Facility operations into tanker trucks for delivery. Security and circulation improvements associated with the addition of lanes to the truck loading complex will be constructed as well.
- C. Other Existing Facilities: The existing tank storage control and manifold facilities, railroad yard (one spur will be realigned), and distribution warehouse will generally remain in their current locations except as may be required as part of normal adjustments to business operations.



Carson Revitalization Project



LEGEND

- Storage Tanks and Ancillary Facilities
- Offices and Support
- Control and Utility Facilities
- Industrial
- Industrial / Commercial
- Distribution Warehouse
- Limited Commercial
- Municipal Service Facility
- Community Retail
- Fire Station
- Truck Loading Area
- Laydown and Storage
- Storm Water / Contact Water Storage
- Buffer (See Section 5)
- Railroad
- Primary Circulation
- Off-Site Circulation
- Relocated Railroad Spur
- Distribution Facility Security Gate

FIGURE 2-3
Land Use and Circulation Plan

Revitalization Areas

The Specific Plan includes six (6) Revitalization Areas. The Revitalization Area locations and uses are summarized as follows, with a detailed description of allowable uses provided later in this section.

- A. Revitalization Area 1 is located on the western edge of the Plan Area and is designated for Industrial/Commercial use.
- B. Revitalization Area 2 is located west of Martin Street and north of 213th Street. Access will be from Martin Street. It is designated for a very limited range of Utility and Commercial uses that will generate very little additional vehicular traffic on Martin or 213th Streets.
- C. Revitalization Area 3 is located at the southwest corner of the intersection of Del Amo Boulevard and Wilmington Avenue. This location, at the intersection of two arterial streets, will accommodate a range of community retail type uses with up to 83,000 square feet of total retail development.
- D. Revitalization Area 4 is located at the northwest corner of the intersection of Dominguez Street and Wilmington Avenue. It is designated as Industrial use with the primary use being the City Municipal Services Facility.
- E. Revitalization Area 5 is located north of the extension of Dominguez Street and is designated for Industrial uses.
- F. Revitalization Area 6 is located east of the extension of Tajauta Avenue and is designated for Industrial uses.

Land Use Program

Table 2-1 details the acreage for each current land use on the existing Plan Area as well as the proposed land uses as delineated by the Specific Plan.



Site Development Plan

The achievement of the Specific Plan intent and implementation of the Land Use Plan is accomplished through concurrent development of the Distribution Facility and the Revitalization Areas. Key issues to be considered in the site development planning are the existing conditions and other applicable constraints, the provision of adequate access, and the designation of appropriate land uses in each area.

West Distribution Facility

Located within a secure perimeter, the primary components of the West Distribution Facility are a tank farm consisting of storage tanks located within a system of containment dikes, numerous pipelines and equipment assemblages associated with the movement of product, and a truck lane facility used to load products into tanker trucks. An essential element of the operation of this facility is the efficient ingress and egress of tanker trucks on a daily basis. The site development plan for the West Distribution Facility is illustrated in **Figure 2-4** West Distribution Facility and described below.

Existing Facilities

The existing facilities within the West Distribution Facility are illustrated in **Figure 2-1**, Existing Conditions, and **Figure 2-4**, West Distribution Facility. There are sixty-one (61) above-ground storage tanks used for ethanol and petroleum products. Fifty-four (54) of these tanks are arranged in a grid pattern in the western half of the site. There are also seven (7) smaller storage tanks, six (6) located west of the loading lanes and one (1) near Del Amo Boulevard. There are two (2) truck loading lanes in the east-central portion of the West Distribution Facility.

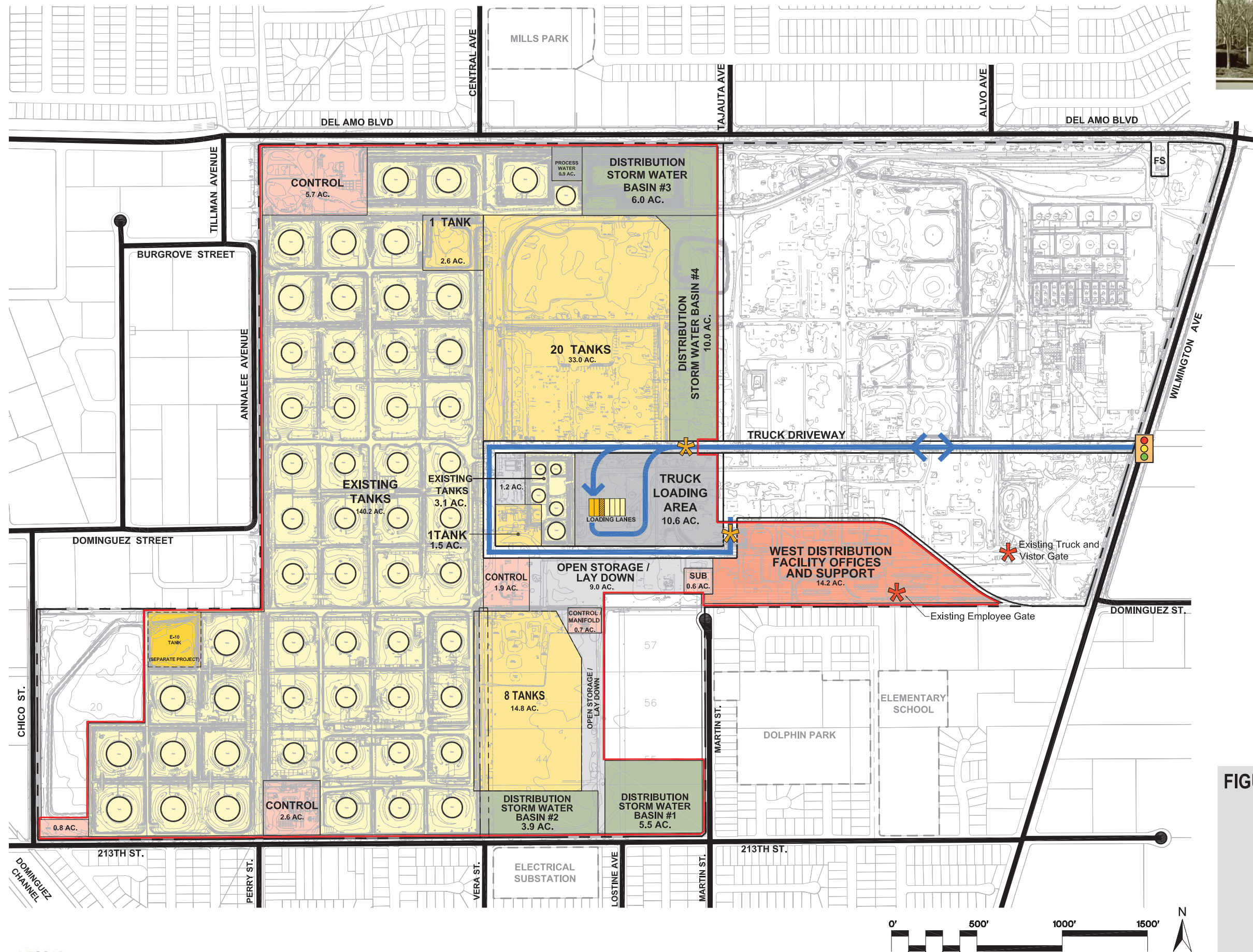
Additional existing facilities are administrative offices and maintenance buildings in the easternmost portion of the site, which extends toward Dominguez Street, and miscellaneous control, utility, and storage areas located throughout the site.

Approved Facilities

At the time of the preparation of this Specific Plan, a separate project was being proposed and reviewed by the lead agency, the Southern California Air Quality Management District (SCAQMD). This separate project was in response to the California Air Resources Board's (CARB) gasoline specification amendments that essentially required fuel producers to increase the percentage of ethanol blended into gasoline to 10 percent by December 31, 2009. The separate project is called the E-10 Project, and includes construction of one (1) storage tank on the west side of the existing tanks. The proposed tank is designated as "E-10 Tank (Separate Project)" in **Figure 2-4**. The E-10 Project is also proposing one additional loading lane. This lane is located on the east side of the existing loading lanes and is designated as



Carson Revitalization Project



LEGEND

- Existing Tanks
- Proposed Tank Area
- Proposed Tank Area (Separate Project)
- Offices and Support
- Control / Manifold
- Truck Loading Area
- Existing Loading Lanes
- E-10 Loading Lane (Separate Project)
- Proposed Loading Lanes
- Open Storage / Laydown / Expansion
- Storm Water Basins
- Primary On-Site Circulation
- Primary Off-Site Circulation
- Security Perimeter
- Proposed Distribution Facility Security Gate
- Existing Distribution Facility Security Gate
- Signalized Intersection

FIGURE 2-4

West Distribution Facility

“E-10 Loading Lane (Separate Project).” The E-10 Project was approved on December 20, 2012.

Proposed Access and Circulation

The primary proposed access to the West Distribution Facility is via a new two-way Truck Driveway extending westward from Wilmington Boulevard. This is the designated ingress and egress route for all trucks serving both the East and West Distribution Facility and this driveway is only for the use of vehicles authorized by the Distribution Facility. Using the designated Truck Driveway, inbound trucks will enter the Plan Area from Wilmington Avenue at a new signalized intersection which will be located approximately 900 feet north of the existing facility entrance at Dominguez Street. After trucks are loaded with product, they exit the secure perimeter of the West Distribution Facility and return to Wilmington Boulevard via the same Truck Driveway route. The security checkpoint through which vehicles enter the secure perimeter of the West Distribution Facility is an entrance gate at the end of the Truck Driveway approximately 2,600 feet west of Wilmington Avenue and approximately 200 feet west of the intersection of the Truck Driveway and the southward extension of Tajauta Avenue. West Distribution Facility employees and authorized visitors may also use this Truck Driveway and security gate entrance.

The existing internal truck route off of Wilmington Boulevard is via a Plan Area entry point at Dominguez Street for approximately 100 feet. The route then turns northward approximately 300 feet to the existing truck and visitor gate (**Figure 2-1**). The new truck route described above is located much closer to the center of the Plan Area, buffered by a distance of approximately 900 feet from the existing adjacent uses to the south. The existing automated security gate to the Distribution Facility office complex near the Plan Area boundary along the westward extension of Dominguez Street is expected to remain and be used by Distribution Facility and office employees (**Figure 2-4**). This entry to the office complex may be relocated to another point in the future at or near the intersection of Dominguez Street and Tajauta Avenue when Dominguez Street is realigned as part of the implementation of Revitalization Area 5.

There currently is no direct access from the existing West Distribution Facility onto Del Amo Boulevard, 213th Street, Chico Street, or Annalee Avenue. The plan for the West Distribution Facility proposes no direct access to these streets (except for emergency access). However, with the implementation of Revitalization Areas 4, 5, and 6 and the extension of Tajauta Avenue and Dominguez Street within the Plan Area to serve these areas, it will be possible for West Distribution Facility employees and visitors to access the primary and employee entrances using those internal roadways. However, even with the extension of those roadways into the Plan Area, all trucks traveling to and from the West Distribution Facility will continue to be required to use the designated Truck Driveway connection to Wilmington Avenue described above.





Proposed Facilities

The proposed facilities within the West Distribution Facility are illustrated in **Figure 2-4**. They include thirty (30) new storage tanks arranged in a grid pattern adjacent to the existing tank farm and near the truck loading lanes. The proposed new tanks are composed of the following:

- To the south of the loading lanes, a cluster of eight (8) tanks are proposed adjacent to and east of the existing tank farm.
- To the north, a cluster of twenty-one (21) tanks are proposed adjacent to and east of the existing tank farm.
- One (1) tank is proposed on a separate site adjacent to the existing cluster of small tanks next to the loading lanes. One small tank is expected to be removed to construct the new tank.

By locating the new tanks as far as feasible from the Plan Area edges, the aesthetic or visual impact on the adjacent areas is minimized, especially the existing residential and commercial areas to the north and south of the Plan Area. Specific additional techniques proposed to buffer and/or screen these facilities from surrounding areas are described in Sections 4 and 5.

The areas designated for new tanks shown in **Figure 2-4** can accommodate thirty (30) new storage tanks at a uniform 160,000 barrels each for a total capacity of 4.8 million barrels. The market driven future storage requirements may result in a need for smaller or larger tank sizes. Whatever the ultimate individual tank sizes, there will be no more than 30 total tanks, all of the new tanks will be located within the area designated “Proposed Tank Area,” and the total capacity of the 30 tanks will not exceed the 4.8 million barrels noted above.

The facilities within the West Distribution Facility also include truck loading lanes. The existing loading complex contains two (2) existing loading lanes and one (1) approved lane that is part of the separate E-10 Project. This cluster of three (3) lanes will be expanded by four (4) additional lanes, for a total of seven (7). The truck ingress and egress to these loading lanes is described above. The tanker truck circulation through the loading complex area is configured in a counterclockwise loop such that there is little to no crossing of inbound truck traffic with outbound truck traffic.

In addition to the proposed facilities noted above, additional improvements which are necessary to support the operation of both the existing and proposed facilities are expected to be constructed in the future as part of this project. These include such items as additional pipelines and pumps, containment dikes, miscellaneous new control facilities and upgrades to existing equipment. This may include the relocation of some tanks and equipment from the East Distribution Facility to the West Distribution Facility.

The 14.2 acre West Distribution Facility Offices and Support Area contains facilities that may need to be expanded, consolidated, or replaced. Consolidated or replacement facilities may be located either within the 14.2 acre area or elsewhere within the Plan Area at a location consistent with the operational requirements of the facility.

There is currently approximately 160,000 square feet of buildings within the combined East and West Distribution Facilities. Any increase in the total square footage would need to be made in conformance with the provisions described in Section 8.

Within the Facility Offices and Support Area (**Figure 2-3**), or elsewhere, all maintenance activities will be conducted within enclosed structures.

The full range of permitted uses is described at the end of this section.

East Distribution Facility

Located within a secure perimeter, the primary existing components of the East Distribution Facility include a railroad yard, rail and truck unloading stations, approximately 120 storage tanks of varying sizes, four (4) separate truck racks with nine (9) total truck loading lanes, and a packaging and distribution warehouse. The site development plan for the East Distribution Facility is illustrated in **Figure 2-5** East Distribution Facility and described in the section entitled Proposed Facilities, below.

Existing Facilities

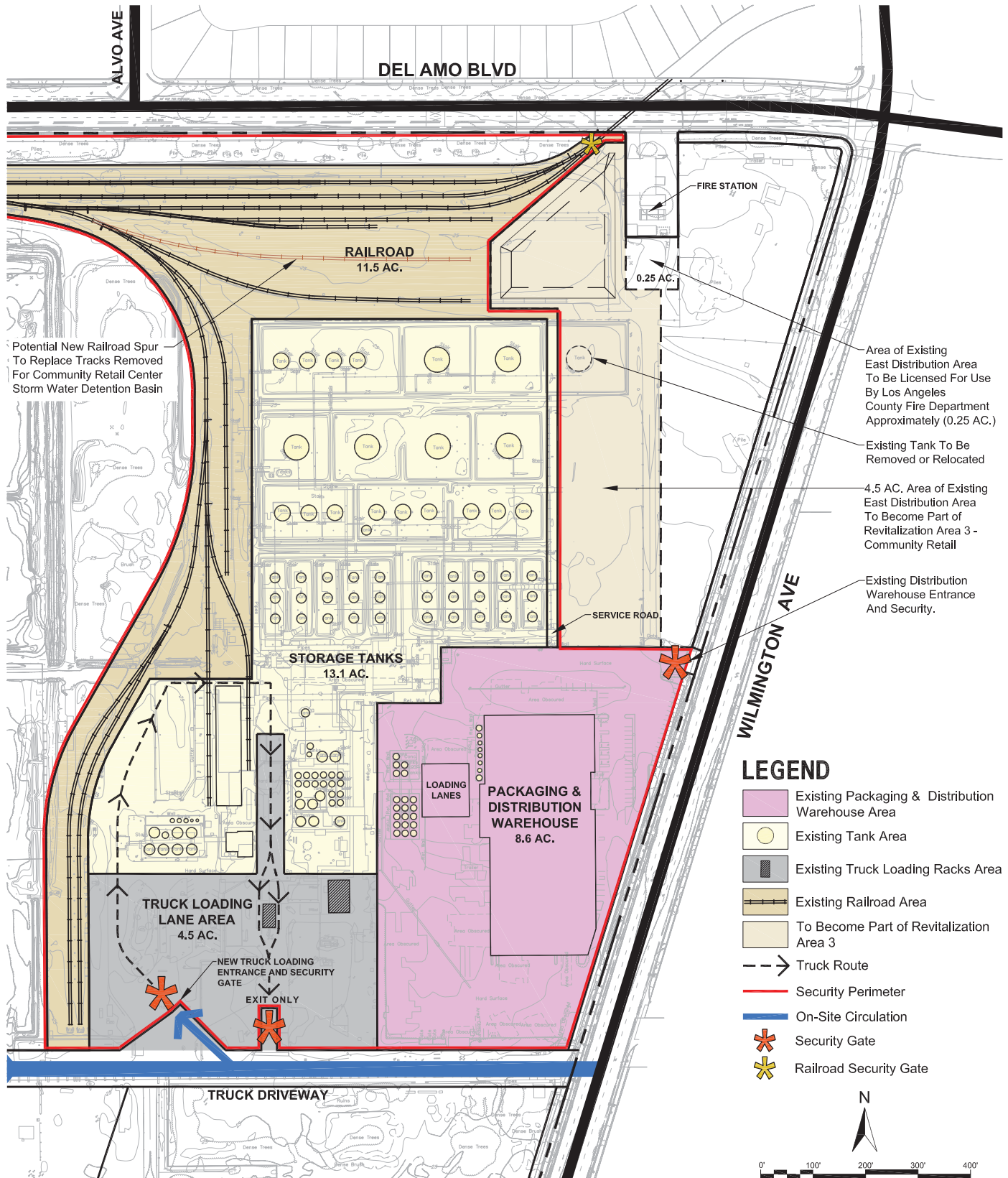
The existing facilities within the East Distribution Facility are illustrated in **Figure 2-1** Existing Conditions. The railroad yard described above is approximately 11.6 acres and situated along the north and west sides of the site. The storage tanks are generally arranged in a varying sized grid pattern in the central portion of this site. These tanks occupy approximately 15.3 acres. The existing packaging and distribution warehouse is located adjacent to Wilmington Avenue. With its associated truck parking and truck rack with three (3) loading lanes, it occupies approximately 8.6 acres. This warehouse area also has approximately 28 small storage tanks. The other truck racks (including six [6] loading lanes) are located near the southern boundary and occupy approximately 4.5 acres. In addition, there are miscellaneous pipeline control apparatus, utility, and storage areas located within the East Distribution Facility.

Proposed Access and Circulation

Access to the East Distribution Facility is along its southern boundary via the new two-way Truck Driveway extending westward from Wilmington Avenue (**Figure 2-5**). The Truck Driveway also serves the West Distribution Facility. Two access points off the Truck Driveway will serve the East Distribution Facility, providing access to the existing loading lanes.



Figure 2-5: East Distribution Facility



Using the new Truck Driveway, inbound trucks will enter the Plan Area from Wilmington Avenue at a new signalized intersection which will be located approximately 900 feet north of Dominguez Street. After trucks load or unload product, they exit the secure perimeter of the East Distribution Facility and return to Wilmington Avenue via the same Truck Driveway route. East Distribution Facility employees and authorized visitors will also use the Truck Driveway and these entrance/exit points to access the facility.

In addition, the East Distribution Facility is served by a railroad spur that connects to the Alameda Corridor to the east. The railroad spur crosses Del Amo Boulevard and Wilmington Avenue and enters the site at the northeast corner of the East Distribution Facility just west of the fire station. The spur feeds an internal railroad yard comprised of several parallel spur lines. From this yard, one spur extends south along the west side of the East Distribution Facility approximately 1,400 feet to the vicinity of the new Truck Driveway. Railroad tank cars convey products to the East Distribution Facility via this railroad spur for storage and subsequent packaging and distribution.

Another railroad spur extends west from the railroad yard approximately 1,700 feet to facilitate the internal maneuvering of tank cars within the railroad yard and into position on the southern spur serving the East Distribution Facility. The existing configuration of the western maneuvering spur extends beyond the future proposed extension of Tajauta Avenue into the property. When construction begins on Revitalization Area 6, which includes the extension of Tajauta Avenue, this railroad spur will be reconstructed to curve southward along an alignment east of Tajauta Avenue to avoid a railroad crossing of this roadway (**Figure 2-3**).

Proposed Facilities

There are no significant new facilities proposed for the East Distribution Facility. Most of the existing facilities will remain and the existing unloading, storage, packaging, warehousing and distribution functions will continue in a manner substantially consistent with current functions and activities. Minor changes to the existing facilities, which includes relocating tanks or equipment, may be required as part of normal adjustments to business operations.

The nine (9) existing loading lanes will remain and trucks using those lanes will arrive and depart the East Distribution Facility using the same Truck Driveway that serves the West Distribution Facility. The rail and truck unloading stations will also remain. The access points to the Truck Driveway are illustrated in **Figure 2-5**.

A new railroad spur is proposed on the north side of the East Distribution Facility. This spur will replace railroad car storage capacity that is lost by the removal of two segments of track to build the proposed Revitalization Area 3 – Community Retail storm water detention basin (**Figures 2-10 and 2-11**).



One (1) or more tanks and some associated pipe infrastructure located in the northeast portion of the site are proposed to be removed to clear a 3.3-acre area for allocation to the adjacent Revitalization Area 3. This additional land area is important to create a size and configuration of Revitalization Area 3 that is suitable for Community Retail use. Thus, as a result of this boundary adjustment, the proposed size of the East Distribution Facility is 4.5 acres less than the existing facility.

The existing Los Angeles County Fire Department fire station on Del Amo Boulevard is adjacent to the East Distribution Facility. Through an agreement with the landowner, separate from this Specific Plan, an approximately 0.25-acre area abutting the south boundary of the existing fire station is proposed for continued licensed use by the fire station (**Figure 2-5**).

Buffer/Setback Areas

Buffer and setback areas total approximately 39.0 acres within the 448-acre Plan Area. These areas are primarily located along the edges of the Plan Area and are illustrated conceptually in **Figure 2-3** Land Use Plan. The width of the buffer areas ranges from approximately 10 feet to 300 feet or more depending on physical constraints. These areas include various Plan Area perimeter landscaped buffer configurations as well as storm water retention basins and bioswales. Buffers and setback areas are described in detail in Section 5, Design Guidelines.

The Specific Plan buffer areas will be improved with landscaping whereas setback areas will contain some specific beneficial use e.g., storm water detention basins or swales. Both of these areas will be consistent with the goal of establishing a zone free of major industrial infrastructure, except where infeasible, around much of the West and East Distribution Facility, along the perimeter roadways of the Plan Area and along adjacent non-industrial land uses. Landscaping within some buffers will enhance the visual quality of the Plan Area perimeter to the extent feasible. Buffers may also be used as appropriate, for screening certain portions of the Revitalization Areas.

Existing Facilities

The existing buffers/setback areas along the perimeter of the 448 acre Plan Area are not formally defined and essentially consist of perimeter security fencing with narrow strips of landscaping in some locations. The size and configuration of these areas varies considerably depending on physical constraints. Along some Plan Area edges, the buffer consists solely of the security fence. Existing facilities within the buffer/setback areas are limited and generally include storm water ditches, service roads, containment structures, and/or infrastructure such as pipelines—both above and below ground. Much of the land directly adjacent to the Plan Area perimeter

is currently vacant or underutilized as illustrated in **Figure 2-1 Existing Conditions**.

Proposed Access and Circulation

The buffer/setback areas often include security fencing. Thus, access and circulation to and within these areas is generally limited to those access points and service roads necessary for security, emergency or maintenance vehicles and/or personnel. In most cases such access is provided from within the West and East Distribution Facility and the Revitalization Areas. In some cases, particularly for those areas adjacent to public streets, maintenance access will be from those public streets.

Proposed Facilities

The proposed major facilities and improvements within the buffer/setback areas are generally shown on **Figure 2-3 Land Use Plan**. More detail is included in Section 5—Design Guidelines. The improvements are generally comprised of new and/or enhanced landscaping where there is sufficient land area and screening/security fences along the Plan Area perimeter roadways. This includes along 213th Street, Del Amo Boulevard, Wilmington Avenue, Annalee Avenue, as well as portions of Chico Street and Martin Street. Landscape improvements will also be provided along the extensions of Tajauta Avenue and Dominguez Street into the Specific Plan area.

In some areas the width of the landscape buffer is significantly constrained by existing facilities and/or industrial infrastructure that cannot be relocated in an economically feasible manner. In other areas, vacant and underutilized property allows buffers/setbacks to be expanded to more than 300 feet wide. In these wider areas, the narrow landscaped buffer along the street is augmented by the additional non landscaped setback areas. These setback areas provide important support functions for the Distribution and Revitalization Areas without creating significant impacts such as visual intrusion, noise, or air pollution. For example, storm water detention basins with associated landscaping along edges visible from a public right-of-way are located in setback areas along 213th Street, Del Amo Boulevard, and the extension of Tajauta Avenue.

Figure 2-6: Revitalization Area 1

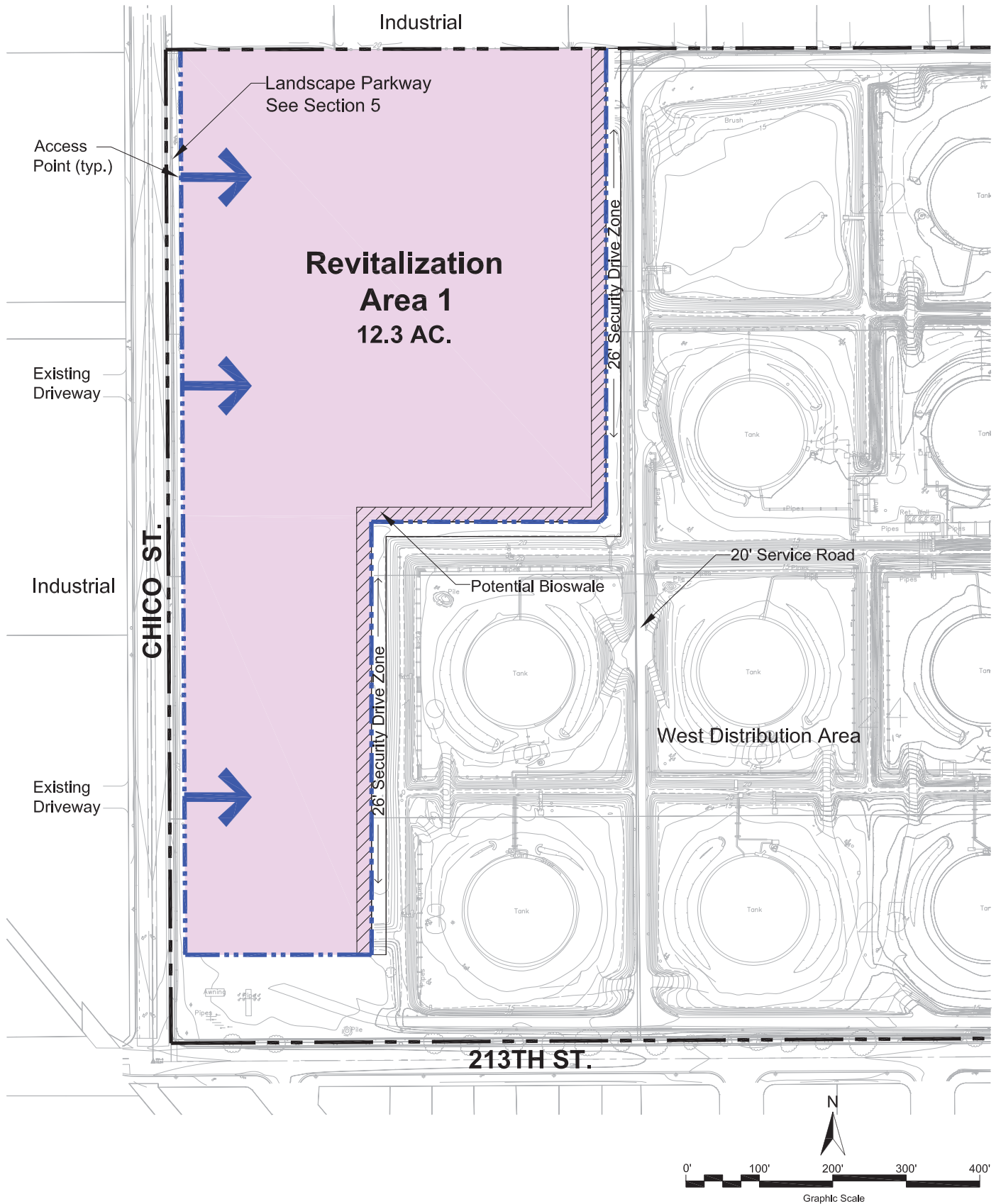


Figure 2-7: Revitalization Area 1 – Conceptual Building Site Plan

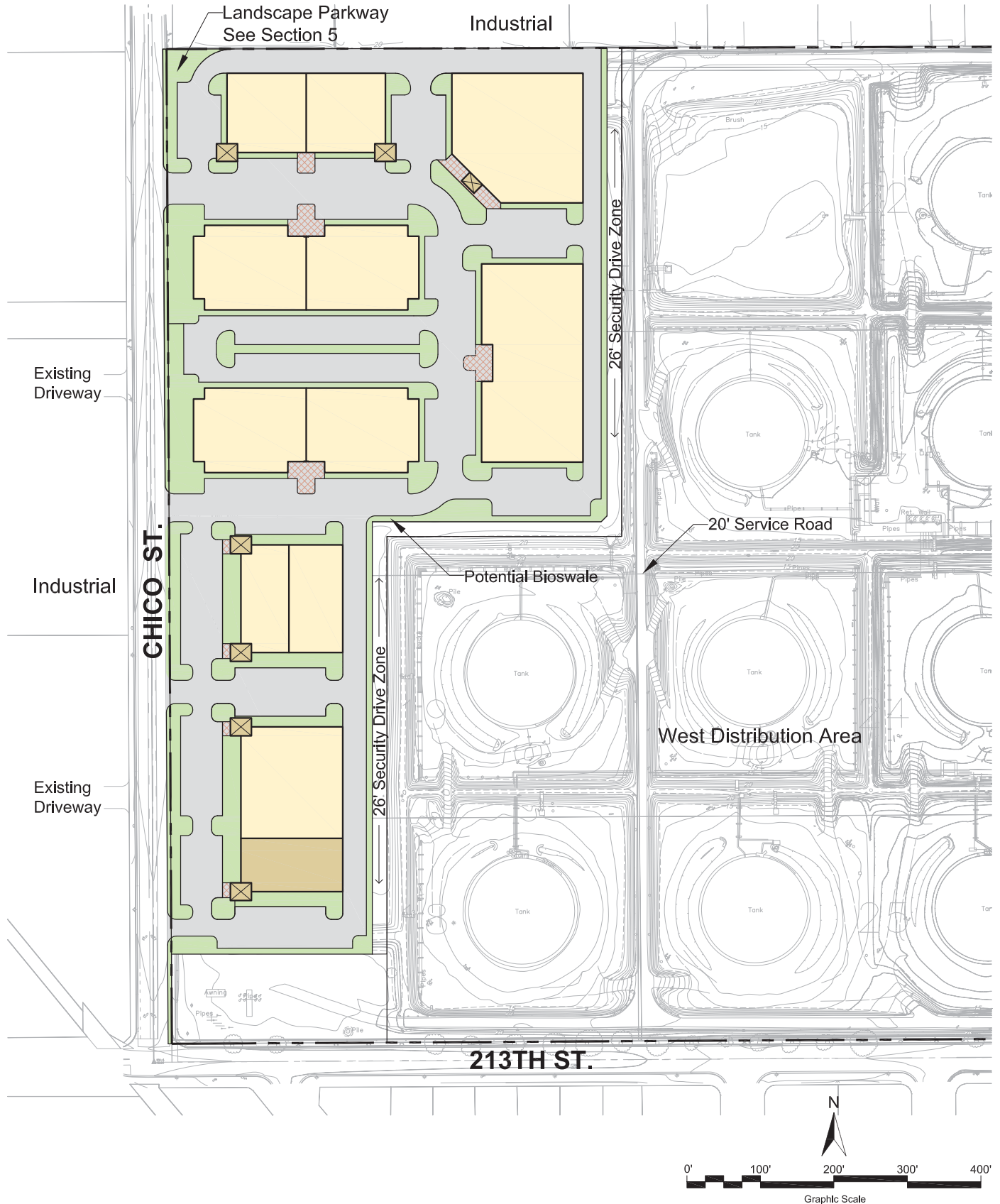


Figure 2-8: Revitalization Area 1 – Conceptual Site Plan Building Site Plan View



View to east



View to northeast

Revitalization Areas 1 through 6

The six revitalization areas total approximately 108.3 acres of the Plan Area and are illustrated in **Figures 2-2 and 2-3**. They are located near the edges of the Plan Area or adjacent to public access roads that would be extended into the Plan Area. They comprise property that is vacant, underutilized, or improved with facilities that are proposed to be relocated as part of the implementation of the Specific Plan. These areas are proposed to be developed with uses that would be generally unrelated to the activities in the West and East Distribution Facility. The exception may be a solar energy facility, which may provide some portion of the power needed to operate the Distribution Facility. Proposed uses in the Revitalization Areas include retail, commercial, and industrial, and the Specific Plan includes individual use and design standards for each of these six areas.

The overall development program for the Revitalization Areas is shown in **Table 2-4**.

Table 2-4: Distribution Facility and Revitalization Area Development Program

Distribution Facility and Revitalization Area (RA)	Size (acres)	Revitalization Area Target FAR	Mixed Industrial (Flex Space, Manufacturers, Industrial Services, Business Services, Office, Distribution/Warehouse) ¹		Retail ¹	Limited Commercial/Utility Uses	Total Existing and Proposed
			Existing	Proposed ¹	Proposed ¹	Proposed	
Distribution	323.6	N/A	160,000	0	--		160,000
RA 1	12.3	0.45	0	241,000	--		241,000
RA 2	13.3	N/A	0	N/A	--	N/A ²	N/A ²
RA 3	8.8	0.22	0		83,000		83,000
RA 4	14.3	0.27	0	170,000 ³	--		170,000
RA 5	11.2	0.45	0	220,000	--		220,000
RA 6	48.2	0.45	0	949,000	--		949,000
Total	431.9	--	160,000	1,580,000	83,000		1,823,000

1 Maximum projected development.

2 The limited commercial uses such as solar power facility, plant nursery, RV storage, etc. are not expected to include daily occupied structures.

3 Based on Final Master Plan Reports, City of Carson Municipal Services Yard, February 2008.

Revitalization Area 1

The site development plan diagram for the 12.3 acre Revitalization Area 1 (Area 1) is illustrated in **Figure 2-6** Revitalization Area 1. A conceptual building site plan for Area 1 is illustrated in **Figure 2-7** and views of that plan from several different angles are illustrated in **Figure 2-8**.



Existing Facilities

The existing facilities within Revitalization Area 1 are illustrated on **Figure 2-1 Existing Conditions**. Currently a storm water detention/retention basin is the predominant use. This basin is one of two such basins currently serving the Specific Plan area. Storm water is collected at various points on the property and pumped to this detention/retention basin where it is retained until it evaporates, infiltrates into the ground or is pumped to the other basin located near Del Amo Boulevard. At build-out of the entire Plan Area, a total of approximately 30 acres of detention/retention basins are estimated to be needed. Prior to the development of new uses in Area 1, the storm water capacity provided by this existing basin will need to be replaced elsewhere in the Plan Area. It is anticipated that this replacement capacity will be either within an improvement of the existing basin in the buffer area along Del Amo Boulevard and Tajauta Avenue or within new basins located in the buffer area along 213th Street west of Martin Street (**Figure 2-3**).

Proposed Access and Circulation

The access to Revitalization Area 1 will be from Chico Street, an existing street on the west side of the 448 acre Plan Area. Chico Street connects at 'T' intersections to both Dominguez Street on the north and 213th Street on the south and via those streets to Avalon Boulevard and Interstate 405. Chico Street also connects to Del Amo Boulevard to the north via Leapwood Avenue (**Figure 3-3**). These connections to existing commercially oriented streets facilitate the development of this area as Industrial/Commercial while minimizing any traffic impact on nearby residential collector streets.

Outside of but adjacent to the east side of Revitalization Area 1 is a service/security drive/fire lane serving the West Distribution Facility. The width of this access drive is proposed to be 26 feet in accordance with the standard desired by the Los Angeles County Fire Department.

Proposed Facilities

The primary use proposed for Revitalization Area 1 is a combination of commercial and light industrial uses. The permitted and prohibited commercial and light industrial activities, and other uses, are listed in **Tables 2-5 and 2-6**. Area 1's location, adjacent to the existing industrial park to the north, as well as the Project's market study, indicate it is suitable for small-scale flex-space-type users. These types of users often combine front-of-house offices and showrooms with back-of-house assembly and light manufacturing operation. The location of Area 1 and its size also indicate it is suitable for warehouse type retail operations that often locate near, but not within, major shopping areas such as South Bay Pavilion. Should such a project be proposed, additional traffic and parking studies may be necessary to determine that the proposed commercial use is consistent with the Specific Plan traffic analysis and the parking requirements for that particular use.

The overall Development Standards and Design Guidelines for the Specific Plan, including Revitalization Area 1, are described in Sections 4 and 5, respectively. Specific design guidelines for this site are also illustrated in **Figure 2-6** and are described as follows:

- Access will be from Chico Street. Driveways will be a minimum of 200 feet from 213th Street. Driveways will either be aligned with existing driveways on the west side of Chico Street or be offset by a minimum of 100 feet from those existing driveways.
- A storm drainage bioswale is expected to be located along the east side of the property (see Section 5, Design Guidelines).
- Given its larger land area, the northern portion of the site is suitable for large-scale retail commercial-type uses as well as light industrial use. There is ample area to include a large parking field to support such a retail commercial use.
- No improvements near the east side of the site shall impact the perimeter security facilities of the adjacent West Distribution Facility.

The full range of permitted uses is described at the end of this section.



Revitalization Area 2

The site development plan diagram for the 13.3-acre Revitalization Area 2 is illustrated in **Figure 2-9** and described below.

Existing Facilities

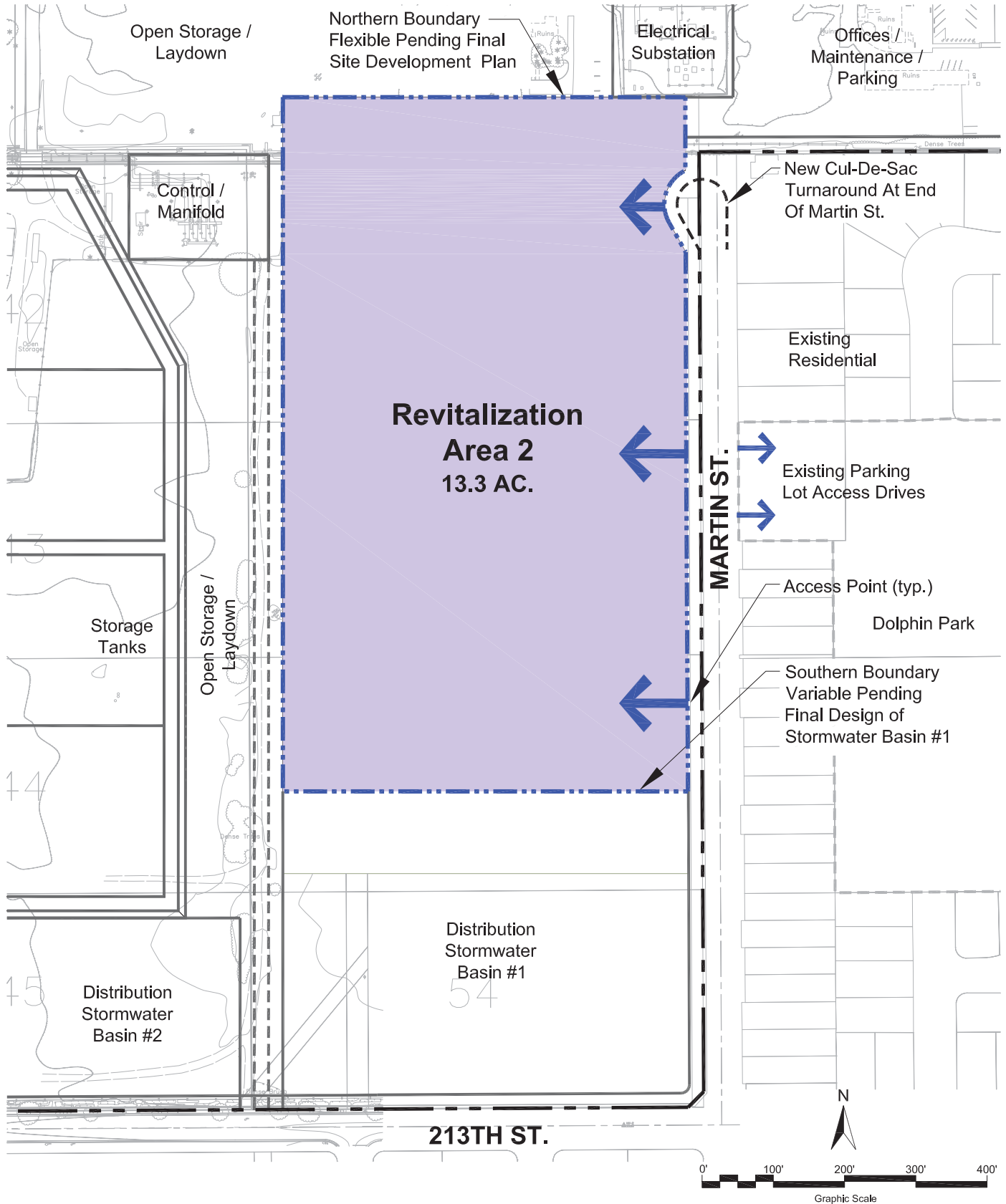
There are no existing facilities within Revitalization Area 2, with the exception of an overhead utility pole line and several pipelines. It is generally vacant property that was used at one time for agriculture. The north boundary is approximately 100 feet north of the northern end of Martin Street and abuts an electrical substation within the West Distribution Facility. The east boundary is Martin Street. The west boundary is near a north-south easement for pipelines within the West Distribution Facility.

Proposed Access and Circulation

The access to Revitalization Area 2 is from Martin Street, a local residential street, which connects to 213th Street, a residential collector street. The current traffic volumes on 213th Street are approximately 4,000 vehicles per day (City of Carson General Plan). This is within the traffic carrying capacity of the roadway as defined by the Transportation Element of the General Plan. However, the Transportation Element of the General Plan also emphasizes the importance of protecting neighborhoods from the impacts of excessive traffic volumes and speeding.

The General Plan anticipates that residential collector streets, such as 213th Street, will carry between 2,000 and 5,000 total vehicles per day.

Figure 2-9: Revitalization Area 2



Any additional development that would generate significant additional traffic on 213th Street could cause the anticipated daily volume to be exceeded. Therefore, the uses allowed in Revitalization Area 2 are limited to a very narrow range of uses that, while utility or commercial in nature, produce little traffic beyond periodic maintenance and service vehicles. These permitted uses are described below and at the end of this section.

Proposed Facilities

The proposed facilities within Revitalization Area 2 are within a limited range of utility, commercial, and open space uses that share the common characteristic of generating little daily vehicular traffic. The permitted and prohibited uses are listed in **Tables 2-5 and 2-6**. Typical uses that meet this criteria include: a solar energy facility, a Christmas tree farm or other plant growing facility for off-site sales, and recreational vehicle storage. These and similar uses respect the constraints of the site while providing a productive use for this area. Given its location adjacent to the residential community to the east and south, Area 2 itself functions as a buffer from the heavy industrial use of the West Distribution Facility. Distribution Stormwater Basin #1 will be located between the southern boundary of Revitalization Area 2 and 213th Street.

The overall Development Standards and Design Guidelines for the Specific Plan, including Revitalization Area 2, are described in Sections 4 and 5, respectively. Specific design guidelines for this site are also illustrated in **Figure 2-9** and are described as follows:

- Traffic volumes generated by the use will be very low.
- Permanent access will be from Martin Street.
- Construction access will be from 213th Street.
- A new cul-de-sac turnaround will be constructed at the end of Martin Street.
- The screen fence and landscaping along Martin Street will be as described in Section 5, Design Guidelines.
- No improvements near the north, south, or west sides of the site shall impact the perimeter security facilities of the West Distribution Facility.
- The location of the northern and southern boundaries of Area 2 is flexible depending on the configuration of the final site development plan for Area 2.

The full range of permitted uses is described at the end of this section.

Revitalization Area 3

The site development plan diagram for the 8.8-acre Revitalization Area 3 is illustrated in **Figure 2-10**. A conceptual building site plan for Area 3 is illustrated in **Figure 2-11** and views of that plan from different angles are illustrated in **Figure 2-12**.

Figure 2-10: Revitalization Area 3

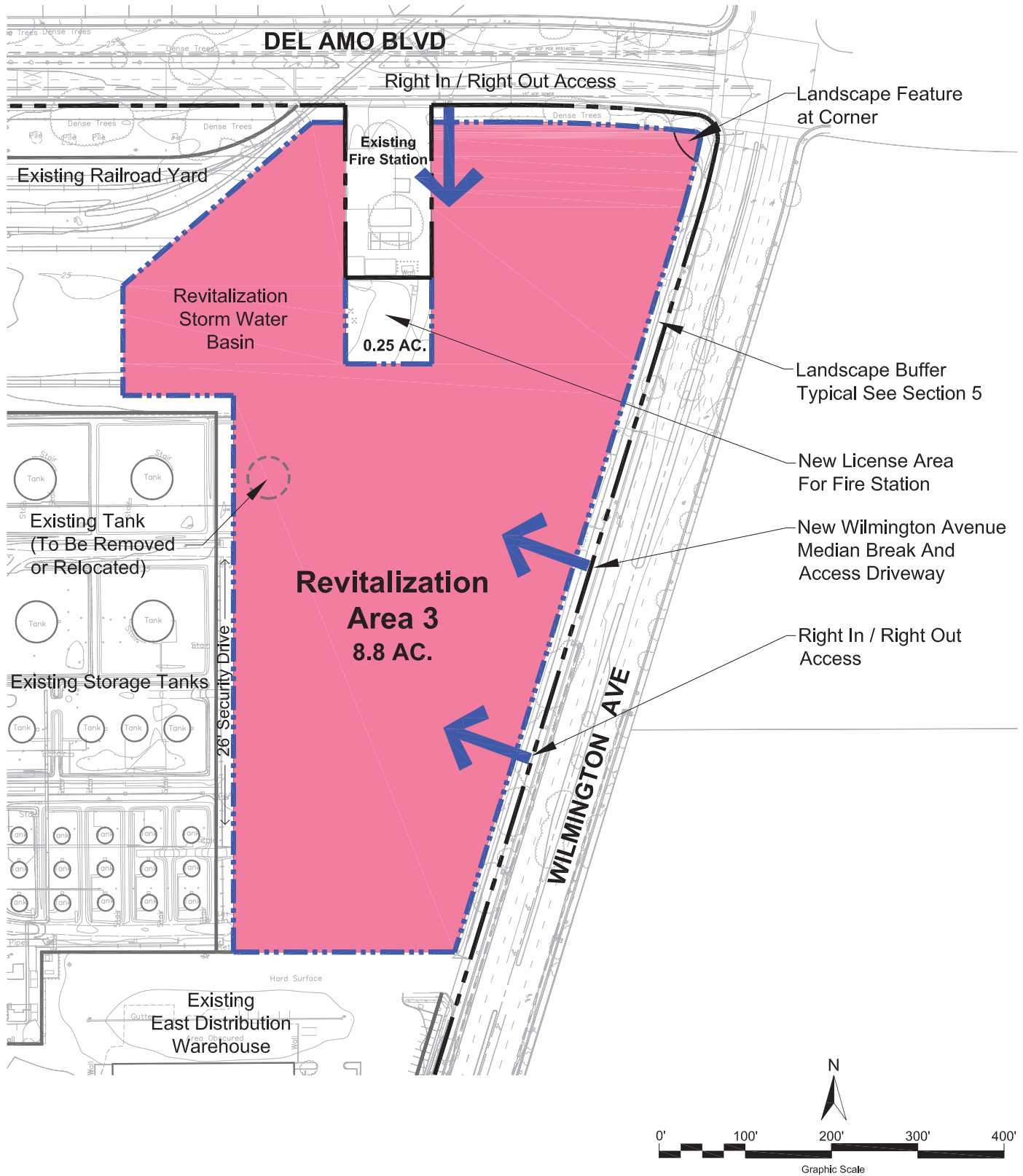


Figure 2-11: Community Retail Center – Conceptual Building Site Plan



Figure 2-12: Community Retail Center – Conceptual Building Site Plan Views



View to southwest



View to northwest

Existing Facilities

Much of Revitalization Area 3 is currently vacant. The western portion of Area 3 contains a railroad spur, and storage tank that are associated with the operations of the Distribution Facility. Necessary facilities will be removed and/or relocated to make this portion of Area 3 available for commercial development. In addition, some underground pipelines and utilities bisect the site and may impact the final site development plan for Area 3.

Proposed Access and Circulation

Revitalization Area 3 is designated for Community Retail uses; consequently, convenient and efficient access is critical to the viability of the site. Primary access is from Wilmington Avenue with two points of access located along this frontage. The first access point is located approximately 600 feet south of the intersection of Wilmington Avenue and Del Amo Boulevard. This access point will allow all movements and will be signalized. The second access point will be located approximately 800 feet south of Wilmington Avenue. This access point will be a right-in/right-out driveway. A third access point is provided by a right-in/right-out driveway located on Del Amo Boulevard just east of the fire station. Internal circulation driveways connect through parking areas to these three access points.

Proposed Facilities

The proposed uses within Revitalization Area 3 are a full range of retail and food service uses normally associated with a shopping center oriented to both the local neighborhood and broader community. See **Table 2-7** and **Table 2-8** for permitted and prohibited uses in this Revitalization Area. The configuration of these facilities may vary depending on the final mix of future tenants.

The overall Development Standards and Design Guidelines for the Specific Plan, including Revitalization Area 3, are described in Sections 4 and 5, respectively. Specific design guidelines for this site are also illustrated in **Figure 2-10** and are described as follows:

- Access is provided by two driveways on Wilmington Avenue and one right-in/right-out driveway on Del Amo Boulevard.
- A storm drainage detention basin is located west of the fire station.
- The site edge buffers are as illustrated in Section 5, Design Guidelines.
- No improvements near the west and south sides of the site shall impact the perimeter security facilities of the East Distribution Facility.

The full range of permitted uses is described at the end of this section.

Not included in Revitalization Area 3 but adjacent to it and immediately south of the existing fire station is a 0.25 acre area. This area is intended for use by the fire department, providing them with additional space for storage of equipment and supplies. This is illustrated in **Figure 2-10**.



Revitalization Area 4

The site development plan for the 14.3-acre Revitalization Area 4 is illustrated in **Figure 2-13** and is described below.

Existing Conditions

Most of Revitalization Area 4 is currently vacant. Part of Area 4 is currently being used by a lessee as a Christmas-tree-growing operation. The southern edge of the site includes the existing main entrance driveway and security gate currently serving the majority of the Plan Area.

Proposed Access and Circulation

The primary access to Revitalization Area 4 is provided by the extension of Dominguez Street into the Specific Plan area. Additional access may be provided by a right-in/right-out driveway on Wilmington Avenue. When Tajauta Avenue is extended into the Plan Area to connect to the extension of Dominguez Street, additional access will be provided from Del Amo Boulevard.

There is no access to Revitalization Area 4 from the Truck Driveway on the north boundary. This Truck Driveway is for access to the West and East Distribution Facilities only.

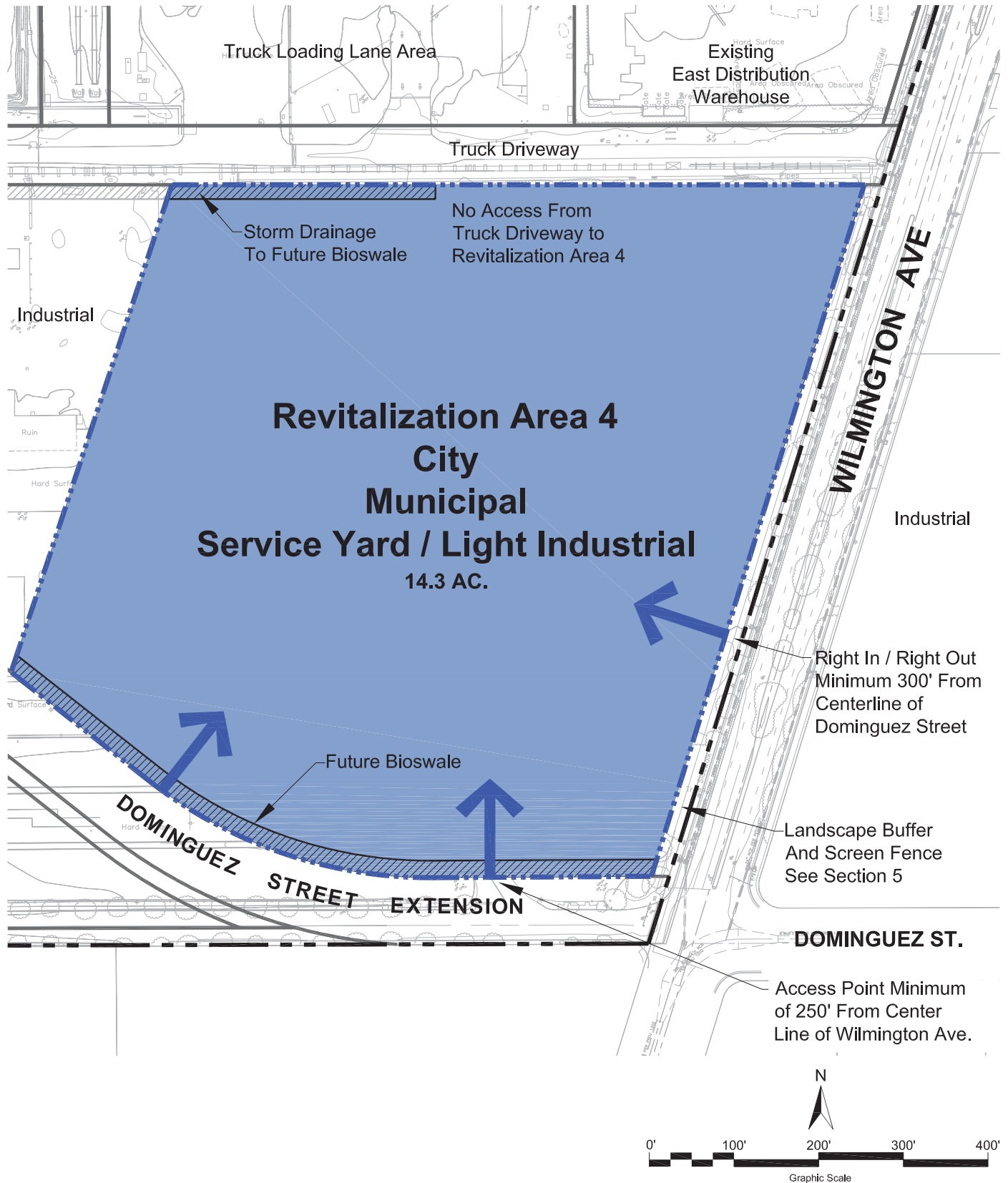
Proposed Development

The primary proposed use for Revitalization Area 4 is a potential replacement site for the City of Carson Municipal Services Yard or light industrial development. The spatial program needs for the Municipal Services Yard were projected in a Master Planning Report for the City Hall Annex and Municipal Services Yard dated February 2008. The Report identified a spatial program of approximately 170,000 square feet of building structures including office and support areas, crew areas, shops and storage, and other covered areas. The spatial program also identified a need for approximately 209,000 square feet (4.8 acres) of exterior areas for various parking and open storage functions. The site circulation, landscaping and setbacks will increase the total development program to the 14.3-acre site provided for this facility.

If the site is not developed as the replacement Municipal Services Yard per a separate agreement, the underlying use is industrial and manufacturing. The permitted and prohibited industrial and manufacturing activities, and other uses, are detailed in **Tables 2-5 and 2-6**.

Due to soil constraints, it is expected that the western portion of Revitalization Area 4 will be mostly paved and used for vehicle parking, and open storage of materials and equipment. Building structures will typically be located on the eastern portion of the site adjacent to Wilmington Avenue. The location and configuration of this site provide an opportunity for developing a relatively large paved multipurpose area with convenient access to the Wilmington Avenue truck route. Thus, Area 4 is particularly suitable for a

Figure 2-13: Revitalization Area 4



Municipal Services Yard or another use that is related to transportation, vehicle parking, or equipment and material storage. Such uses may require screening and buffers along Wilmington Avenue and Dominguez Street.

The overall Development Standards and Design Guidelines for the Specific Plan, including Revitalization Area 4, are described in Sections 4 and 5, respectively. Specific design guidelines for this site are also illustrated in **Figure 2-13** and are described as follows:

- Prior to the construction of new uses in Revitalization Area 4 and the extension of Dominguez Street into the Plan Area along its new alignment, the existing entrance facilities at the southern edge of Area 4 will be realigned to make the site available for development.
- The northern boundary of Area 4 along the Truck Driveway that is greater than 100 feet from the edge of the Wilmington Avenue right-of-way is exempt from screening, landscaping, and edge treatment requirements as indicated elsewhere in the Development Standards and Design Guidelines.
- Except for the 150 feet immediately east of the extension of Tajauta Avenue, the storm drainage bioswale located on the north side of Dominguez Street should be incorporated into the overall landscaping plan for parcels with frontage on Dominguez Street.

The full range of permitted uses is described at the end of this section.

Revitalization Area 5

The site development plan for the 11.2-acre Revitalization Area 5 area is illustrated in **Figure 2-14** and is described below.

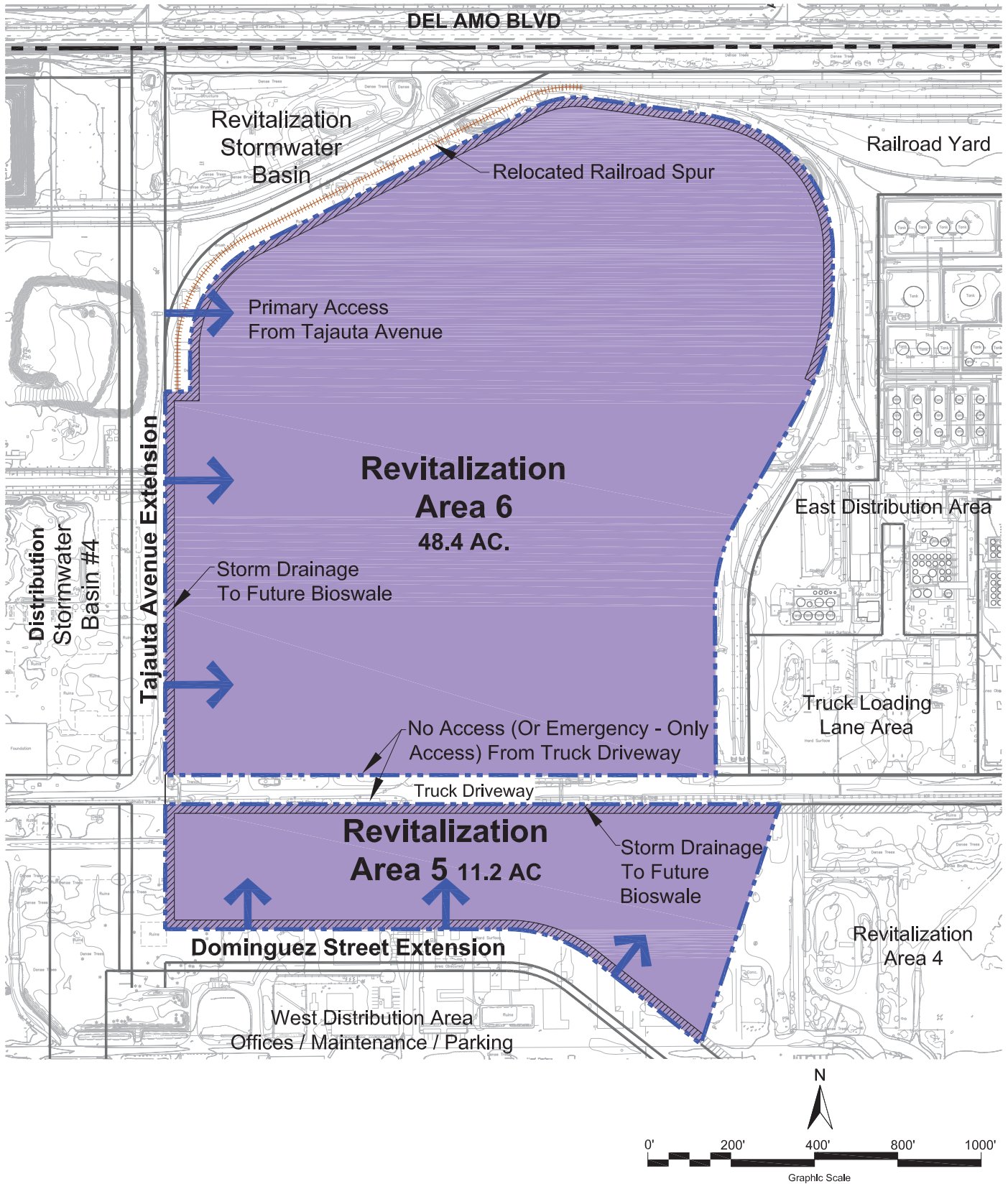
Existing Conditions

Most of Revitalization Area 5 is currently vacant or used for open storage of materials and equipment. Some maintenance and storage buildings are located on the south side of the site near the future alignment of Dominguez Street. There is also one water tank on the site located near the future Truck Driveway. Prior to the development of new uses in Revitalization Area 5, necessary facilities will be removed or relocated to areas within the East or West Distribution Facility.

Proposed Access and Circulation

The primary access to Revitalization Area 5 is from the extension of Dominguez Street westward from Wilmington Avenue into the Specific Plan area. Access may also be from the segment of future Tajauta Avenue between Dominguez Street and the Truck Driveway. When Tajauta Avenue is extended into the Plan Area to connect to the extension of Dominguez Street, this will also allow access from Del Amo Boulevard. However, in the case that Tajauta Avenue has not been constructed prior to the extension

Figure 2-14: Revitalization Areas 5 and 6





of Dominguez Street, an emergency-only access connection to the Truck Driveway will be provided.

There is no access to Revitalization Area 5 from the Truck Driveway on the north boundary. This Truck Driveway is for access to the West and East Distribution Facility only. Truck access to Area 5 will be via Wilmington Avenue, the designated truck route.

Proposed Development

The primary proposed uses for Revitalization Area 5 are Industrial and Manufacturing uses. The permitted and prohibited industrial and manufacturing activities, and other uses, are listed in **Tables 2-5 and 2-6**. Area 5 is slightly constrained due to the relatively narrow parcel depth between Dominguez Street (a public access easement) and the Truck Driveway. It is expected that uses with smaller land area requirements will be located here.

The overall Development Standards and Design Guidelines for the Specific Plan including Revitalization Area 5 are described in Sections 4 and 5 respectively. Specific design guidelines for this site are described in **Figure 2-14** and as follows:

- To provide the best possible streetscape along Dominguez Street, buildings should be sited close to Dominguez Street with service areas to the rear of the parcel adjacent to the Truck Driveway.
- Architectural treatments should emphasize building façades oriented toward Dominguez Street.
- The northern boundary of Area 5 along the Truck Driveway is exempt from screening, landscaping, and edge treatment requirements, as indicated elsewhere in the Development Standards and Design Guidelines.

The full range of permitted uses is described at the end of this section.

Revitalization Area 6

The site development plan for the 48.4-acre Revitalization Area 6 is illustrated in **Figure 2-14** and is described below.

Existing Conditions

Revitalization Area 6 is currently vacant and is situated on a portion of the site of the former refinery; soil remediation activities are currently underway on this site. The site is to be prepared for redevelopment through planned remediation activities and/or through engineered and/or institutional controls. The anticipated completion timeframe for these activities indicates that development within Revitalization Area 6 is likely to occur in the last phase of Specific Plan development (see Section 7).

Proposed Access and Circulation

Primary access to Revitalization Area 6 is from the extension of Tajauta Avenue south from Del Amo Boulevard into the Plan Area. When Tajauta Avenue is extended into the Plan Area, it is expected to connect to the extension of Dominguez Street to be constructed beforehand. This will allow access from Wilmington Avenue as well. However, in the case that Dominguez Street has not been constructed prior to the Tajauta Avenue extension, an emergency-only access connection to the Truck Driveway will be provided.

The development of Revitalization Area 6 for light industrial uses is expected to require the relocation of the existing railroad spur along the north boundary of Revitalization Area 6. The extent of this relocation will be determined by the final design of Revitalization Area 6 and the Revitalization Stormwater Basin to the north.

There is no access to Revitalization Area 6 from the Truck Driveway on the south boundary. This Truck Driveway is for access to the West and East Distribution Facility only. Truck access to Area 6 will be via Del Amo Boulevard and Wilmington Avenue, the designated truck routes.

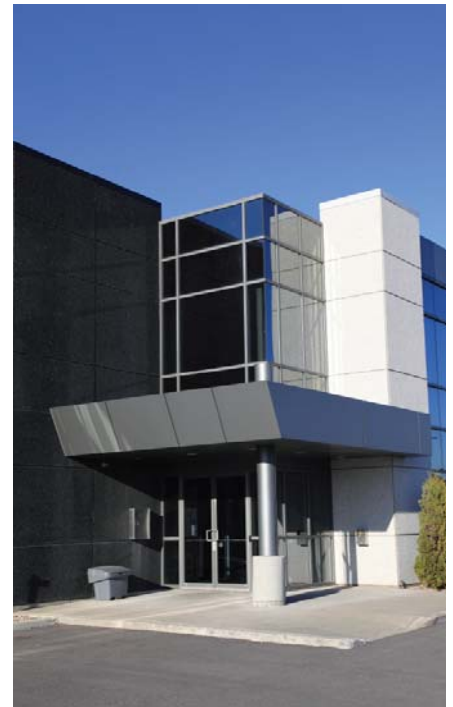
Proposed Development

The primary proposed uses for Revitalization Area 6 are Industrial and Manufacturing. The permitted and prohibited industrial and manufacturing activities, and other uses, are listed in **Tables 2-5 and 2-6**. Considering the size and configuration of the site, it may be most suitable for a variety of separate businesses. In the case that market demand at the time of development is for multiple sites, an internal circulation road, not currently shown on **Figure 2-14**, may be required to provide access from Tajauta Avenue to these various businesses.

The overall Development Standards and Design Guidelines for the Specific Plan including Revitalization Area 6 are described in Sections 4 and 5 respectively. Specific design guidelines for this site are described in **Figure 2-14** and as follows:

- The storm drainage bioswale located on the east side of Tajauta Avenue should be incorporated into the overall landscaping plan for parcels with frontage on Tajauta Avenue.
- Architectural treatments should emphasize façades oriented toward Tajauta Avenue.
- The southern boundary of Area 6 along the Truck Driveway, except for the 150 feet immediately east of the extension of Tajauta Avenue, and the northern and eastern boundaries of Area 6 along the East Distribution Facility are exempt from screening, landscaping, and edge treatment requirements, as indicated elsewhere in the Development Standards and Design Guidelines.

The full range of permitted uses is described at the end of this section.





Permitted Land Uses

The land use designations described herein include the level of detail necessary to clarify and specify the permitted uses as well as the limitations and variations that are allowed. Once approved, the Specific Plan will constitute the new zoning for the Specific Plan area. Any policies, regulations, standards, or guidelines not specifically addressed or modified in this Specific Plan will be regulated under the existing provisions within the City of Carson Zoning Code.

Tables 2-5 and 2-7 on the following pages identify permitted land uses for each of the specific development areas within the Plan Area. A list of uses prohibited within the Plan Area is also provided in **Table 2-6** and **Table 2-8**. All uses are prohibited except as expressly permitted by the provisions of **Tables 2-5 and 2-7**. However, uses not listed can be found to be permitted uses in accordance with CMC 9172.24 Interpretation Procedure.

Uses that require limited site improvements, such as storage use, are temporarily allowed during the ongoing remediation activities in Revitalization Areas 4, 5, and 6. Appropriate screening from the surrounding public streets may be required for these temporary uses.



Table 2-5: Carson Revitalization Project Permitted Uses in Specific Plan Areas

Permitted Uses	Specific Plan Areas							
	West Distribution Facility Operations Area	West Distribution Facility Offices and Support Area	East Distribution Facility	Revitalization Area 1	Revitalization Area 2	Revitalization Area 4	Revitalization Area 5	Revitalization Area 6
MANUFACTURING OF THE FOLLOWING PRODUCTS								
Pharmaceuticals – drugs, medicines, vitamin tablets				X		X	X	X
Perfume, cosmetics, toiletries (except soap)				X		X	X	X
Novelties, buttons, brushes, toys, candles				X		X	X	X
Ceramics, pottery, statuary						X	X	X
Jewelry, watches, clocks, optical goods, musical instruments, scientific instruments, electronic instruments, phonographs, phonograph records, radios, television sets, electronic parts, precision metal products, wire, springs, tools, sandpaper, emery cloth, grinding wheels, printer's type				X		X	X	X
Electric and gas fixtures, electric appliances, electric motors and generators, batteries (including rebuilding), signs (electric, neon, billboards, etc.)				X		X	X	X
Furniture, bedsprings, boxes, coffins, fences, sash and doors, venetian blinds, window shades				X		X	X	X
Clothing, dry goods, draperies, bedding, rugs, upholstery, automobile seat covers, awnings, bags, rope, baskets				X		X	X	X
Ink, polish, putty, enamel (except lacquer, synthetic enamel, polyurethane), ethylene glycol				X		X	X	X
Engines (no foundry)				X		X	X	X
Tile (indoor kiln)						X	X	X
Biodiesel fuel	X		X				X	X
MANUFACTURING OF PRODUCTS FROM THE FOLLOWING MATERIALS								
Textiles, wood, yarn, fur, felt, canvas, leather, hair, feathers, paper, cloth				X		X	X	X
Bone, horn, shells, cellophane, casein (except glue)				X		X	X	X
Wood, cork, fiberglass, clay, glass (no blast furnace), plastic (no pyroxylin)				X		X	X	X
Aluminum, sheet metal, ornamental iron, steel (no outdoor welding)				X		X	X	X
Rubber (rubber is not to be melted and, where a banbury mixer is used, the resulting dust is to be washed)				L		L	L	L
MANUFACTURING OF THE FOLLOWING MATERIALS								
Dextrin				X		X	X	X
Cloth, textiles, upholstery, felt, canvas				X		X	X	X
Wallboard, fiberglass, glass (no blast furnace)				X		X	X	X

X Automatically permitted use

L Automatically permitted use provided special limitations and requirements are satisfied (CMC, Division 8 of Part 4 and Division 8 of Part 3)

C Use permitted upon approval of a conditional use permit

A Permitted as an Accessory Use

Table 2–5: Carson Revitalization Project Permitted Uses in Specific Plan Areas (Continued)

Permitted Uses	Specific Plan Areas							
	West Distribution Facility Operations Area	West Distribution Facility Offices and Support Area	East Distribution Facility	Revitalization Area 1	Revitalization Area 2	Revitalization Area 4	Revitalization Area 5	Revitalization Area 6
INDUSTRIAL ACTIVITIES INVOLVING THE FOLLOWING PROCESSES								
Sewing, weaving and knitting of textiles, dyeing of yarn and fabrics				X		X	X	X
Cleaning of fabrics, curtains, carpets				X		X	X	X
Mattress renovation				X		X	X	X
Photo-finishing, film developing and processing, photoengraving, lithography, block printing, silk screening, printing, book binding				X		X	X	X
Glass silvering, optical grinding, fitting and mounting; glass blowing (no blast furnace)				X		X	X	X
Furniture redecorating and restoration, antique restoration, cabinet making, wood carving				X		X	X	X
Plastic molding (including hydraulic press)				X		X	X	X
Tire retreading and recapping				X		X	X	X
Raw rubber processing (rubber is not to be melted and, where a banbury mixer is used, the resulting dust is to be washed)				L		L	L	L
Metal plating and finishing (no perchloric acid)				L		L	L	L
Metal engraving, metal fabrication (no snap riveting) metal spinning, tool tempering, welding (no outdoor welding)				X		X	X	X
Foundry (no brass or bronze) – precision investment casting, die casting						X	X	X
Grinding, dressing or cutting of stone, granite or marble; sand washing				X		X	X	X
Starch mixing and bottling, paint spray booth, shellac mixing (no cooking), paint or enamel mixing (except lacquer, synthetic enamel, polyurethane)				X		X	X	X
Oil canning and packaging (not more than 100 barrels stored above ground)				L		L	L	L
Oil canning and packaging (no limit on amount stored above ground)	X		X					
Water treatment	X		X	X	X	X	X	X
FOOD MANUFACTURING AND PROCESSING								
Ice, soft drinks, beer, wine, malt products, dairy products, candy, confections, pastries, bread, oleomargarine, sodium glutamate, honey, nuts and similar food products (no lard, pickles, sauerkraut, or vinegar)				X		X	X	X
Box lunch preparation				X		X	X	X
Fruits and vegetables – packing, canning, processing or extracting or bottling of juices (must be at least 100 feet from any residential zone, public school, public park, hospital or long-term health care facility)				L		L	L	L
Fish barbecuing or smoking (oven less than 10 cubic feet, no fish cleaning, retail sales only)				L		L	L	L

- X Automatically permitted use
- L Automatically permitted use provided special limitations and requirements are satisfied (CMC, Division 8 of Part 4 and Division 8 of Part 3)
- C Use permitted upon approval of a conditional use permit
- A Permitted as an Accessory Use

Table 2-5: Carson Revitalization Project Permitted Uses in Specific Plan Areas (Continued)

Permitted Uses	Specific Plan Areas							
	West Distribution Facility Operations Area	West Distribution Facility Offices and Support Area	East Distribution Facility	Revitalization Area 1	Revitalization Area 2	Revitalization Area 4	Revitalization Area 5	Revitalization Area 6
SERVICE AND REPAIR								
Linen, towel or uniform supply				X		X	X	X
Assaying, gas heater testing, pest control, cesspool cleaning service, plumbing contractor, roofing contractor, tree surgeon				X		X	X	X
Carpenter shop, machine shop, metal working shop, sheet metal shop, tinsmith, gunsmith (no weapons manufacture involving use or testing with explosive materials), blacksmith, lapidary shop, electrical motor and appliance repair (no outdoor welding or furnace)	A	X	A	X		X	X	X
Boat repair, vehicle repair (no limit on size of vehicle), equipment and machinery repair, subject to the limitations of CMC 9138.2 if within 300 feet of other than an industrial zone				L		L	L	L
Laboratory – product testing, product research (no chemical, biological, anatomical testing)	A	X	A	X		X	X	X
EQUIPMENT SALES AND RENTAL BUSINESS								
Motor vehicles and heavy equipment of all types and sizes, contractor's equipment, agricultural equipment				X		X	X	X
AUCTION								
Auction – indoor or outdoor (no swap meet or flea market)				C		C	C	C
WHOLESALE								
Wholesale activities of all types (except livestock and poultry)	X	X	X	X		X	X	X
STORAGE								
Cold storage plant				X		X	X	X
Warehousing of furniture, household goods, dry goods, clothing, textiles, durable goods, no perishable foods		X		X		X	X	X
Glass, lumber (no boxes or crates), naval stores, plaster, empty barrels, metal (no scrap), machinery, equipment		X		X		X	X	X
Stockpile of rock, sand, crushed aggregate, gravel, or fill material for use on-site								
Not more than 2,000 tons	X		X	X		X	X	X
More than 2,000 tons (must be at least 1,000 feet from any residential zone, and any conditional use permit shall be subject to approval or other action by the City Council)	C		C	C		C	C	C
Clay and clay products				X		X	X	X

X Automatically permitted use

L Automatically permitted use provided special limitations and requirements are satisfied (CMC, Division 8 of Part 4 and Division 8 of Part 3)

C Use permitted upon approval of a conditional use permit

A Permitted as an Accessory Use

Table 2–5: Carson Revitalization Project Permitted Uses in Specific Plan Areas (Continued)

Permitted Uses	Specific Plan Areas							
	West Distribution Facility Operations Area	West Distribution Facility Offices and Support Area	East Distribution Facility	Revitalization Area 1	Revitalization Area 2	Revitalization Area 4	Revitalization Area 5	Revitalization Area 6
Petroleum and petroleum products								
Not more than 2,500 barrels				X		X	X	X
More than 2,500 barrels	X		X					
Cargo containers used for storage of materials used on-site (storage of empty cargo containers not permitted)	A		A					
Natural Gas								
Below ground – any amount	X		X					
Above ground – not more than 500,000 cubic feet	X		X					
Above ground – more than 500,000 cubic feet	C		C					
Oxygen, acetylene (subject to Fire Code requirements)	X		X					
Liquid Petroleum Gas – not more than 30,000 gallons	X		X					
Liquid Petroleum Gas – more than 30,000 gallons	C		C					
Aircraft fuel and lubricant	X		X					
Fertilizer (not more than 5,000 pounds)	X		X	X	X	X	X	X
Creosote, creosoted poles (temporary storage ¹)	X		X	X	X	X	X	X
Motor vehicles (not including impounding yard)	X	X		X		X	X	X
TRANSPORTATION, COMMUNICATIONS, UTILITIES, AND PUBLIC SERVICE								
Service yard – public utility or public service (Municipal Services Yard)						X		
Aircraft beacons and navigational aids – operating	X		X	X	X	X	X	X
Railroad yard	X		X					
Truck fueling station (private)	X		X			X	X	X
Rail offloading facility	X		X					X
Petroleum and Biofuels Distribution Terminal ²	X		X					
EDUCATION								
Trade school				X		X	X	X
ANIMAL SERVICES								
Animal shelter, pound, kennel, training school				C		C	C	C
Animal hospital, animal research institute				X		X	X	X

X Automatically permitted use

L Automatically permitted use provided special limitations and requirements are satisfied (CMC, Division 8 of Part 4 and Division 8 of Part 3)

C Use permitted upon approval of a conditional use permit

A Permitted as an Accessory Use

1 Temporary storage of excavated creosote foundation poles prior to transport offsite for disposal

2 Petroleum and Biofuels Distribution Terminal is defined as the existing facilities and proposed expanded facilities located in the East and West Distribution Facility areas and includes, as major facilities, storage tanks and loading lanes for fuel tanker trucks.

Table 2-5: Carson Revitalization Project Permitted Uses in Specific Plan Areas (Continued)

Permitted Uses	Specific Plan Areas							
	West Distribution Facility Operations Area	West Distribution Facility Offices and Support Area	East Distribution Facility	Revitalization Area 1	Revitalization Area 2	Revitalization Area 4	Revitalization Area 5	Revitalization Area 6
WIRELESS TELECOMMUNICATIONS FACILITIES (SEE CMC 9138.16)								
Minor wireless telecommunications facilities, subject to the requirement of CMC 9138.16	L	L	L	L	L	L	L	L
Major wireless telecommunications facilities, subject to the requirement of CMC 9138.16	C	C	C	C	C	C	C	C
LIMITED COMMERCIAL AND UTILITY USES								
Solar power generation facility (including battery storage and fuel cells)	X	X	X		X	X	X	X
Plant nursery (no on-site sales)				X	X	X	X	X
Mini storage				X		X	X	X
RV storage	X	X		X	C	X	X	X
Warehouse type retail commercial				X				
RECYCLING FACILITIES								
Processing facility for recyclables, light						X		
OFFICES								
Business, professional, financial, insurance, real estate, utility payments, telegraph, telephone answering service, messenger service, advertising, newspaper or publishing (no printing), ticket agency, travel agency, employment agency, collection agency, detective agency, security service (See CMC 9138.17 and 9138.18)	X	X	X	X		X	X	X
SPECIAL USES³								
Publicly-owned outdoor recreation – parks, playgrounds, picnic grounds and recreational facilities, including incidental buildings (no motor-driven or jet-propelled model airplane area)		X		X	X	X	X	X
Privately-owned outdoor recreation – parks, playgrounds, picnic grounds and recreational facilities, including incidental buildings (no motor-driven or jet-propelled model airplane area)		C ⁴		C	C	C	C	C
Golf course and club including golf pitch-and-put course, driving range, and miniature golf		C ⁴		C	C	C	C	C

X Automatically permitted use

L Automatically permitted use provided special limitations and requirements are satisfied (CMC, Division 8 of Part 4 and Division 8 of Part 3)

C Use permitted upon approval of a conditional use permit

A Permitted as an Accessory Use

³ Eligible for consideration as a Special Use to be permitted under additional regulations adopted pursuant CMC 9151.6.

⁴ Eligible for consideration in the West Distribution Facility Offices and Support Area as part of a program for consolidation and replacement of support facilities. This 14.2 acre area is illustrated on Figure 2-3.

Table 2–6: Uses Prohibited in Specific Plan Areas

MANUFACTURING OF THE FOLLOWING PRODUCTS
Soap, bleaching powder, glue
Chamois
Lacquer, synthetic enamel, polyurethane
Engines (with foundry)
Automobiles, trailers, boats, aircrafts, heavy equipment
Concrete block, brick, tile (outdoor kiln)
Poisons (Class A and Class B) ¹ – pesticides, rodenticides, insecticides, herbicides
Explosives – fireworks, dynamite, ammunition, weapons involving use or testing with explosive materials
MANUFACTURING OF PRODUCTS FROM THE FOLLOWING MATERIALS
Hydrocyanic acid, tar, coal tar, pyroxyline plastic, guncotton
MANUFACTURING OF THE FOLLOWING MATERIALS
Glass (with blast furnace)
Polyurethane foam
Cellophane, celluloid, cellulose
Steel
Gas acetylene, chlorine, ammonia, synthetic ammonia
Acid, caustic soda, soda ash, lye, lime
Gelatin, grease, tallow
Cement, gypsum, terracotta
Kalsomine, lamp black, size, phenol, potash, pyroxylin plastic
Petroleum, petroleum cleaning compound, asphalt, tar, coal tar, creosote
Organic peroxide
Fertilizer
Explosives – nitroglycerine, nitromethane, nitroethane, cellulose nitrate, gunpowder, blasting powder
INDUSTRIAL ACTIVITIES INVOLVING THE FOLLOWING PROCESSES
Wool pulling
Rubber reclaiming
Foundry (including brass or bronze) forging, drop forge, drop hammer, boiler works, smelter, blast furnace, coke oven, scrap metal processing, metal fabrication (including snap riveting)
Vehicle dismantling or wrecking, junk and salvage processing, subject to the requirements of CMC 9148.1
Aircraft power plant testing
Ore grinding and reduction
Paper shredding
Aggregate batch plant, aggregate dryer, rock or asphalt crushing, asphalt plant, sandblasting.
Shellac mixing (with cooking)
Petroleum refining, oil reclaiming, coal or coal tar distillation
Potash refining
Bone distillation, fat rendering, offal reduction, curing or tanning of furs or hides, processing of animal by-products
Creosoting
Fertilizer works, manure spreading and drying
Use of organic peroxides, ² nitromethane, nitroethane

Table 2–6: Uses Prohibited in Specific Plan Areas (Continued)

RESOURCE EXTRACTION
Borrow pit
Oil fields, oil wells
FOOD MANUFACTURING AND PROCESSING
Lard, pickles, sauerkraut, and vinegar
Fish barbecuing or smoking
Dressing of poultry or rabbits
Slaughtering of animals
Meat, fish, dog or cat food – packing, canning, processing
Coffee roasting
Cigars, cigarettes
Chewing tobacco
SERVICE AND REPAIR
Boat repair, vehicle repair (no limit on size of vehicle), equipment and machinery repair
Laboratory – chemical, biological, anatomical
AUCTION
Auction – indoor or outdoor (no swap meet or flea market)
WHOLESALE
Poultry
STORAGE
Petroleum coke
Polyurethane foam
Cement silo, grain elevator
Natural Gas (above ground more than 500,000 cubic feet)
Agricultural chemicals
Liquid petroleum gas (more than 30,000 gallons)
Explosives – dynamite, nitroglycerine, nitromethane, nitroethane, cellulose nitrate, gun powder, blasting powder
Junk, salvage, metal scrap, rags, bottles, nonferrous scrap
Waste paper
Poison (Class A or Class B) ³ – pesticides, rodenticides, insecticides, herbicides
Organic peroxides ⁴ – (more than 50 pounds)
Vehicle impounding yard
Aircraft
TRANSPORTATION, COMMUNICATIONS, UTILITIES AND PUBLIC SERVICE
Jail farm, honor farm
Blimp port, heliport, helistop
Railroad repair shop, roundhouse
Transfer station for refuse, sewage treatment plant
Truck terminal
Truck yard
Intermodal container transfer facility

Table 2–6: Uses Prohibited in Specific Plan Areas (Continued)

RECREATION
Arcade
Archery range
Outdoor drive-in theater
Range for pistol, rifle, skeet, or trap shooting; turkey shoot
Model airplane area (motor-driven or jet-propelled)
Fairgrounds, outdoor festival (permanent)
Race track – horse, automobile, motorcycle
Zoo
AGRICULTURE
Earthworm farm (must be at least 100 feet from any residential zone, public school, public park, hospital or long-term health care facility)
Mushroom farm (must be at least 300 feet from any residential zone, public school, public park, hospital or long-term health care facility)
Egg candling
STUDIOS
Motion picture studio or set – indoor or outdoor
CEMETERY
Cemetery, mausoleum, columbarium, crematory
ANIMAL SERVICES
Horse stable, riding academy – commercial or private
Pet cemetery
Electronic message center signs
OUTDOOR ADVERTISING
Electronic message center signs
Outdoor advertising sign
RECYCLING FACILITIES
Large collection recycling facility
Processing facility for recyclables, heavy

1 Classification according to the Los Angeles County Fire Department (R.M. Graziano's Tariff No. 25)

2 Having a severity classification of 3 or greater according to tests prescribed by the Society of the Plastics Industry and acceptable to the Los Angeles County Fire Department

3 Classification according to Los Angeles County Fire Department (R.M. Graziano's Tariff No. 25)

4 Having a severity classification of 3 or greater according to tests prescribed by the Society of the Plastics Industry and acceptable to the Los Angeles County Fire Department

Table 2–7: Permitted Uses in Revitalization Area 3

Commercial Uses	Revitalization Area 3
RETAIL SALES	
Department stores, variety stores, and specialized stores for apparel, items for personal use, household items, plants and flowers, and supplies and small equipment for businesses, including antiques (incidental restoration permitted) but no other secondhand items; swap meets and flea markets, as defined in CMC 9191.670, are prohibited	X
Indoor mini-mart, auction house	C
Building materials other than ornamental brick, stone, tile, or flagstone (incidental storage of sand, gravel, or rock limited to 2,000 tons total)	L
Ornamental brick, stone tile or flagstone (see CMC 9133)	C
Monuments, tombstones, statuary	X
Feed and grain	X
Secondhand store, pawn shop	X
PERSONAL SERVICES	
Barber shop, beauty shop, reducing salon, manicure parlor	X
Clothing services – laundry or dry cleaning, hand laundry, sponging and pressing, tailor, dressmaker, seamstress, shoe repair	X
Animal services, dog clip and wash, veterinary office or clinic (no animal hospital or kennel)	X
MECHANICAL AND REPAIR SERVICES	
Locksmith, watch repair, small appliance repair, radio and television repair, bicycle repair	X
Fix-it shop (incidental lawn mower sharpening permitted)	X
Furniture redecorating, restoration and upholstering; glass repair, installation or glazing; screen repair; plumbing shop; lawn mower sharpening	X
Parcel delivery service	X
GRAPHIC ARTS SERVICES	
Copying, address graphing, mimeographing, photostating, instant printing, blueprinting, silk screening, photography (incidental photo finishing and film developing permitted), picture framing (incidental frame construction permitted), photo-finishing, film developing	X
STUDIOS	
Costume design, interior decoration, photography, writing, drama, dance, music, arts and crafts (including stained glass)	X
Stained glass assembly	X
Radio, television, recording	X
Motion pictures – indoor (see CMC 9133)	C
OFFICES	
Business, professional, financial, insurance, real estate, utility payments, telegraph, telephone answering service, messenger service, advertising, newspaper or publishing (no printing), ticket agency, travel agency, employment agency, collection agency, detective agency, security service, bail bondsman, check cashing (see CMC 9138.17 and 9138.18)	X
Drive-through banks	X
Wholesale business, manufacturer's agent, broker (no storage or deliveries other than samples)	X
FOOD SALES AND SERVICE	
Restaurant (including refreshment stands, soda fountain, drive-in or drive-through restaurants)	X
Food store-grocery, fish, meat, fruits and vegetables, retail bakery, pastry, candy, health food, take-out food, tobacco shop	X

Table 2–7: Permitted Uses in Revitalization Area 3 (Continued)

Commercial Uses	Revitalization Area 3
Poultry shop (no live poultry or slaughtering)	L
Food catering (only direct retail sales or retail distribution)	X
Dog or cat food catering (retail only)	X
ALCOHOLIC BEVERAGE SALES AND SERVICES	
Alcoholic beverage sales in conjunction with a department store or supermarket	X
Alcoholic beverage sales in conjunction with variety store, drug store, mini-market, drive-through market, food store or grocery store excluding a supermarket, take-out food, liquor store (subject to the requirements of CMC 9138.5)	C
Alcoholic beverage sales and service in conjunction with cocktail lounge, bar, arcade, pool hall, billiards, card room, bowling alley, indoor theater, night club, and an eating establishment other than a bona fide restaurant (subject to the requirements of CMC9138.5)	C
Alcoholic beverage sales and service in conjunction with a bona fide restaurant	X
VEHICLE SALES AND SERVICE	
Sales:	
Automobile service station, subject to the requirements of CMC 9138.12	L
Automobile laundry, subject to the requirements of CMC 9138.13	C
Automobile parts (new)(1)	X
Motorcycles or motor scooters (new) (1) (see CMC 9138.15)	X
Repair of all vehicles up to 2-ton capacity (no boats)	
Minor repair as defined in CMC 9138.11 and subject to the provisions of CMC 9138.2	L
TRANSPORTATION-RELATED USES	
Automobile parking lot or parking building (no long-term vehicle storage, no storage of inoperable vehicles)	X
Shared parking facilities (see CMC 9133)	C
Passenger station – bus or rail; taxi stand	X
COMMUNICATIONS AND UTILITIES	
Post office	X
Telephone exchange	X
Amateur radio station	X
Gas distribution meter or control station (landscaping or screening required to the satisfaction of the director)	L
Gas measurement station (not less than 300 feet from any residential zone, public school, public park, hospital or long-term health care facility)	L
Pumping station, water well (landscaping of site and screening of facilities required to the satisfaction of the Director)	L
Water reservoir (see CMC 9133)	C
EDUCATION	
Physical training school – gymnastics, martial arts	X
RECREATION	
Pool hall, billiards, card room, bowling alley, gymnasium	X
Arcade (subject to the requirements of CMC 9138.4)	C
PUBLIC ASSEMBLY	
Indoor theater (motion picture or live stage), night club	X

Table 2–7: Permitted Uses in Revitalization Area 3 (Continued)

Commercial Uses	Revitalization Area 3
PUBLIC AND QUASI-PUBLIC USES	
Fire station, police station, library, museum	X
Archaeological dig, provided the Director determines there is a reasonable prospect that significant scientific, cultural, or historical information will be obtained from the site	L
HEALTH SERVICES	
Medical or dental laboratory	X
Medical or dental office or clinic, public health center	X
Optical services (for the fitting, grinding, or mounting of eyeglasses)	X
Pharmacy (with or without drive-through)	X
Ambulance service	C
AGRICULTURAL USES	
Cultivation and/or sale of plants including nursery, orchard, vineyard, field crops, flowers, greenhouses, lathhouses and similar activities (no mushroom farm)	X
OUTDOOR ADVERTISING	
Electronic message center signs (see CMC 9136.7)	C
TEMPORARY USES	
Election campaign office in a trailer (not permitted earlier than 90 days before the election; to be removed within 14 days after the election)	L
Office or other permitted commercial use in a trailer or other mobile unit (permitted for a period not exceeding 6 months during construction of a building on the same lot while a building permit is in effect; Director may approve reasonable time extensions if construction is found to be proceeding in good faith)	L
Storage of construction materials and equipment at a construction site without the screening that would be required for permanent outdoor storage (only during the period a building permit is in effect)	L
Sidewalk, parking lot, and tent sales (see CMC 9138.8)	L
Christmas tree sales, pumpkin sales	X
WIRELESS TELECOMMUNICATIONS FACILITIES	
Minor wireless telecommunications facilities, subject to the requirement of CMC 9138.16.	L
Major wireless telecommunications facilities, subject to the requirement of CMC 9138.16.	C

Table 2–8: Uses Prohibited in Revitalization Area 3

VEHICLE SALES AND SERVICE
Sales
Automobiles, recreation vehicles, and trucks not over 2-ton capacity (new) (See CMC 9138.15)
Automobiles, recreation vehicles, and trucks not over 2-ton capacity (used) (See CMC 9138.15)
Recreation vehicles over 2-ton capacity (new) (See CMC 9133 and 9138.15)
Recreation vehicles over 2-ton capacity (used) (See CMC 9133 and 9138.15)
Travel trailers or trailers, not over 2-ton capacity (new)
Travel trailers or trailers, not over 2-ton capacity (used)
Trucks, trailers, over 2-ton capacity (new) (See CMC 9133)
Trucks, trailers, over 2-ton capacity (used) (See CMC 9133)
Boats and accessory equipment
Rental and Leasing
All vehicles up to 2-ton capacity
All vehicles over 2-ton capacity (see CMC 9133)
Recreational vehicles (see CMC 9138.15(c))
Repair of all vehicles up to 2-ton capacity (no boats)
Major repair as defined in CMC 9138.11
TRANSPORTATION-RELATED USES
Heliports, helistops
Communications and utilities
Electric distribution substation
EDUCATION
Elementary or secondary school – public or private; professional school; business school; barber or beauty school; school of arts, crafts, dance, photography, writing, drama or music.
Swimming school – indoor or outdoor
RECREATION
Public park or playground
Driving skill course
Indoor rink – roller skating, skateboards, ice skating
Outdoor rink – roller skating, skateboarding, ice skating
Lawn bowling, croquet courts
Private recreational facilities.
Swimming pool
Tennis court, volleyball court, polo field, athletic field, miniature golf
Golf driving range, pitch-and-putt course, golf course
PUBLIC ASSEMBLY
Church, temple, or other place of religious worship.
Auditorium, meeting hall, wedding chapel
Community center, lodge hall, private club
Outdoor theater (live stage, not a drive-in)
HEALTH SERVICES
Hospital – general acute care, acute psychiatric; long-term health care facility.

Table 2–8: Uses Prohibited in Revitalization Area 3 (Continued)

DAY CARE
Community day care facility
RESIDENTIAL USES
Mixed-use (commercial/residential) development
Mobile home park
Group quarters for members of a religious order (convent, rectory, monastery, etc.)
Community residential care facility, boarding or rooming house, fraternity or sorority house, dormitory, residential hotel or similar group quarters, motel units with kitchens.
TRANSIENT HOTEL
Transient hotel, motel
TEMPORARY USES
Subdivision directional sign
Fireworks stand
Carnival, mechanical rides, pony rides, outdoor festival and similar uses
Circus rodeo
Yard sales.
Tent revival
OUTDOOR ADVERTISING
Outdoor advertising sign in the electronic marquee signage (EMS) overlay district, subject to the requirements of CMC 9138.71
SALES
Auctions for used automobiles, recreational vehicles, travel-trailers, trucks or trailers, motorcycles or motor scooters

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3 Circulation Plan



Introduction

This section describes the transportation and circulation systems serving the Carson Revitalization Project Specific Plan (Specific Plan). More specifically, this section includes the following:

- Overview of the regional context.
- Descriptions of existing transportation facilities surrounding the Specific Plan area (Plan Area).
- Detailed descriptions of the major on-site and off-site transportation components serving the Plan Area, including new and reconfigured roadways and intersections.
- Policies and design standards applicable to all transportation components.

The Specific Plan includes an internal publicly accessible private roadway network that connects to the adjacent public roadway system. Emphasis is placed on ensuring connectivity between uses and separating internal tanker truck traffic from internal mixed vehicular traffic. This separation aims to create an efficient circulation system consistent with City policies. The internal private streets in the Plan Area are designed in accordance with the City public street standards.



The Specific Plan also includes an existing railroad spur serving the East Distribution Facility that connects easterly to the Alameda corridor, a 20-mile-long rail cargo expressway linking the ports of Long Beach and Los Angeles to the transcontinental rail network near downtown Los Angeles.

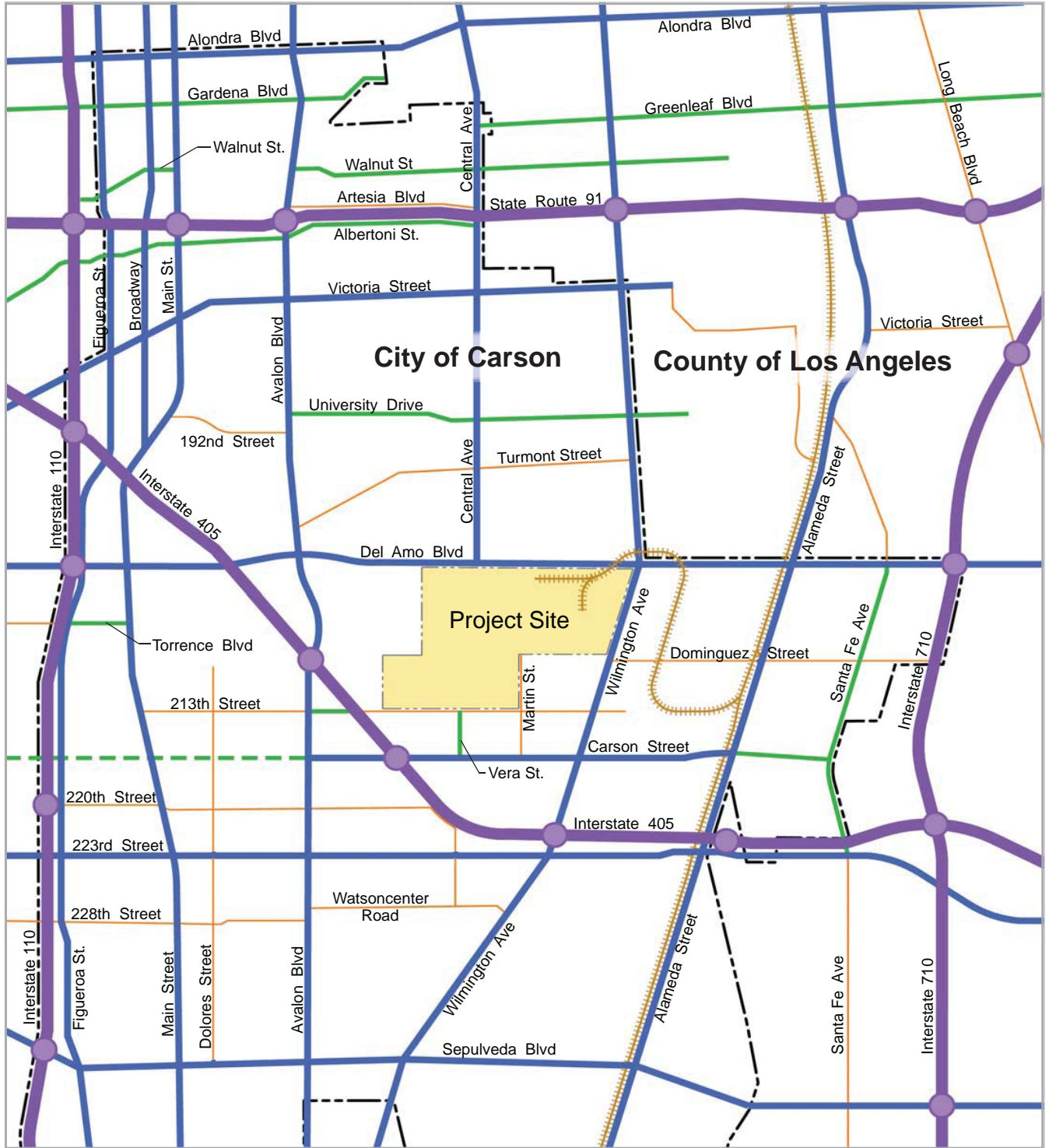
The Plan Area circulation system has been designed to link seamlessly with City and regional transportation systems. It distributes Plan Area truck traffic to designated truck routes that connect to interchanges on the regional freeway network, thus directing traffic away from nearby residential neighborhoods.

Regional Context

Vehicular traffic related to the Plan Area has access to the regional roadway network via adjacent roads designated as major highways in the Transportation and Infrastructure Element of the City of Carson General Plan. These highways connect to four nearby freeways serving the region: State Route 91—the Artesia Freeway (SR-91) to the north which runs from Redondo Beach east to Riverside county, Interstate 710—the Long Beach Freeway (I-710) to the east which runs from Long Beach north to East Los Angeles, State Route 110—the Harbor Freeway (SR-110) to the west which runs from Los Angeles Harbor north to downtown Los Angeles, and Interstate 405—the San Diego Freeway (I-405) to the south which runs from Orange County north to the San Fernando Valley.

The key major highway streets that connect the Plan Area to these freeways are Wilmington Avenue, Del Amo Boulevard, Carson Street, and Avalon Boulevard. These roadways are illustrated in **Figure 3-1** Regional Circulation. Portions of these connecting roadways are also designated as truck routes in the City of Carson General Plan.

Figure 3-1: General Circulation

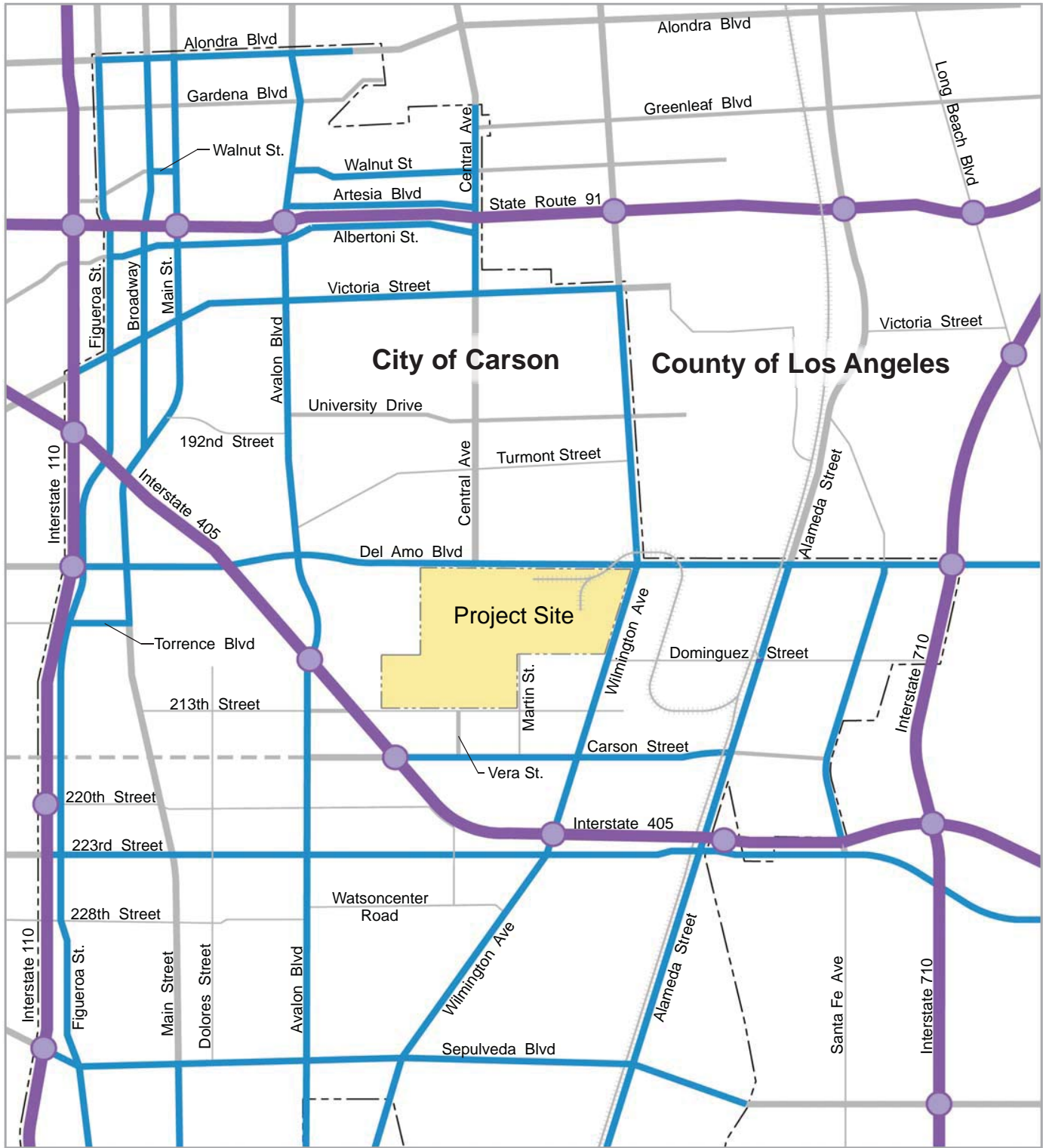


Legend

- Regional Freeway / Interstate Highway
- Major Highway
- Secondary Highway
- - - Modified Secondary Highway
- Collector Street
- ||||| Alameda Corridor and Railroad Spur to Site
- - - City Limits
- Interstate Interchange



Figure 3-2: Existing Truck Routes



Legend

- City of Carson and Surrounding Area Truck Routes
- Regional Freeway / Interstate Highway Truck Routes
- Major Highway
- Secondary Highway

- Modified Secondary Highway
- Collector Street
- Alameda Corridor and Railroad Spur to Site
- City Limits
- Interstate / State Route Interchange



Existing Vehicular Circulation

The Plan Area contains an ethanol, chemical, and petroleum products distribution facility that has been operating in various forms since the 1920s. The distribution of these products via tanker trucks directly serves the energy needs of the region and is fundamental to the operation of the existing Distribution Facility. As illustrated in **Figure 3-2 Existing Truck Routes**, the City of Carson General Plan designates truck routes within the regional roadway network and some of those currently serve the Plan Area. Through the use of designated truck routes the flow of trucks is directed onto streets designed to accommodate them and to protect residential streets from excessive truck traffic.

The ethanol tanker truck traffic accessing the Distribution Facility is subject to a Conditional Use Permit [CUP] from the City. The CUP limits the maximum number of ethanol trucks per day and the maximum daily average trucks per month. In addition the CUP requires that the trucks access the Distribution Facility from the Wilmington Avenue entrance and use a designated route to access the regional freeway system. This route is north on Wilmington Avenue to Del Amo Boulevard and then east on Del Amo to the I-710 freeway.



Del Amo Boulevard



Wilmington Avenue

There are no existing public streets within the Specific Plan area. However, existing public roads delineate some of the boundaries of the Plan Area and these streets connect to other streets in the residential areas to the north and south and in the industrial areas to the west and east. The significant roadways in the immediate vicinity of the Plan Area are illustrated in **Figure 3-3 Existing Transportation Facilities** and described below.

Del Amo Boulevard is adjacent to the north Plan Area boundary. It is a four-lane divided road, designated a Major Highway, that extends east-west through central Carson. It connects the Plan Area to I-710 to the east, SR-110 to the west and I-405, via Avalon Boulevard, to the west as well. The City of Carson General Plan designates Del Amo as a major highway. Such roadways function to connect traffic from collector streets to the major freeway systems as well as provide access to adjacent land uses. They also link principal elements of the City of Carson to other adjacent cities. These roadways typically accommodate inter-city trips for automobiles, trucks and busses with a volume of 25,000 or more vehicles per day.

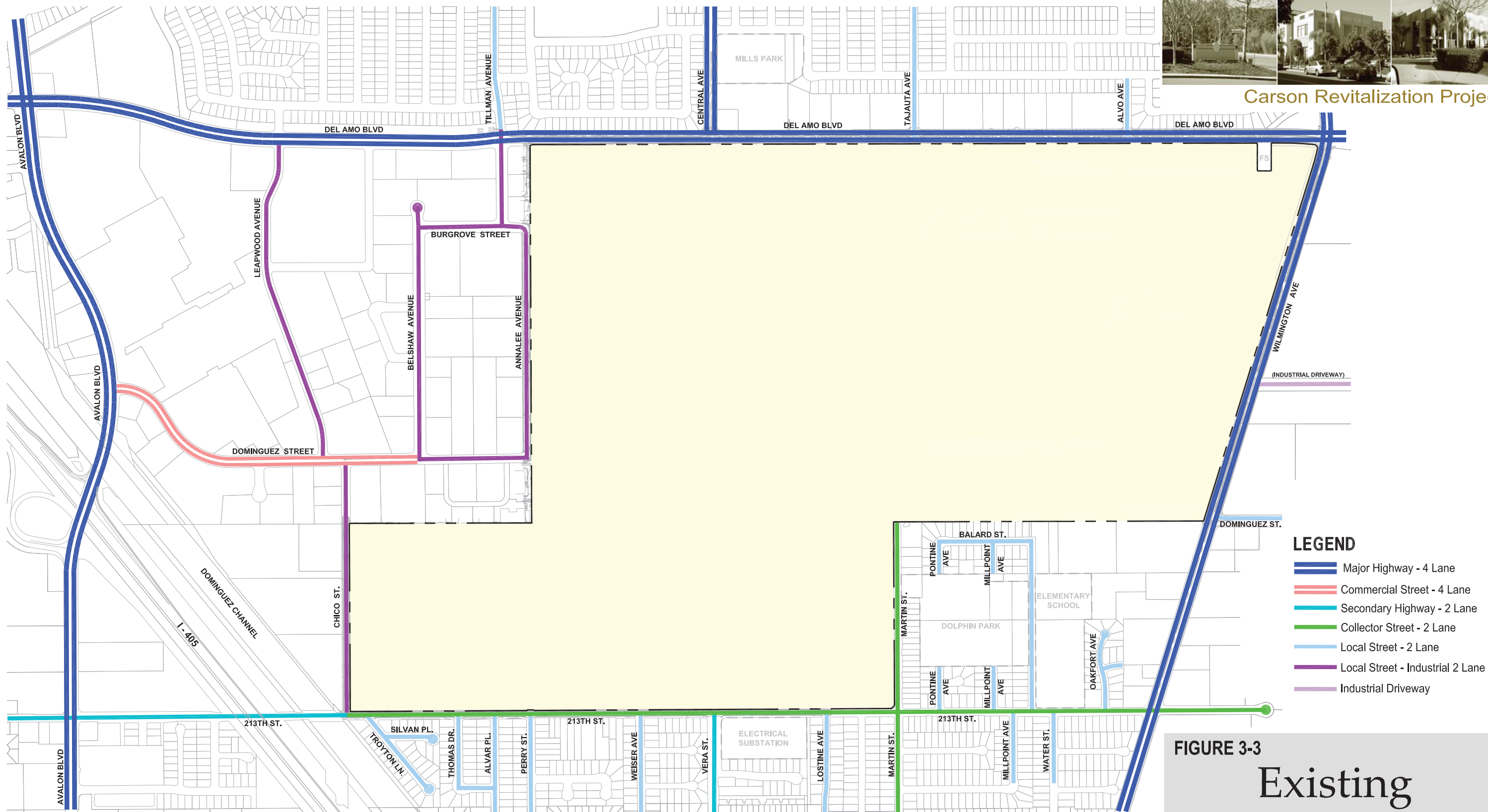
Del Amo Boulevard is a designated truck route on the segment between SR-110 and I-710. However, as discussed above and in Section 2—Land Use Plan, all ethanol tanker truck traffic outbound from the East Distribution Facility and West Distribution Facility is directed initially onto Wilmington Avenue northbound; then it is directed to I-710 via the segment of Del Amo Boulevard east of Wilmington Avenue. Inbound ethanol tanker truck traffic follows the same route.

Wilmington Avenue is adjacent to a portion of the east Plan Area boundary. It is a four-lane divided road that extends north-south through east central Carson. It connects the Plan Area to SR-91 to the north and I-405 to the south. As with Del Amo Boulevard, Wilmington Avenue is designated a major highway in the City of Carson General Plan, thus expected to carry a volume of 25,000 or more vehicles per day.

Wilmington Avenue serves a large area of industrial businesses and is a designated truck route from Victoria Street north of the Plan Area to the City boundary south of I-405. However, as discussed above and in Section 2—Land Use Plan, all ethanol tanker truck traffic outbound from the Specific Plan land uses is directed initially onto Wilmington Avenue northbound; then it is directed to I-710 via the segment of Del Amo Boulevard east of Wilmington Avenue. Inbound ethanol tanker truck traffic follows the same route.



Carson Revitalization Project



- LEGEND**
- ▬ Major Highway - 4 Lane
 - ▬ Commercial Street - 4 Lane
 - ▬ Secondary Highway - 2 Lane
 - ▬ Collector Street - 2 Lane
 - ▬ Local Street - 2 Lane
 - ▬ Local Street - Industrial 2 Lane
 - ▬ Industrial Driveway

FIGURE 3-3
Existing Transportation Facilities



213th Street is adjacent to a portion of the south property boundary. It is a two-lane roadway from Main Street on the west to Wilmington Avenue on the east. The City of Carson General Plan designates 213th Street as a collector street except for a short segment between Avalon Boulevard and Chico Street that is designated a secondary highway.

Collector streets function to serve as an intermediate route to handle traffic between smaller local streets and secondary and major highways. Collector streets are generally expected to carry traffic volumes between 2,000 to 5,000 vehicles per day; however, some collector streets in the City carry as many as 10,000 vehicles per day.

Although designated a collector street, 213th Street between Chico Street and Wilmington Avenue has some characteristics of a local neighborhood street with homes directly fronting on the street along some sections. As such, preserving the local character of this street, by not adding any significant volume of traffic, has been a key part of the overall circulation plan.

Chico Street is adjacent to the southwest property boundary. It is a short two-lane street with a center two-way left turn lane that connects 213th Street to the south with Dominguez Street to the north. Those two streets connect west to Avalon Boulevard and its interchange with I-405. Chico Street is designated a local street-industrial in the City of Carson General Plan.

Annalee Avenue is adjacent to the northwest Plan Area boundary. It is a two-lane street that forms part of a loop street system in the light industrial area west of the Plan Area. This loop street system connects north to Del Amo Boulevard and south to Dominguez Street. Annalee Avenue is designated a local street-industrial in the City of Carson General Plan.

Martin Street is adjacent to a portion of the east Plan Area boundary. It is a short two lane residential street that terminates in a dead end at the south Plan Area boundary. Martin Street serves a small number of residential lots and provides access to a parking area for Dolphin Park. Martin Street is designated a Local Street in the City of Carson General Plan.



213th Street



Chico Street



Annalee Avenue



Martin Street

Specific Plan Vehicular Circulation

The guiding principle for transportation in the City of Carson is to “provide a safe and efficient circulation system that improves traffic flow while enhancing pedestrian safety, promoting commerce, and providing for alternative modes of transportation.” In accordance with this principle, the Specific Plan provides an internal street system that segregates the flow of this component of the traffic, that is, the tanker truck traffic that serves only the Distribution Facility. These tanker trucks are directed to a Truck Driveway and through intersections designed to have the capacity to handle such traffic. As a result, the traffic volume on other streets in or surrounding the Plan Area is not burdened by these Distribution Facility truck trips. **Figure 3-4** Circulation Plan depicts the overall circulation system for the Specific Plan including the access points, existing and proposed roadways, and intersection improvements.

Existing streets are used to access Revitalization Areas 1 through 3. Specifically, Revitalization Area 1 is bounded by Chico Street on the west and this street will provide access for all future development on this site. Revitalization Area 2 is bounded by Martin Street on the east. This street will provide access for the very limited amount of vehicular traffic generated by the limited types of development permitted on this site. In addition, the existing abrupt dead end of Martin Street will be reconfigured into a cul-de-sac to facilitate u-turns and provide area for a landscaped terminus to the view north toward the end of the street. Revitalization Area 3 is bounded by Del Amo Boulevard on the north and Wilmington Avenue on the east. These two streets will provide access for the retail commercial development on this site.

The new roadways within the Plan Area are designed to accommodate the volume of truck and vehicle traffic typical of an industrial area. These roadway sections, as detailed in **Figure 3-5** Specific Plan Street Sections, provide adequate area for travel lanes and turning movements, landscaped areas, drainage facilities, and sidewalks.

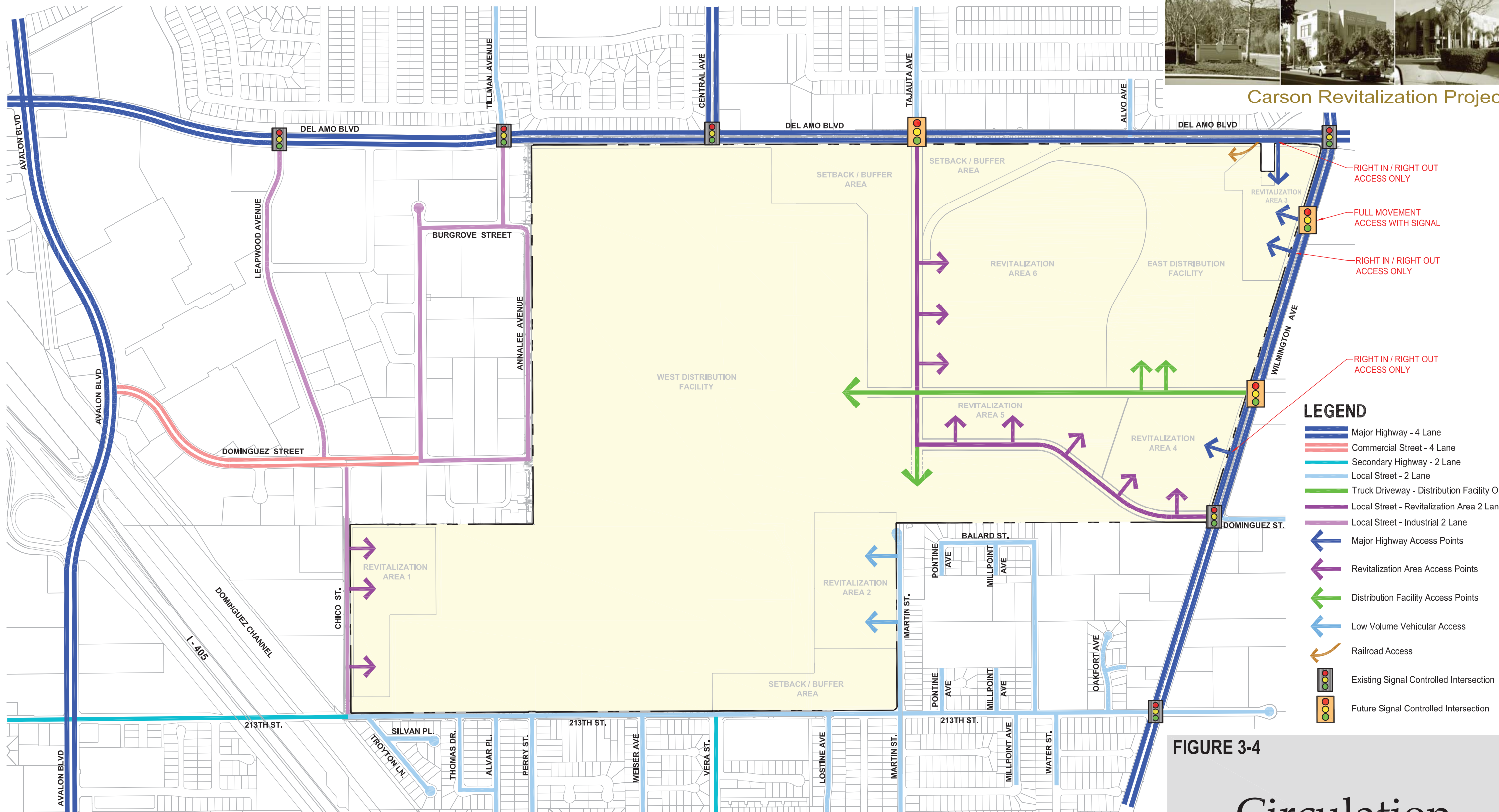
The volume of tanker truck traffic on the Truck Driveway moving to and from the East Distribution Facility and West Distribution Facility is segregated from other vehicular and truck traffic to and from Revitalization Areas 4 through 6. The Truck Driveway, which serves trucks operating on a 24-hour basis, will be moved from its current alignment (**Figure 2-1**) to a location in the interior of the Plan Area at a greater distance from existing residences and businesses that are adjacent to the south Plan Area boundaries (**Figure 3-4**).

Vehicular traffic traveling to and from Revitalization Areas 4 through 6 will access the Plan Area via a southward extension of Tajauta Avenue and a westward extension of Dominguez Street. The intersection of these two streets creates a through connection from Del Amo Boulevard to Wilmington Avenue; thus vehicles can access Revitalization Areas 4-6 from either roadway. This helps evenly distribute vehicle trips to aid traffic flow.

A solar power generating facility and certain recreational uses are permitted uses in Revitalization Areas 2, 4, 5, and 6. Should Revitalization Areas 4, 5, and 6 be developed with such uses, there may be no need for street access. The extensions of Tajauta Avenue and Dominguez Street noted above could be deleted from the plan for vehicular circulation.



Carson Revitalization Project



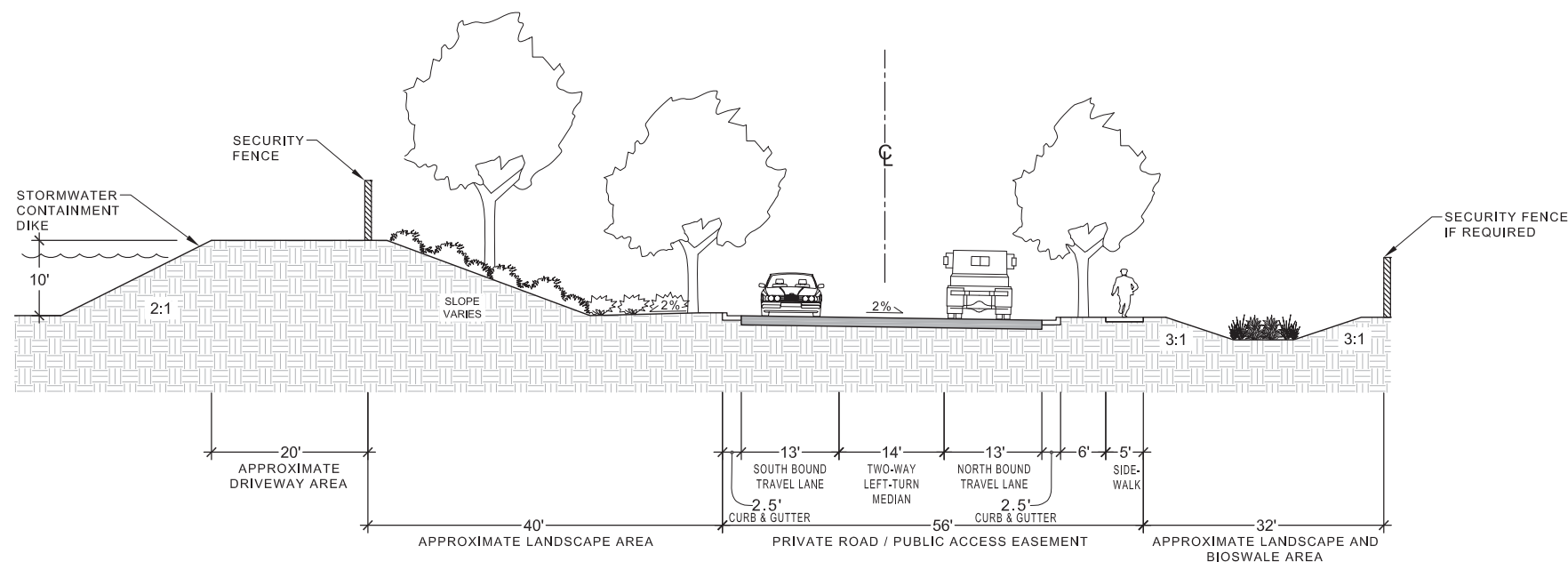
- LEGEND**
- ▬▬▬ Major Highway - 4 Lane
 - ▬▬▬ Commercial Street - 4 Lane
 - ▬▬▬ Secondary Highway - 2 Lane
 - ▬▬▬ Local Street - 2 Lane
 - ▬▬▬ Truck Driveway - Distribution Facility Only
 - ▬▬▬ Local Street - Revitalization Area 2 Lane
 - ▬▬▬ Local Street - Industrial 2 Lane
 - ↔ Major Highway Access Points
 - ↔ Revitalization Area Access Points
 - ↔ Distribution Facility Access Points
 - ↔ Low Volume Vehicular Access
 - ↔ Railroad Access
 - 🚦 Existing Signal Controlled Intersection
 - 🚦 Future Signal Controlled Intersection

FIGURE 3-4
Circulation Plan





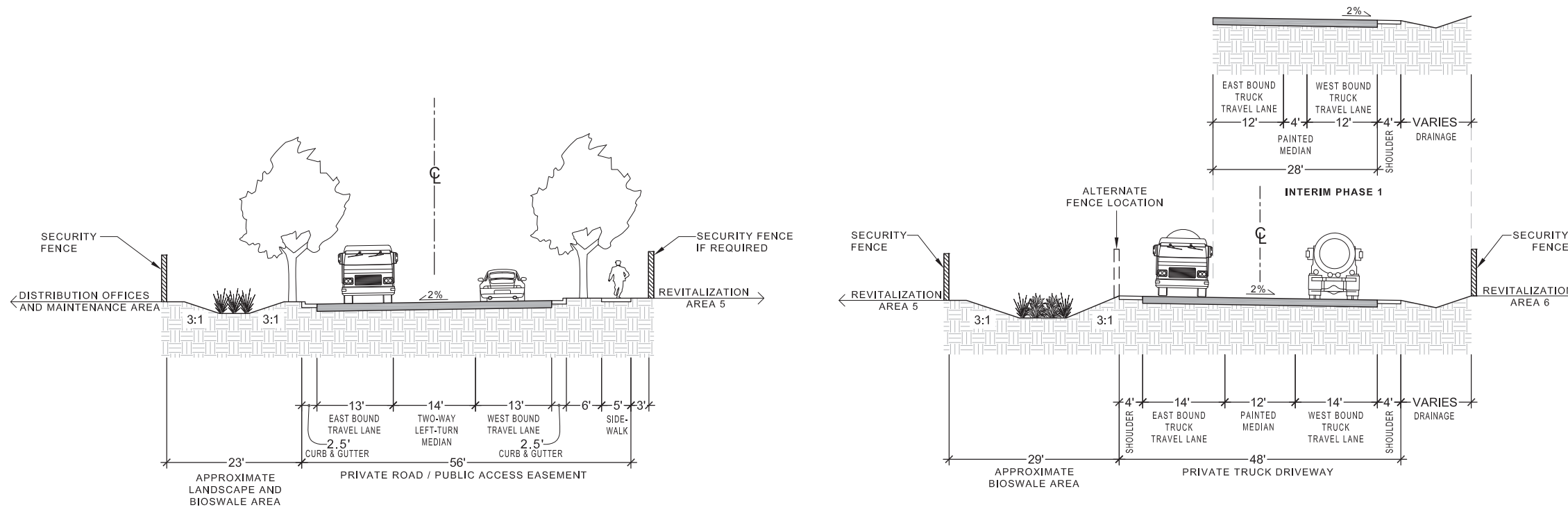
Carson Revitalization Project



Tajuata Avenue (South of Del Amo Boulevard)

(View North, No Parking)

NTS



Dominguez Street (West of Wilmington Avenue)

(View West, No Parking)

NTS

Truck Driveway

(View West, No Parking)

NTS

FIGURE 3-5
Specific Plan
Street Sections

Specific Plan Access

Several intersections will be modified or created to provide access to the Plan Area while maintaining the flow of traffic on the roadways along the Plan Area perimeter (**Figure 3-4**). Three points of access are provided along Del Amo Boulevard. One is at Tajauta Avenue. When Tajauta Avenue is extended south of Del Amo Boulevard into the Plan Area, this intersection will be modified to provide a full movement signal controlled intersection. This extension is mainly to provide access to Revitalization Areas 4 through 6 but it will also provide employee and contractor access to the West Distribution Facility. The second is the existing railroad access point located on Del Amo Boulevard, approximately 500 feet west of Wilmington Avenue. This access point will remain at that location. The third is at Revitalization Area 3. A right-in/right-out-only access will be provided from Del Amo Boulevard, approximately 380 feet west of the intersection of Del Amo Boulevard and Wilmington Avenue, just east of the existing fire station.

Five points of access are provided along Wilmington Avenue. Additional points of access will be provided to Revitalization Area 3 from Wilmington Avenue. The first is a full movement access point located approximately 600 feet south of the intersection of Wilmington Avenue and Del Amo Boulevard. The second is a right-in/right-out access point located approximately 800 feet south of the intersection of Wilmington Avenue and Del Amo Boulevard. The third is a full movement signalized intersection on Wilmington Avenue, approximately 900 feet north of Dominguez Street for the Truck Driveway. The signal at this intersection will also serve the existing industrial driveway on the east side of Wilmington Avenue and offset slightly to the north. The fourth is a potential right-in/right-out access point between the Truck Driveway and Dominguez Street to serve Revitalization Area 4. The fifth is the existing intersection of Wilmington Avenue and Dominguez Street. As Dominguez Street is extended west of Wilmington Avenue into the Plan Area, the existing full movement signalized intersection will remain. This will mainly provide access to Revitalization areas 4 through 6 but also provide employee access to the West Distribution Facility.

Access to Revitalization Area 2 will be provided at points along Martin Street. The number and location of these access points will be based on the use and site plan. The land uses permitted in Revitalization Area 2 generate low Average Daily Trips (ADT); thus, it is appropriate to provide access from this local residential street. Martin Street's dead end will be replaced by a cul-de-sac to improve turn-around traffic movements.

Access to Revitalization Area 1 will be provided at points along Chico Street. The number and location of these access points will be based on the final site development plan.

In addition to the Plan Area access points noted above, emergency-only access points as may be required will be provided. These emergency-only Plan Area access points may be located at any point where the Plan Area boundary abuts a public right-of-way or public access easement.



Distribution Facility Access and Security

Due to the nature of the operations at the Distribution Facility, it has security requirements above and beyond those of typical industrial land use areas. The existing and proposed changes to the configuration of the secure perimeter are described below.

Existing Distribution Facility Secure Perimeter

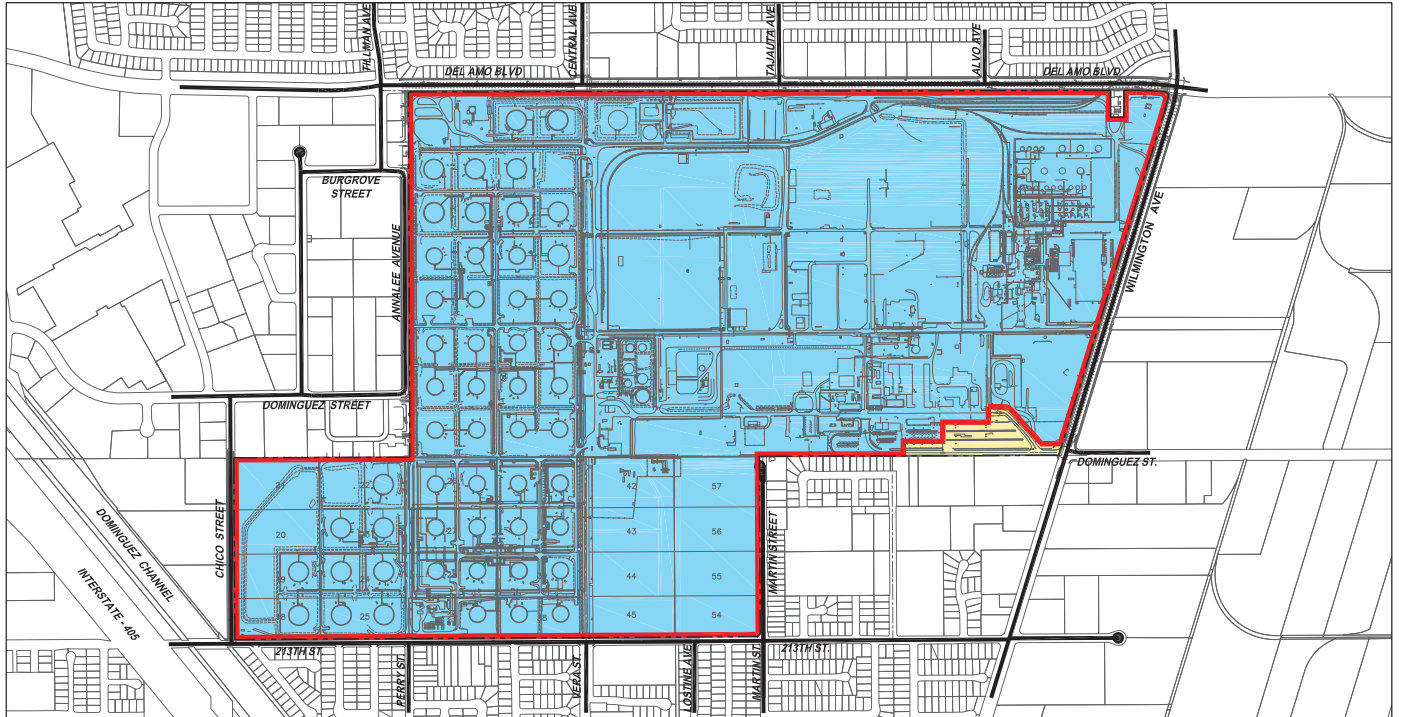
The 448-acre Distribution Facility has historically been surrounded by a secure perimeter, with access to the property permitted only through controlled entry points. The secure perimeter consists of a variety of fencing, including fencing with barbed wire. Security measures supporting this perimeter fence include but are not limited to personnel, lighting, and electronic surveillance and detection devices which are deployed to prevent unauthorized persons from entering the property.

Specific Plan Distribution Facility Secure Perimeter

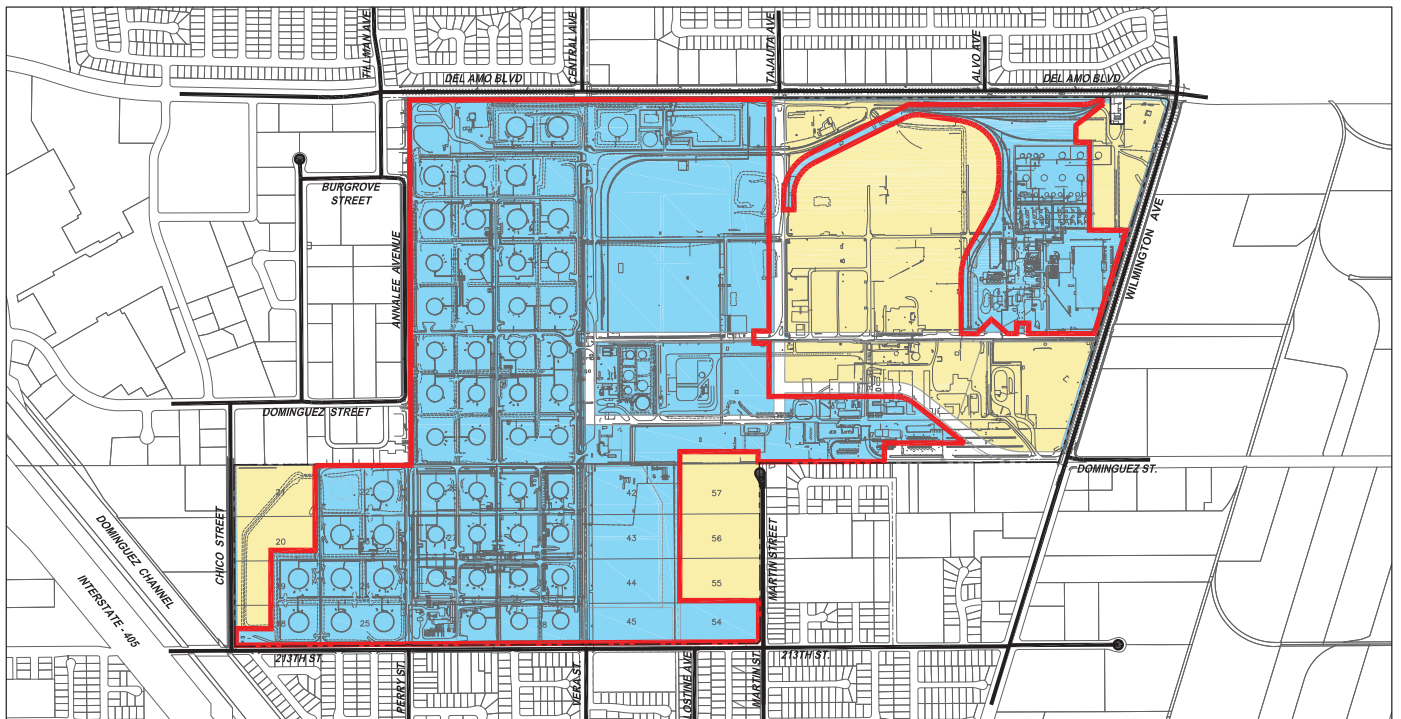
The implementation of the Specific Plan, in particular the development of Revitalization Areas 1 through 6, will require public access into areas that were previously within a singular secure perimeter encompassing almost the entire property. This is illustrated in **Figure 3-6**. Therefore, the existing operational area will be consolidated and divided into the separate East Distribution Facility and West Distribution Facility, each with its own secure perimeter and controlled entry points. As a result, the Revitalization Areas and roadways within the remaining Plan Area can have public access where needed. This increase in the area open to public access is also illustrated in **Figure 3-6**.

The delineation of the secure perimeters for the East Distribution Facility and West Distribution Facility are permitted to remain flexible in order to respond to changing operational considerations and security requirements. However, at all times at each stage of any development a secure perimeter will be maintained around the Distribution Facility.

Figure 3-6: Secure Distribution Facility and Secure Access Points



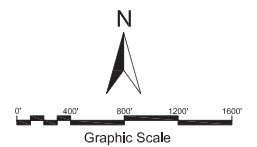
Existing Distribution Facility Secure Perimeter



Specific Plan Distribution Facility Secure Perimeter

Legend

- Existing / Proposed Distribution Facility Secure Perimeter
- Secure Distribution Facility
- Revitalization Areas





Public Transit

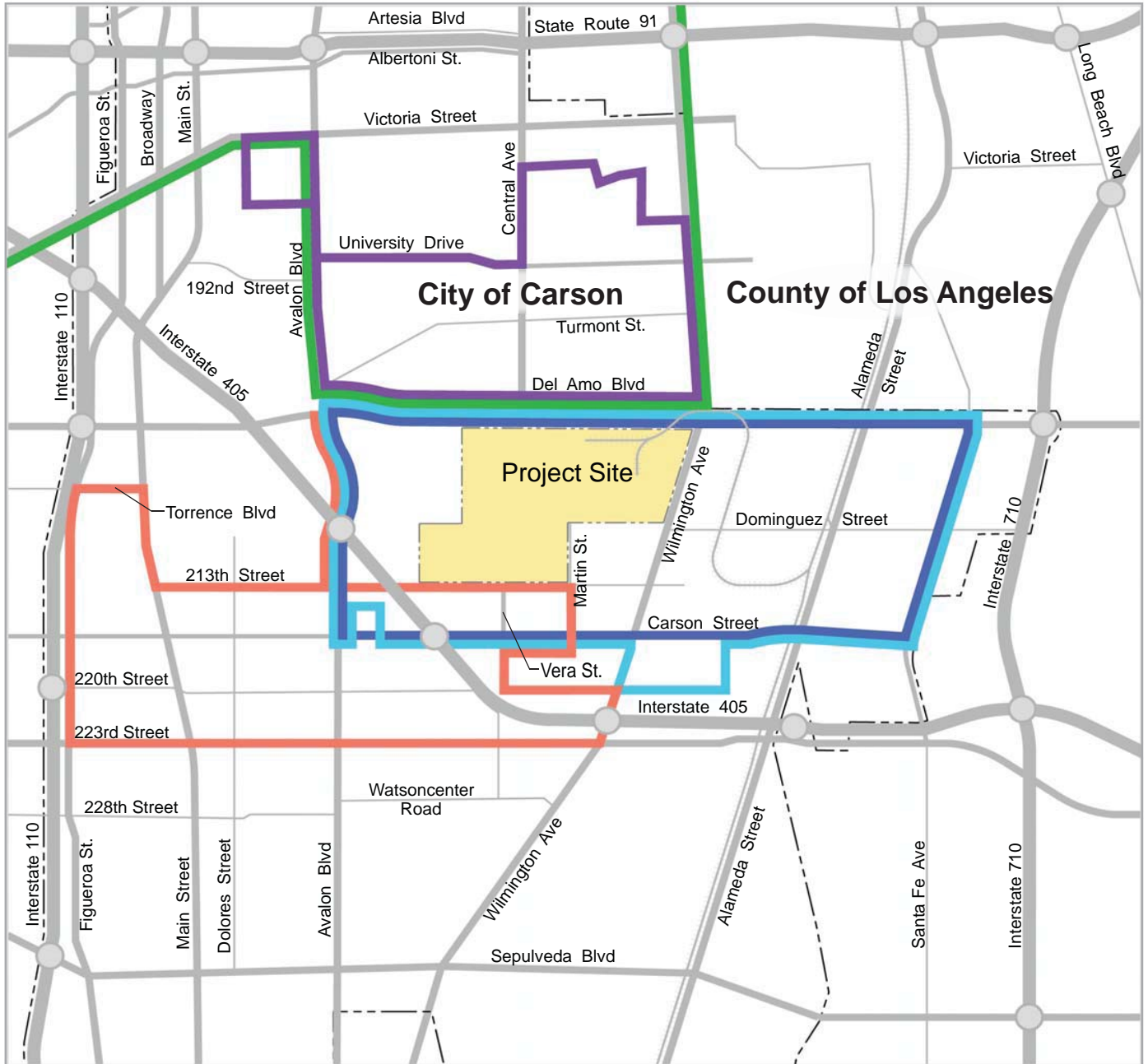
The Plan Area is well served by existing public transit routes. Public transportation in the City of Carson and in the vicinity of the Carson Revitalization Project Specific Plan area is provided by three public transit agencies: the Carson Circuit Transit System, Torrance Transit, and the Los Angeles County Metropolitan Transportation Authority (MTA).

Two of these transit agencies provide bus service along streets that are adjacent to the Specific Plan area. Four routes operate along Del Amo Boulevard on the north boundary of the Plan Area and one route operates on 213th Street which is part of the south boundary of the Plan Area (**Figure 3-7**). These bus routes also interconnect to other bus lines thus providing multiple ways to get to and from the Plan Area via public transit. Carson Circuit Route E serves the Carson neighborhoods to the north of the Plan Area. It is a loop route that operates east to west along the segment of Del Amo Boulevard adjacent to the Plan Area. Route E will connect those neighborhoods to the proposed commercial and industrial development adjacent to Del Amo Boulevard.

Three Carson Circuit routes converge west of the Plan Area at the South Bay Pavilion facilitating transfers to other routes serving the area. Carson Circuit Route F serves the Carson neighborhoods to the south and west of the Plan Area. This is a loop route that operates west to east along the segment of 213th street adjacent to the Plan Area. Route F will connect those neighborhoods to the proposed industrial and commercial development in Revitalization Area 1 adjacent to Chico Street. Carson Circuit Route D and Carson Circuit Route G serve Carson neighborhoods to the west and east of the Plan Area. These routes operate along the segment of Del Amo Boulevard adjacent to the Plan Area with Route D running west to east and Route G running east to west. These two routes will connect the Central Carson area to the commercial and industrial development adjacent to Del Amo Boulevard.

MTA Line 205 serves central Carson operating between Willowbrook to the north of Carson and San Pedro to the south. It operates two way service along the segment of Del Amo Boulevard adjacent to the Plan Area. Line 205 and other connecting MTA bus lines provide transit service to the Plan Area from the larger regional area.

Figure 3-7: Existing Bus Routes



Legend

Carson Circuit Transit System (City Bus)

- (D) Metro Blue Line
- (E) Del Amo Boulevard
- (F) Civic Center
- (G) Metro Blue Line
- (LINE 205) Metropolitan Transportation Authority (MTA)

Regional Circulation

- Regional Freeway / Interstate Highway
- Major Highway
- Secondary Highway / Modified Secondary
- Collector
- Alameda Corridor and Railroad Spur to Site
- City Limits
- Interstate Interchange



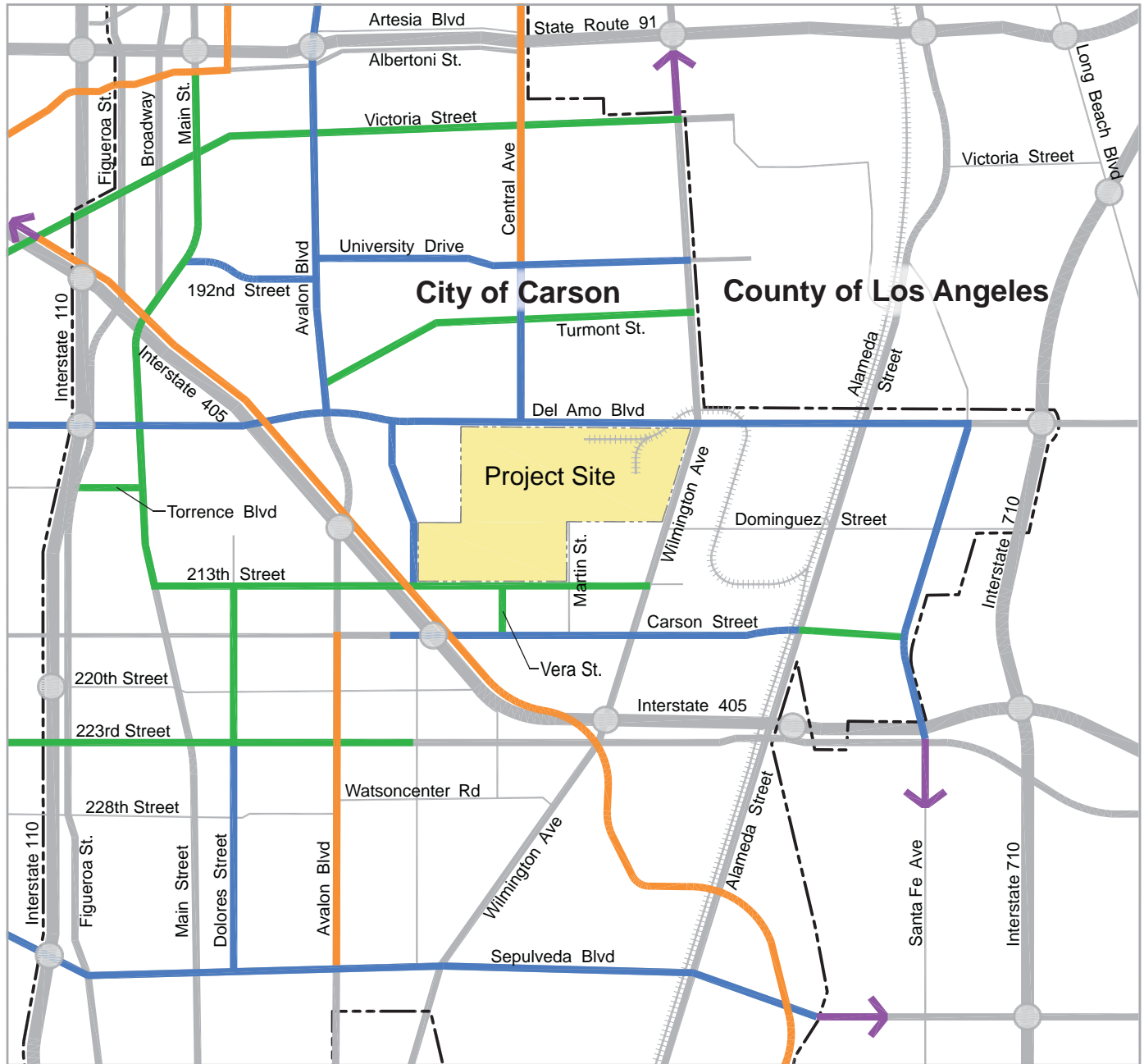


Pedestrian and Bicycle Circulation

On the Plan Area perimeter, there are existing sidewalks along Del Amo Boulevard, Wilmington Avenue, Martin Street and 213th Street. As part of the development of Revitalization Area 1, a 5-foot-wide sidewalk adjacent to the curb will be provided along the east side of Chico Street. Within the Plan Area, both Tajauta Avenue and Dominguez Street will have a 5-foot-wide sidewalk on one side of the street (**Figure 3-5**). The Truck Driveway is designed as a driveway for authorized tanker trucks and signage at each end will indicate clearly that pedestrians are prohibited. As such, there are no sidewalks along the Truck Driveway to encourage pedestrian use. There is a 4-foot-wide shoulder along each side of the Truck Driveway.

The City of Carson Bicycle Plan includes a Class II Bicycle Lane along the Plan Area perimeter on Del Amo Boulevard and Chico Street (**Figure 3-8**). Also, 213th Street is designated a Class III Bicycle Route along the southern Plan Area boundary. Existing bicycle facilities adequately traverse around the Plan Area and the industrial areas to the east via Del Amo Boulevard, Leapwood Avenue, Chico Street, 213th Street and Carson Street providing bicycle routes to points beyond the Plan Area. No bicycle facilities are proposed within the Plan Area.

Figure 3-8: Existing Bicycle Plan



Legend

Carson Bicycle Routes

- Class I - Path
- Class II - Lane
- Class III - Route
- Adjacent Community

Regional Circulation

- Regional Freeway / Interstate Highway
- Major Highway
- Secondary Highway / Modified Secondary
- Collector
- Alameda Corridor and Railroad Spur to Site
- City Limits
- Interstate Interchange



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4 Development Standards



Introduction

This section of the Carson Revitalization Project Specific Plan defines the development standards applicable to new development on the property. The standards do not apply to development that exists on the property at the time of adoption of the Specific Plan. These standards supersede any conflicting requirements of the City of Carson Zoning Code. Where standards are not specified in this section, the City of Carson Zoning Code will apply. Future amendments by the City to the Zoning Code shall not be automatically applicable to this Specific Plan unless such amendments are necessary to (a) protect occupants of the Plan Area from a condition impacting their health and safety, or (b) comply with state or federal law. Where a conflict occurs between the provisions of this Specific Plan and the Light Industrial, Heavy Industrial, and Commercial General standards, and any other provisions of the Municipal Code, the Specific Plan goals, policies and standards shall apply.

Relationship to the Zoning Code

The purpose of the City of Carson Zoning Code is as follows:

“...to serve the public health, safety, comfort, convenience, and general welfare by establishing land use districts designed to obtain the physical, environmental, economic, and social advantages resulting from planned use of land in accordance with the General Plan of the City of Carson, and by establishing those regulations for the development and use of land and improvements within various districts which will ensure that the growth and development of the City of Carson shall be orderly, attractive and efficient for the maximum benefit of its citizens.”

With the adoption of the Carson Revitalization Project Specific Plan, the Plan Area will be rezoned to a Specific Plan designation and will be subject to the special development standards as described in this document. The Specific Plan will use established General Plan and Zoning terminology and land use descriptions, each of which can be translated into City zoning designations. Any policies, standards, or guidelines not specifically addressed or modified in this Specific Plan will be regulated under the applicable Heavy Industrial, Light Industrial, or Commercial General provision within the City’s Zoning Code. Specifically, the policies, standards, or guidelines not addressed or modified in this Specific Plan for the East and West Distribution Facility will be regulated under the Heavy Industrial Zone, for the Revitalization Areas 1, 2, 4, 5, and 6 under the Light Industrial Zone, and for Revitalization Area 3 under the Commercial General Zone.

General Development Standards

The following Development Standards control the building envelopes and setbacks for the proposed structures and other site improvements. These standards have been designed to provide some flexibility in Plan Area design while ensuring a consistent and coordinated built environment.

Table 4–1: General Development Standards

	Revitalization Areas	Distribution Facility
NEW BUILDING MINIMUM SETBACKS		
Plan Area Perimeter Setbacks (from ROW or property line)		
Del Amo Boulevard	10 feet	20 feet
Wilmington Avenue	10 feet	20 feet
Plan Area Southern Boundary – Wilmington Ave. to Martin St. (from the property line of adjacent residential or industrial zoned property)	N/A	50 feet
Martin Street	10 feet	20 feet
213th Street	N/A	20 feet
Chico Street	20 feet	20 feet
Plan Area Northern Boundary between Chico Street and Plan Area Western Boundary South of Annalee Avenue	20 feet	20 feet
Plan Area Western Boundary Southward from Del Amo Boulevard and along Annalee Avenue	N/A	20 feet
Plan Area Internal Setbacks		
Building to Tajauta Avenue PAE ¹	25 feet	25 feet
Building to Dominguez PAE ^{1,2}	20 feet	10 feet
Building to Truck Driveway RAE or storm drainage/water quality facility ³	0 feet	0 feet
Distribution Facility – Building to Building	N/A	20 feet
Revitalization Area – Building to Building	20 feet	N/A
Revitalization Area 1 – Building to easterly property line ⁴	40 feet	N/A
Revitalization Area 3 – Building to westerly property line ⁴	26 feet	N/A
NEW TANK MINIMUM SETBACKS⁵		
Plan Area Perimeter Setbacks		
Del Amo Boulevard	N/A	450 feet
Martin Street	N/A	750 feet
213th Street	N/A	350 feet
Interior Setbacks		
Tank to Tajauta Avenue PAE	N/A	350 feet
Tank to Tank	N/A	75 feet
ENCROACHMENT INTO SETBACKS		
Encroachments	See CMC 9136.29 or 9146.29	See CMC 9146.29
SIDEWALKS AND LANDSCAPE AREAS		
Plan Area External Perimeter Sidewalk Width	5 feet minimum	5 feet minimum
Internal Sidewalk Width Adjacent to:		
Tajauta Avenue PAE	5 feet minimum	5 feet minimum
Dominguez Street PAE	5 feet minimum	5 feet minimum
Minimum Required Landscaped Open Space		
Plan Area Perimeter Open Space/Landscaping	Per Section 5 Specific Plan	Per Section 5 Specific Plan
Internal Open Space as a Percentage of Lot or Leasehold Area	5%	0%

1 Setback measured from the edge of the Public Access Easement (PAE).

2 Setback from PAE or Restricted Access Easement (RAE) to existing structure is 5 feet.

3 Setback measured from the edge of the Restricted Access Easement (RAE).

4 These minimum setbacks may be increased for a particular proposed use or site plan based on more detailed analysis of the proximity to the West and East Distribution Facility and/or future changes to applicable standards and regulations.

5 A tank is a structure and not a building. Tank setbacks refer to the up to 30 proposed new storage tanks located in the West Distribution Facility.

Table 4–2: Maximum Structure Height Development Standards^{1,2}

	Base Structure	Secondary Features ³
REVITALIZATION 3		
Primary Retail Structures >8,000 square feet	32 feet	42 feet
Pad Structures ⁴ <8,000 square feet	22 feet	26 feet
REVITALIZATION 1		
	35 feet	45 feet
REVITALIZATION 2		
	18 feet	24 feet
REVITALIZATION 4, 5, 6		
	50 feet	60 feet
EAST DISTRIBUTION AREA		
New Building	22 feet	26 feet
New Tank	N/A	N/A
WEST DISTRIBUTION AREA		
New Building	32 feet	42 feet
New Tank	53 feet	N/A

1 This height standard does not apply to the height of poles, towers, or similar kinds of industrial or utility infrastructure.

2 Any increase in height should be considered via a development plan approval pursuant to CMC Section 9172.23 by the Planning Commission.

3 Secondary features are architectural elements, such as towers, that are part of the overall architectural design and massing plan for the structure.

4 Adjacent to Wilmington Avenue and Del Amo Boulevard.

5

Design Standards and Guidelines



Introduction

The Carson Revitalization Project Specific Plan Design Standards and Guidelines (Design Guidelines) are intended to be a key reference to assist future Project designers in understanding the framework to achieve the goal of high-quality development and improvements within Revitalization Areas 1 through 6 and along the perimeter boundaries of the entire Carson Revitalization Project Specific Plan area (Plan Area). These Design Guidelines are recommendations that complement the mandatory Plan Area development standards contained in **Section 4–Development Standards**, as well as the City of Carson Zoning Code. The Design Guidelines also provide examples of desirable potential design solutions and acceptable design interpretations of certain mandatory development standards.

The provisions of these Design Guidelines apply to all development within the areas designated Revitalization Areas 1 through 6 in **Section 2–Land Use Plan**. They also apply to the treatment of Plan Area perimeter edge conditions.

All development within Revitalization Areas 1 through 6 is subject to Site Plan and Design Review and approval shall be granted by City's Planning Division prior to the issuance of a building permit.



Distribution Facility

Given the industrial nature of the existing and anticipated ongoing operations within the Distribution Facilities, these areas are exempt from these Design Guidelines. The areas comprising the East Distribution Facility and the West Distribution Facility currently contain miscellaneous industrial infrastructure improvements, including petroleum storage tanks, truck loading lanes, pipelines and control facilities, and office and maintenance buildings, as well as areas proposed for development with new tanks and loading lanes. The design of these new tanks and loading lanes, as well as any structures, will be similar to the existing facilities.

Corporate logos such as the Shell pecten and its associated text, such as currently displayed on a large storage tank in the photograph on this page, is permitted within the East and West Distribution Facility only.

Within the Plan Area, the West Distribution Facility will be bordered by a landscape buffer between its required security fencing and the extensions of Dominguez Street and Tajauta Avenue (**Figure 3-5**).

Where the Distribution Facility abuts the Plan Area perimeter, a combination of security fencing and various site-specific landscape edge treatments will provide screening of views into the Plan Area to the degree feasible. The various edge conditions and considerable constraints along the Plan Area perimeter are discussed further below in the section titled Plan Area Perimeter Design Guidelines.

Design Goals

Outside of the Distribution Facilities, the Plan Area contains several different land uses. These different land uses are defined by individual character and building types that facilitate their particular function. Despite the inherent differences in function, character, and building type associated with different land uses, the intent of these Design Guidelines is to apply common design principles to all development exclusive of the Distribution Facility in the Plan Area to achieve a generally cohesive overall Project identity.

Similarly, the appropriate screening and landscape design for each section of the Plan Area perimeter will vary depending on the land use within that section and the adjacent off-site land use.

In the Revitalization Areas, each land use is typically associated with an appropriate level of design detail. For example, retail and office buildings would typically implement a certain level of building design and detail, landscaping, and employee amenities. In contrast, industrial, manufacturing, and warehousing uses will typically present fewer opportunities to implement such details. However, by implementing the Design Guidelines outlined here, a quality building and site design may be achieved.

The Plan Area is likely to be developed in phases over a period of 20 years or more. Each phase of development will accordingly suit the individual Project objectives, tenant requirements, economics, and aesthetics of the conditions at different points in time. Additionally, it is important that as the Plan Area as a whole is developed with various new industrial, commercial, or public uses, the overall Project goals are achieved. This will enhance the recognition that the Plan Area is an appropriately designed part of the City of Carson, with a distinct identity.

The following design goals express the intent of the Design Guidelines. The achievement of these goals will ensure the cohesive development of the Plan Area.

1. Ensure that design and site planning considerations within the Revitalization Areas and Plan Area perimeter complement and do not unreasonably impact the operations and security requirements of the East Distribution Facility and the West Distribution Facility.
2. Create a cohesive visual character and consistent level of quality that will unify the architecture, Plan Area features, and landscaped areas as these elements are developed across the Plan Area.
3. Enhance the visual quality of the Plan Area perimeter, where practical, especially near residential land uses.
4. Sequence improvements in a manner that is appropriate for the anticipated long term, phased development of the Plan Area.
5. Encourage appropriate sustainable practices such as resource conservation, green building techniques, and water-wise landscape design.

Revitalization Area Design Guidelines

These Design Guidelines apply to all Revitalization Areas, including all individual end-user sites, located within the Plan Area. These Design Guidelines are meant to convey the general standards and level of quality expected for Plan Area planning and design, building design, functional and support elements, landscaping, signage, and lighting.

In some instances, there may be an alternative way to achieve the intent of a specific guideline presented within this section. In such cases, the City shall consider a limited number of alternatives if the character and intent of the guideline can be achieved through the proposed alternate means or methods.



Visitor parking and access should be accommodated with convenient parking and clearly identified building entries.



Building setbacks should meet the minimum requirements, but should also be proportional to existing development.

Plan Area Planning and Design

To consistently maintain the desired quality of Plan Area design, functionality, and appearance throughout the Revitalization Areas, these main guidelines apply:

1. Locate receiving and loading areas at the sides and/or rear of buildings.
2. Screen receiving and loading areas and any outdoor storage, equipment, and work areas from view of a public or private street.
3. Provide convenient vehicular access, clear and simple on-site circulation, and adequate visitor parking.
4. Visually emphasize the main entrances to buildings.
5. Provide landscaped open spaces where appropriate along a public or private street, at entrances, and at employee break areas or pedestrian gathering points.

Desirable planning concepts for the Revitalization Areas include the following:

1. Primary structures should have a minimum of 5 feet of landscaping between the parking area or walkway and the building façade. These landscaped areas should include a mixture of trees, shrubs, and other plant material. The exception is for façades internal to a site, facing areas that are predominantly for loading or receiving.
2. Large blank walls and loading areas without architectural articulation should not face public or private streets.
3. To create visual diversity and avoid a long undifferentiated string of building façades, a variety of building and parking setbacks (in excess of the minimum required) should be provided.
4. Building setbacks should meet the minimum requirements but should also be proportional to the scale of the structure and existing adjacent development. Larger structures should have a deeper setback area to maintain an appropriate spatial relationship.
5. Ancillary structures, such as those associated with loading bays, storage areas, and trash enclosures, should be visually and spatially in harmony with the overall design and configuration of the buildings.
6. Where provided, employee break and recreation areas and open spaces should incorporate shade structures or trees to provide relief from the sun.
7. On large sites, focal points should be developed to create a sense of variety and interest. This may be achieved by incorporating vertical building features near main building entrances combined with landscaping and special paving materials.
8. Solar access to existing rooftops should be preserved.

Circulation and Parking

On-site circulation is to be designed to provide clear, efficient, and safe access for visitors, employees, delivery trucks, and pedestrians. Parking lots and parked vehicles are not to be the dominant visual elements of the Plan Area as seen from public or private streets.

Design Standards

1. Adequate areas for vehicular maneuvering, stacking, truck staging, delivery, loading, and emergency vehicle access shall be provided.
2. Access points from a public or private street to a delivery or loading area, whether located in the front, side, or rear of the site, shall be located as far as possible from nearby intersecting streets so that adequate stacking room is provided for turning movements.
3. Building entrances and on-site circulation systems shall be designed and located to minimize pedestrian versus vehicle conflicts.
4. Parking lots adjacent to and visible from public streets shall be partially screened from view by low screening vegetation, walls (approximately 36 inches to 48 inches in height), earth berms, or changes in elevation, or combinations thereof whenever possible.

Design Guidelines

1. Parking lots should provide areas for motorcycle parking.
2. Where feasible, vehicles should not be required to enter a public or private street in order to move from one area to another within an individual Revitalization Area.
3. Large parking lots should generally be located along the sides of buildings, or at the rear. Where parking in front of the buildings is typical for uses such as retail in Revitalization Area 3, parking lots should be planned as several smaller bays with landscaped areas creating visual separation.
4. Parking areas typically for the use of customers or visitors should be located toward the front of the site; however, these areas should be generally limited to a depth of one parking bay, or approximately 60 feet. Employee parking areas should be located to the side or rear of the site.
5. On-site pedestrian circulation systems should be connected to public sidewalks within the public right-of-way.
6. Pedestrian access between nearby off-site transit stops and the main on-site employment centers should be as direct as possible along clearly defined pathways.



Encourage parking lots at the sides or rear of buildings, with building entries and landscaping adjacent to the street edge.



Typically limit parking to one bay in front of industrial buildings.



Parking lots should be partially screened and softened with low vegetation along public streets.



Evenly distributed shade trees located within landscaped islands in this parking court provide needed shade while enhancing views.



Emphasize landscaping adjacent to sidewalks and building entrances with enhanced features or plant material.

Landscape Design

Although the Plan Area is primarily industrial and commercial, a consistent approach to landscape design is to highlight the entrances to buildings and parking lots; provide transition or buffering between neighboring sites; and screen delivery, outdoor storage, equipment, and work areas.

Design Standards

1. Landscaping, in combination with screen walls, shall be used to screen less visually appealing areas such as trash enclosures, storage areas, delivery areas, public utilities, and mechanical equipment from public view.
2. Trees that drop excessive flowers, fruit, or litter shall be avoided adjacent to pedestrian walkways.
3. Trees shall be located no closer than 5 feet to underground utility lines or utility laterals.
4. Planted trees shall have a minimum container size/box of 24 inches.
5. A water-wise landscape design, including native or low-water-use plants, shall be used. Refer to the section on Water-Wise Landscape Design at the end of these Design Guidelines.
6. All planting areas shall be irrigated. Refer to the section on Water-Wise Landscape Design at the end of these Design Guidelines.
7. All plant material shall be compatible with Zone 22 of the Sunset Climate Zone Map by Sunset Publishing Corporation or Zone 10b of the United States Department of Agriculture's Cold Hardiness Zones Map.
8. A 10-foot minimum landscaped buffer shall be provided between parking areas and any Plan Area perimeter public right-of-way, and a 6-foot minimum landscaping buffer should be provided for internal public access private streets or driveways.

Design Guidelines

1. Plant material should be in scale with the adjacent buildings and available space and be located such that at maturity they accomplish the intended shading or screening without excessive pruning.
2. Plant material should be protected from vehicular and pedestrian encroachment through the use of appropriate layout, curbs, raised planting surfaces, or walkways.
3. Planting areas should be used, except in delivery and loading areas, as a traffic barrier to protect buildings from possible contact with vehicles.
4. Trees should be no closer than 10 feet to street lights unless otherwise directed by the City.

5. Linear root barriers should be installed at each tree planted within 5 feet of a curb or sidewalk. Root barriers on the curb side should be 18 inches deep. Root barriers should extend a minimum of 6 feet beyond each side of the trunk of the tree along the item to be protected.
6. The use of turf is discouraged. If included, turf areas should be used as part of an entry feature or in another highly visible location, the area should be limited in size and should use drought-tolerant grass species where possible.
7. Trees and shrubs should be spaced appropriately to allow for long-term growth to maturity. Tree and shrub species should be selected based on growth characteristics compatible with adjacent buildings or infrastructure to minimize any future root intrusion problems.
8. Enhanced planting should be used as visual focal points or highlight entries and any key activity nodes.
9. Due to challenging soil conditions found on-site, extra care should be given to prepare soil amendments as appropriate prior to planting. "Structural soil" should be considered to increase the effective root zone for tree planting in areas that may have particularly poor soil conditions or that might be subject to compaction due to the limited size of the planting area such as in a tree well or parking lot island.
10. Plant material that is short-lived or susceptible to disease in this region should be avoided. Planting in drifts or masses of the same species is both attractive and encouraged; conversely, excessively large expanses of single plant species should be avoided due to their monotonous appearance and potential loss of aesthetic appeal if struck by disease.

Parking Lot Landscape Design

Planting within parking lots in the Revitalization Areas is to be given special consideration. These areas are typically located out of the public right-of-way or main public access easements and may contain different plant material than the adjacent street. The following are in addition to the standards and guidelines for Landscape Design, above, and are intended to create a functional and attractive parking environment.

Design Standards

1. Plant material adjacent to parking spaces or pedestrian walkways shall generally produce little litter and be without thorns or sharp leaves.
2. Planting areas shall be of a layout and dimension large enough to support healthy plant growth and discourage pedestrians from cutting through, stepping onto, or damaging plant material.



Enhanced planting should be used to highlight entries.



A landscaped buffer should be provided between parking areas and public right of way.



Landscaping, in combination with screen walls, should be used to screen areas such as trash enclosures and delivery areas,



Landscape can be used to soften building edges and buffer parking areas.

3. Plant material within or adjacent to parking lots shall be selected with consideration for ability to withstand harsh urban conditions and grow to an appropriate, mature size.
4. Water-wise planting techniques shall be incorporated. Refer to the section on water-wise landscape design at the end of these Design Guidelines.

Design Guidelines

1. In large parking lots, trees should be located throughout the parking lot and not only at the ends of the parking rows. This will maximize the aesthetic effect and reduce the “heat island” effects of large expanses of pavement.
2. Parking lots should incorporate an even distribution of shade trees, approximately one tree per six spaces in industrial land use areas, distributed throughout the lot. A clear pedestrian pathway or walkway should be provided from parking lots to building entrances. The use of pedestrian lighting and enhanced colors or materials are encouraged in the design of pedestrian walkways or sidewalks near building entrances.
3. Parking lot trees at maturity should have broad canopies to shade cars and create a more attractive environment.
4. All planting areas should be bordered by a concrete curb a minimum of 5 inches high when adjacent to a parking surface. The exception to this is for low-impact development features where surface runoff is to drain directly into the landscape area.
5. Enhanced landscaping should be provided at key points such as the driveway entry to the street, at the building entry, and at employee break areas.
6. Landscape design of parking lots should be coordinated with building design, lighting layout, and signage locations.

Walls and Fences

Walls and fences perform various functions within the Carson Revitalization Project. Fences that provide the required security functions around the East Distribution Facility and West Distribution Facility are described in Section 3. The landscaping adjacent to these security fences must be consistent with requirements for maintaining the security function of these barriers, as also illustrated in that section. Walls and fences within the Revitalization Areas may also provide a security function depending on the type of business and typical screening and buffering. Where feasible, walls and fences are to be designed to blend with the adjacent building architecture. Landscaping is to be used in combination with walls to soften the appearance and aid in the prevention of graffiti.

Design Guidelines

1. Walls and fences should be constructed as low as possible while performing their security and screening function.
2. Where a security fence is required, it may be up to a 7-foot-high chain link fence or 7-foot-high masonry wall with three to six strands of barbed wire extending to a height of 1 foot above for a total height of 8 feet.
3. Both sides of all screen walls or perimeter walls should be architecturally treated to blend with the building architecture. Wherever suitable, landscaping should be used in combination with security fences or perimeter walls.

Building Design

The Plan Area design goal of encouraging sustainability may be addressed, in part, through the incorporation of green building practices, where feasible. Green building practices increase energy efficiency and are encouraged. See information about the U.S. Green Building Council at www.usgbc.org.

Industrial buildings are understood to be most functional when configured as simple rectangular or square floor plates with simple massing of the three dimensional building form. When accommodating multiple tenants, the use of groups of reasonably proportioned buildings, rather than one massive building, is the preferred design solution. Where this is not feasible, various techniques can be used to design visually appealing buildings while retaining the efficiency of the traditional square or rectangular shapes.

Elements seen as desirable in such a well designed building are the following:

- Variations in the façade treatment, especially on the street-facing front and sides
- Enhanced architectural treatment at main building entrances
- Screening of delivery and storage areas from view from the public or private streets

Elements seen as undesirable are the following:

- Long continuous blank walls visible from the public or private streets
- Unscreened or inadequately screened service areas or trash dumpsters
- Structures without façade treatments that help break up the visual mass of a box-shaped structure



Examples of enhanced architectural treatment at the main building entrances.



Examples of variation in vertical planes of the building include change in material, depth, and texture, as well as the use of canopies.



Focus architectural detail and landscape enhancements at the building entrance so that it is easily identifiable.

Building Massing

A mass is defined as a three-dimensional form such as a cube, box, or cylinder. Combinations of forms and voids, or the incorporation of open spaces in the forms can change the appearance and the visual perception of mass. This type of architectural articulation can often make the building more interesting and less imposing. It is understood that major changes in the form of industrial buildings can often be economically unfeasible for this type of use. However, certain design techniques can be used to economically and effectively accomplish the intent of these Guidelines by varying the visual perception of the mass of a structure as viewed from the public and private streets and other major public view points. These techniques include the following:

1. Surface detailing, changes in material, and window placement that contribute to a distinctive and balanced appearance.
2. Variations in the vertical planes of the building, with projecting and recessing elements. Such treatments at building entrances are seen as particularly effective.
3. Variations in the wall height.
4. Variations in the roof elevation or the form of the roof structure.
5. Features such as horizontal bands, reveals, trim, parapets, awnings, overhangs, or other architectural articulation or ornamentation incorporated at different locations on the wall surface.
6. Minimizing blank walls by adding windows, changing the color or texture, and adding various trim details, reveals, and projections along the wall surface.

Building Entrances

It is important that the main entrance to a building be clearly identifiable. It is the primary point of arrival for visitors and employees and should be treated as a significant architectural feature.

1. The main building entrance features should be designed as a significant part of the building's overall composition.
2. Building entrances should be easily identifiable from the parcel entrance and easily accessible.
3. Entrances to large structures should portray an integrated quality appearance and be architecturally tied to the overall mass and building composition. Entrances should not appear to be an "add-on" element.
4. Design elements such as overhangs, enhanced landscaping that complements the building, vertical architectural features, and special building materials should be used to create a visually significant building entrance.

Building Materials

The selection and placement of building materials on the façade facing the street provides visual interest at the pedestrian level. Where varied treatments are used, visually heavy materials and textures should be used to form the building base and potentially as accents at corners or on the upper portions of walls. Architectural details and reveals should be used to enhance the building and adjacent pedestrian spaces by utilizing form, color, and shadow to create a more interesting façade.

1. False thematic façades and simulated materials should be avoided.
2. Materials requiring a high level or frequency of maintenance should be avoided.
3. Wall materials should utilize non-toxic, recycled content materials wherever feasible.
4. Walls subject to potential contact by machinery or trucks should be of durable materials that can withstand incidental contact damage or can be easily repaired.



Color can emphasize key architectural features and enhance the buildings appearance.

Building Color

Well-coordinated color palettes that enhance and unify the appearance of exterior features of the building and site improvements are encouraged. However, these guidelines are not intended to discourage the creative use of color on building façades or specific architectural accent features used to achieve distinctive industrial buildings.

1. Flat, muted colors should be used on large major wall planes to reduce sun glare. Bright whites and large areas of intense light color should be avoided. The exception is the use of colors with a high albedo on flat roofs not visible from the ground as part of cool-roof energy efficiency techniques.
2. Subdued colors should be generally used for the overall building color. Bright or accent colors should be considered for trim, windows, doors, and key architectural features.
3. The bright or accent colors should be coordinated with the wall colors.

Delivery and Loading Facilities

Delivery and loading areas are to be carefully designed, located, and integrated into the site plan and building architecture. This is to ensure that these critical functional elements do not detract from the view from public or private streets nor create a nuisance for adjacent property owners. These areas are to be located and designed for easy access by trucks and service vehicles and for convenient access by each building tenant requiring access to such facilities.



Landscaping and walls should screen loading areas from view.



Delivery areas should accommodate trucks without the need to back up into adjoining streets.

Design Standards

1. To prevent delivery areas typical of industrial, manufacturing, and warehousing uses from visually impacting the view from public or private streets, these facilities shall be located on the side or rear of the structure.
2. Delivery areas shall be screened with portions of the building, architectural wing walls, and landscaping, or combinations thereof, to prevent an adverse visual impact when viewed from the front of the building.
3. Delivery areas shall be designed to accommodate trucks without the need to back up into an adjoining public or private street.

Design Guidelines

1. Delivery areas should be located to minimize circulation conflicts with other Plan Area uses.
2. The location of delivery areas should be self-evident or clearly marked with directional signage.
3. Additional requirements for these areas, as well as requirements for screening, fences, and walls are described in the Carson Municipal Code.

Utilities and Storage

The functional need for utility and storage areas is expected to be part of the early building and Plan Area design process. The requirements for such facilities may vary significantly depending on tenant requirements, but they are recognized as essential components of certain industrial and manufacturing processes.

Design Standards

1. Exterior storage shall be confined to portions of the Plan Area least visible from public rights-of-way and be screened to minimize visibility from significant public viewpoints, including adjacent residential land use.

Design Guidelines

1. Utility lines from the service drop to the site should be underground.
2. Utility equipment such as electric and gas meters, electrical panels, cable boxes, and junction boxes should be located within the building.
3. Utility equipment such as transformers may be located outside of the building. If located within an area of high public visibility, they should be screened in a manner consistent with that allowed by the franchise utility provider.

4. Where screening is required in areas of high public visibility, acceptable screening elements include masonry walls, berms, and landscaping.
5. Any outdoor equipment whether on the front or side of the structure or the roof should be appropriately screened and should not be placed immediately adjacent to public walkways. If the method of screening includes walls, the walls should be architecturally compatible with the adjacent structure.
6. Roof access should be provided from the interior of the building. Exterior roof access ladders should be avoided.
7. Gutters and downspouts should be concealed unless designed and finished as a decorative architectural feature of the building façade.

Trash and Recycling Enclosures

Trash and recyclables storage area enclosures are to be designed consistent with the building architecture, configured consistent with functional and access requirements, and located in areas that minimize visual impact. Trash and recyclables storage areas for industrial uses are regulated by Carson Municipal Code Sections 9164.3 through 9164.5.

Design Standards

1. Every end user site shall provide a facility capable of handling the trash and recyclables generated by that site.
2. The design of the trash and recyclables enclosure shall allow the provider of solid waste collection and disposal services to efficiently collect trash and recyclable materials.

Design Guidelines

1. Exterior trash and recyclable enclosures should be consistent with the design of the building architecture.
2. Where appropriate, a pedestrian entrance to the trash and recyclables enclosure should be provided so that large service access gates do not have to be opened as often.
3. Trash and recyclables enclosures located in employee or visitor parking areas should be screened with both landscaping and walls. The enclosures should be separated from adjacent parking stalls by a minimum 3-foot-wide planting area.
4. Drainage from adjoining pavement and roof areas should be diverted around the trash and recyclables area.

Exterior Lighting

Exterior lighting is to provide visibility, safety, and security for businesses, vehicles, and pedestrians. It may also be used to enhance the architecture of buildings and landscape features. Primarily, exterior lighting provides for nighttime safety and security. Additionally, lighting layout, fixture selection, shielding, and automatic timer motion detector mechanisms are expected to be designed to be energy efficient, minimize glare and light spillage, avoid light trespass, and provide effective illumination without creating light pollution. Full or partial cut-off lighting is to be used to the greatest extent practicable. Full cut-off fixtures direct light where it is needed—directly down and out, not up and sideways. These fixtures save money and are energy efficient since they direct light rays below the horizontal plane extending from the fixture and prevent light from being wasted upward. Full cut-off fixtures significantly reduce the impact of light pollution on the night sky.

Design Standards

1. Lighting shall be used to provide sufficient illumination for security and safety of areas such as roadways, parking, delivery areas, loading docks, working areas, and pedestrian pathways. Excessive lighting that creates hot spots or spills into adjacent sites shall be avoided.
2. Particular care shall be taken to avoid light spillage and trespass where residential land uses are near the Plan Area boundary and security needs require lighting along the Plan Area perimeter fence.

Design Guidelines

1. All building entrances should be well illuminated for safety and security.
2. Light fixtures attached to a building should be designed or selected to be compatible with the architecture of the building.
3. Where used, up-lighting of buildings should use the lowest wattage possible to minimize impacts on the night sky. Light sources for wall washing and tree lighting should be hidden.
4. The use of spotlighting should be limited and should be shielded from adjacent properties and directed at a specific object or target area.

Signage

Plan Area and building signage can either significantly enhance or diminish the aesthetic appeal of the Project. Standards for signage are provided in Carson Municipal Code. Provisions for sign placement, sign scale in relation to the building, and the readability of the sign are to be considered in the overall approach to the use of signage.

Design Standards

1. Signage shall be for identification and direction only, and shall not be used for advertising.

2. Any signage that contains elements that project perpendicular from the building façade shall have a minimum clearance of 8 feet from ground level to the bottom of the sign.
3. Lighting directed at all exterior signs shall illuminate the sign without producing glare or spillage on pedestrians or autos, or into adjacent properties.
4. The backs of all signage visible to the public shall be suitably finished and maintained. Signs shall be free of visible bracing, angle irons, guide wires, or similar supports.
5. Billboards are prohibited within the Plan Area.
6. Raceway type signage is prohibited within the Plan Area.
7. A sign program shall be submitted for Revitalization Area 3.
8. Window signs shall not cover more than 20 percent of the window area.

Design Guidelines

1. Monument signage and landscaping should be coordinated with the landscape theme of the adjacent surroundings and function as appropriate accents.
2. Signage should coordinate with the building design, color, and materials.
3. The method of signage attachment to a building should be considered in the overall building and sign design.
4. Signage should not cover up windows or important architectural features.
5. Flush-mounted signage should be positioned within or integrated with architectural features, such as a panel above the entry or flanking a doorway.
6. Flush-mounted signage should align with other signage on the building to maintain a consistent pattern.
7. A single site with multiple tenants should provide a consistent location and configuration for individual wall-mounted signage and address numbering.
8. Appropriately located and clearly visible small-scale signage should provide clear direction to delivery and loading, visitor parking, and other special areas when not readily apparent.
9. Plastic or internally illuminated sign cabinets should be avoided. Internally illuminated or back-lit individual lettering or externally illuminated lettering and logos are the preferred design.
10. To conserve energy, there should be an appropriate shut-off time for illuminated signage for businesses that do not operate at night.



Monument signage should be consistent with the landscape theme and of the edge conditions with appropriate accents.



Signage should be for identification only and should coordinate with the building design, color, and materials.

Plan Area Perimeter Design Guidelines

The Design Guidelines for the perimeter of the Plan Area are focused on the visual enhancement of the edge conditions particularly where infrastructure of the Distribution Facility is in the vicinity of public streets or residential neighborhoods. Currently, the Plan Area perimeter edge consists of security fencing and a variety of landscape treatments.

The security fencing is a requirement of the operator of the existing facility. It is anticipated that these requirements will be periodically updated to respond to any new, future security standards. Also, in some locations, existing trees will have to be removed to reasonably comply with security requirements.

Currently, the landscaping and, in some locations, security fence slats have been installed to visually enhance the edge of the property and, while remaining consistent with security requirements, soften views from outside the Plan Area into the operational area of the facilities. In some locations, the existing landscaping provides aesthetically pleasing and effective screening. However, in other locations, trees have grown to a height that is beyond their ability to effectively screen the Plan Area at eye level.

To achieve the Design Goals described in the Introduction to this section, the objectives for the treatment of the Plan Area perimeter are as follows:

1. Maintain a secure perimeter around the Distribution Facility consistent with the owner's corporate operational standards and the best practices and recommendations of state and federal agencies.
2. Enhance the visual quality for the Plan Area perimeter as viewed from the outside looking inward.
3. Identify opportunities to enhance the combination of landscaping and security fencing to improve the visual appearance of the Distribution Facility as seen from vehicles and pedestrians traveling along the adjacent public streets.
4. Identify landscaping techniques that will provide appropriate screening of views into the Distribution Facility from residential land use areas either across the street or directly abutting the Plan Area perimeter.
5. Identify landscape concept designs that are compatible with the constraints posed by underground pipeline corridors, monitoring wells, overhead power lines, and other industrial infrastructure elements that exist in various configurations along the perimeter of the Plan Area.
6. Use landscape design elements that complement the security fencing particularly at the East and West Distribution Facilities. Security requirements may limit the height of plant material in certain areas and the location of plant material may need to be set back

from internal security accessways and clear zones, security walls and fences.

7. Identify landscaping techniques that will enhance external views into Revitalization Areas.
8. Use water-wise techniques and plant material for new landscaping for the Plan Area perimeter and Revitalization Areas and progressively transition, over time, the existing landscaping, where feasible, to a plant material palette and configuration that requires less water overall for irrigation and requires less frequent maintenance.
9. When reclaimed water is available, use reclaimed water to irrigate perimeter landscaping.

The intent is to balance the requirements for site security and surveillance zones with the desire to soften, buffer, or screen the views into the Plan Area. These perimeter treatments will replace the standard requirement for a masonry wall separating residential and industrial land uses (CMC 9146.3, A, 1). To be successful, the Plan Area perimeter improvements should provide a pleasant visual filter that strategically refocuses the eye of the viewer. However, all perimeter improvements must be consistent with applicable security requirements.

Visual Perception

The visual appearance of the Plan Area is influenced by many factors. The general public, including vehicular passengers on adjacent roadways, pedestrians, and adjacent residents, each have a different frame of reference for their visual perception of the Plan Area at any given moment in time. This is based on such characteristics as their distance from the Plan Area boundary, their speed if in motion, their angle of view, and their elevation relative to any fencing, landscape buffer, or screening. A major factor to consider is the effectiveness of the perimeter visual filtering and/or screening at different heights.

Figure 5–1: Distribution Facility Perimeter Fence Typical Section



Note: Chain link fence consists of fence fabric not less than 7 feet in height and fitted with a top guard of not less than 1 foot. Top guard consists of a 3-6 strand barbed wire top guard constructed of 9 gauge or heavier wire angled out and up at a 45 degree angle.

Visual Height Zones

To analyze existing conditions and potential screening techniques, the view through the perimeter zone into the Plan Area interior is divided into four Visual Height Zones, as depicted in **Figure 5-2**.

Low Zone

The Low Zone (ground level to 6 feet high) includes views to the foreground that are typically visually complex, since details are viewable up close. In this zone, the view is typically to the narrow strip of landscaping in front of the perimeter security fence. This fence is semi-opaque (chain link with slats). Where the fence is directly on the Plan Area boundary line abutting the sidewalk, there is no room for plant material to soften the appearance of the fence. In some locations, the security fence is on top of an embankment, thus increasing the effective screening height of the fence.

Middle Zone

The Middle Zone (6 to 12 feet above ground level) includes direct views to existing facilities within the Plan Area. Along the perimeter edge, this visually important zone is intermittently screened by the canopy of small to medium sized trees or very large shrubs.

High Zone

The High Zone (12 to 24 feet above ground level) includes views to tall infrastructure such as petroleum storage tanks or other existing facilities that may be located near the edge of the Plan Area. In some locations, petroleum storage tanks located near the Plan Area edge tend to dominate the view. Medium and large canopy trees provide partial screening of this zone along portions of the Plan Area perimeter.

Sky High Zone

The Sky High Zone (higher than 24 feet above ground level) includes views mostly of the sky, typically interrupted only by infrequent utility poles. This zone also occasionally includes some mature eucalyptus trees that have bare trunks up to 25 feet or more and an open canopy extending above.

These zones detail the typical visual experience and bring to light particular functional requirements of potential plant material for screening that may need to be addressed. The screening effectiveness and aesthetic character of existing vegetation and security fencing often varies at different heights. These conditions change over time. For example, a eucalyptus tree that has a very high mature height may provide good screening of the Middle and High zones for several years. However, for the vast majority of its life span, it will have a canopy only in the Sky High Zone atop a very tall bare trunk.



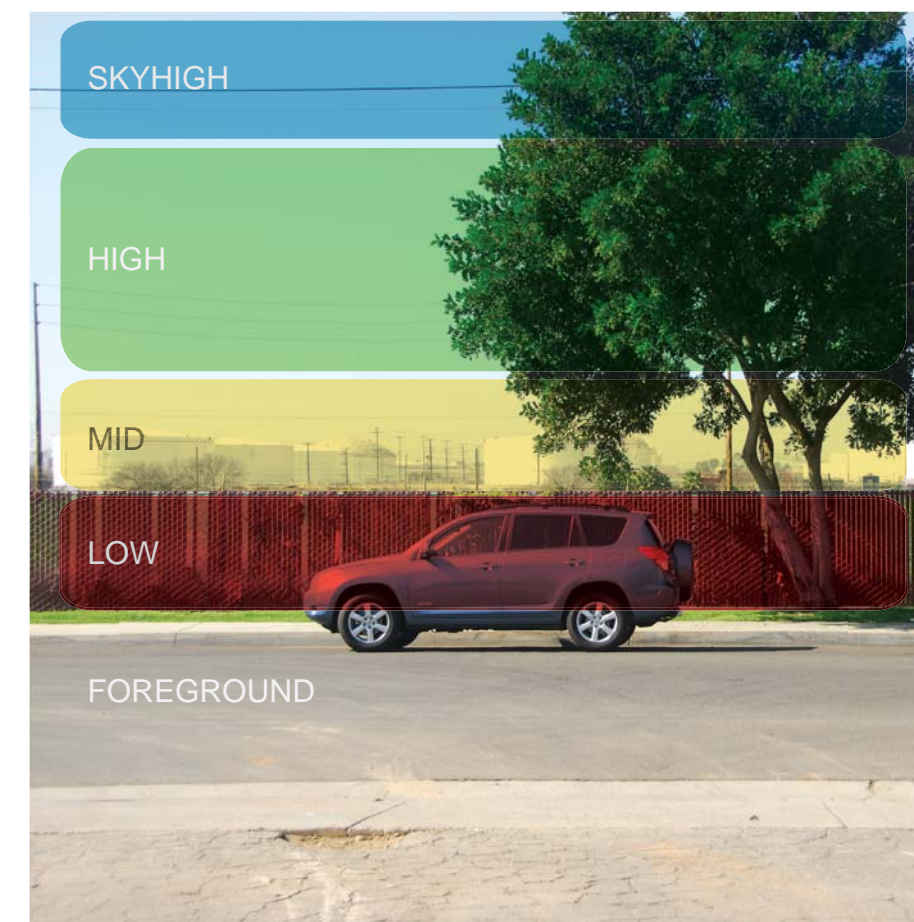
Carson Revitalization Project



Del Amo Boulevard, Facing Southwest



213th Street, Facing North



Martin Street, Facing West

The Visual Height Zones illustrate the visual analysis of the plan area perimeter by subdividing the typical viewshed of the Plan Area perimeter as seen from approximately 100 feet from the Plan Area boundary. Typical viewsheds looking toward the Plan Area illustrated above include Del Amo Boulevard (at left), 213th Street (center), and Martin Street (at right).

Visual Height Zones

- 0' - 6' = Low Zone
- 6' - 12' = Mid Zone
- 12' - 24' = High Zone
- 24' - + = Skyhigh Zone

FIGURE 5-2
Visual Height Zones

To effectively meet these screening challenges at different heights and enhance the visual perception of the Plan Area, each of the various segments of the Plan Area perimeter was analyzed based on its unique conditions and challenges. These conditions vary considerably, given the nature of the existing industrial land use and the existing constraints of above and below ground infrastructure. Due to the varying spatial limitations along the Plan Area perimeter, it is not practical or feasible to create 100 percent opaque screening of all potential views into the Plan Area. However, through the use of creative design techniques, especially in locations that are highly visible to many people, it is possible to enhance the overall visual quality of the Plan Area perimeter even with considerable site constraints.

Landscape Design

The design intent is to direct the focus of the viewer to aesthetically pleasing areas and maximize the effectiveness of each element of the proposed design. For example, spatially constrained edge areas would be planted with appropriate plant material that is attractive but also controls access (species with thorns), provides screening (evergreen species) and enhances visibility (species that mature at appropriate height). Since plant material changes in size and shape as it grows to maturity, careful planning and species selection will be necessary to ensure that the screening intent is maintained over time. These design techniques should be incorporated along the Plan Area perimeter:

Plan Area Perimeter Plant Material Selection

1. Tree species should achieve a manageable mature size that will retain intended screening effectiveness over its lifetime.
2. Trees planted should have a minimum container size of a 24-inch box.
3. Tree and shrub species should not require excessive pruning to accommodate security requirements, street clearance, or normal maintenance.
4. Plant material should have growth characteristics compatible with adjacent infrastructure to minimize any potential root intrusion problems.
5. If planted under overhead wires, tree species of limited mature height shall be selected.
6. Tree species that drop excessive flowers, fruit, or litter should be avoided adjacent to sidewalks.
7. Turf shall not be used as part of the Plan Area perimeter landscape.
8. Plant material should be selected for the ability to withstand harsh urban conditions, achieve the desired growth and screening, and maintain a consistent healthy appearance over a long lifespan.

9. Plant material should be selected for low maintenance characteristics and should not require excessive pruning or shearing to maintain an acceptable appearance.
10. Durable plant materials including native and low water use species should be used as part of an overall water-wise landscape design. Refer to the section on water-wise landscape design at the end of these Design Guidelines.
11. All plant material should be compatible with Zone 22 of the Climate Zone Map by Sunset Publishing Corporation or Zone 10b of the United States Department of Agriculture's Cold Hardiness Zone Map.

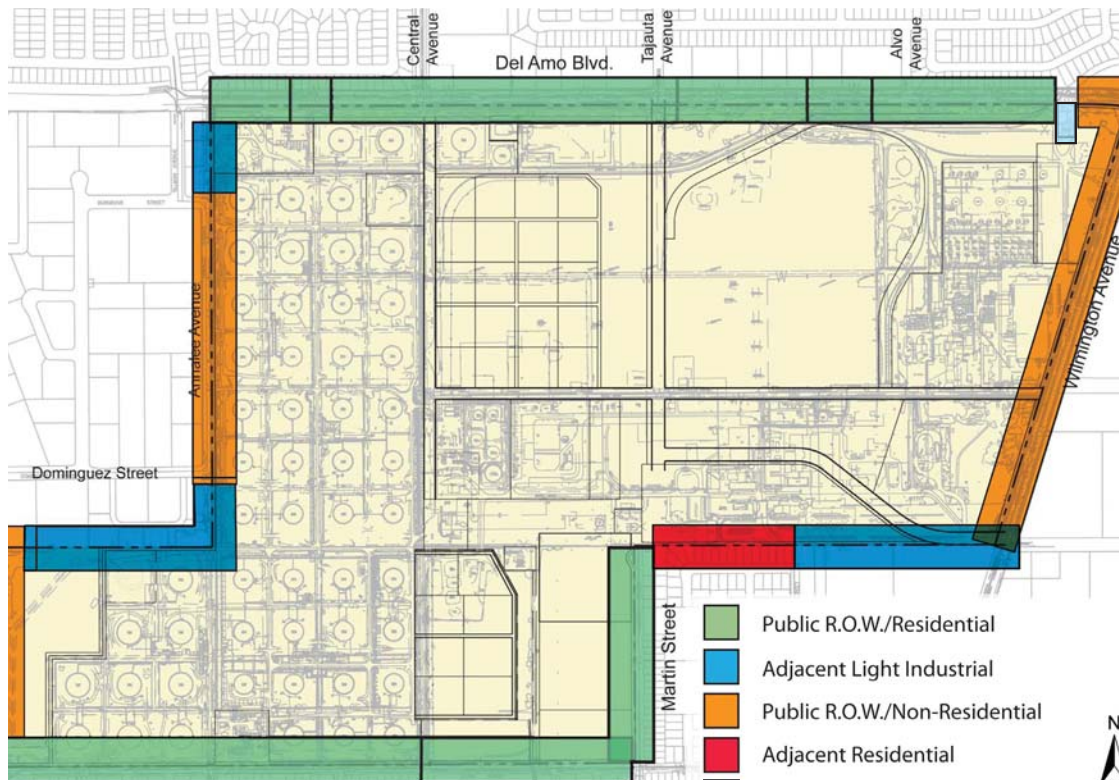
Landscape Details

1. Muted earth tone colors for chain link security fencing slats should be used so the fence will tend to recede visually and the visual focus will be on adjacent plant material.
2. All planting areas shall be irrigated. Refer to the section on water-wise landscape design at the end of these Design Guidelines.
3. Linear root barriers shall be installed at each tree planted within 5 feet of an underground pipeline, curb, or sidewalk. Root barriers on the side to be protected should be a minimum of 18 inches deep. Root barriers should extend a minimum of 6 feet beyond each side of the trunk of the tree along the object to be protected.
4. Due to challenging soil conditions found on-site, extra care should be given to prepare soil amendments as appropriate prior to planting. "Structural Soil" or other techniques for improving plant health and growth should be strongly considered to maximize the effective root zone for trees planted along the Plan Area perimeter.

Landscape Layout

1. Use a hierarchy of plant material sizes that contribute to a comfortable pedestrian scale at the sidewalk.
2. Locate trees such that they complement street trees that may exist within an adjacent public right-of-way.
3. Enhanced planting should be used at high visibility areas, if space allows, such as entries, or locations where major streets end perpendicular to the Plan Area edge.
4. Layout may vary due to special conditions. Implementation of screening or buffering along the Plan Area perimeter may be limited in some specific locations if field verification of site data reveals conflicts with known or unknown utilities or pipelines that are not feasible or practical to resolve in a cost-effective manner.
5. Trees should be planted no closer than 10 feet to street lights unless otherwise directed by the City.

Figure 5-3: Plan Area Perimeter Key Map

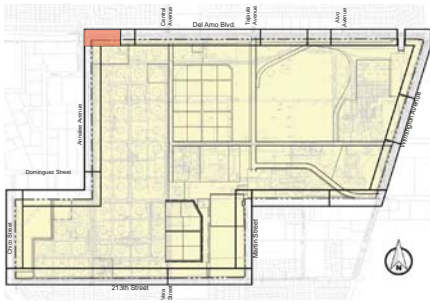


Plan Area Design Concepts

To effectively address the Plan Area perimeter opportunities and constraints in detail, it is subdivided into several segments based on adjacency to rights-of-way, site constraints, and adjacent land use, as shown in **Figure 5-3**. In **Figures 5-4 through 5-31**, detailed illustrative design concepts depict how the Plan Area perimeter design goals and objectives may be efficiently and effectively achieved in each of these different conditions. These concepts provide an illustration of the design intent for screening and landscaping along the Plan Area perimeter as the edge conditions vary. In addition to these general conditions, numerous special situations exist that will determine the exact layout and implementation strategy. These include bus stops, utility boxes/vaults/poles in or adjacent to the public right-of-way, Plan Area emergency access gates, driveways, and containment dikes. Another special condition along the Plan Area perimeter is the location of existing underground pipes that will remain. The location of these pipelines has been preliminarily identified from existing plans in most areas. However, the exact location will need to be verified during the subsequent final design process. Adjustments to the design concepts may be required to respond to the actual location of the underground pipes.

Where the Plan Area immediately abuts adjacent fire station or Industrial land use areas, no screening or buffering is required. The configuration of any fencing or wall between these abutting land uses at the Plan Area perimeter will generally be limited by security requirements only.

Del Amo Boulevard, Condition 1



Key Map

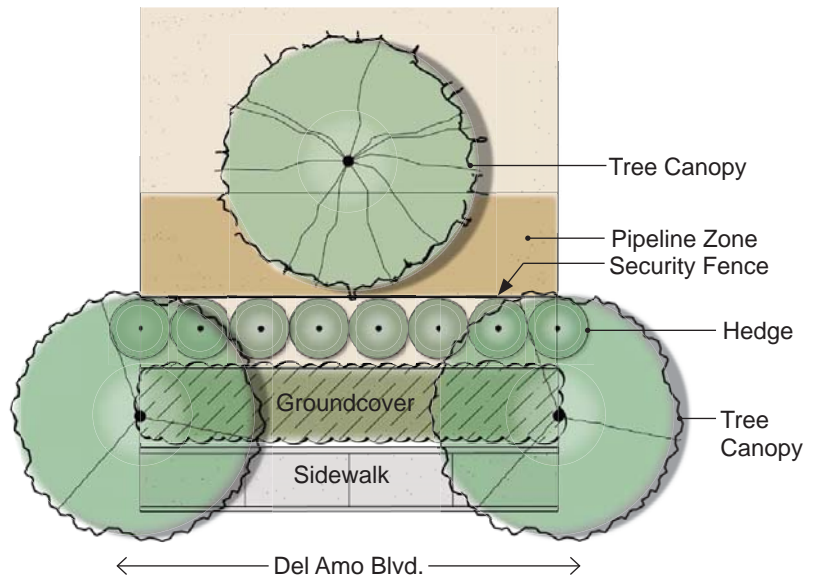
All six sections of Del Amo Boulevard shown in the key map above include several common components:

- Retain the mature existing trees except those that compromise security.
- Replace existing turf with water-wise groundcover or low shrubs.
- Replace existing hedge with an appropriately sized water-wise species that does not require excessive pruning to maintain desired size and appearance.
- Add (muted color) vinyl slats to the existing 8-foot-high chain link with barbed wire fence.

- This design concept applies to 340 feet of Del Amo Boulevard frontage from the storm water management pump at the northwest corner of the Plan Area eastward to the lateral fence shift.
- Add evergreen medium canopy trees both inside and outside the fence line to filter views in the Mid and High Visual Height Zones.



Existing Condition



Proposed Typical Plan View

Figure 5-4: Eye Level Perspective View of Proposed Improvements

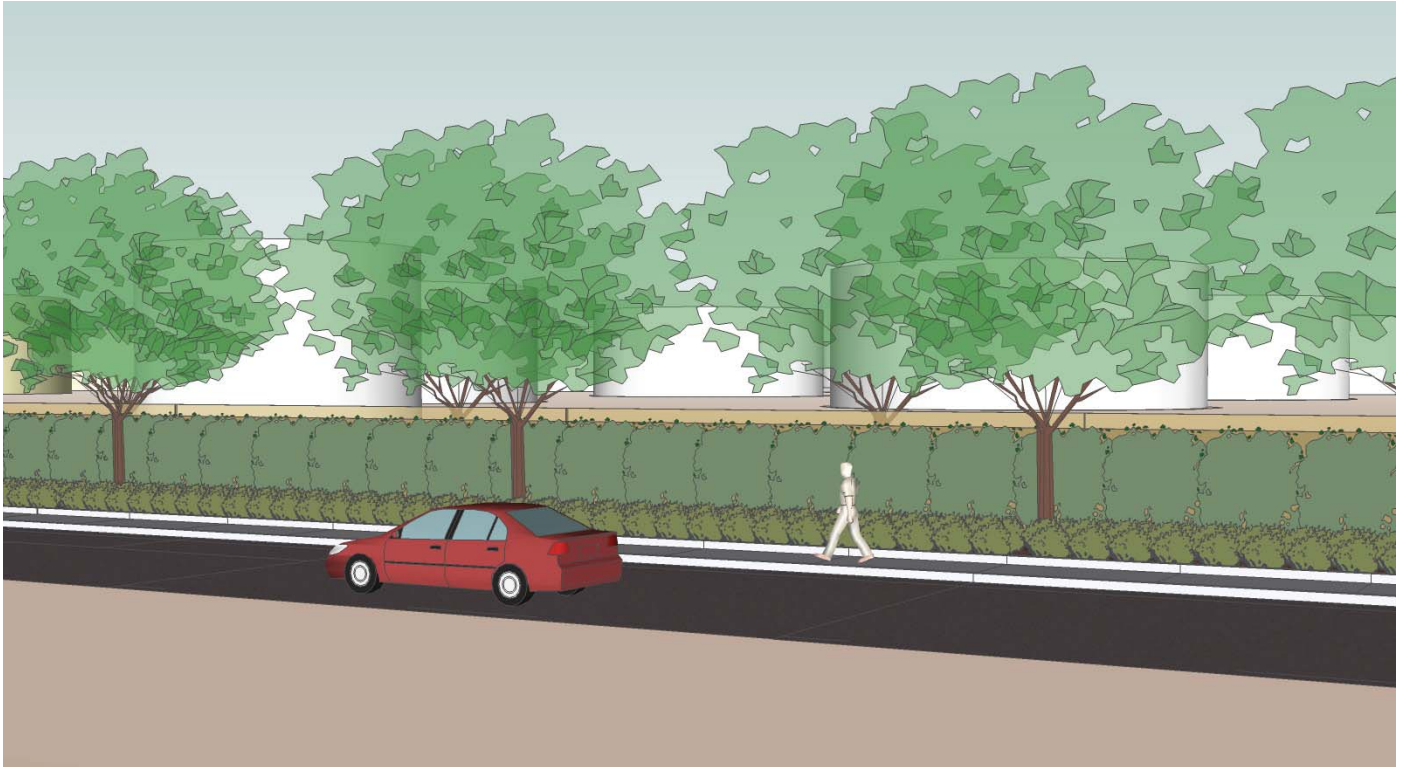
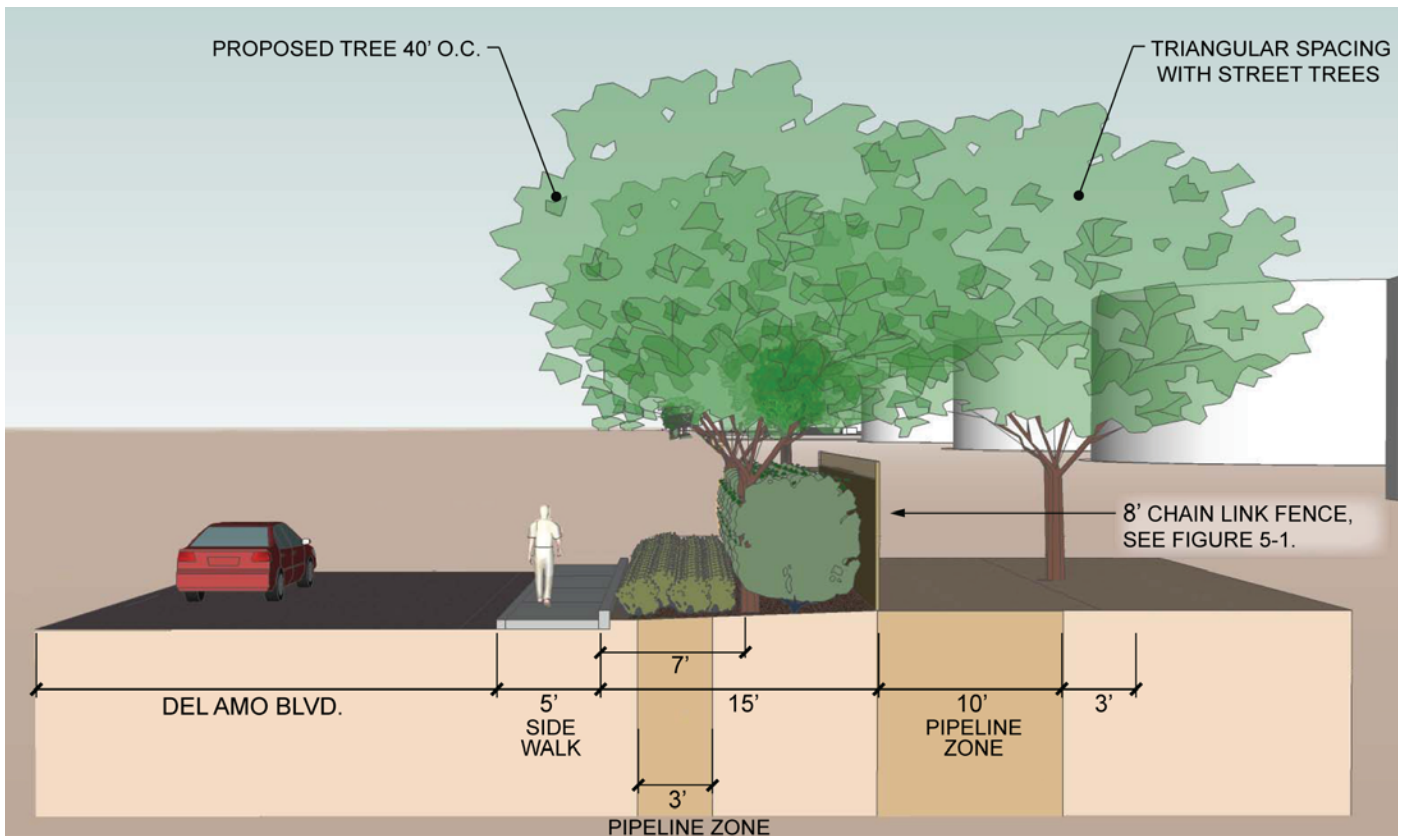


Figure 5-5: Proposed Section





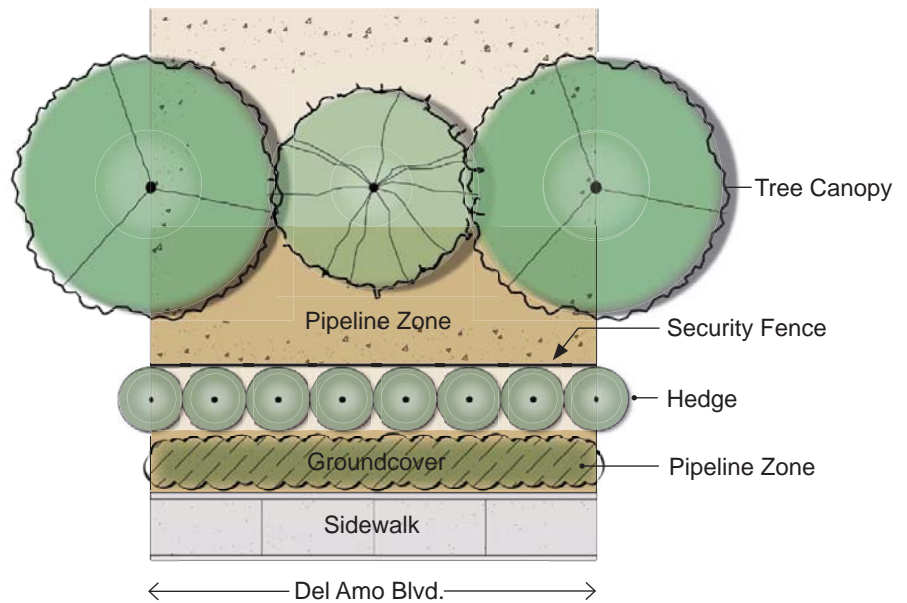
Key Map

Del Amo Boulevard, Condition 2

- This design concept applies to 250 feet of Del Amo Boulevard frontage from the lateral fence shift eastward to the westernmost of the adjacent storage tanks.
- Add evergreen medium canopy trees inside the fence line to filter views in the Mid and High Visual Height Zones.
- Since underground pipelines may preclude trees outside the fence line, in between the medium trees, add evergreen small canopy trees inside the fence line.



Existing Condition

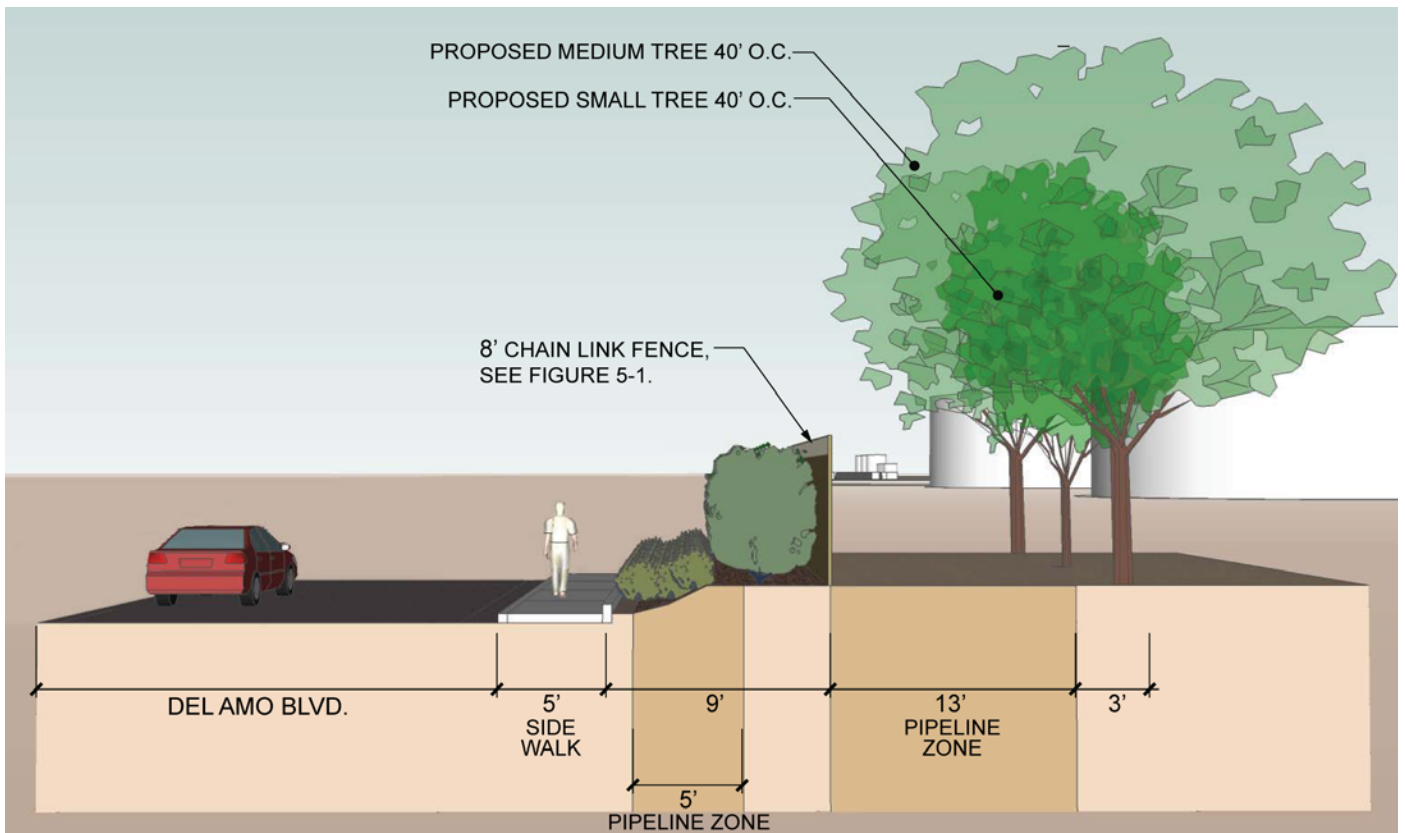


Proposed Typical Plan View

Figure 5-6: Eye Level Perspective View of Proposed Improvements



Figure 5-7: Proposed Section





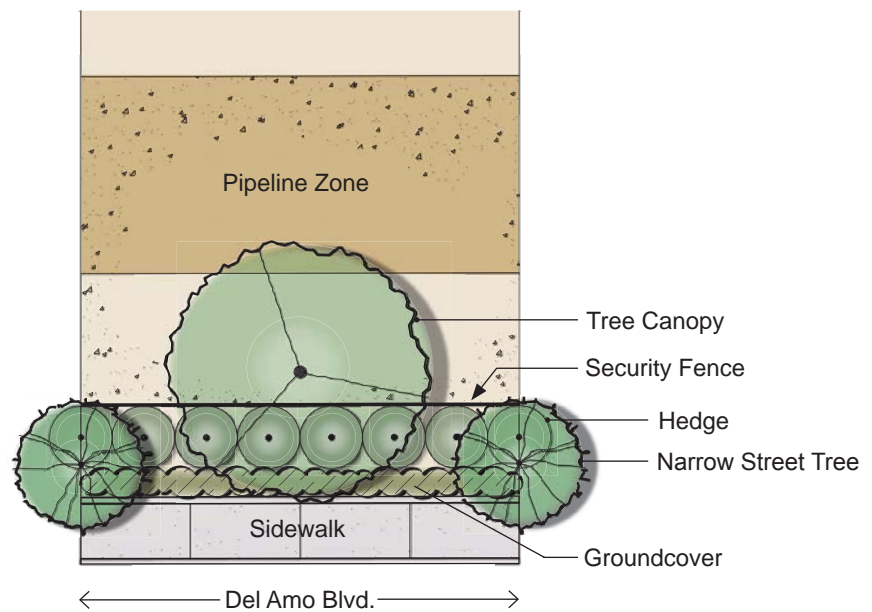
Key Map

Del Amo Boulevard, Condition 3

- This design concept applies to 2,135 feet of Del Amo Boulevard frontage from the westernmost of the adjacent storage tanks eastward to Tajauta Avenue.
- Add evergreen medium canopy trees inside the fence line to filter views in the Mid and High Visual Height Zones.
- Outside the fence line, add evergreen narrow canopy trees.
- Stabilize slope.



Existing Condition

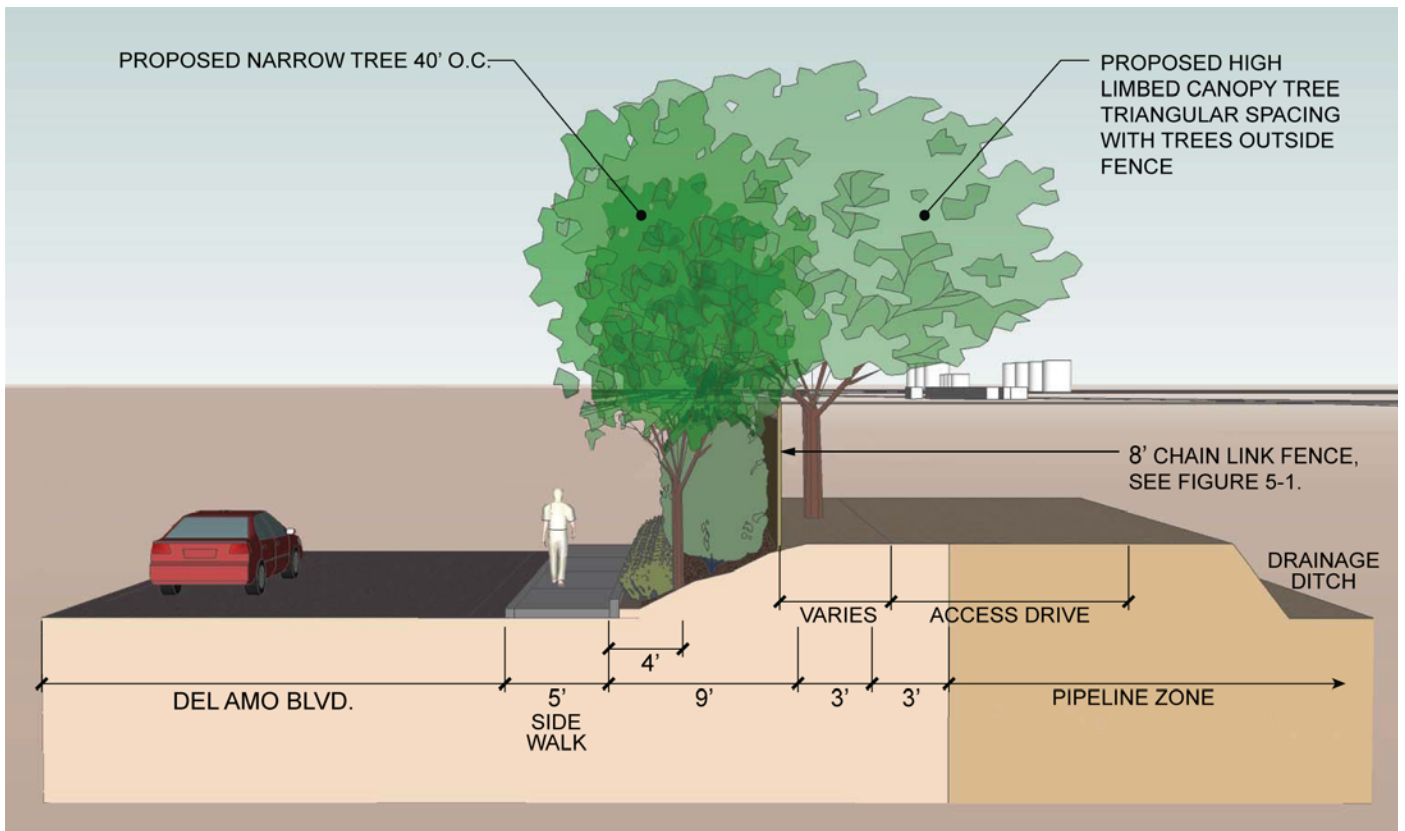


Proposed Typical Plan View

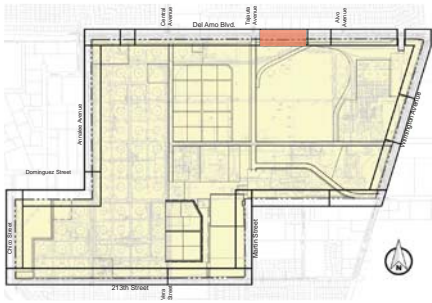
Figure 5-8: Eye Level Perspective View of Proposed Improvements



Figure 5-9: Proposed Section



Del Amo Boulevard, Condition 4

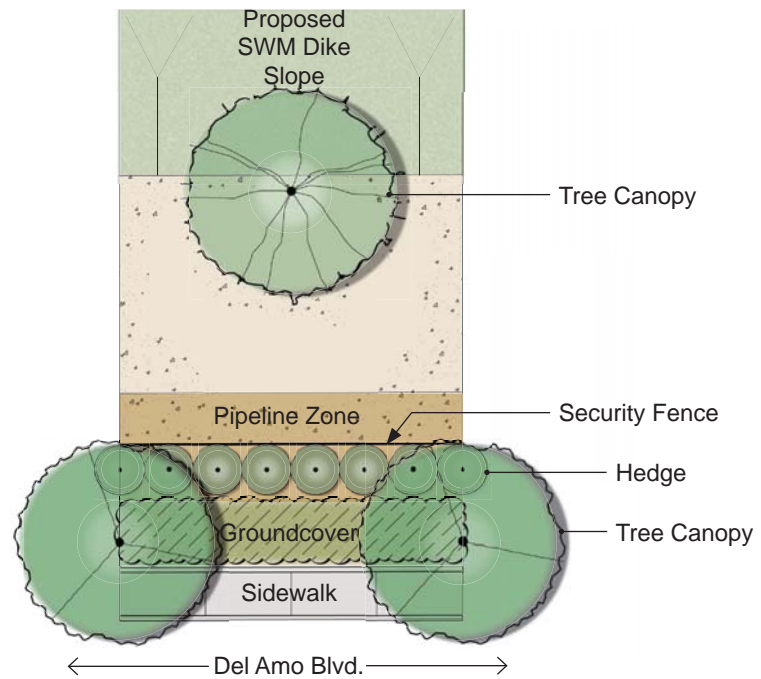


Key Map

- This design concept applies to 800 feet of Del Amo Boulevard frontage from Tajauta Avenue eastward to the slope transition.
- Add evergreen medium canopy trees both inside and outside the fence line to filter views in the Mid and High Visual Height Zones.
- Stabilize slope.



Existing Condition



Proposed Typical Plan View

Figure 5-10: Eye Level Perspective View of Proposed Improvements

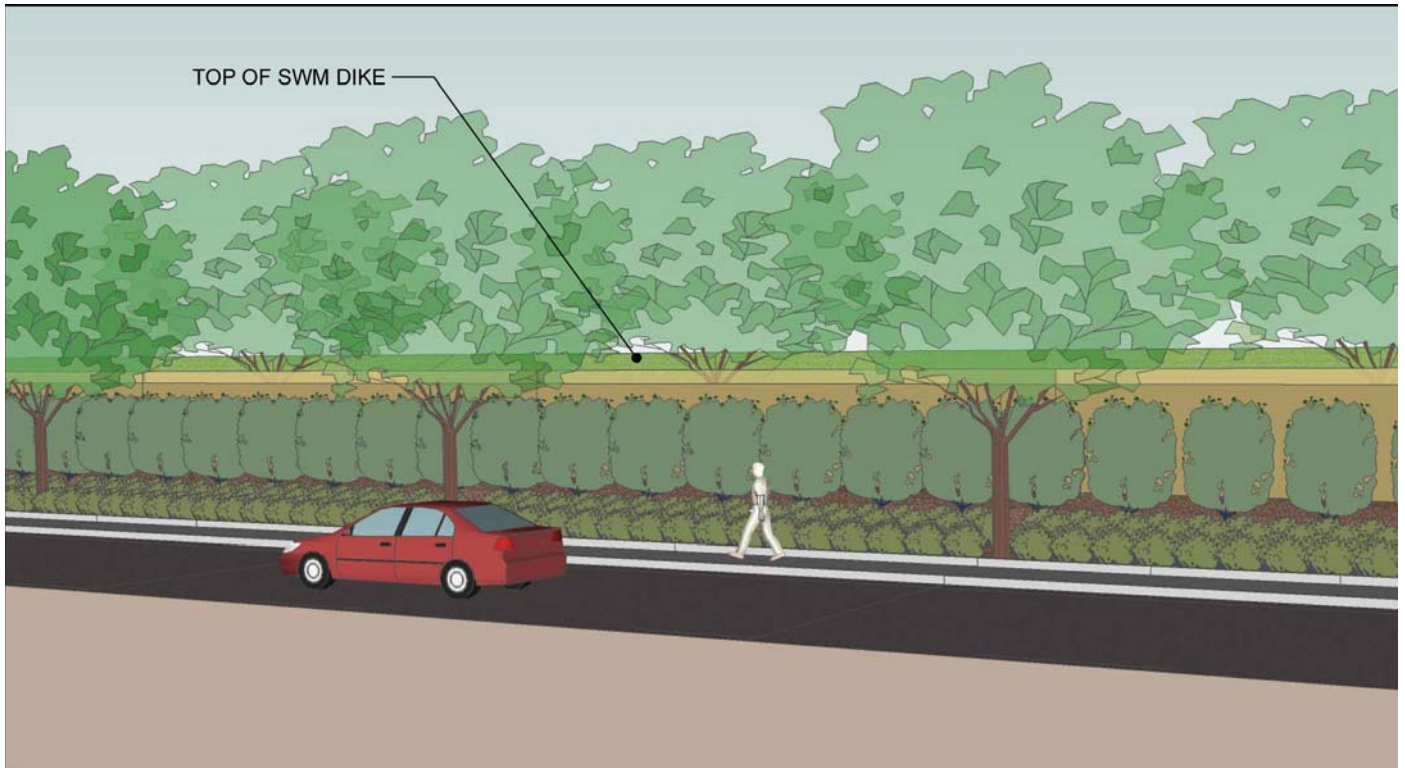
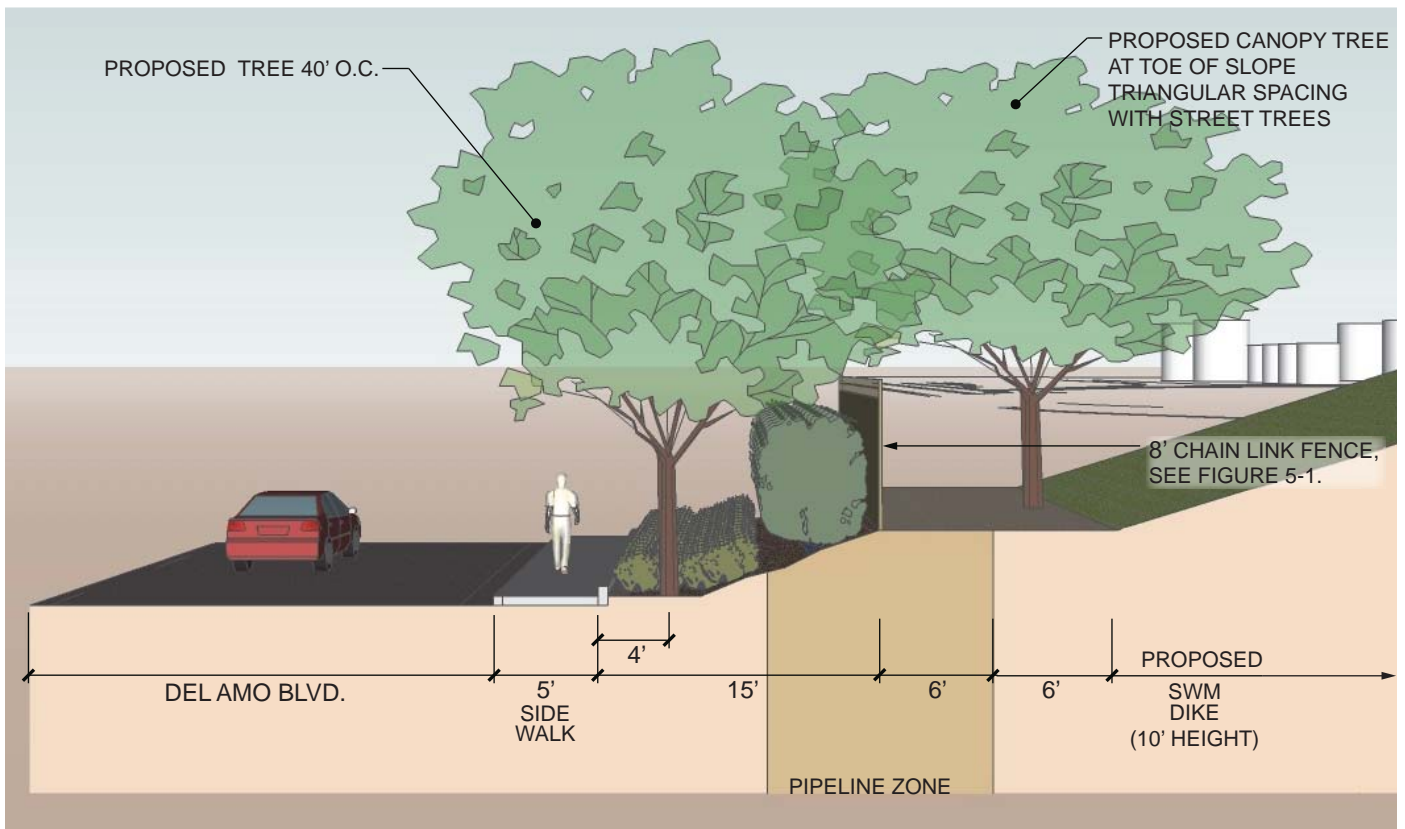


Figure 5-11: Proposed Section



Del Amo Boulevard, Condition 5

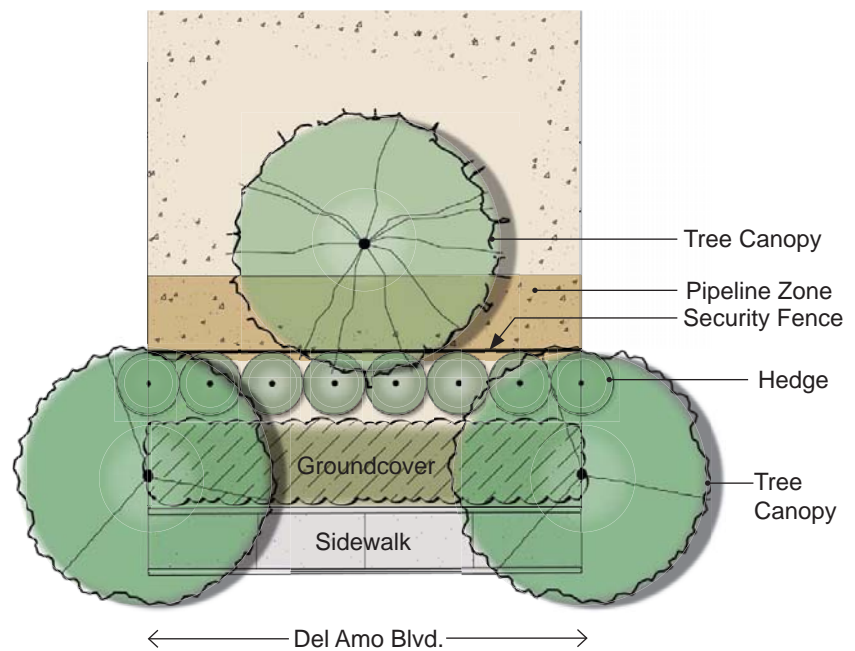
- This design concept applies to 400 feet Del Amo Boulevard frontage from the slope transition eastward to the underground pipeline shift west of Alvo Avenue.
- Add evergreen medium canopy trees both inside and outside the fence line to filter views in the Mid and High Visual Height Zones.



Key Map



Existing Condition



Proposed Typical Plan View

Figure 5-12: Eye Level Perspective View of Proposed Improvements

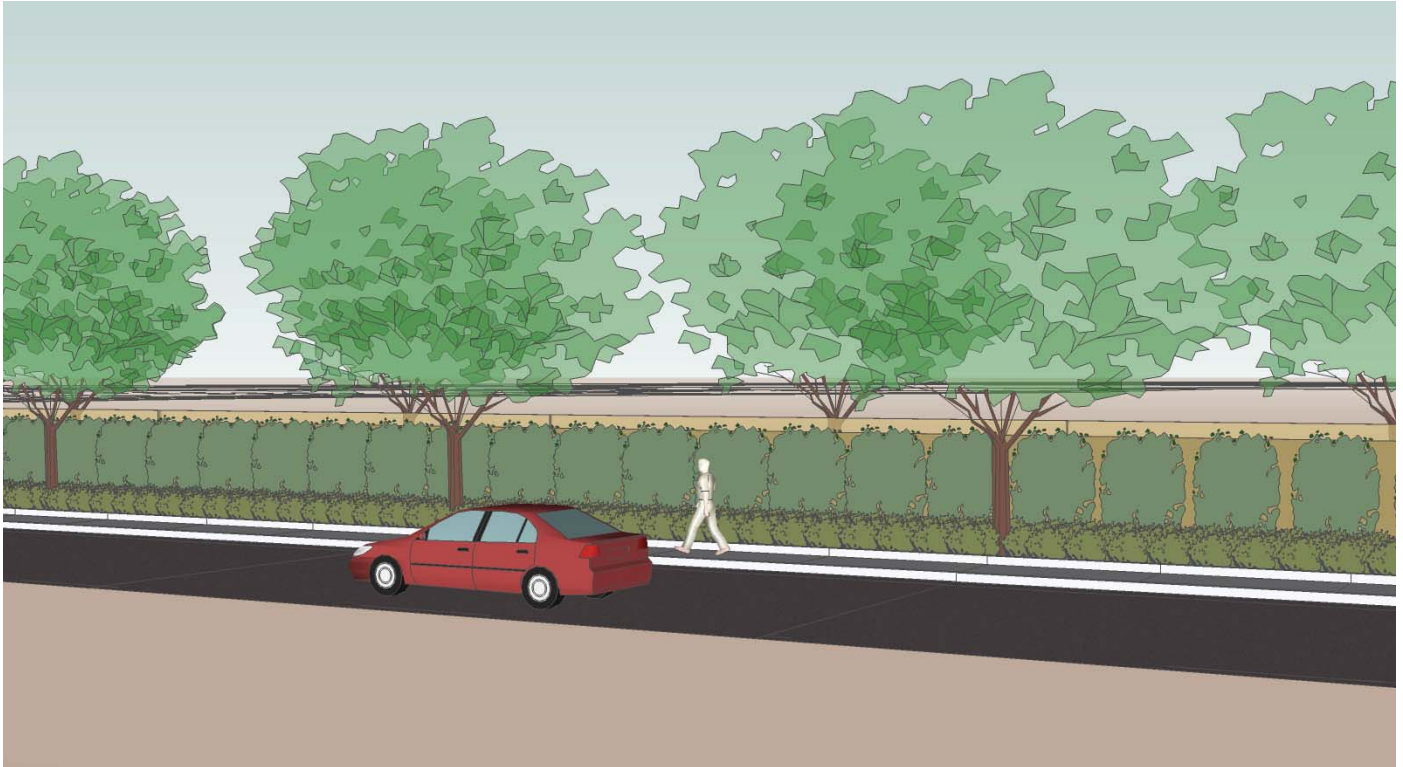
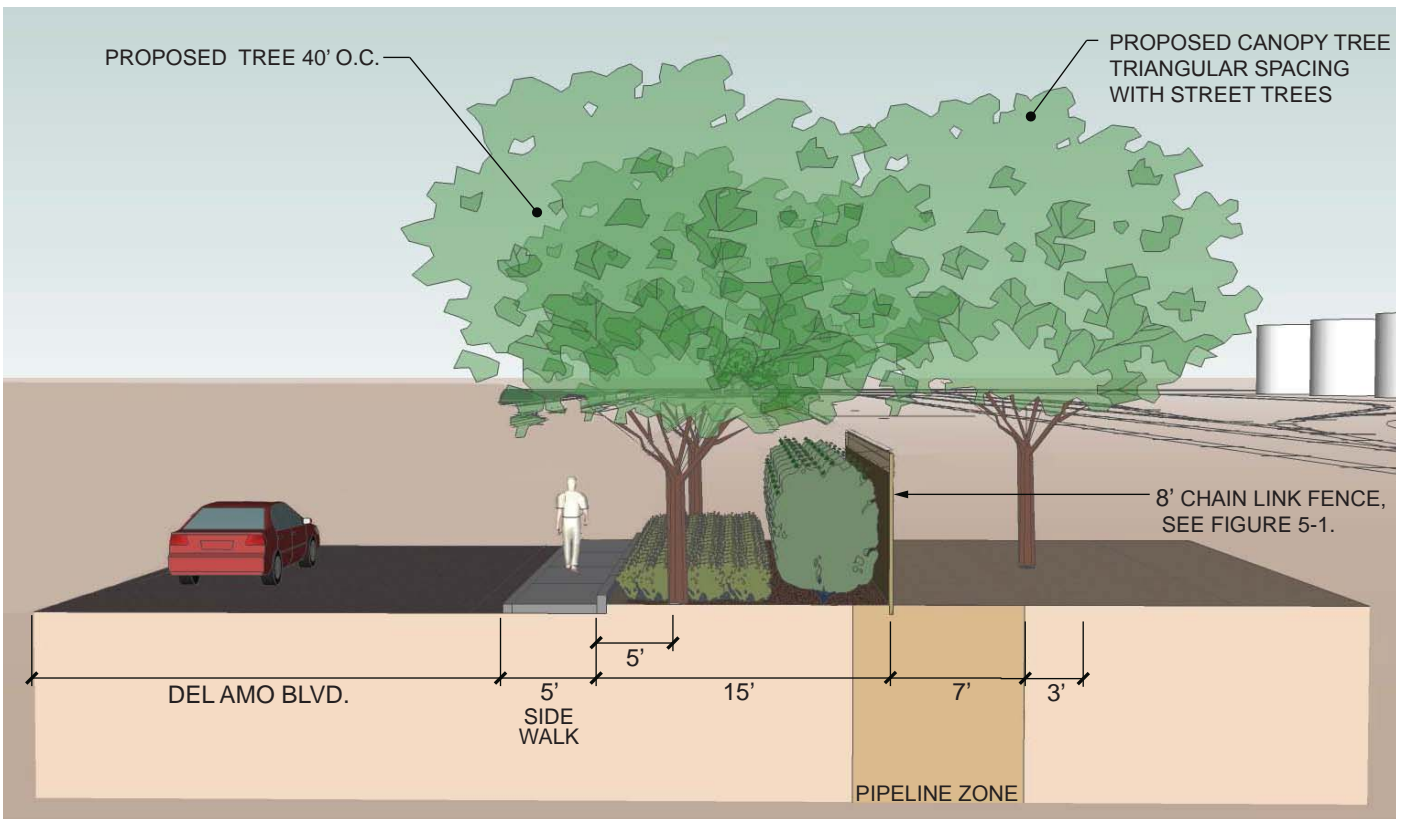
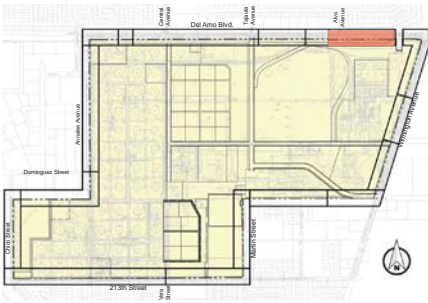


Figure 5-13: Proposed Section



Del Amo Boulevard, Condition 6

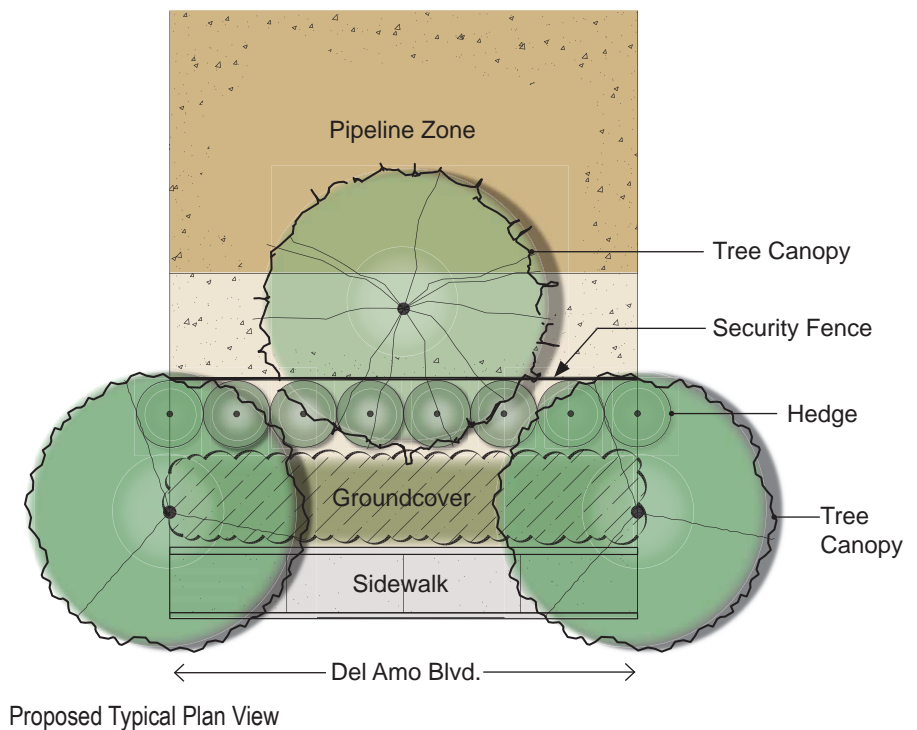
- This design concept applies to 1,224 feet of Del Amo Boulevard frontage from the underground pipeline shift west of Alvo Avenue eastward to the Plan Area railroad access gate adjacent to the fire station.
- Add evergreen medium canopy trees both inside and outside the fence line to filter views in the Mid and High Visual Height Zones.



Key Map



Existing Condition

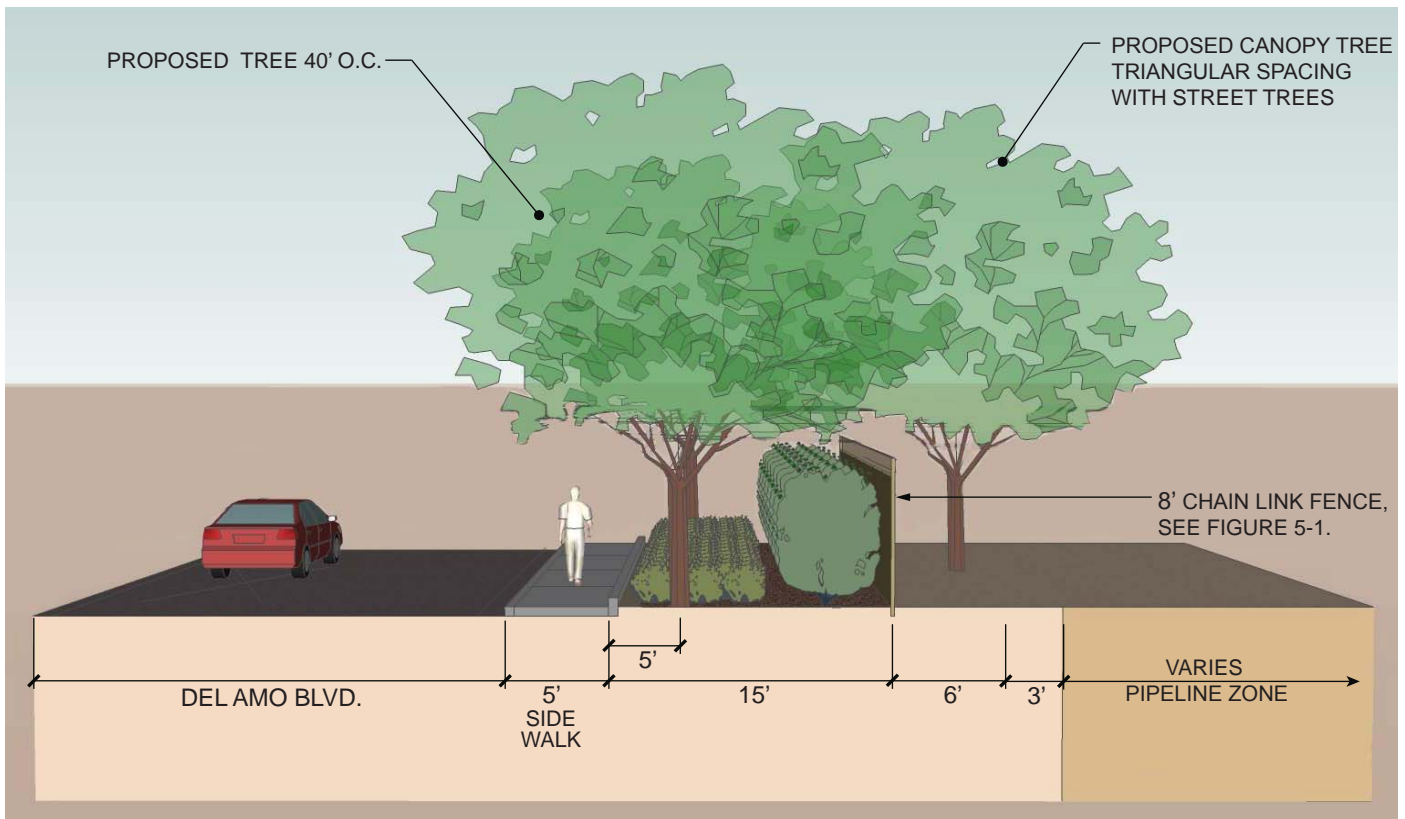


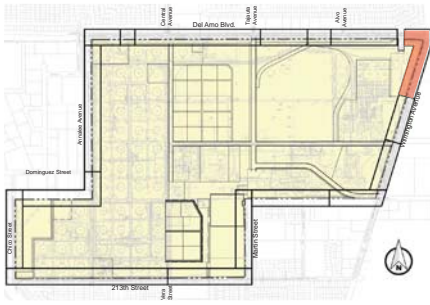
Proposed Typical Plan View

Figure 5-14: Eye Level Perspective View of Proposed Improvements



Figure 5-15: Proposed Section





Key Map

Del Amo Boulevard and Wilmington Avenue at Revitalization Area 3

This design concept applies to 1,270 feet of the Plan Area perimeter. This includes 315 feet of Del Amo Boulevard frontage from the fire station eastward to the northeast corner of the Plan Area and 955 feet of Wilmington Avenue frontage from the northeast corner of the Plan Area southward to the East Distribution Facility. This concept proposes several components typical of retail commercial development. When Revitalization Area 3 is developed as a Community Retail land use, relocate the security fence westward to the edge of the East Distribution Facility.

Remove the mature existing overgrown street trees and continue sidewalk paving in place of tree wells in the public right-of-way. Add small canopy flowering trees approximately 3 feet from the back of Wilmington Avenue sidewalk. Selected tree species shall reach a mature height compatible with planting beneath overhead utility lines, should lightly filter views in the High Visual Height Zones, and provide shade for parking. Within the building/parking setback adjacent Wilmington Avenue, add appropriately sized water-wise plant material that does not require excessive pruning to maintain desired size (24- to 36-inch height max) and appearance. Where parking lots are adjacent to the street, a three-foot high decorative wall may be provided in lieu of a continuous hedge, if desired, to screen parking and control pedestrian movement. Wheel stops are required where the parking area abuts landscape to prevent overhang damage to wall or plant material. Where buildings are adjacent to the street, trees and other plant material should complement building architecture. Coordinate all tree placement with building fenestration and signage.

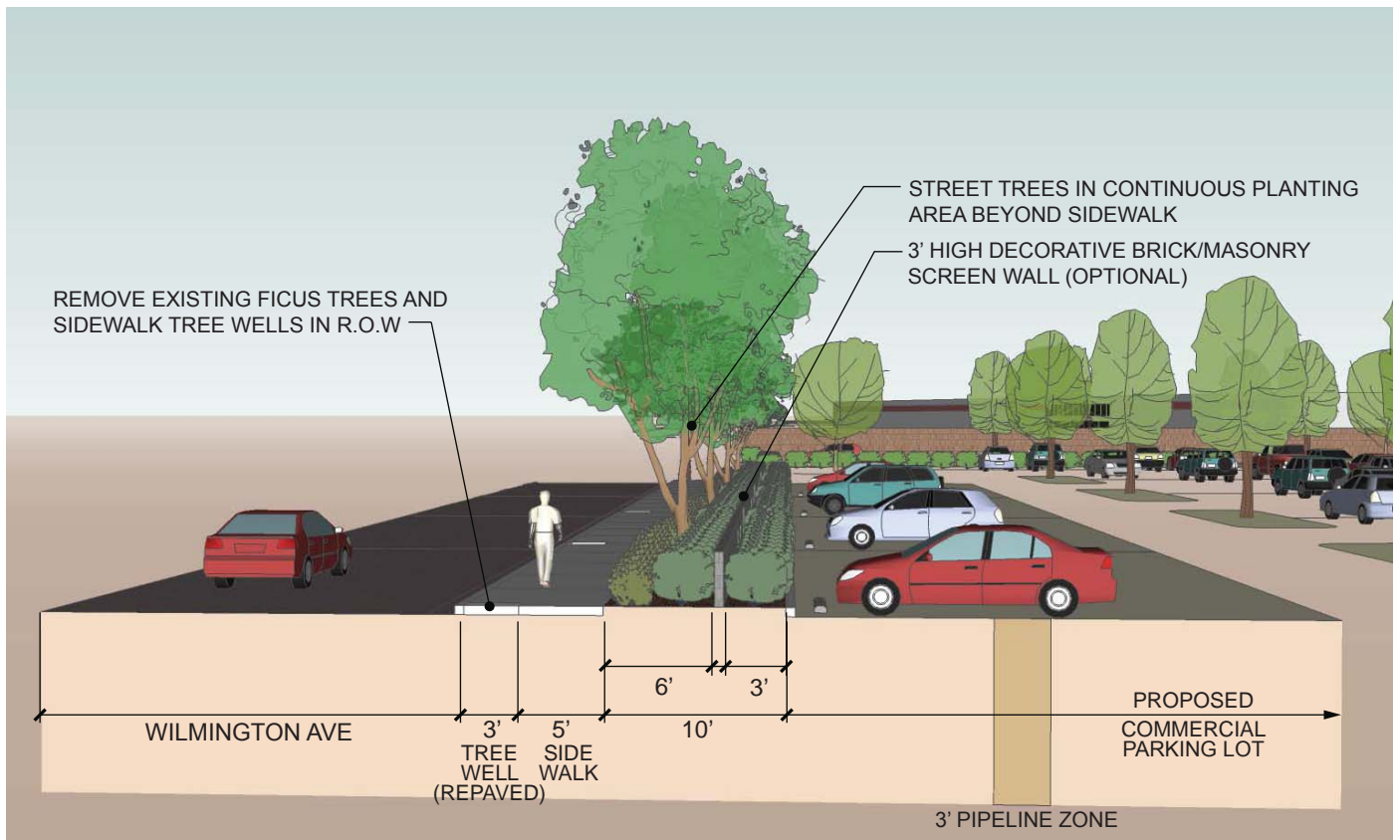


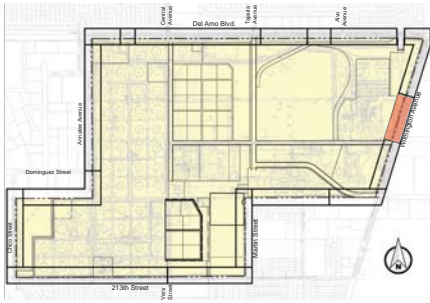
Existing Condition

Figure 5-16: Eye Level Perspective View of Proposed Improvements



Figure 5-17: Proposed Section





Key Map

Wilmington Avenue at East Distribution Facility

This design concept applies to 800 feet of the Plan Area perimeter. This includes Wilmington Avenue frontage from Revitalization Area 3 southward to the proposed Truck Driveway. This concept proposes minor modification to a constrained area. Retain the mature existing street trees (very large Fig trees) in the public right-of-way. Add small canopy flowering trees seven feet from the back of Wilmington Avenue Street sidewalk (integral with curb) to lightly filter views in the Mid and High Visual Height Zones. Coordinate spacing to alternate them with existing street trees. Addition of these trees may be limited by the presence of underground pipelines in this area. Where feasible within the area adjacent to Wilmington Avenue, add or replace with appropriately sized water-wise plant material that does not require excessive pruning to maintain desired size and appearance. Retain existing 8-foot-high masonry wall/chain link with barbed wire fence combination.

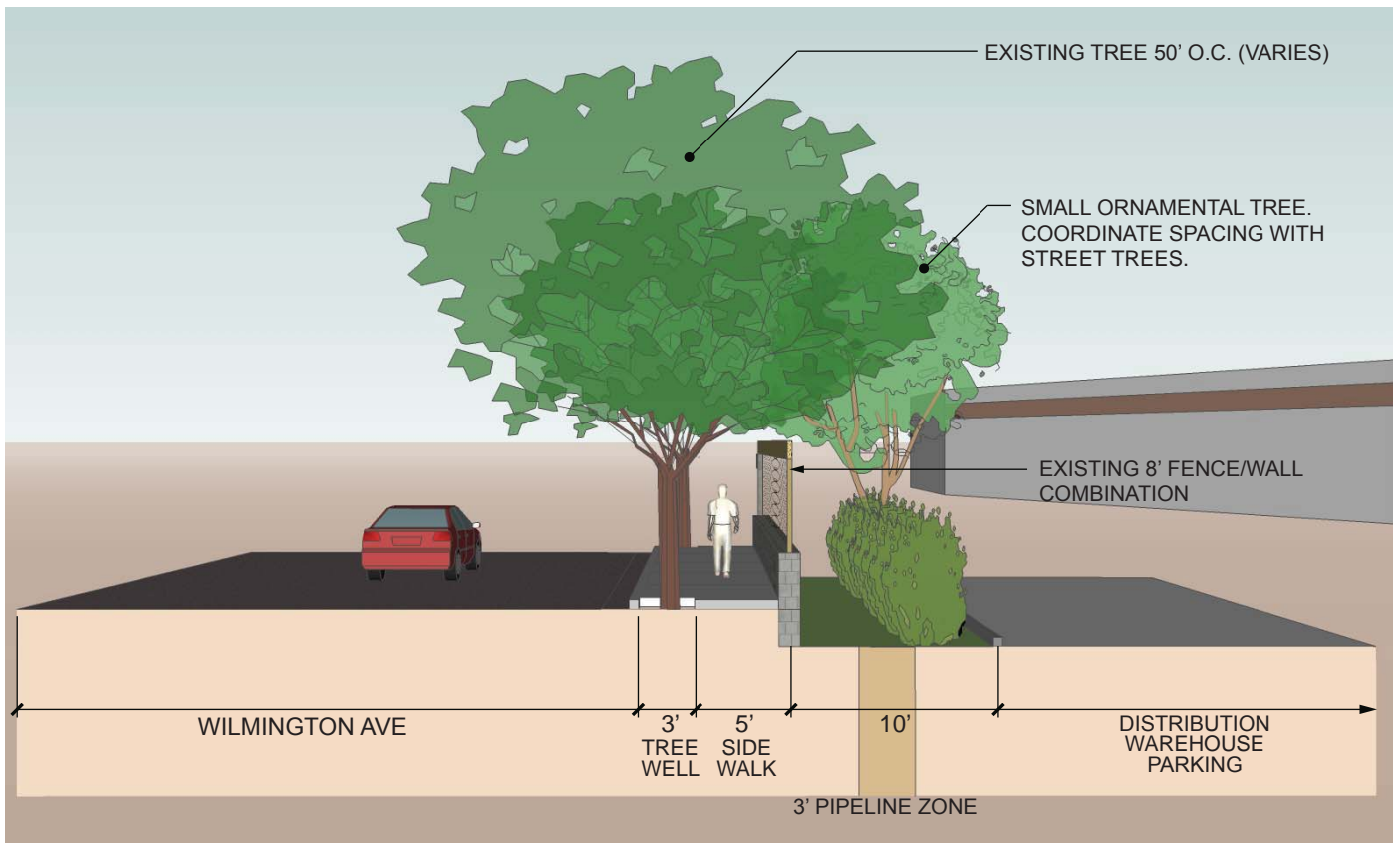


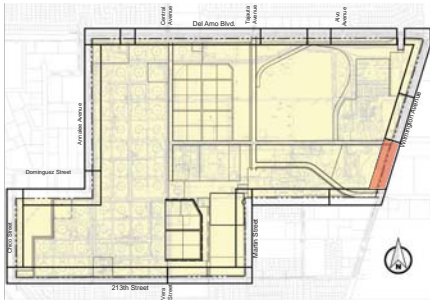
Existing Condition

Figure 5-18: Eye Level Perspective View of Proposed Improvements



Figure 5-19: Proposed Section





Key Map

Wilmington Avenue at Municipal Service Facility

This design concept applies to 860 feet of the Plan Area perimeter. This includes Wilmington Avenue frontage from the proposed Truck Driveway southward to Dominguez Street. This concept proposes several components. The existing 8-foot-tall security fence with vinyl slats is removed to open up the views from Wilmington Avenue into the Plan Area. The varying-width landscaped setback includes ground cover or low shrubs. Retain the mature existing street trees (very large Fig trees) in the public right-of-way. Add ornamental trees in the landscaped setback coordinated with the existing street trees and the vaults that contain equipment and monitoring wells. Add appropriately sized water-wise plant material that does not require excessive pruning to maintain desired size and appearance. The design of this edge condition is expected to be refined in coordination with the final Plan Area design and, in particular, the location of buildings, driveways, and parking near Wilmington Avenue.



Existing Condition

Figure 5-20: Eye Level Perspective View of Proposed Improvements

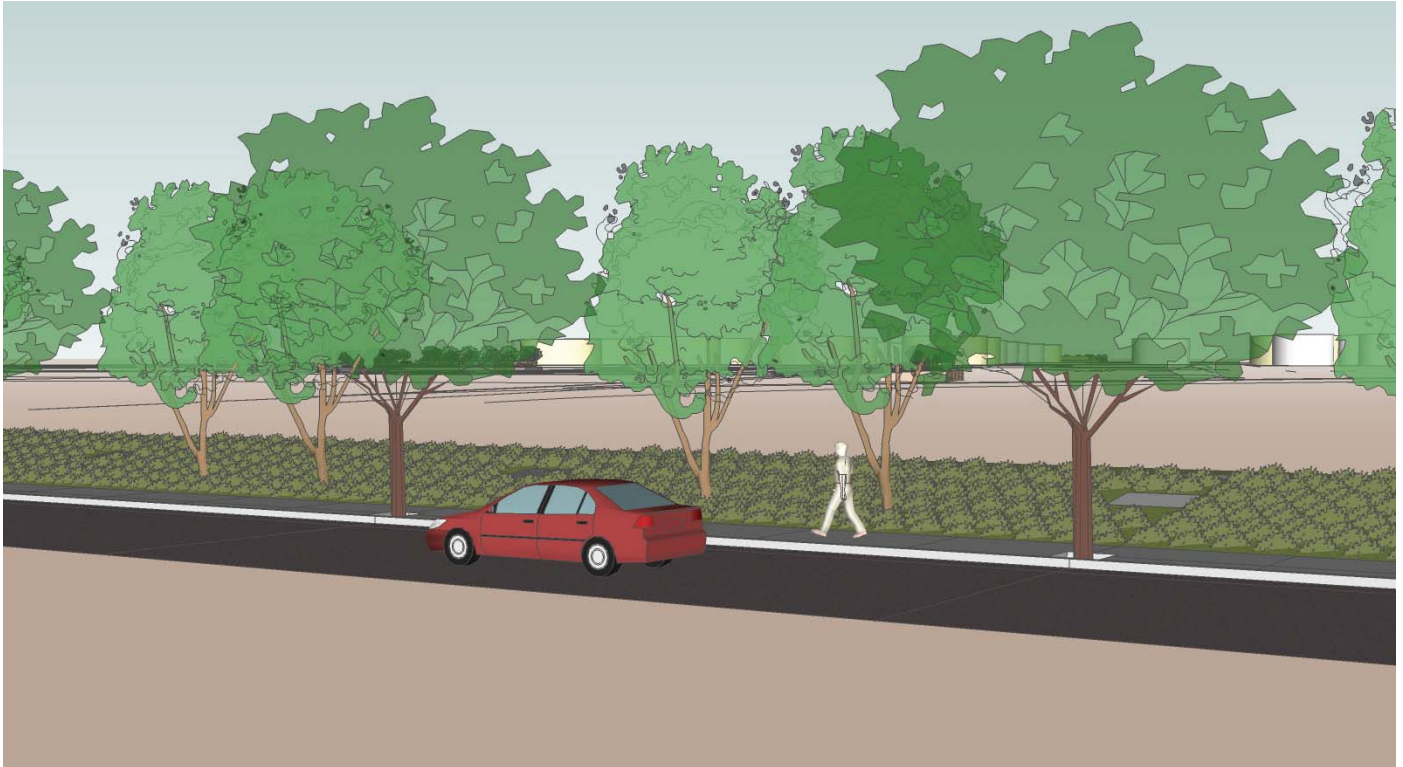
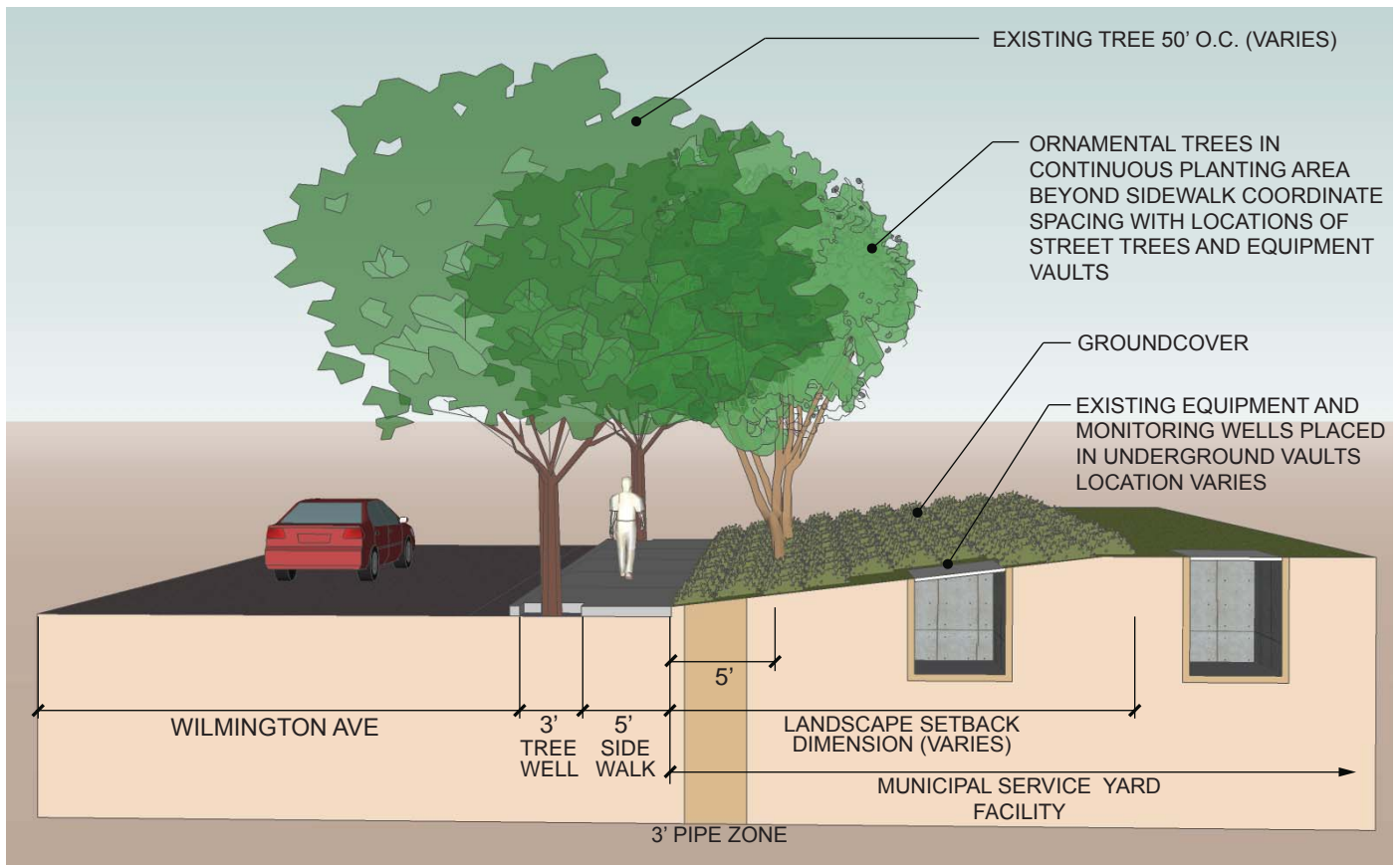


Figure 5-21: Proposed Section





Key Map

Plan Area Abutting Residential

This design concept applies to 1,135 feet of the Plan Area perimeter. This includes the southern Plan Area boundary east of Martin Street where 15 existing residential lots share a side or rear yard boundary with the Plan Area. This concept proposes several components. Retain the mature existing trees underneath the power lines, although they require regular pruning. Over time as these trees need replacement, substitute a different species that is compatible with safe planting under power lines without the need for excessive pruning and is compatible with security requirements. Or, locate the trees an appropriate distance from the power lines. Add evergreen medium canopy trees inside the fence line along and in the vicinity of the Plan Area edge to filter views in the Mid and High Visual Height Zones. This should provide consistent visual screening of a majority of the view. Retain the existing 6- to 10-foot-tall chain link with barbed wire fencing with vinyl fence slats and/or existing intertwined vines, which provide screening. Add new (muted color) vinyl slats, where feasible, to the security fence.



Existing Condition 1

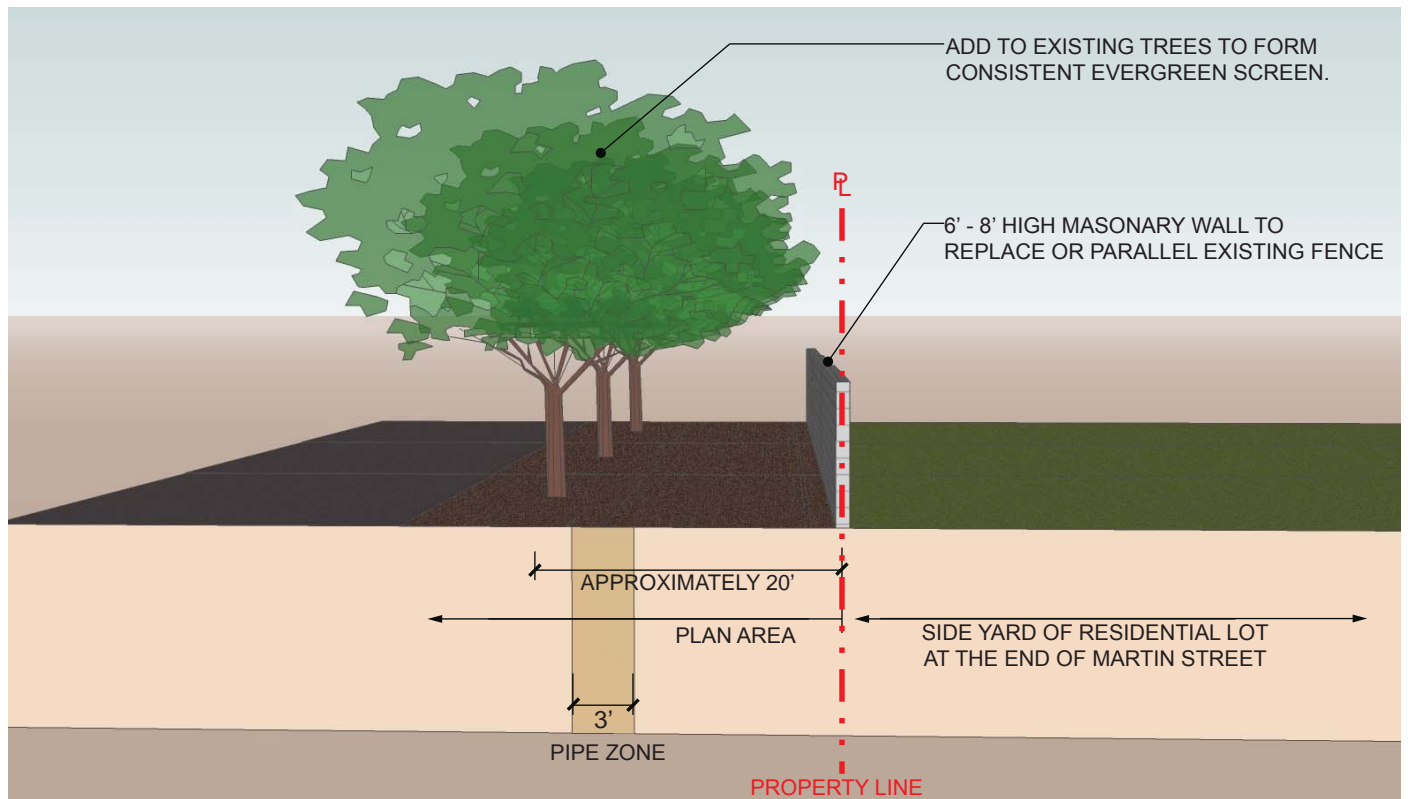


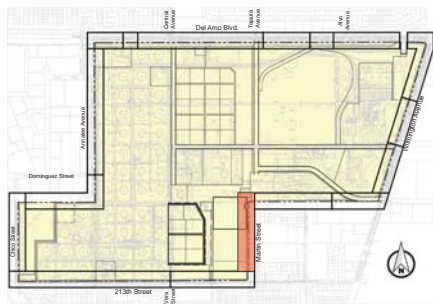
Existing Condition 2

Figure 5-22: Plan View of Proposed Improvements



Figure 5-23: Proposed Section of Martin Street Residential Side Yard at Project Boundary





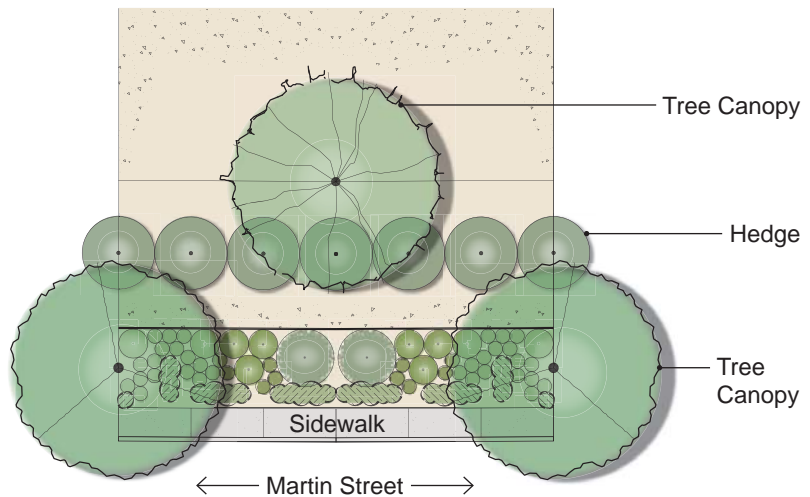
Key Map

Martin Street

This design concept applies to 1,350 feet of Martin Street frontage from the proposed cul-de-sac at the Plan Area boundary southward to 213th Street. This concept proposes several components. Retain the mature existing street trees underneath the power lines although they require excessive pruning. Over time as these trees need replacement, substitute a species that is compatible with safe planting under power lines (e.g., Lagerstroemia). Add a row of evergreen medium canopy trees inside the fence line to filter views in the Mid and High Visual Height Zones. Also inside the fence line, add a tall evergreen hedge to screen views in the Low Visual Height Zone. Replace existing turf outside the fence line with informal plantings of durable water-wise groundcover and mixed shrubs. This planting will also include the northern edge of the proposed cul-de-sac. Due to security requirements, the existing fence may be replaced with a 7-foot-high chain link with barbed wire fence with vinyl slats (total height 8 feet).



Existing Condition

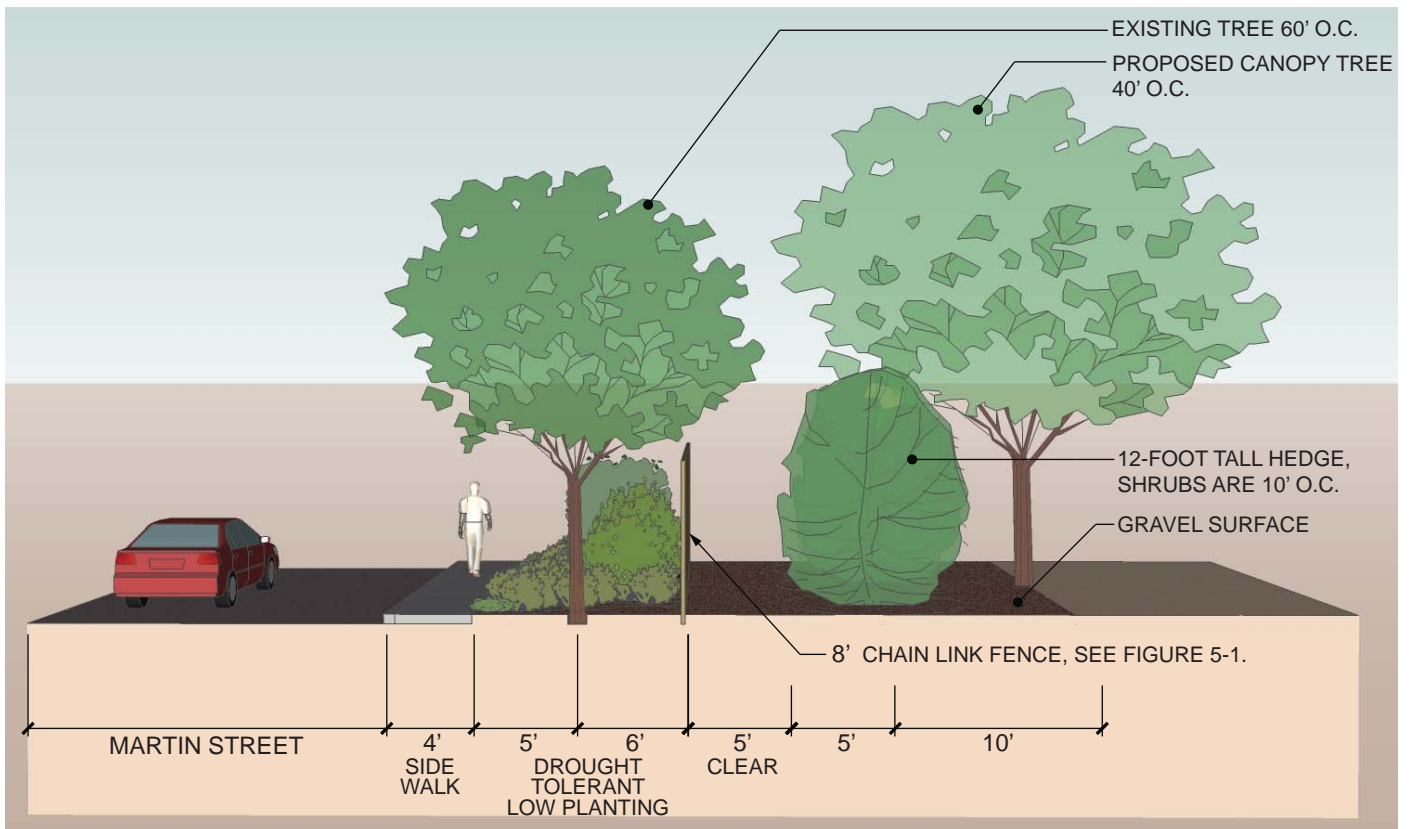


Proposed Typical Plan View

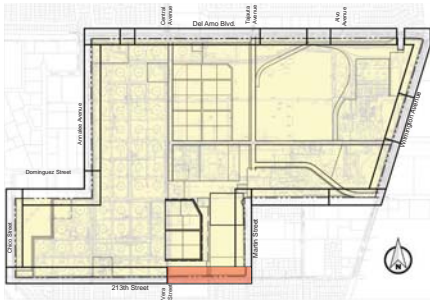
Figure 5-24: Eye Level Perspective View of Proposed Improvements



Figure 5-25: Proposed Section



213th Street East of Vera Street

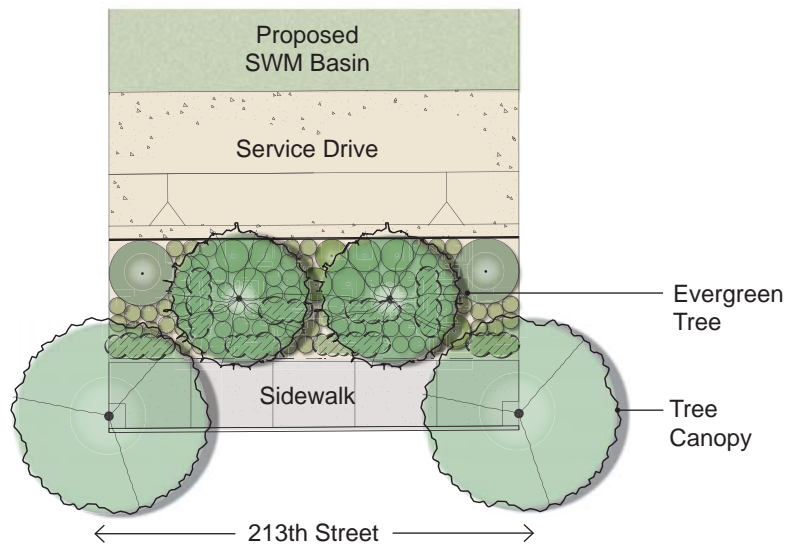


Key Map

This design concept applies to 1,300 feet of 213th Street frontage from Martin Street westward to Vera Street. This concept proposes several components. Retain the existing street trees that are showing signs of stress in the public right-of-way. Along the proposed stormwater management basins add a 3- to 5-foot-high earthen berm and locate the fence atop it. Add evergreen small canopy trees on the berm slope outside the fence line to filter views in the Mid and High Visual Height Zones. These should be located at appropriate spacing in between the existing street trees to form as continuous a visual screen as is feasible. Replace existing clipped shrubs and plant berm slope outside the fence line with an informal arrangement of water-wise plant material that does not require excessive pruning to maintain desired size and appearance. Use (muted color) vinyl slats on the new 7-foot-high chain link with barbed wire fence (total height 8 feet).



Existing Condition

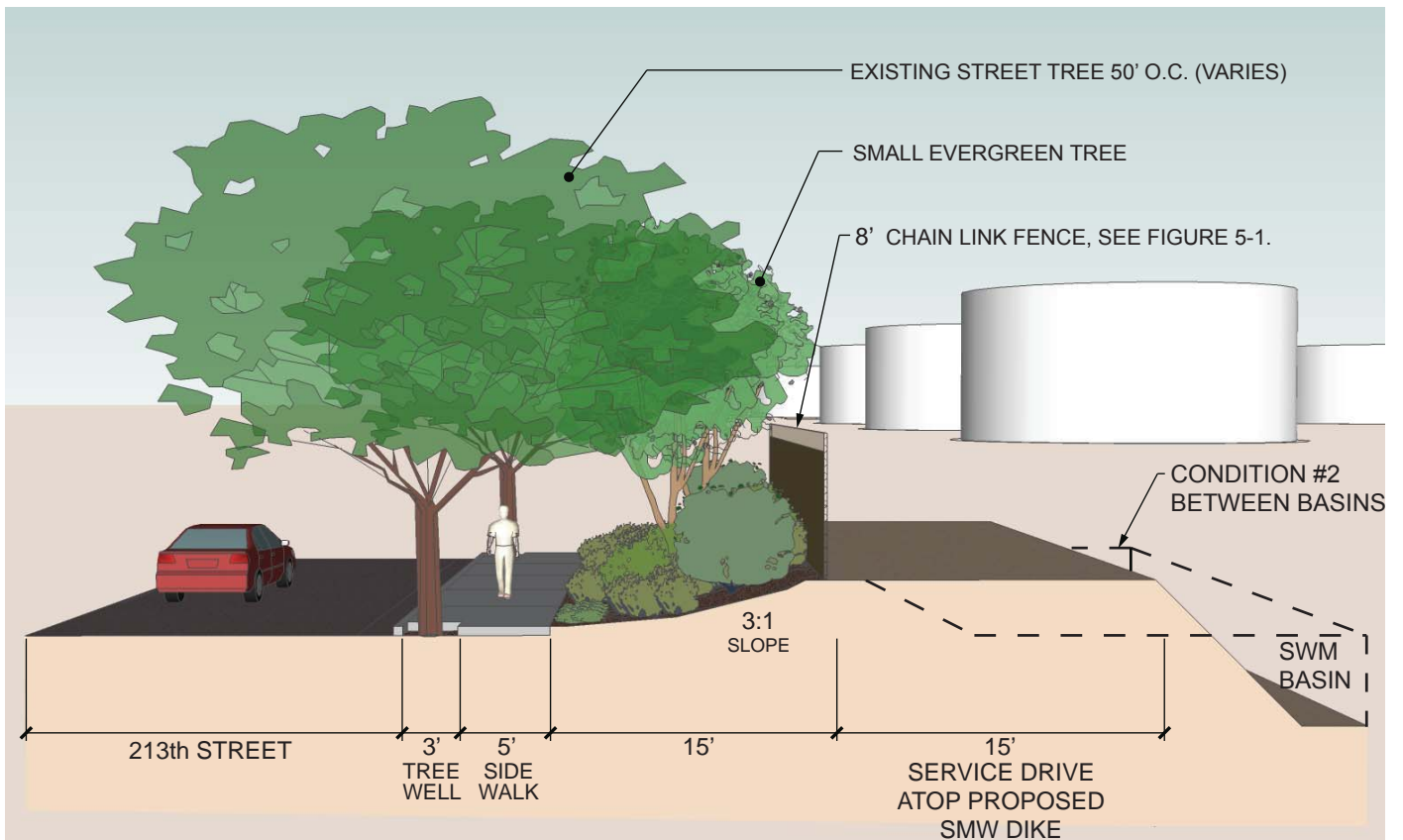


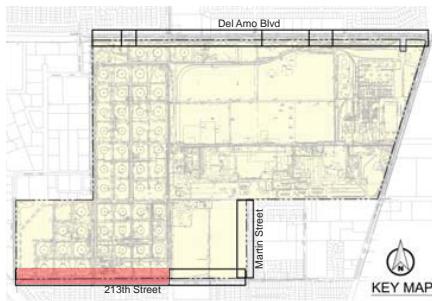
Proposed Typical Plan View

Figure 5-26: Eye Level Perspective View of Proposed Improvements



Figure 5-27: Proposed Section





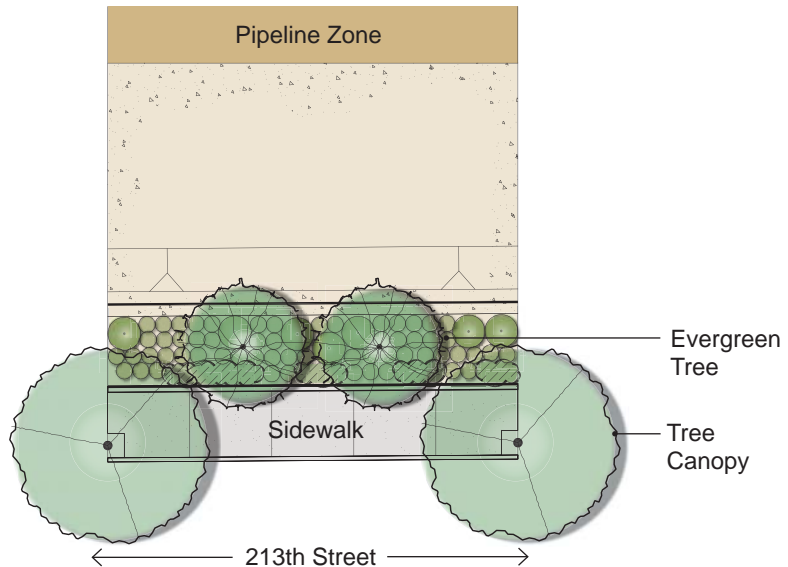
Key Map

213th Street West of Vera Street

This design concept applies to 2,600 feet of the Plan Area perimeter. This includes 213th Street frontage from Vera Street westward to Chico Street. This concept proposes several components in this extremely constrained area. Retain the existing street trees including those that are showing signs of stress in the public right-of-way. Modify the existing 6-foot-high storage tank containment dike and locate the fence atop it. This modification would retain the north side of the dike as is and add a slough wall at the base of the south side to lessen the slope and better facilitate landscaping. Add evergreen small canopy trees on the south dike slope outside the fence line to filter views in the Mid and High Visual Height Zones. These should be located at appropriate spacing in between the existing street trees to form as continuous a visual screen as is feasible. Plant the berm slope outside the fence line with an informal arrangement of water-wise plant material that does not require excessive pruning to maintain desired size and appearance. Use (muted color) vinyl slats on the new 7-foot-high chain link with barbed wire fence (total height 8 feet).



Existing Condition

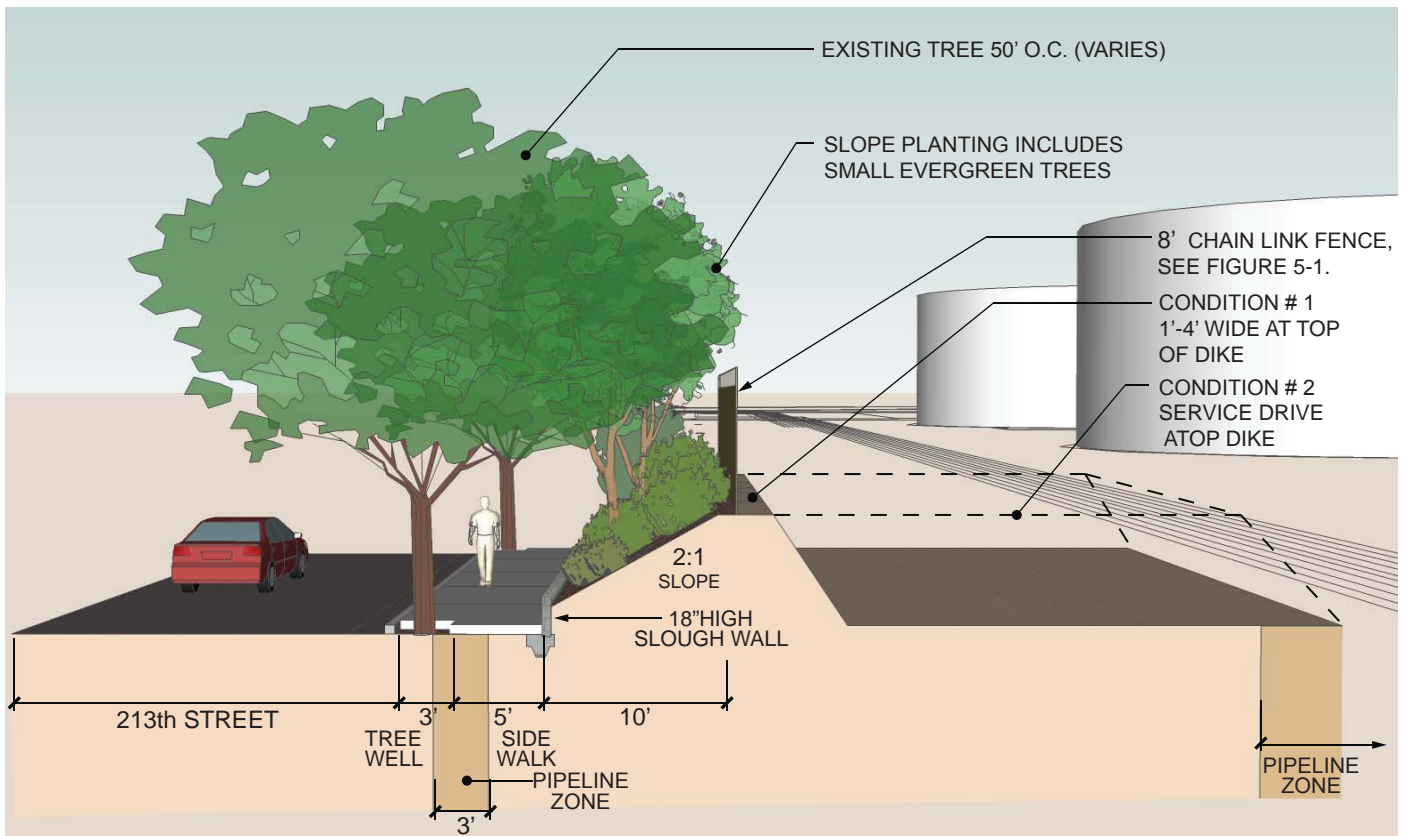


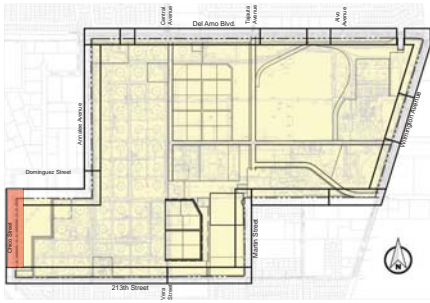
Proposed Typical Plan View

Figure 5-28: Eye Level Perspective View of Proposed Improvements



Figure 5-29: Proposed Section





Key Map

Chico Street

This design concept applies to 1225 feet of the Plan Area perimeter. This includes Chico Street frontage from 213th Street northward to the northwest corner of the Plan Area south of Dominguez Street. This concept proposes several components. When Revitalization Area 1 is developed as a Industrial/ Commercial land use, locate a new security fence eastward at the edge of the West Distribution Facility. Use vinyl slats (muted color) on this fence. Add evergreen medium or large canopy trees interspersed with small canopy flowering trees 5 feet from the back of a new sidewalk along Chico Street (integral with curb) to lightly filter views in the Mid and High Visual Height Zones and provide shade for parking. Within the building/parking setback adjacent to Chico Street, add appropriately sized water-wise plant material that does not require excessive pruning to maintain desired size and appearance.

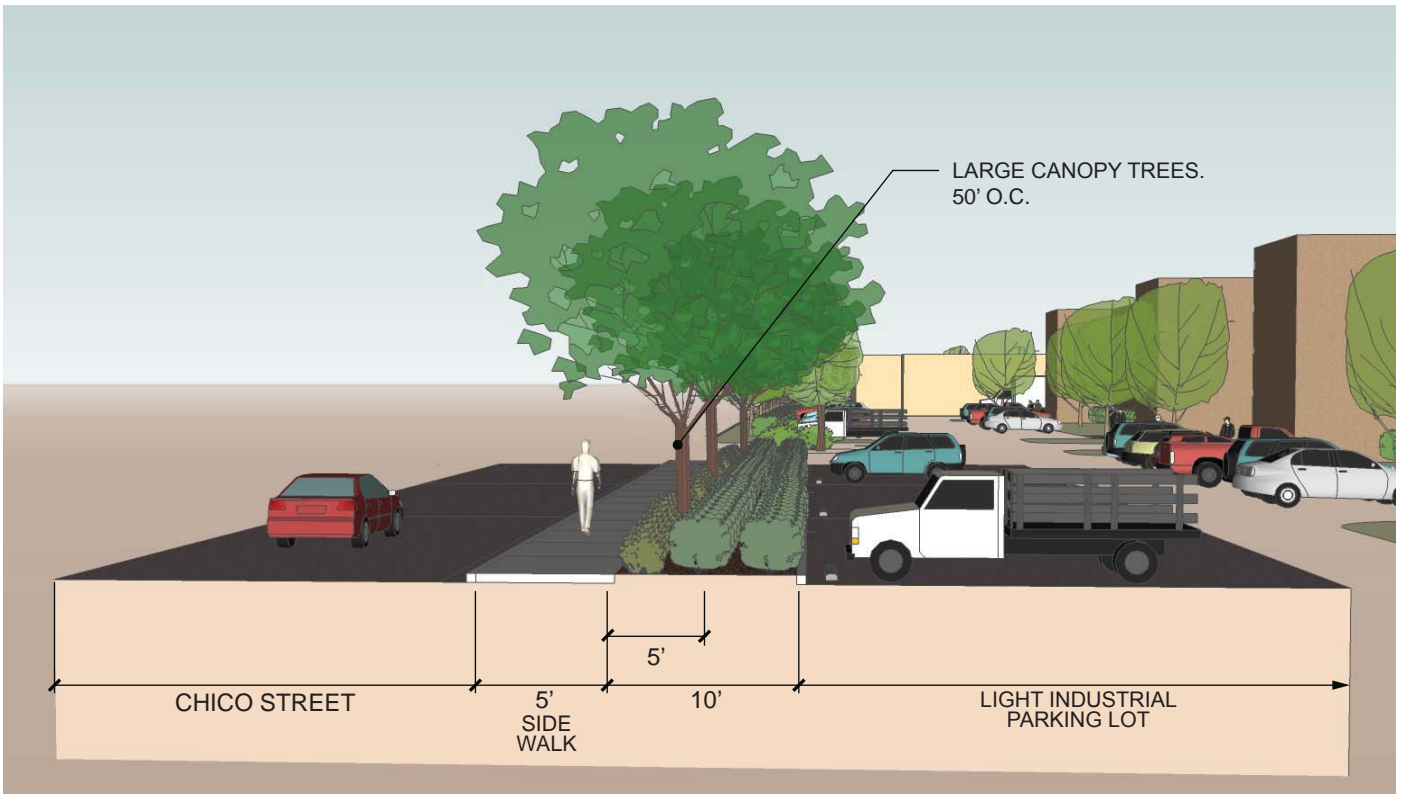


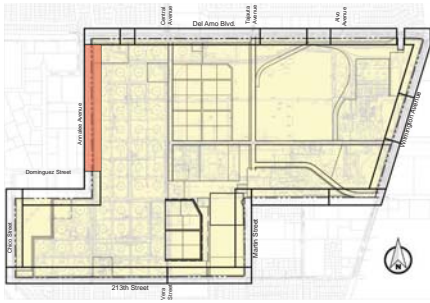
Existing Condition

Figure 5-30: Eye Level Perspective View of Proposed Improvements



Figure 5-31: Proposed Section





Key Map

Annalee Street

This design concept applies to 1,680 feet of the Plan Area perimeter. This includes Annalee Avenue frontage as it abuts the western Plan Area boundary. This area borders an existing light industrial park and has been recently landscaped. Retain the existing plant material and mature trees except those that may compromise security. Add vinyl slats (muted color) to the existing 7-foot-high chain link with barbed wire if required by security standards (total height 8 feet).



Existing Condition



Existing Condition

Water-Wise Landscape Design

The Water-Wise landscape design concepts proposed in this Specific Plan are based on the following basic principles:

1. Minimize the use of vegetation with high water use requirements (especially turf). High water use vegetation may be specified on a limited basis depending on its use and function. Specify plants that are well-suited to regional and local conditions.
2. Maximize the use of drought-tolerant and native vegetation.
3. Establish vegetation hydrozones, which are landscape areas composed of plant materials that have similar water needs.
4. Ideally, irrigation controllers are specified with the ability to schedule run-times based on site-specific weather data. Water at night, when evaporation is much lower and air is calmer. Avoid runoff and overspray and use high-efficiency irrigation equipment.
5. Improve the soil. Doing so improves the soil's ability to resist evaporation and retain moisture. Aerate heavy or compacted soil around trees.
6. Mulch. A two- to four-inch layer of mulch also evens out temperature extremes and prevents soil from crusting, allowing better water penetration.

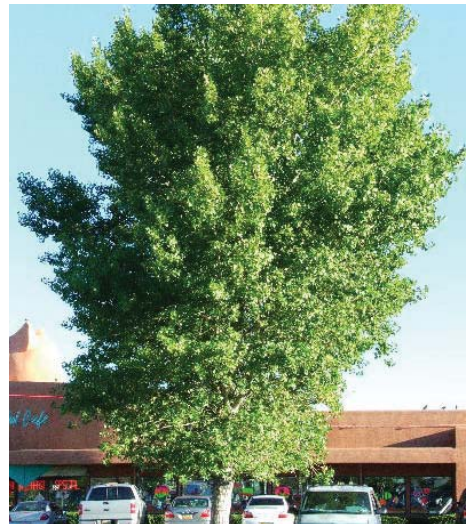
The water-wise plant palette is not exclusive to desert plants. As illustrated by the following images, water-wise plant material appropriate for the Plan Area is varied, natural in appearance and does not need heavy pruning. An appropriate palette includes deciduous and evergreen plants of varying textures, color, bloom periods and sizes.



Scarlet Honey Myrtle (*Melaleuca Fulgens*)



Afghan Pine (*Pinus Eldarica*)



Western Cottonwood (*Populus Fremontii*)



California Lilac (*Ceanothus*)



Daylily (*Hemerocallis Hybrids*)



Muhly Grass (*Muhlenbergia Capillaris*)



Grevillia (*Grevillea Noellii*)



Mexican Feather Grass (*Stipa Tenuissima*)



Red Hot Poker (*Kniphofia Uvaria*)



Orchid Rockrose (*Cistus Purpureus*)



Britton's Dudleya (*Dudleya Brittonii*)



Brisbane Box (*Tristania Conferta*)



Majestic Beauty Magnolia (*Magnolia Grandiflora*)



New Zealand Flax (*Phormium Tenax*)



English Lavender (*Lavandula Angustifolia*)



Blue Fescue (*Festuca Glauca*)



Mattole River Fuchsia (*Zauschneria Septentrionalis*)



American Century Plant (*Agave Americana*)



Bush Snapdragon (*Galvezia Speciosa*)



Chaparral Candle (*Yucca Whipplei*)



Weeping Bottle Brush (*Callistemon Viminalis*)



Red Yucca (*Hesperaloe Parviflora*)



Carolina Cherry Laurel (*Prunus Caroliniana*)

Typical Water-Wise Plant Palette

Trees

Afgan Pine (*Pinus eldarica*)
 Australian Willow (*Geijera parviflora*)
 Brisbane Box (*Tristania conerta*)
 California Sycamore (*Platanus racemosa*)
 Camphor Tree (*Cinnamomum camphora*)
 Carolina Cherry Laurel (*Prunus caroliniana*)
 Chinese Elm (*Ulmus parvifolia*)
 Chinese Flame Tree (*Koelreuteria bipinnata*)
 Chinese Pistache (*Pistacia chinensis*)
 Coast Live Oak, California Live Oak (*Quercus agrifolia*)
 Crape Myrtle (*Lagerstroemia indica*)
 Fern Pine (*Podocarpus gracilior*)
 Flame Tree, Australian Flame Tree (*Brachychiton acerifolius*)
 Goldenrain Tree (*Koelreuteria paniculata*)
 Holly Oak (*Quercus ilex*)
 Jacaranda (*Jacaranda mimifolia*)
 Maidenhair Tree, Ginkgo (*Ginkgo biloba*)
 New Zealand Christmas Tree (*Metrosideros excelsa*)
 Pittosporum (*Pittosporum* spp.)
 Purple Leaf Acacia (*Acacia baileyana* 'Purpurea')
 Red Gum, River Red Gum (*Eucalyptus camaldulensis*)
 Sawleaf Zelkova (*Zelkova serrata*)
 Silk Floss Tree (*Chorisia speciosa*)
 Tecate Cypress (*Cupressus forbesii*)
 Weeping Bottlebrush (*Callistemon viminalis*)
 Western Cottonwood (*Populus fremontii*)
 Western Redbud (*Cercis occidentalis*)

Shrubs

Aloe (*Aloe* spp.)
 American Century Plant (*Agave americana*)
 Australian Tea Tree (*Leptospermum leavigatum*)
 Blue Eyed Grass (*Sisyrinchium bellum*)
 Britton's Dudleya (*Dudleya brittonii*)
 Bush Poppy (*Denromecon harfordii*)
 Bush Snapdragon (*Galvezia speciosa*)
 California Fuschia, Hummingbird Flower (*Zauschneria californica*)
 California Lilac (*Ceanothus*)
 Cape Plumbago (*Plumbago capensis* or *P. auriculata*)
 Carolina Laurel Cherry (*Prunus caroliniana*)
 Ceanothus (*Ceanothus* spp.)
 Century Plant (*Agave americana*)
 Chaparral Candle (*Hesperoyucca whipplei*)
 Chinese Photinia (*Photinia serrulata*)
 Coastal Sage, California Sage Brush (*Artemisia californica*)
 Coffeeberry (*Rhamnus californica*)
 Daylily (*Hemerocallis* hybrids)
 English Lavender (*Lavandula officinalis* and *L. angustifolia*)
 Flax (*Phormium tenax*)
 Fountain Butterfly Bush (*Buddleia alternifolia*)
 Glossy Abelia (*Abelia grandiflora*)

Grevillea (*Grevillea noellii*)
 Lantana (*Lantana* spp.)
 Laurel Sumac (*Rhus laurina*)
 Lily-of-the-Nile (*Agapanthus africanus*)
 Majestic Beauty Magnolia (*Magnolia grandiflora*)
 Mattole River Fuchsia (*Zauschneria septentrionalis*)
 New Zealand Flax (*Phormium tenax*)
 Orchid Rockrose (*Cistus purpureus*)
 Penstemon (*Penstemon strictus*)
 Pink Indian Hawthorn (*Raphiolepis indica* 'Rosea')
 Pittosporum (*Pittosporum* sp.)
 Pride of Madeira (*Echium fastuosum*)
 Red Hot Poker (*Kniphofia uvaria*)
 Red Yucca (*Hesperaloe parviflora*)
 Rosemary (*Rosmarinus officinalis*)
 Sargent Juniper (*Juniperus chinensis sargentii*)
 Scarlet Honey Myrtle (*Melaleuca fulgens*)
 Sea Lavender (*Limonium perezii*)
 Toyon (*Heteromeles arbutifolia*)
 White Rock Rose (*Cistus hybridus*)

Vines

Bougainvillea (*Bougainvillea*)
 Creeping Fig (*Ficus pumila*)
 Wisteria (*Wisteria* spp.)

Grasses and Groundcovers

Blanket Flower (*Gaillardia grandiflora*)
 Blue Fescue (*Festuca glauca*)
 Coyote Bush (*Baccharis pilularis* 'Pigeon Point')
 Deer Grass (*Muhlenbergia rigens*)
 English Lavender (*Lavandula angustifolia*)
 Mexican Feather Grass (*Stipa tenuissima*)
 Muhly Grass (*Muhlenbergia capillaris*)
 Red Fescue (*Festuca rubra*)

6 Infrastructure and Public Services



Introduction

This section describes the existing utilities infrastructure available, the required improvements to the existing infrastructure, and the proposed new infrastructure to support the development of the Carson Revitalization Project (Project). It also summarizes engineering information obtained from the City of Carson and other public and private utility providers. For the purpose of this Specific Plan, this section addresses the following infrastructures:

- Topography and Grading
- Storm Water Drainage
- Low Impact Development and Water Quality
- Electrical Service
- Natural Gas Service
- Telephone/Telecommunications Service
- Potable Water Supply and Distribution
- Reclaimed Water
- Wastewater Collection and Conveyance
- Solid Waste
- Fire and Police Protection



Existing Topography and Proposed Topography

The Carson Revitalization Project Specific Plan area generally slopes from southeast to northwest at a relatively flat gradient. The existing ground elevations within the Plan Area vary from 27.5 feet near the intersection of Wilmington Avenue and Dominguez Street to 18.0 feet near the northwest corner of the Plan Area.

Proposed grading for the East and West Distribution Facility will generally be similar to the existing grading in those areas. The areas for which there will be new grading and changes to the surface elevation will be in the location of up to thirty (30) new tanks and the three (3) new storm water detention/retention basins and one (1) expanded existing basin. The thirty (30) new tanks will be surrounded by appropriate containment mechanisms. These dikes are between approximately 5 feet and 7.5 feet high. This will be similar to the containment dikes surrounding the existing tanks. Storm water Distribution Basin #3 may be surrounded by a dike up to approximately 12 feet high. Storm water Distribution Basin #4 may be surrounded by a dike up to 10 feet high. Storm water Distribution Basins #1 and #2 are expected to be excavated into the ground but also may be surrounded by containment dikes up to approximately 5 feet high depending on the final design of the basin.

The proposed grading for Revitalization Areas 1 through 6 is illustrated in **Figure 6-2**. In each area, the existing ground will be slightly regraded to increase the slope gradient and allow surface flow storm water to be directed to swales. These swales, discussed in more detail below, are located on the east edge of Area 1, the west edge of Areas 2 and 3, and to serve Areas 4 through 6 along one side of Tajauta Avenue, Dominguez Street, and both sides of the Truck Driveway. This regrading approach for the Revitalization Areas is to facilitate the development of these sites using, as much as possible, surface flow storm drainage systems and Low Impact Development principles (see subsection “Low Impact Development”).

Implementation of the grading plan is anticipated to require a temporary stockpile site. This is discussed in more detail in Section 8.

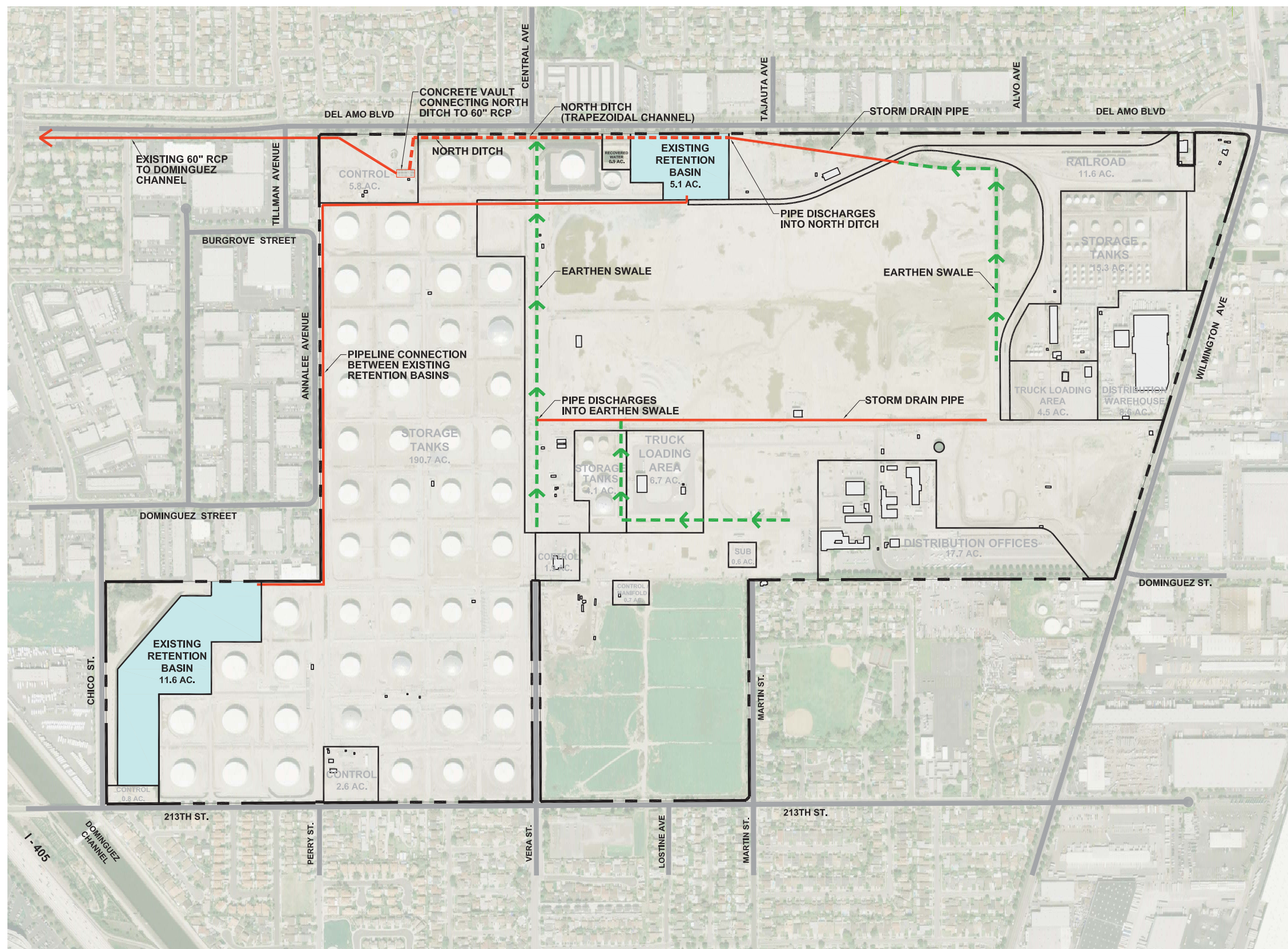
Existing Hydrology Conditions

The existing surface water management of the Plan Area was designed so that most of the storm water that falls on the Plan Area is retained within the area. The facility operates under a Storm Water Pollution Prevention Plan (SWPPP), as required by federal standards.

The internal on-site storm drainage system is composed of a network of piping and swales that collects the storm water. These swales direct the storm water to locations where pumps can convey it to one of two existing



Carson Revitalization Project



LEGEND





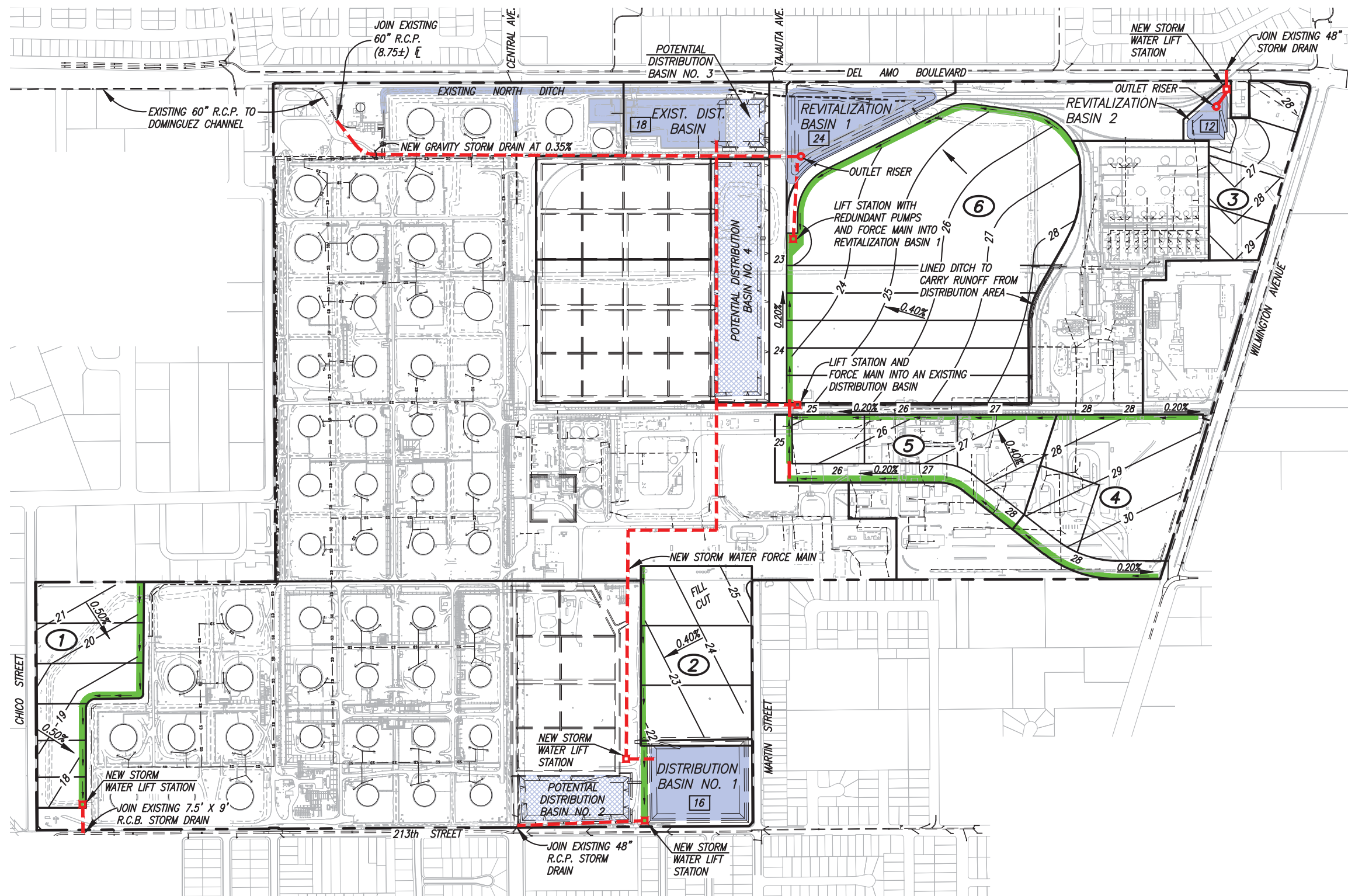
	STORM DRAIN PIPE
	EARTHEN SWALE
	NORTH DITCH CHANNEL
	EXISTING RETENTION BASIN

FIGURE 6-1
Existing Stormwater Drainage





Carson Revitalization Project



LEGEND

- PROJECT BOUNDARY
- PROPOSED RETENTION / CONTACT WATER BASINS
- PROPOSED CONTOUR
- PROPOSED BASIN BOTTOM ELEV.
- PROPOSED STORM DRAIN
- VEGETATED SWALE
- REVITALIZATION AREA NUMBER
- DRAINAGE SWALE SECTION *SEE FIGURE 6-3

EARTHWORK SUMMARY:

DESCRIPTION	CUT	FILL
RAW QUANTITIES:	411,400 C.Y.	615,000 C.Y.
STREET/UTILITY UNDERCUT:	+2,900 C.Y.	-16,200 C.Y.
NET:	411,400 C.Y.	598,800 C.Y.

EXPORT UNUSABLE SOIL: 193,300 C.Y.
TOTAL IMPORT REQUIRED: 380,700 C.Y.

NOTE: GRADING QUANTITIES ARE APPROXIMATE.

FIGURE 6-2
Preliminary Grading & Storm Drain Plan

storm water retention basins (**Figure 6-1**). The total capacity of the two basins is approximately 30 million gallons.

The storm water stored in these basins leaves the Plan Area in four ways:

1. Evaporation into the air (a majority of the water).
2. Some water percolates into the ground beneath the basins. This is limited due to the low percolation rate of the soil on-site.
3. Discharged to the public sanitary sewer system in accordance with the Los Angeles County Department of Public Works Industrial Waste Disposal Permit, dated May 1, 2012.
4. Discharged to a 60-inch-diameter private pipe that connects to the Dominguez Channel in accordance with a permit from the Regional Water Quality Control Board.

Proposed Surface Water Management System

The proposed surface water management system for the Project will consist of two separate storm water systems; one system will serve the existing and improved East and West Distribution Facility and a separate system will serve the Revitalization Areas 1 through 6.

The Distribution Facility's storm drain system will operate in a manner similar to today but with some facilities improved and relocated. Storm water collecting in the tank containment areas and elsewhere will be directed to pumps that convey it to the retention basins (**Figure 6-2**). Distribution Basins 1 and 2 are located north of 213th Street and west of Martin Street. Basin 1, Basin 2, and/or a combination of these two basins is expected to replace the capacity of the existing basin near Chico Street, which is being eliminated to create Revitalization Area 1 (**Figure 6-1**).

Potential Distribution Basin 3 is located south of Del Amo Boulevard and is an expansion of an existing storm water basin. Potential Distribution Basin 4 is located south of Del Amo Boulevard and west of Tajauta Avenue. These three (3) new basins and improvement of an existing basin are part of the buffer area around the Distribution Facility. The storm water stored in these basins leaves the site in three (3) ways:

1. Evaporation into the air.
2. Discharged to the public sanitary sewer system (permit dated May 1, 2012).
3. Discharged to a 60-inch-diameter private pipe that connects to the Dominguez Channel.



Revitalization Area 6 will physically divide the East and West Distribution Facility. To maintain separate storm drainage facilities, the storm water from the East Distribution Facility will be collected and pumped to one of the Distribution Basins in the West Distribution Facility. Swale D, located on the west side of the East Distribution Facility, is part of this collection system. This is illustrated on **Figure 6-2**.

Distribution Basin 1 and the potential Distribution Basins 2, expanded Distribution Basin 3, and Distribution Basin 4 are shown in **Figure 6-2**. The size and configuration shown is based on the preliminary hydrology study and preliminary design of the adjacent land uses, including the storage tanks and containment areas. The final design of these facilities may require some adjustments to the footprint of the basins and the basin depth. The average height of basin dikes may also vary but is limited by a maximum average dike height of five (5) feet for Distribution Basins 1 and potential Distribution Basin 2 and ten (10) feet for potential Distribution Basins 3 and 4.

The storm drain system for Revitalization Areas 1–6 will operate in a different manner. The system is based on the National Pollutant Discharge Elimination System (NPDES) Permit granted in 2001 to the County of Los Angeles by the Los Angeles Regional Water Quality Control Board. Under this permit, the County is required to regulate the discharge of pollutants from private property developments. Reduction of pollutants from entering the public storm water system is accomplished by requiring the installation of post-construction control best management practices (BMPs) on qualifying projects. In 2002, the County of Los Angeles published the Standard Urban Storm Water Mitigation Plan (SUSMP) to address storm water pollution from new development projects and redevelopment projects. The SUSMP contains a list of minimum required BMPs that must be used for a project. The BMPs that are included in this Project are described in the following section entitled Low Impact Development.

The Revitalization Area 1 through 6 storm drainage system is consistent with SUSMP and applies several specific Low Impact Development Principles. As a treatment control BMP, the storm water runoff from the development parcels and streets will sheet flow into vegetated swales. These swales, illustrated conceptually in **Figure 6-3**, convey the water to the Revitalization Basins near Del Amo Boulevard or the public storm drain system in 213th Street while also providing some water quality treatment of the storm water.

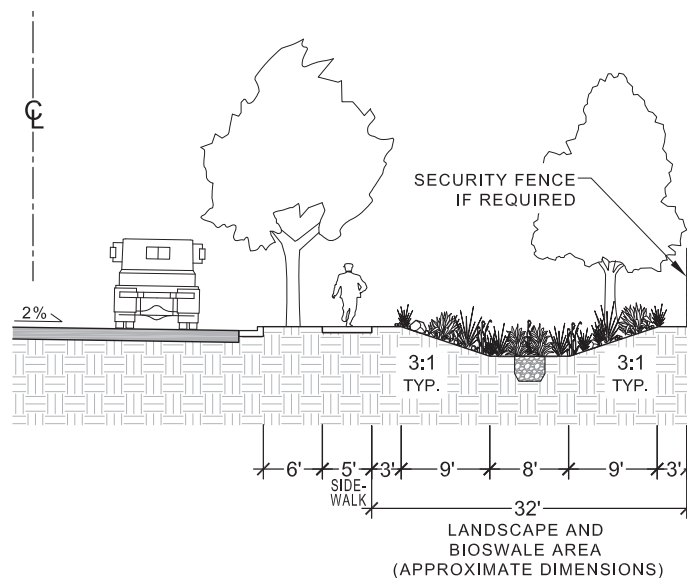
Swale A is located on the east edge of Revitalization Area 1. It collects storm water from the 12.3-acre area and conveys it to a low point near the south edge of the site. From that point it is connected by pipe with a pump to the City storm drain pipe in 213th Street. Swale B is located on the west edge of Revitalization Area 2. It collects storm water from the 14.6-acre area and conveys it south to a pipe with a pump that connects the City storm drain pipe in 213th Street. Swale C is located on the north edge of Revitalization

Figure 6-3: Bioswale Sections

Section A-1
Tajuata Avenue
(South of Del Amo Boulevard)

(No Parking) NTS

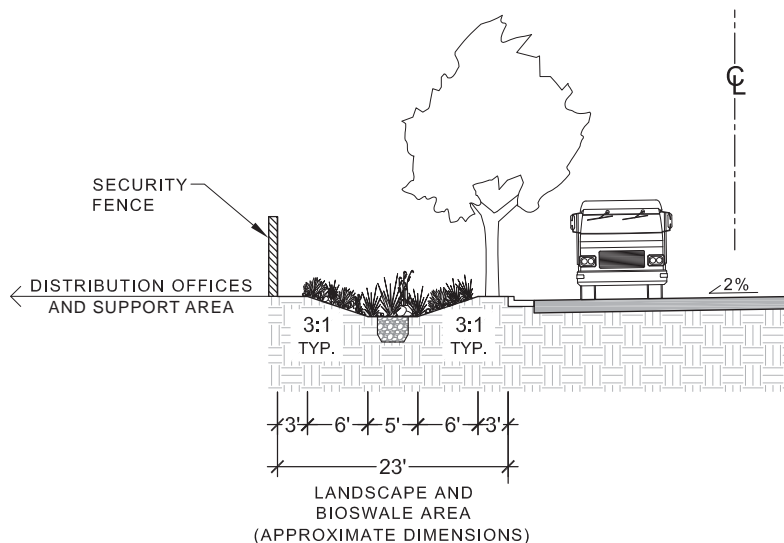
1. Landscape with bunch grasses, shrubs, and herbaceous plant material using xeriscape techniques interspersed with rocks, gravel, boulders, and/or cobbles to allow sedimentation and add aesthetic value.
2. Dimensions may vary along length of swale depending on anticipated flow volume.
3. Use gravel trickle drain along center of swale where appropriate per final engineering.



Section B-2
Dominguez Street Extended

(No Parking) NTS

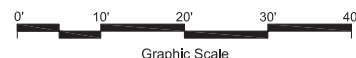
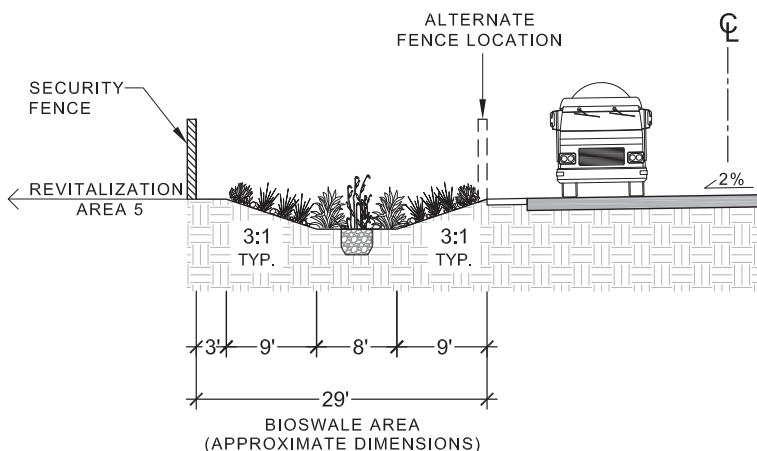
1. Landscape with bunch grasses, shrubs, and herbaceous plant material using xeriscape techniques interspersed with rocks, gravel, boulders, and/or cobbles to allow sedimentation and add aesthetic value.
2. Dimensions may vary along length of swale depending on anticipated flow volume.
3. Use gravel trickle drain along center of swale where appropriate per final engineering.



Section C-3
Truck Driveway

(No Parking) NTS

1. Landscape with bunch grasses, shrubs, and herbaceous plant material using xeriscape techniques interspersed with rocks, gravel, boulders, and/or cobbles to allow sedimentation and add aesthetic value.
2. Dimensions may vary along length of swale depending on anticipated flow volume.
3. Use gravel trickle drain along center of swale where appropriate per final engineering.



Area 6. It collects storm water from this 48.4-acre area and conveys it west and south to connect to a lift station adjacent to Tajauta Street. The lift station pumps the water into Revitalization Basin #1 located at the southeast corner of Del Amo Boulevard and Tajauta Avenue. Swale D is located along the west edge of the East Distribution Area and along the north edge of the Truck Driveway. It collects water from this area and the Truck Driveway and conveys it to a lift station located near the southwest corner of Revitalization Area 6. This lift station pumps the water to one of the Distribution Basins. Swale E is located along the south edge of the truck driveway. It collects water from Revitalization Areas 4 and 5 and conveys it west to Swale F at the intersection of the truck driveway and Tajauta Avenue. Swale F is located along the east edge of Tajauta Avenue and the north side of Dominguez Street. It collects water from Dominguez Street and from the western portions of Areas 5 and 6 and also conveys water from Swale E, which connects to Swale F.

A new gravity storm drain connects Revitalization Basin #1 to the existing private 60-inch-diameter storm drainage pipe, which connects to the public storm drain system at the Dominguez Channel. Since the existing 60-inch-diameter pipe is also used as an overflow by the Distribution Facility, a perforated riser will be used in Revitalization Basin #1 to limit the outflow quantity to leave some capacity available. A new storm drain connects Revitalization Basin #2 to the 48-inch-diameter County of Los Angeles storm drain pipe in Del Amo Boulevard.

Low Impact Development

The City of Carson is working with the Los Angeles Regional Water Quality Control Board (LARWQCB) to comply with the Clean Water Act (CWA) and the National Pollution Discharge Elimination System (NPDES) program. The City of Carson currently operates under The Los Angeles County Municipal Storm Water NPDES Permit No. CAS004001, Order No. 01-182 as amended by Regional Board Order No. R4-2007-0042 on August 9, 2007. The objective of Order No. 01-182 is to protect the beneficial uses of receiving waters in Los Angeles County. To meet this objective, the Order requires that the Los Angeles Countywide Storm Water Quality Management Plan (SQMP) specify best management practices (BMPs) that will be implemented to reduce the discharge of pollutants in storm water to the maximum extent practicable. Permit No. CAS004001 requires implementation of a Storm Water Quality Management Program (SQMP), which provides specific guidelines to control, reduce and monitor discharges of waste to storm drain systems. The emphasis of the SQMP is pollution prevention through education, public outreach, planning and implementation as source control BMPs first and structural and treatment control BMPs second.

On January 16, 2007, the County of Los Angeles Board of Supervisors adopted a comprehensive Countywide Energy and Environmental Policy.

The policy directed Public Works and Regional Planning to develop green building standards for commercial and industrial developments and to develop Low Impact Development Guidelines. The Board's decision resulted in the addition of Section 22.52.2310 of the Los Angeles County Ordinance, which requires compliance with the Low Impact Development requirements as defined in Chapter 12.84 of Title 12 of said Los Angeles County Code.

The LARWQCB's main concern in relation to the Clean Water Act and the Los Angeles County Municipal Storm Water Discharge permit (Permit) is the reduction of urban impacts on receiving waters by maintaining pre-development hydrology, which in turn minimizes the quantity and affects the quality of urban pollutants reaching waterways. These goals are achieved by designing sites that disturb only the smallest area necessary (starting from the layout, grading, and compaction phases of construction); minimizing soil compaction and imperviousness; preserving natural drainages, vegetation, and buffer zones; and utilizing on-site, small-area storm water treatment techniques. These principles and techniques are collectively known as "Low Impact Development" (LID). LID principles are based on controlling storm water at the source and redistributing the discharge throughout the Plan Area to preserve pre-development hydrologic conditions such as storage, infiltration, groundwater recharge, storm water retention and detention, reduction of impervious surfaces, and the lengthening of flow paths and runoff times. Other environmental concerns include the preservation of sensitive areas such as riparian corridors, wetlands, woodlands and stream, creeks, and tributaries. This is unlike conventional approaches that typically convey and manage runoff in large facilities located at the base of watershed (treatment control). These multifunctional designs incorporate alternative storm water management practices such as functional landscape that act as storm water facilities, flatter grades, depression storage and open drainage swales. This system of controls can reduce the need for a centralized BMP facility for the control of storm water runoff.

The LARWQCB has worked with the County to develop LID standards to maintain the pre-development hydrology and prevent pollution. These LID standards are based on the new development of previously undeveloped land. However, in the case of the Carson Revitalization Project, the existing area contains significant development, and that existing development results in no off-site storm drainage discharge except in extreme storm events. Maintaining that characteristic of no storm water discharge for the East and West Distribution Facility is part of the Proposed Hydrology System discussed in this section. However, maintaining no storm water discharge for the Revitalization Areas is not feasible and would not be consistent with how the standards are applied to similar commercial and industrial areas in Carson and the Los Angeles area. Therefore, in conformance with the intent of the standards, the Carson Revitalization Project has incorporated LID features into the Specific Plan process for the Revitalization Areas. In addition to the standard treatment control water-quality BMPs, the proposed

Specific Plan area will incorporate these LID features and other techniques into improvement designs to meet the following storm water goals:

- Minimize impervious and directly connected impervious surfaces,
- Implement pollution prevention methods supplemented with source controls and treatment controls,
- Maximize the use of naturalized, surface drainage systems,
- Control post-development peak storm water runoff discharge rates and velocities to prevent or reduce impacts on downstream system capacity, and
- Minimize consumptive use of water.

The Specific Plan is expected to meet these goals through the following approaches.

Proposed Grading

The proposed Plan Area provides for a grading design that will minimize significant changes to the existing topography. Most of the Plan Area is very flat and will remain so. The proposed layout provides for grading that directs storm water to swales that convey it to the detention basins.

Minimized Use of Potable Water

Landscape plant palette requiring low water use will be implemented to reduce the use of potable water for irrigation. Large turf areas will be minimized. In addition, irrigation controllers that automatically adjust station run time based on current climate conditions (e.g., humidity, wind, evapotranspiration) will be used.

Proposed LID Features

The design of the infrastructure will use as many LID features as practicable to enhance water quality. These LID features may include, but are not limited to, permeable pavement, vegetated filter strips/pavers to disconnect impervious areas, and bioswales. The potential use of these LID features will be limited by the characteristics of the soils on-site and their capacity to percolate runoff. These recommended LID features may be refined or other LID features may be incorporated to comply with the City's adopted standards for LID as the design progresses. The following are descriptions of potential LID features that may be implemented for the Specific Plan development.

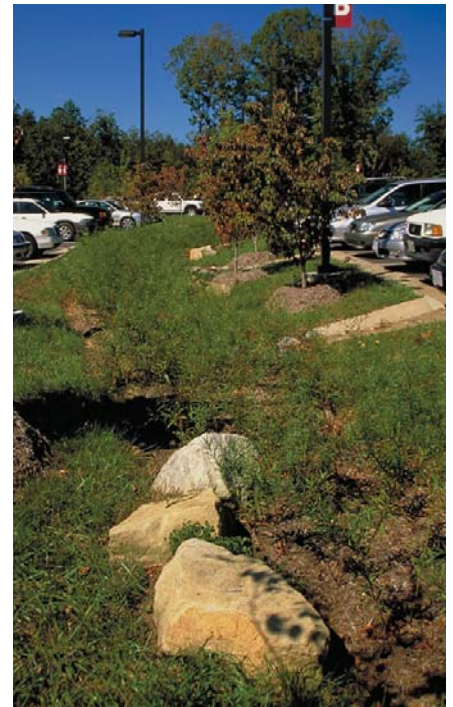
Vegetated Filter Strips/Pavers

Grass filter strips are low-angle vegetated slopes designed to treat sheet flow runoff from immediately adjacent impervious areas. Filter strips (also known as vegetated filter strips and grassed filters) function by slowing runoff velocities, filtering out sediment and other pollutants, and providing some infiltration into underlying soils. Because they use sheet flow and not channelized flow, these small scale filter strips can be more effective than larger swales at removing suspended solids and trash from runoff. They provide good “pretreatment” of storm water that will then be routed to another technique such as a vegetated swale or a bioretention area. Pavers will allow separation of impervious areas.



Bioswales

Bioswales are an important LID technique used to convey storm water runoff. These vegetated, open, shallow channels slow runoff, filter it, and promote infiltration into the ground; as a result, runoff volumes are smaller, peak discharge rates are lower, and runoff is cleaner. This approach contrasts with conventional stormwater strategies that rely on gutters and pipes that increase the velocity of runoff and do nothing for water quality. These facilities are illustrated in **Figures 6-2 and 6-3**.



Detention/Water Quality Basins

End-of-the-line detention, water quality and retention facilities will also provide additional water quality benefits to ensure that the development meets or exceeds the requirements of the LARWQCB. These facilities are illustrated in **Figure 6-2**.

Water Quality in Revitalization Areas

Water quality treatment requirements are expected to be met or exceeded through the combination of both LID (source control) and BMPs (treatment control) methods and facilities. The treatment control facilities will provide water quality treatment that meets the requirements of the LARWQCB, while the LID will supplement that treatment.

Planning for the Carson Revitalization Project has incorporated space for the bioswales within or adjacent to each of the Revitalization Areas. Local surface runoff will either sheet flow to or be collected and conveyed through the bioswales. In addition to the LID features, runoff from the Specific Plan area will be treated by the end-of-the-line detention, water quality, and, for the Distribution Facility, retention basins.

Electrical Service

Electric service to the property is provided by Southern California Edison (SCE). There is an SCE Substation located adjacent to 213th Street south of the property, and electrical service is extended from that substation to an on-site substation located just north of the northerly end of Martin Street. From this on-site substation, power lines currently extend throughout the property to buildings, control facilities, and other facilities requiring electrical service.

With the implementation of the Project, the East and West Distribution Facility will continue to be served by this on-site electrical substation, which will be expanded as necessary to support the electrical requirements of the improved Distribution Facility. Electrical service to Revitalization Areas 1 through 6 will be from extensions of existing SCE electrical service in the rights-of-way of adjacent streets.

One of the limited land uses permitted in Revitalization Area 2 is a solar power facility. If such a use is developed on all or a portion of Revitalization Area 2, it would be connected into the electrical substation on-site that serves the East and West Distribution Facility to provide a portion of the electrical energy needed for those facilities.

Natural Gas Service

Natural gas service to the property is provided by Southern California Gas Company (SCGC) Pacific Region. A medium and high-pressure distribution system extends throughout the City of Carson. There are no current deficiencies in the natural gas supply system that serves the City. For the proposed system, SCGC would extend the local distribution system into the Specific Plan area to serve the natural gas service needs of the East and West Distribution Facility and Revitalization Areas.

Telephone/Telecommunications

Telephone and other telecommunication services can be provided to the Plan Area by multiple service providers. Telephone service facilities consist of both fiber and copper facilities. Both aerial and underground lines exist within the City. The undergrounding of new facilities may be considered on a case-by-case basis.

Water Supply

The following section provides an overview of the existing potable water system pertinent to the proposed Project, including the source of potable water, water treatment facilities, off-site water distribution system, and other water supply considerations. It also describes the proposed on-

site distribution system to meet potable water demands and fire flow requirements for the Project.

There is a water purveyor in the City of Carson that serves the Plan Area, the California Water Service Company Rancho Dominguez District. The district was formed in 2000 when California Water Service Company (Cal Water) merged with Dominguez Services Corporation. The existing Cal Water South Bay service areas were combined with the Dominguez South Bay service areas. The district supplies water for its service area using a combination of local ground water and imported surface water. The local groundwater supply is currently pumped from eight active wells throughout the service area. The purchased surface water is imported by the Metropolitan Water District of Southern California (MWD) from the Colorado River and the State Water Project in northern California.

The California Water Service Company's Water Supply Assessment Report, dated June 29, 2011, provides information on existing and future water infrastructure that would serve the Plan Area. Discussions were also held with Cal Water to identify specific future water supply and distribution facilities.

Water Purveyor

Cal Water is a private water company that supplies water for the City of Carson and will provide potable water to the entire Plan Area. Cal Water is a California Public Utilities Commission regulated water utility. The Cal Water Rancho Dominguez District includes, in addition to Carson, Hermosa Beach, Redondo Beach, the Palos Verdes Peninsula, Hawthorne, Torrance, Compton, Long Beach, and Harbor City. The existing and proposed water distribution system is illustrated in **Figure 6-4**. For the proposed system, a new main in Tajauta Avenue and Dominguez Street will connect to the existing 18-inch-diameter water main in Del Amo Boulevard and a 20-inch-diameter water main in Wilmington Avenue. This will form a looped connection to maintain reliability of the water supply. The separate fire protection system for the East and West Distribution Facility is described in Section 6.11.

Currently all of the existing on-site water facilities are owned and maintained by the property owner. These and any expanded water facilities within the East and West Distribution Facilities will continue to be owned and maintained by the property owner. The proposed water main loop along the extensions of Tajauta Avenue and Dominguez Street and related mains serving Revitalization Areas 4, 5, and 6 will be owned and maintained by Cal Water.

Preliminary Reclaimed Water System Plan

The West Basin Municipal Water District (WBMWD) provides reclaimed water to the City of Carson. It has a Carson Water Recycling Plant, which abuts the Carson Revitalization Project Specific Plan area and is located at the southwest corner of Wilmington Avenue and Dominguez Street. The WBMWD reclaimed water mains extend from the plant north along Wilmington Avenue turning west along Del Amo Boulevard as well as south along Wilmington Avenue, turning west along 213th Street and turning south along Martin Street.

The Project will be connected to this reclaimed water system and reclaimed water will be used for landscape irrigation along the perimeter of the Plan Area and along the extensions of Tajauta Avenue and Dominguez Street within the Plan Area. The existing and proposed reclaimed water system is illustrated in **Figure 6-5**. Reclaimed water will also be used for landscape irrigation use in Revitalization Areas 2 through 6 and in the West Distribution Facility office and maintenance area. Currently there is not a WBMWD reclaimed water line in the vicinity of Revitalization Area 1. Additionally, reclaimed water may also be used for the hydro testing of existing and new storage tanks or other needs within the East and West Distribution Facility, provided sufficient volumes can be obtained from the existing reclaimed water infrastructure and subject to applicable discharge permit requirements.

The meter and point of connection to the WBMWD reclaimed water main will be at one or more locations near the perimeter of the Plan Area. From the point of connection(s), lateral lines internal to the Plan Area will extend in a system of loops to serve the landscape irrigation and other uses. At Revitalization Areas 2 through 6, a sub meter may be used to measure the volume of reclaimed water used. Alternatively, a direct connection to the WBMWD reclaimed water main may be made to serve individual Revitalization Areas.

Figure 6-4: Preliminary Water Supply System

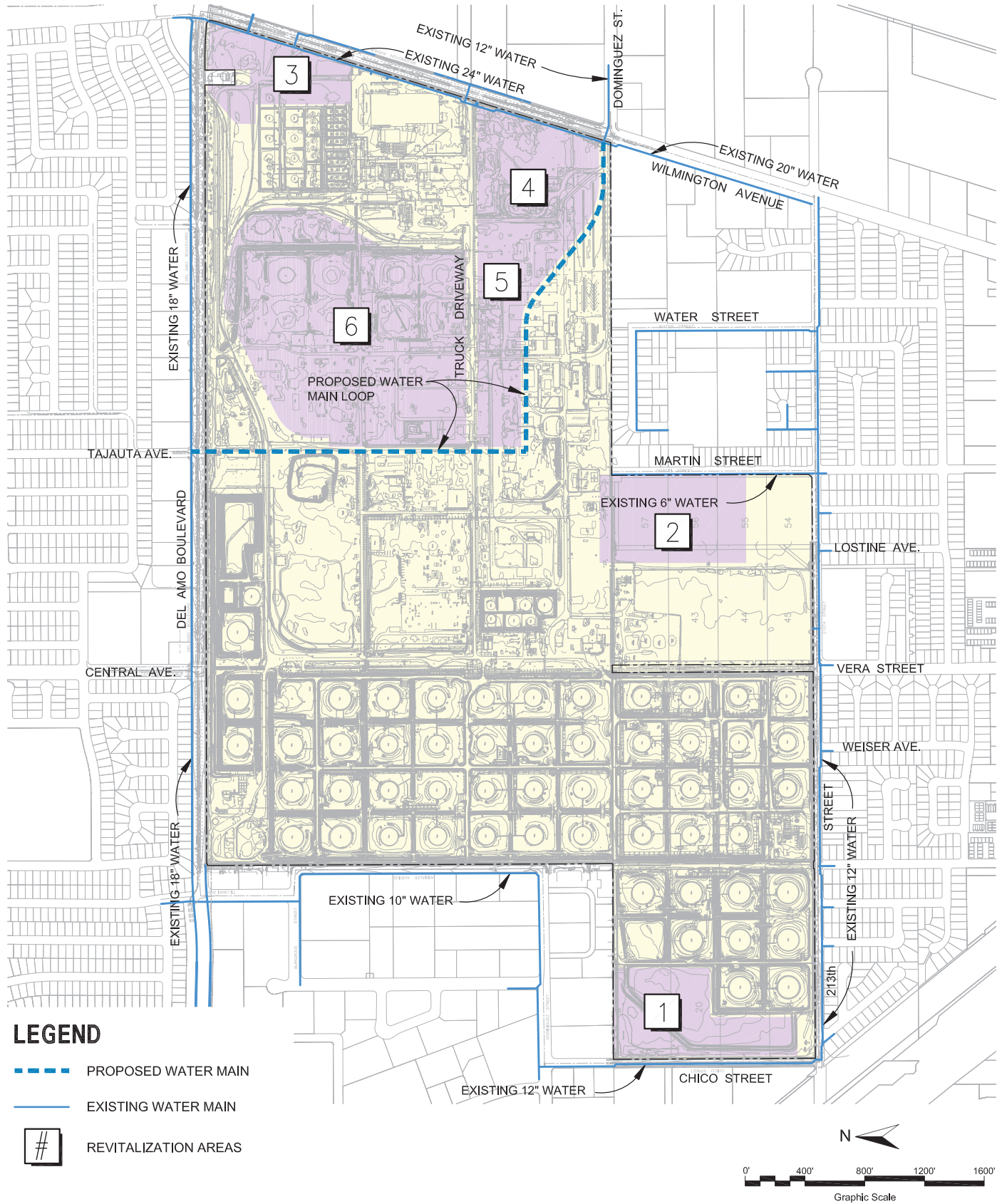
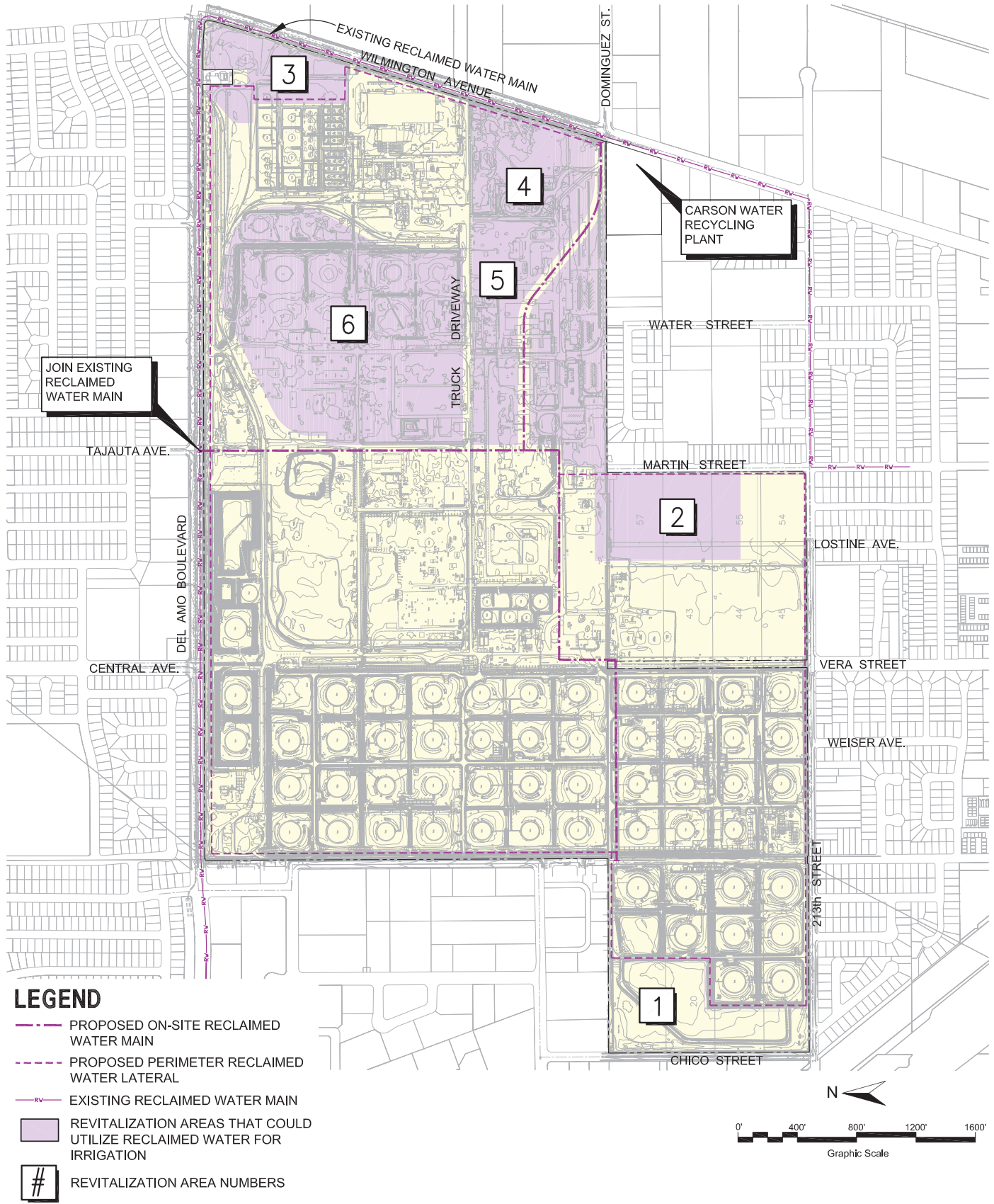





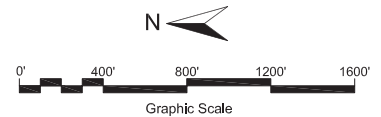


Figure 6-5: Preliminary Reclaimed Water System



LEGEND

-  PROPOSED ON-SITE RECLAIMED WATER MAIN
-  PROPOSED PERIMETER RECLAIMED WATER LATERAL
-  EXISTING RECLAIMED WATER MAIN
-  REVITALIZATION AREAS THAT COULD UTILIZE RECLAIMED WATER FOR IRRIGATION
-  REVITALIZATION AREA NUMBERS



Sanitary Sewer Service

This section describes the existing sewer system pertinent to the proposed Project including the off-site collection system and wastewater treatment plant. The proposed on-site sanitary sewer-system is also discussed.

Existing Off-Site Sewer Facilities

There are existing public sewer facilities surrounding the Plan Area within the public streets. The locations of these facilities are illustrated in **Figure 6-6**. The large diameter trunk sewer mains are owned and maintained by the Sanitation District of Los Angeles County, while the smaller diameter collector mains are owned and maintained by the Los Angeles County Department of Public Works.

Wilmington Avenue

There are two existing trunk sewer mains in Wilmington Avenue, both owned and maintained by the Sanitation District of Los Angeles County. A 60-inch-diameter clay pipe, originally constructed in 1927, is located 3.5 feet east of the street centerline. In 1997 a 54-inch-diameter PVC liner was installed inside this existing 60-inch-diameter clay pipe. This pipe flows in a southerly direction.

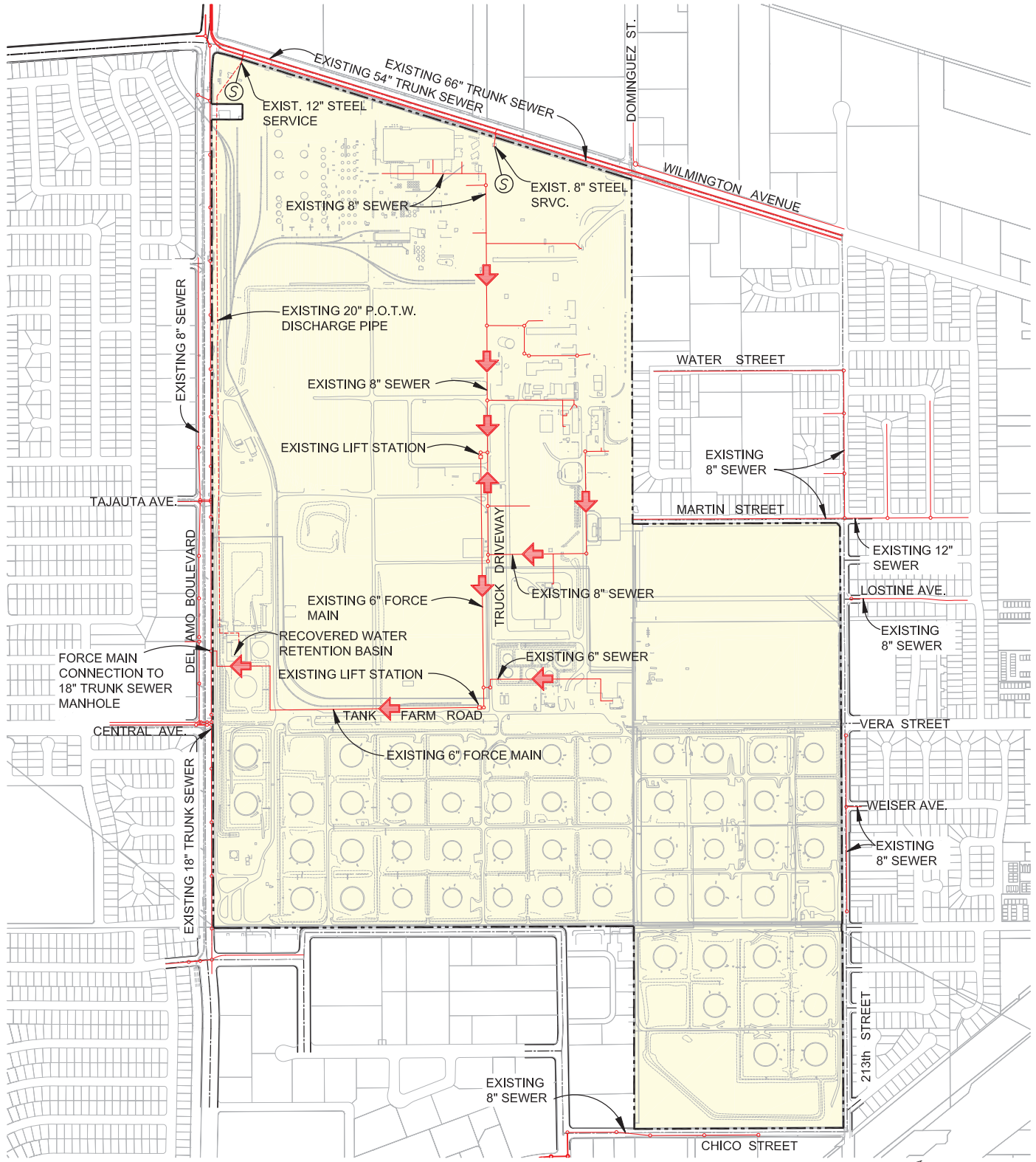
A 66-inch semi-elliptical pipe, originally constructed in 1940, is located 25 feet west of the street centerline. This pipe also flows in a southerly direction.

There is an existing 12-inch-diameter steel sewer service that is connected to both trunk mains approximately 200 feet south of the southerly edge of Del Amo Boulevard and that service extends westerly to the Plan Area. Currently, the privately owned treatment works discharge from an existing recovered water retention basin is discharged into this sewer service. There is also an existing 8-inch-diameter steel service that is connected to both trunk mains approximately 35 feet south of the southerly edge of the extension of the future Truck Driveway that extends westerly to the Plan Area.

Del Amo Boulevard

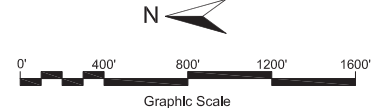
There is an existing trunk sewer main 40 feet south of the centerline of Del Amo Boulevard that is owned and maintained by the Sanitation District of Los Angeles County. This main flows in a westerly direction and is 15 inches in diameter as it crosses Wilmington Avenue and increases to 18 inches approximately 800 feet easterly of the intersection with Tajauta Avenue. There is also an 8-inch-diameter main along the northerly edge of the street that connects to the 18-inch trunk main at the intersection with Tajauta Avenue.

Figure 6-6: Existing Sewer Service



LEGEND

— EXISTING SEWER MAIN



213th Street, Martin Street, and Lostine Avenue

There is an existing 8-inch-diameter sewer main in 213th Street that flows westerly from the intersection with Vera Street to the intersection with Weiser Avenue where it then runs southerly to 216th Street.

There is also an 8-inch-diameter main in 213th Street that flows westerly from the intersection with Water Street to the intersection with Martin Street where it connects to an 8-inch-diameter main that runs from the northerly terminus of Martin Street in a southerly direction to Carson Street.

In Lostine Avenue there is an 8-inch-diameter main that starts at the Lostine intersection with 213th Street and flows in a southerly direction to 215th Place. All of these mains are owned and maintained by the Los Angeles County Department of Public Works.

Existing On-Site Sewer Facilities

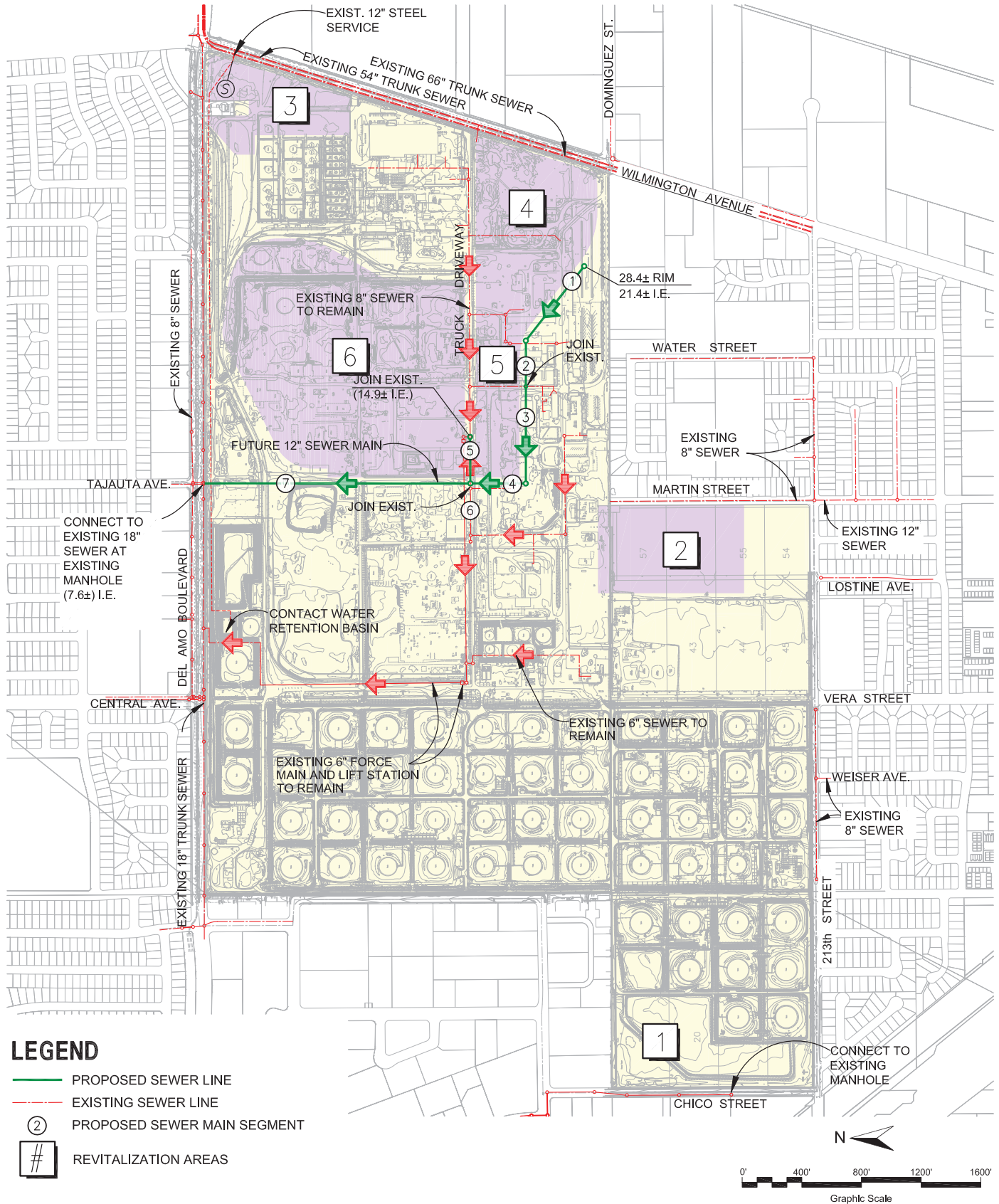
The existing on-site buildings with sewer are served through 8-inch gravity mains located within the alignment of the future Truck Driveway. The mains flow westerly from the East Distribution Facility and easterly from the ethanol loading lanes to a sewer lift station located on the northerly edge of the Truck Driveway that was installed in 2007. From the lift station, a 6-inch-diameter force main runs westerly to a second lift station at the northeast corner of the intersection of the Truck Driveway and Tank Farm Road. From the second lift station, a 6-inch force main runs northerly and discharges into a manhole in the 18-inch trunk sewer main in Del Amo Boulevard.

Proposed Sewer Facilities

The proposed on-site sewer facilities will be owned and maintained by the Los Angeles County Department of Public Works. Maintenance includes regular cleaning to prevent clogs, routine repairs, and emergency services if necessary. Currently, all of the existing on-site wastewater facilities are owned and maintained by the property owner. The proposed public sewer mains will be designed using public sewer standards.

As shown in **Figure 6-7**, a new sewer main would start in the extension of Dominguez Street near the southwest corner of Revitalization Area #4. From there it would continue westerly to the intersection with the proposed Tajauta Avenue extension. The new main would then flow northerly in the Tajauta Avenue extension to the intersection with the new Truck Driveway where it would join the existing sewer mains from the East Distribution Area. The new main would then continue northerly and connect to an existing manhole in the 18-inch trunk sewer in Del Amo Boulevard. The proposed alignment would provide a new gravity sewer system that serves Revitalization Areas 4, 5, and 6.

Figure 6-7: Preliminary Sewer Service Plan



The existing 18-inch main in Del Amo Boulevard is about 13 feet deep and, according to the Sanitation District, has a design capacity of 4.7 cubic feet per second (c.f.s.) (2,109 gallons per minute), with an existing peak flow of 1.2 c.f.s. as measured on March 5, 2008. That leaves an available capacity of 3.5 c.f.s. (1,570 gallons per minute) at the point of connection. The additional peak flow discharge from Revitalization Areas 4, 5, and 6 is estimated to be 1.4 c.f.s. Therefore there is available capacity to serve these development areas.

Revitalization Area 3, the Community Retail parcel in the northeast corner of the site, should be able to connect to the existing 12-inch sewer service that discharges into the two trunk sewer mains in Wilmington Avenue. This existing service is currently being used by Shell as a discharge point for the recovered water retention basin. Shell has an industrial waste discharge permit which allows them to discharge an average flow of 238,168 gallons per day with a peak flow rate of 750 gallons per minute. These discharges will need to be taken into account in the design of the new service to the proposed community retail building(s) and a backflow prevention device will need to be installed.

The existing sewer mains surrounding the site are deep enough to achieve a gravity sewer system for the Revitalization Areas without significantly raising the on-site finished surface elevations. Ultimately, permission will be needed to connect to the trunk sewer in Del Amo Boulevard together with an industrial waste discharge permit.

Solid Waste

The collection of solid waste in the City of Carson is by the exclusive franchisee that is contracted with the City to provide this service. The current franchisee is Waste Management, Inc. The Waste Management Transfer Station located at 321 Francisco Street in Carson provides residential, commercial, and industrial trash collection and recycling services. Waste Management currently provides waste collection services to the Specific Plan area. It will continue to provide such services to the improved Distribution Facility and Revitalization Areas 1–6 as they are developed. Any solid waste generated as a result of the ongoing remediation program or preparation of the site for development that is not suitable for disposal in the landfill typically used by Waste Management will be transported to a specialized landfill or disposal facility designed for such material.

Fire and Police Protection

The Los Angeles County Fire Department provides fire protection, suppression, and emergency services to the City of Carson, including the Specific Plan area. Fire Department Battalion #7 covers the City of Carson and portions of Gardena and Compton with a total of six fire stations. Station #10, located adjacent to the Specific Plan area at 1860 East Del Amo Boulevard, is the jurisdictional engine company for the Plan Area. Four other stations are within 2 miles of the Plan Area and are illustrated in **Figure 6-8**. The response times from those stations and staffing based on information from the County Fire Department are as follows:

Table 6-1: Fire Department Response – Times and Staffing¹

Station	Distance (miles)	Response Time (minutes)	Total Staff
10	0.1	1.0	5
36	2.0	3.0	5
116	1.0	2.0	9
105	1.0	2.5	9
127	1.0	2.5	6

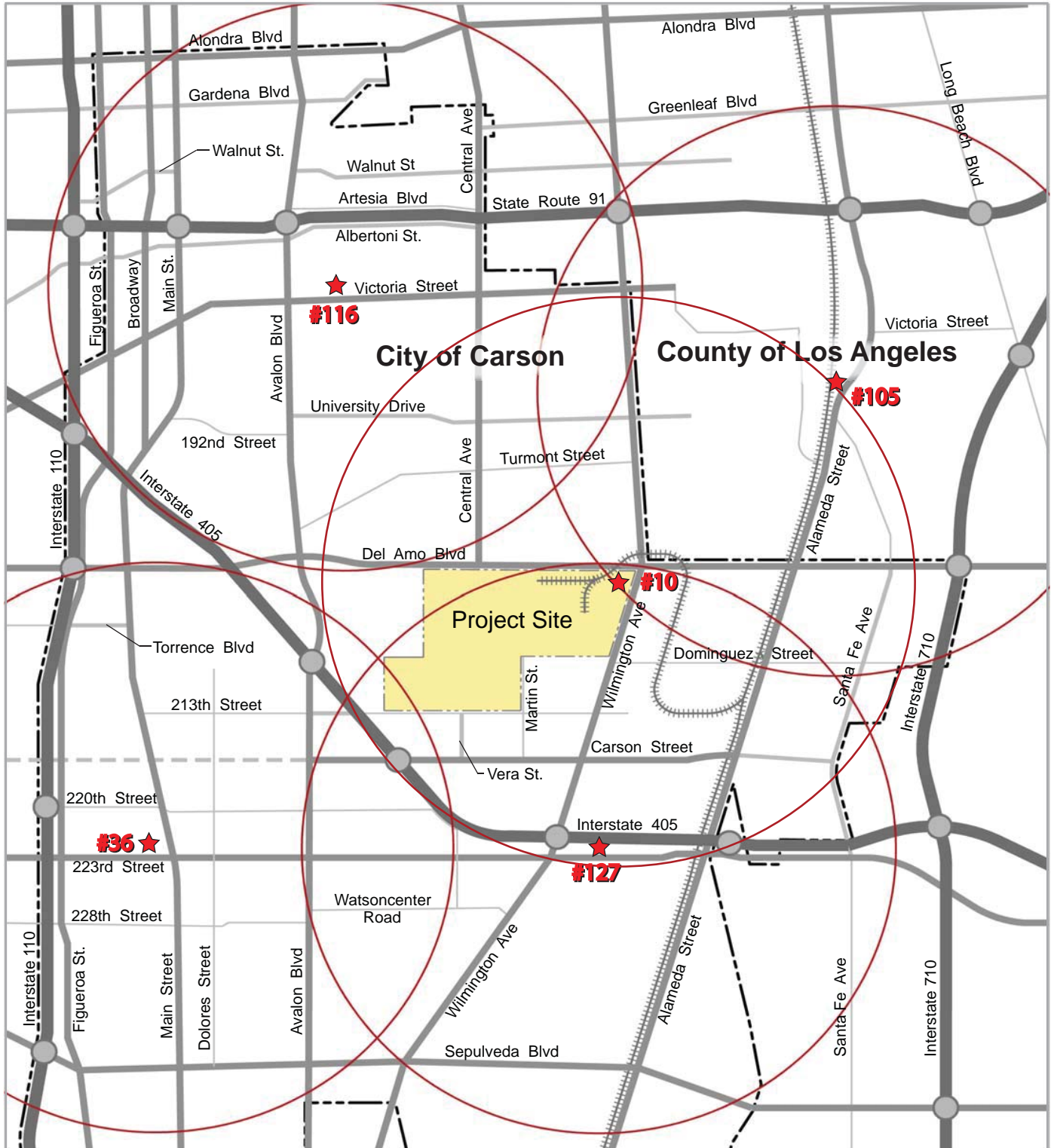
¹ Source: Los Angeles County Fire Department letter, October 13, 2010.

The East and West Distribution Facility fire protection system will remain a separate system from the water main extended into the property to serve the Revitalization Areas. The primary water supply for this separate fire protection system is a main that connects to the 24-inch-diameter main in Wilmington Avenue and extends east, parallel to the Truck Driveway, to the vicinity of the storage tanks in the eastern and western portions of the property. Lateral lines extend from this main to serve various fire hydrants and monitors within the storage tank area. A separate lateral also supplies water to the truck loading area. An existing diesel fire pump serves as a booster pump for the truck area foam system to ensure that the required pressure is available to this foam system.

The future development of the West Distribution Facility will require some improvement of the existing fire protection systems. Existing facilities may be relocated as part of the development. The new truck loading lanes will include improvement of the existing foam and sprinkler systems and ancillary equipment to support these systems. Similarly, the new storage tank area will include improved fire protection measures in accordance with Shell policy and applicable regulatory standards.

Police services for the City of Carson are provided by the Los Angeles County Sheriff's Department. There is one existing Carson Sheriff Station located near the Civic Center on South Avalon Avenue.

Figure 6-8: Fire Station Locations



Legend

- ★ LACFD Fire Station and Number
- 1.5 - Mile Radius from Fire Station



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7

Infrastructure and Facilities Financing and Maintenance



Introduction

This section of the Carson Revitalization Project (Project) Specific Plan provides the general framework for the financing and maintenance of improvements in the Specific Plan area (Plan Area), including private improvements with public access. Although this section provides the general framework for the financing and of public and private improvements in the Plan Area, a comprehensive financing plan shall be prepared prior to Project construction. The comprehensive financing plan for the construction and maintenance of public facilities and certain private facilities shall identify the following:

- Private source financing for the on site public and private improvements, projected Development Impact Fees, and Project costs of the vertical construction.
- Public source financing for the on site or off site public improvements.

The Project entitlements will include a Development Agreement. If the Development Agreement includes sufficient information on the financing of public and private facilities, then a separate comprehensive financing plan may not be required.

Maintenance of Public Improvements and Private Facilities

In general, improvements within all public rights-of-way, public access easements, and public facilities will be maintained by the public entity or franchise utility having legal authority to own, operate, and maintain the improvements. In general, additional private improvements (such as landscaping outside of the public right-of-way) will be maintained by the private property owner or a business association created to deal with maintenance issues for multiple owners or tenants. Table 7.1 outlines the entities responsible for the maintenance of various improvements and facilities within the Plan Area.



Table 7-1: On-Site Maintenance Responsibility Matrix

Facility	City of Carson	Franchise Utilities	Business Association or Sub-Association	Distribution Facility Owner
Tajauta Avenue (on site)			X	
Dominguez Street (on site)			X	
Truck Driveway				X
Revitalization Streets/Driveways			X	
Distribution Storm Water Basins 1, 2, 3, and 4				X
Revitalization Area Storm Water Basin			X	
Water Service Mains			X	
Reclaimed Water Mains			X	
Sewer Service Mains			X	
Storm Drainage Collection Facilities			X	X
Electrical Service		X		
Landscaping Adjacent to Public ROW or Public Access Easement				
Del Amo Boulevard				X
213th Street				X
Martin Street			X	X
Tajauta Avenue (west side)				X
Tajauta Avenue (east side)			X	
Dominguez Street (south side)				X
Chico Street/Revitalization Area #1			X	
Del Amo & Wilmington/Revitalization Area #3			X	
Wilmington & Dominguez/Revitalization Area #4	X			
Revitalization Areas #5 and #6			X	
Landscaping and Fencing around and within Specific Plan Area				
West Distribution Facility				X
East Distribution Facility				X
Revitalization Areas #1, 2, 3, 5, and 6			X	
Revitalization Area #4	X			

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8

Administration and Plan Implementation



Introduction

This section of the Carson Revitalization Project Specific Plan describes mechanisms for implementing the Specific Plan and is to be consulted whenever there is a question concerning Specific Plan implementation in relation to subsequent projects that may be developed within Specific Plan area (Plan Area) boundaries. As the City of Carson (City) is the public agency responsible for the administration of the Specific Plan, the tools and procedures described in this section are to be implemented consistent with all City rules, standards, and policies.



Specific Plan Authority

The Specific Plan is adopted by Ordinance by the City of Carson City Council and is used as the basis for the review of all subsequent projects in the Plan Area. As a regulatory document, the Specific Plan establishes the land use and associated development, design, and infrastructure standards that must be met to successfully implement the Project.

Through the inclusion of development, design, and infrastructure standards and incorporation by reference of the applicable City of Carson Zoning Ordinance provisions, the Specific Plan creates zoning standards specifically applicable to the Plan Area. As a regulatory document, all subsequent design documents and development activities in the Plan Area are required to be consistent with this Specific Plan. In instances where the requirements of this Specific Plan conflict with the Zoning Ordinance or other City standards, the Specific Plan shall control. Conversely, if this Specific Plan is silent on an issue, standards within the existing Zoning Ordinance or other adopted City standards shall prevail.

Additional Actions Required

General Plan Amendment

The Plan Area is currently designated in the City of Carson General Plan for Heavy Industrial, Light Industrial, and Business Park land uses. To be consistent with the General Plan, the land uses would need to be revised to Heavy Industrial, Light Industrial, Business Park, General Commercial, and General Open Space in a configuration similar to that proposed in the Specific Plan. This reconfiguration would extend the Heavy Industrial to cover most of the East and West Distribution Facility; Light Industrial to cover Revitalization Areas 4, 5, and 6; Business Park to cover Revitalization Areas 1 and 2; and General Commercial to cover Revitalization Area 3. The major storm water detention and retention basins would be covered by a General Open Space designation. This is illustrated in **Figure 8-1**.

Rezoning

The Plan Area is currently zoned as Heavy Industrial. To be consistent with how Specific Plan areas are designated in the City of Carson, the Plan Area would need to be rezoned to a Specific Plan designation.