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4.7 PUBLIC SERVICES AND UTILITIES

4.7.1 INTRODUCTION

The following section provides an analysis of utilities, public services, and public facilities for the proposed Sports Park project in the City of Long Beach. Utilities include the provision or disposition of water, wastewater, solid waste disposal services, electricity, natural gas, telephone, and cable television. Public services include law enforcement and fire protection services. Public facilities included in this discussion address public schools and public libraries.

4.7.2 EXISTING ENVIRONMENTAL SETTING

Police Protection

The Long Beach Police Department (LBPd) provides police protection services throughout the City of Long Beach. There are currently 968 sworn officers within the LBPd service area with the current officer to population ratio being approximately 2.0 officers per 1,000 residents. It is the goal of the LBPd to strengthen that ratio to 2.5 officers per 1,000 residents. The average citywide response time to priority one calls (life or property in imminent danger) for service is 5.2 minutes. The LBPd goal for police response times for priority one calls is under five minutes.

The LBPd operates a helicopter surveillance program; a canine unit; a full-service, 24-hour jail facility; a communications/dispatching center; an investigation bureau; and a firing range. Community-oriented police activities include community relations, traffic and parking enforcement, a Neighborhood Watch Program, crime prevention, bicycle patrol, and a DARE Program. As part of the LBPd's service to the community, project site plans are reviewed by the Police Chief to determine the need for any additional crime prevention and safety measures.

The Patrol Bureau of the LBPd is divided into four divisions (North, South, East, and West). The LBPd substation, located approximately 3.5 miles from the project site at 1835 Santa Fe Avenue, will serve the project area. This full-service police station serving the West Patrol Division was completed in 1997, following the adoption of the 1994 LBPd Strategic Plan. The maximum capacity of the substation is 125 employees, although it currently operates at approximately 80 percent capacity (100 employees). Figure 4.7.1 shows the location of the nearest police and fire stations.

The LBPd is part of the Los Angeles County Law Enforcement Mutual Aid Organization, which is overseen by the Los Angeles County Sheriff's Department. In the event that mutual aid is required, the Emergency Operations Bureau of the Sheriff's Department is notified, and in turn, notification of other cities in predetermined response groups occurs. The City of Signal Hill Police Department, California State University Police, Long Beach Community College Police, Veteran's Hospital Police, and the United States Coast Guard are also available for mutual aid, if needed.

Fire Protection

The City of Long Beach Fire Department (Fire Department) provides fire and emergency medical response, fire prevention, and hazardous materials regulatory enforcement to the project area. As part of its service to the community, project plans are reviewed by the Fire Chief to ensure compliance with all applicable fire code and ordinance requirements for construction, access, water mains, fire flows, and fire hydrant placement.

The Fire Department consists of four bureaus that include Administration, Operations, Fire Prevention, and Support Services and maintains a staff of approximately 450 fire personnel. The Operations Bureau include the Emergency Medical Services Division (EMS), which is responsible for the primary and continuing education of all firefighters as it relates to the delivery of medical services.

The Fire Department maintains 23 fire stations, a Fire Training Center, 22 engines, 4 trucks, 9 paramedic rescues, 1 foam apparatus, 3 airport fire fighting and rescue vehicles, two harbor fireboats, and one technical rescue vehicle. Several fire stations serve the project area. Fire Station Number 7 located at 2295 Elm Avenue, Fire Station Number 9 and Fire Station Number 10 located at 1417 Peterson Avenue, are the closest stations to the project site. Fire Station Number 7 currently responds to over 5,400 calls per year. If required, fire and rescue apparatus from other nearby stations in the City of Long Beach's fire protection system can provide additional support. Response times from these units vary with location and proximity to the project area. Table 4.7.A provides the locations of the nearest Fire Department stations. Figure 4.7.1 depicts the location of local police and fire stations.

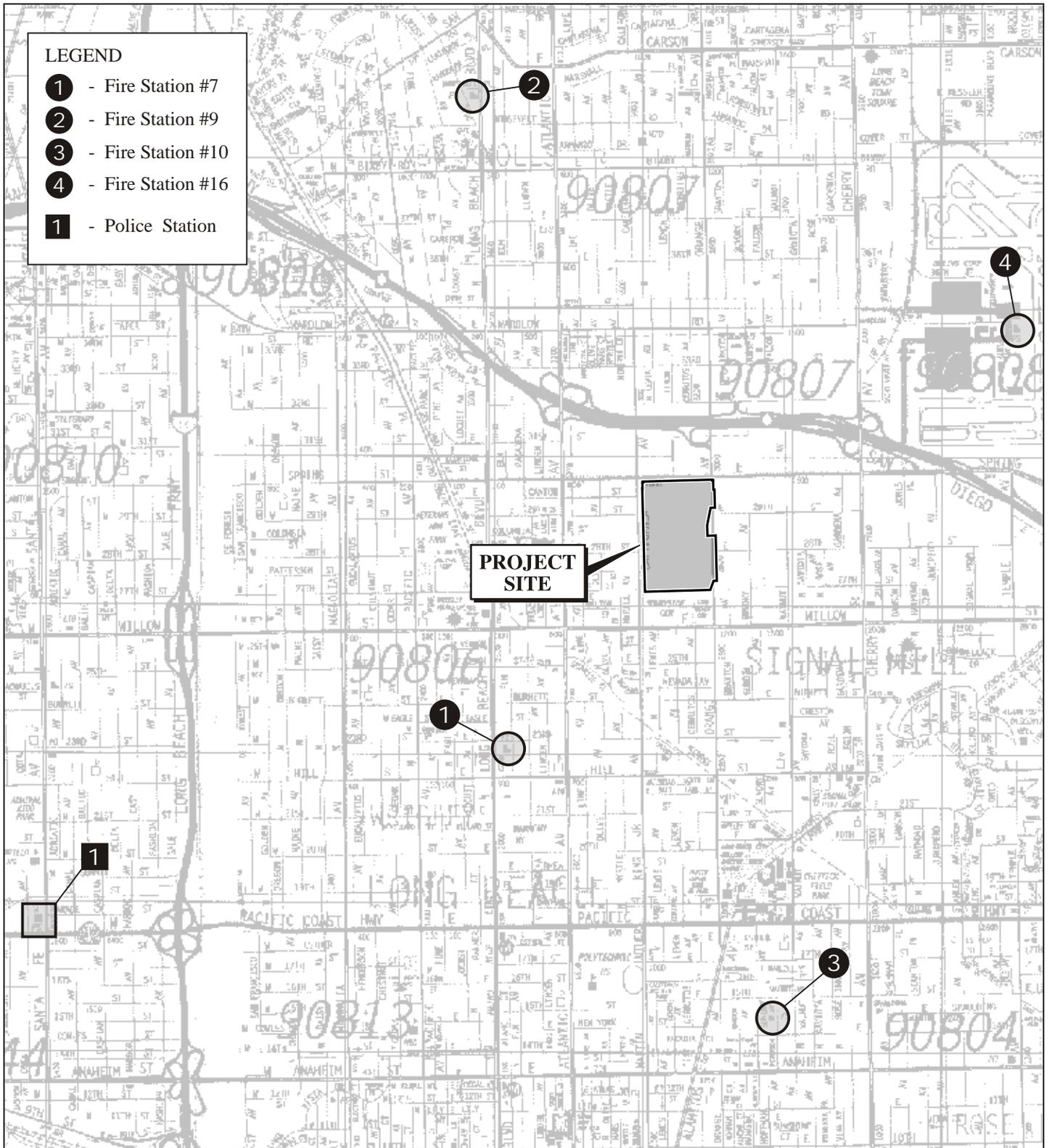
Table 4.7.A: Applicable Long Beach Fire Department Station Locations

Station	Location	Distance from Project Site	Response Time Approximately	Equipment
Fire Station 7	2295 Elm Avenue	1.31 miles	5 minutes	Engine, Truck
Fire Station 9	3917 Long Beach Boulevard	2.5 miles	6 minutes	Engine and Paramedic Rescue
Fire Station 10	1417 Peterson Avenue	2.5 miles	6 minutes	Engine and Paramedic Rescue
Fire Station 16	2890 Wardlow Road	1.51 miles	Airport Service only except for Battalion Chief	Battalion Chief Only

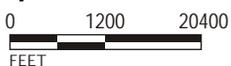
Source: Long Beach Fire Department 2004.

The average citywide emergency response time from dispatch to arrival is less than five minutes. The Fire Department goal for emergency response times is to have the first engine arrive within four minutes of dispatch and for the first Paramedic Rescue to arrive within eight minutes. Six personnel are dispatched for life-threatening medical responses, and a minimum of 19 personnel are dispatched for initial response to structure fires.

The Fire Department maintains a limited mutual aid agreement with the Los Angeles County Fire Department. That agreement is currently under examination and may be significantly altered or



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BASE MAP SOURCE: THE THOMAS GUIDE

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FIGURE 4.7.1

Long Beach Sports Park
Police and Fire Stations

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eliminated in the near future. The Fire Department is also part of the California Office of Emergency Services Master Mutual Aid system.

The Insurance Services Office (ISO) conducts a municipal survey and ranks cities as to their degree of fire safety. Cities are evaluated in terms of deficiency points and are then assigned a class ranking between 1 and 10, with 1 being the highest rating. The Long Beach Fire Department received a class 1 ranking during the last survey.

The City of Long Beach adopted the California Fire Code (CFC), with some amendments and modifications, as part of the part of the City's Municipal Code. Fire flow requirements are based on building types and floor area and range from 1,250 to 8,000 gallons per minute (gpm) at 20 pounds per square inch (psi). The modifications include amendments to fire extinguisher and storage requirements. Generally, the intent of the CFC is to prescribe regulations consistent with nationally recognized good practices for the safeguarding of life and property from the hazards of fire and explosion.

In accordance with the CFC, the Fire Department requires the installation of sprinkler systems in many new buildings including retail buildings in excess of 5,000 square feet and buildings greater than 55 feet in height. In addition, on-site hydrants are required in any portion of a project site that exceeds the allowable distance from a public hydrant located in the right-of-way. Fire flow requirements are subject to Fire Department standards based on the type of building and use on a case-by-case basis.

Public Schools

The Long Beach Unified School District (LBUSD) provides public school services to the project area. Of the 96 schools in the LBUSD, Burroughs Elementary School, Signal Hill Elementary School, and Burnett Elementary School are located nearest to the project area. The location of each school is shown in Figure 4.7.2. Classroom sizes for the three schools nearest the project are provided in Table 4.7.B.

Table 4.7.B: Classroom Sizes for Schools near the Project Area

School Name	Grades	Number of Classes (2002–2003)	Average Class Size (2002–2003)	District Average Class Size (2002–2003)
Boroughs Elementary	K–5	19	22.5	28.2
Signal Hill Elementary	K–5	47	22.1	28.2
Burnett Elementary	K–5	56	21.2	28.2

Source: Education Data Partnership 2004.

Enrollment in the LBUSD in 2002–2003 totaled 97,212 students in grades kindergarten through grade 12. Growth has occurred in the LBUSD at an average annual rate of approximately 2.8 percent over the past 10 years, and the annual increase in overall LBUSD enrollment from the 2000–2001 school year to the 2001–2002 school year was 2.5 percent. A limited Reciprocal Use Agreement (28143)

exists between the City of Long Beach and LBUSD for use of certain portions of Cesar E. Chavez Park and a nearby school. At this time, there are no Reciprocal Use Agreements or policies that would be applicable to the proposed project.

Libraries

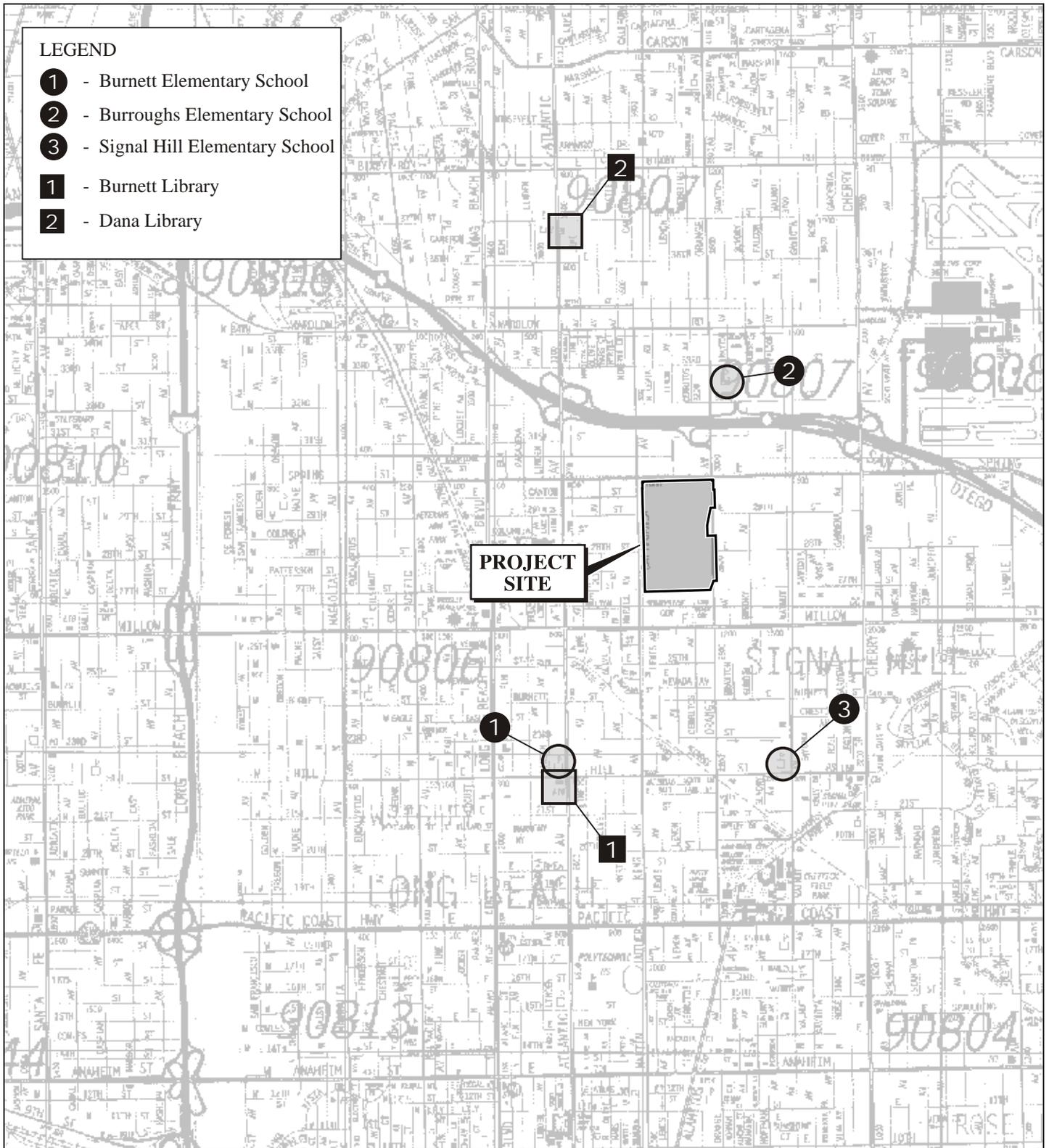
The project area is served by the Long Beach Public Library System, which is composed of 1 main library and 11 neighborhood branch libraries. The main library, which serves as a State and federal Depository, is located at 101 Pacific Avenue in downtown Long Beach, adjoining City Hall. This library includes a Family Learning Center that provides homework assistance for students in grades kindergarten through eight and facilities for Family and Preschool Storytime Programs and a Children's Film Program.

While the main library serves the entire City, neighborhood libraries serve smaller areas, generally located within a one-mile radius of the library. The two neighborhood libraries located closest to the project site are the Burnett Neighborhood Library and the Dana Neighborhood Library. Figure 4.7.2 provides the location of the schools and libraries closest to the project site.

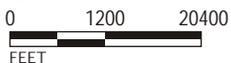
The Burnett Library, located at 560 East Hill Street in Long Beach, approximately one mile (1.43 miles) southeast of the project site. The 7,500-square-foot facility circulated 74,631 items in 2002–2003. The Dana Neighborhood Library, located at 3680 Atlantic Avenue, is approximately one mile (1.45 miles) north of the project site. This branch contains about 50,700 items, including books, magazines, and audiovisual materials in a 6,800-square-foot facility. Both libraries offer computers with Internet access, the library catalog, a community resource file, and various on-line reference resources.

There are currently no planned expansions for Burnett or Dana Libraries. However, the Long Beach Public Library has plans to replace the 2,100-square-foot Mark Twain Neighborhood Library, located approximately two miles south of the proposed project site at 1325 E. Anaheim Street, with a 16,155-square-foot library to be located at 1401 E. Anaheim Street. The funding for this new library will be a 65 percent California State Library Bond Act and 35 percent City of Long Beach match. The library is tentatively scheduled to open in December 2006. In addition, preliminary plans are also being made to replace the North Neighborhood Library with a new, greatly expanded library. This new library will be located in or near the Village Center at South Street and Atlantic Avenue.

In October 2003, the Long Beach Public Library System was directed to reduce its budget by 10 percent or \$1.1 million. To achieve this savings, the Long Beach Public Library System reduced core services, such as hours of operation and the book budget (14 percent reduction), closed the Main Library on Sundays, extended the replacement cycle on computers, reduced funding for technology upgrades and supplies, and implemented a plan called "rolling closures." The plan of rolling closures means that 10 of the 11 neighborhood libraries have reduced services to four days per week. Overall, 10 of the 11 neighborhood libraries have experienced a 20 percent reduction in hours and staffing. It is not known how long these reductions will continue.



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BASE MAP SOURCE: THE THOMAS GUIDE

FIGURE 4.7.2

Long Beach Sports Park
Public Schools and Libraries

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Natural Gas

Natural gas resources are drawn upon at naturally occurring reservoirs primarily located outside of the State and delivered via a high-pressure transmission line. California has three primary regional access points where interstate pipelines deliver natural gas into the State. Gas destined for southern California is accessed at a series of market hubs, with interconnections to Pacific Gas and Electric (PG&E) and the Southern California Gas Company. As the gas is transported to its destination, the pressure is maintained with assistance of compressors. The gas is then received at a storage field (e.g., underground storage tanks) and redistributed through another series of transmission lines.

The Long Beach Energy Department (Energy Department or LBE) receives gas from the Southern California Gas Company and is the natural gas provider in the City of Long Beach. The Energy Department has the capacity to deliver over 155 million cubic feet per day with a historic peak delivery of 73 million in December 1998. This peak delivery represents about 47 percent of the Energy Department's delivery capacity.

The Energy Department maintains 14-inch natural gas lines in Spring Street and Orange Avenue, 12-inch lines in Spring Street, and a 4-inch line in California Avenue. The project site is currently served by a 12-inch high-pressure natural gas line connected to the 14-inch line in Orange Avenue and by several "stubbs" off the line in California Avenue. Figure 4.7.3 shows the location of natural gas lines surrounding the proposed project site. Using established consumption factors provided by the South Coast Air Quality Management District (SCAQMD), the monthly natural gas demand associated with the existing conditions on the project site was calculated. As shown in Table 4.7.C, baseline or existing uses on the project site are estimated to consume approximately 99,700 cubic feet per month (cu. ft/mo).

The Long Beach Gas Department has stated that these facilities and the interconnecting system are currently in good operation. Currently, the Energy Department does not have any plans for expansion of existing facilities near the proposed project area. Service availability is based upon present gas supply conditions and regulatory policy.

Table 4.7.C: Estimated Existing Natural Gas Consumption

Land Use	Floor Area	Consumption Factor (cu. feet/square foot/month)	Monthly Gas. Consumption (cu. feet/month)
Light Industrial*	8,242	6.62	54,562.04
Commercial**	15,561	2.90	45,126.90
Total	23,803	—	99,688.94

* Includes Guardian Fence Company, Long Beach Spring, and McPherson's Sandblasting.

** Includes John and Bob's Auto Body, Kruger Towing, Nate Jones Tire, and Pacific Striping.

Source: SCAQMD CEQA Handbook, Natural Gas Usage Rate (G), Table A9-12-A.

Electricity

The project site is within the service territory of the Southern California Edison Company (SCE). According to the California Energy Commission (CEC), the SCE service area experienced a peak

demand of 18,724 megawatts (MW) in 2000 and a total local growth of 98.3 million MW hours¹ (MWh). The CEC estimates that peak demand and net energy load within SCE service territory will continue to grow annually by 2.4 percent and 2.0 percent respectively. In light of these forecasts, the CEC projects a peak demand in SCE service territory of 24,960 MW in 2012 (the latest year in the current demand forecasts) and a net energy load of 125.2 million MWh. As shown in Table 4.7.D, existing uses on the project site are estimated to consume approximately 288 MWh annually.

Table 4.7.D: Estimated Existing Electricity Usage

Land Use	Floor Area	Consumption Factor (KWh/square foot/year)	Monthly Electricity Consumption (KWh/year)
Misc.	8,242	10.5	86,541
Commercial/Office	15,561	12.95	201,514.95
Total	23,803	—	288,055.95

Source: SCAQMD CEQA Handbook, Electric Usage Rate (G), Table A9-11-A

As shown on Figure 4.7.3, SCE maintains overhead electric transmission lines on Orange Avenue and California Avenue and underground transmission lines in Spring Street. Overhead transmission lines located on the project site will be relocated and put underground as part of the project. Currently, SCE does not have plans for expansion of its current facilities.

Water

The Long Beach Water Department (LBWD) supplies water to the project area through a system of underground pipelines. There are two types of water supply sources: natural resources and reclamation. Water is used for fire control purposes as well as for drinking (potable), washing, flushing, recreational purposes, and other domestic consumption. Reclaimed water is wastewater that has been treated to a sufficient degree for certain types of uses, is nonpotable, and must be conveyed in a separate system from potable water to avoid the possibility of direct human consumption. Reclaimed water can be used for irrigation purposes.

The LBWD provides water services for domestic, irrigation, and fire protection purposes to the City of Long Beach. The LBWD also reviews project plans to ensure compliance with all applicable fire code and ordinance requirements for construction, access, water mains, fire flows, and fire hydrant placement. The LBWD provides 100 percent of the City's water needs, mixing locally developed water from LBWD operated wells with water from the Metropolitan Water District (MWD). The LBWD takes advantage of the MWD's off-peak rate structure during the winter months, beginning in September. During the summer months, the LBWD satisfies almost 42 percent of its demand by pumping its own wells and about 50 percent by importing water from the MWD. The remaining 8 percent of the water supply for nondrinking purposes is tertiary treated reclaimed water from the Sanitation Districts of Los Angeles County Long Beach Reclamation Plant owned and operated by the County Sanitation Districts of Los Angeles. The Harbor Department (the Port of Long Beach) gets its water from three sources, including LBWD's Alamitos Reservoir, LBWD's J. Will Johnson

¹ A watt-hour is an electric energy unit of measure equal to one watt of power supplied to (or taken from) an electric circuit steadily for one hour.

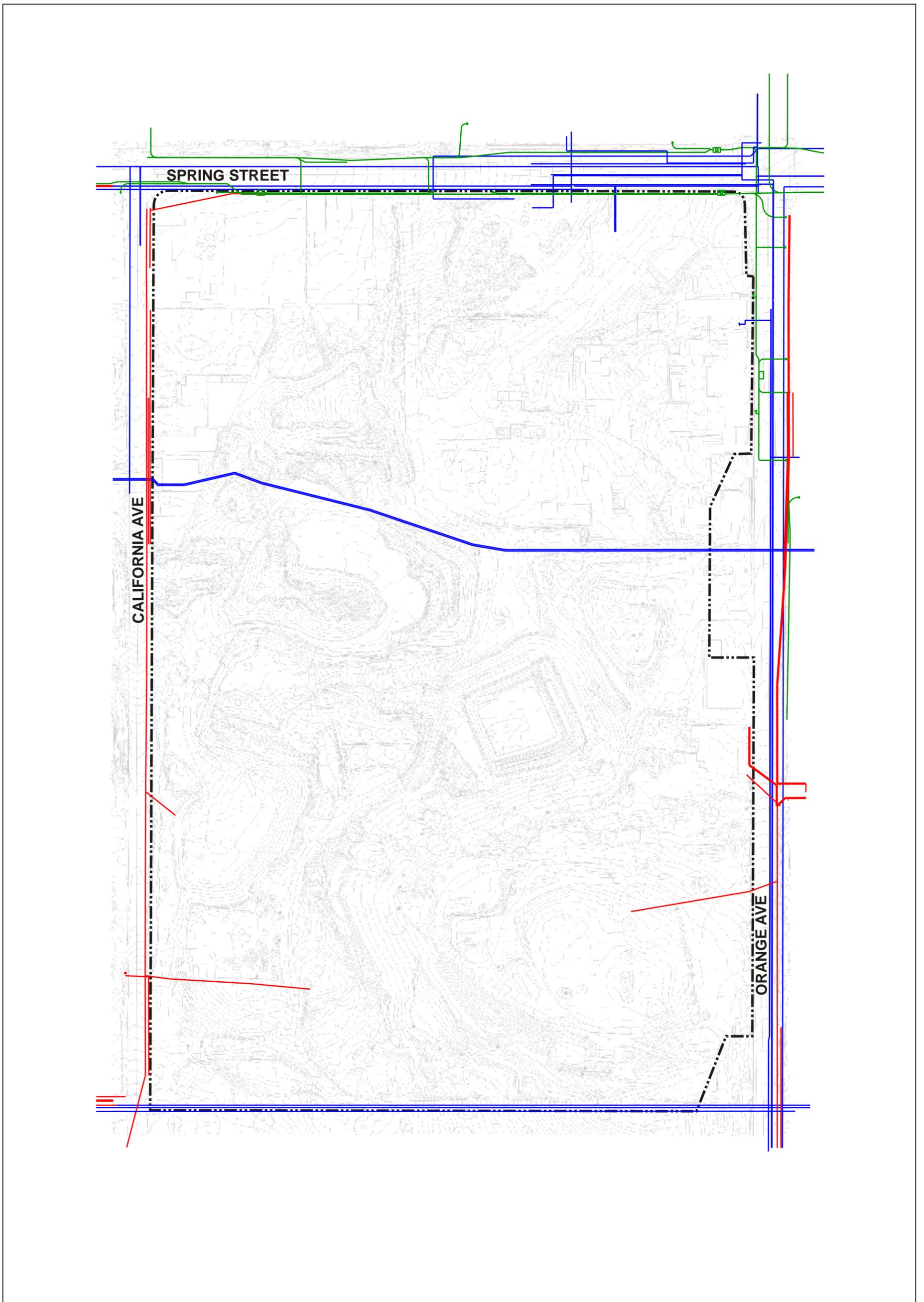
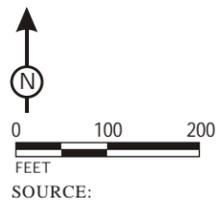


FIGURE 4.7.3

LSA



- LEGEND
- - Electric, Overhead
 - - Electric, Underground
 - - Gas
 - - - - - Project Boundary

Long Beach Sports Park
Existing Gas and Electric Transmission Lines

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Reservoir, and from the Los Angeles Department of Public Works (LADPW). The LADPW currently serves the western portion of the Port of Long Beach, which includes the Navy Mole Area.

The LBWD also provides reclaimed water services within the City of Long Beach. The Water Reclamation Plan provides approximately 21 million gallons per day (mgd) of reclaimed water. The City of Long Beach utilizes water for irrigation in local parks, golf courses, schools, cemeteries, nurseries, freeways, greenbelts, and other landscaped areas.

As shown in Figure 4.7.4, LBWD maintains 12-inch water lines in Spring Street and Orange Avenue and a 12-inch and 20-inch water line in California Avenue. There is also a 16-inch water line located in the transmission corridor along the southern boundary of the project site. The project site is currently served by connections to 12-inch water lines in Spring Street and Orange Avenue and a connection to the 20-inch water line in California Avenue. The project site is not currently served by a reclaimed water line. LBWD's existing main reclaimed water transmission line is located on Carson Street. A 20-inch transmission branch main extends southwesterly to the intersection of Wardlow and Walnut Avenue. From this point, an 8-inch branch extends southwesterly and terminates at the intersection of Walnut Avenue and Interstate 405 (I-405).

Domestic water demand coefficients were used to estimate existing water demand. The demands were evaluated for light industrial and commercial/office uses. Water demand generally consists of water utilized for human consumption, kitchen, toilet, bath, and irrigation purposes. The portion of this water not used for human consumption or irrigation purposes is discharged to the sewer system. Therefore, water demand can be estimated as a function of wastewater generation using sewage generation factors provided by the LBWD. Generally, water demand factors are equivalent to approximately 125 percent of sewage generation factors. The demand coefficients used to estimate existing project site water demand exceed the values used in the Domestic Water Demand Study prepared by Boyle Engineering for the LBWD in March 1994. However, use of demand coefficients provides a more conservative analysis of project impacts and allows for water demand calculations based on multiple uses and the square footage attributed to each project site use.

Based on a demand coefficient of 200 gallons per 1,000 square feet of existing occupied uses (including light industrial, commercial, and office uses), the existing daily demand is estimated to be approximately 4,760 gpd of water, or 5.3 acre-feet per year. Table 4.7.E provides both the estimated daily demand and the maximum peak daily demand for existing uses.

Table 4.7.E: Estimated Existing Water Demand

Land Use	Floor Area (sf)	Demand Coefficient	Estimated Water Demand (gpd)
Light Industrial	8,242	200 gallons per 1,000 sf per day	1,648
Commercial/Office	15,561	200 gallons per 1,000 sf per day	3,112
Average Daily Demand Total	—	—	4,760.60
Maximum (Peak) Daily Demand Total*	—	—	8,188.23

* Maximum Daily Demand = 1.72 x Average Daily Demand
Source: City of Long Beach Water Department.

Sewer

The City of Long Beach is a member of the Sanitation Districts of Los Angeles County (LACSD or Sanitation Districts), a confederation of independent special districts that provide wastewater and solid waste services in Los Angeles County. LACSD is the wastewater service provider for the project site. The Sanitation Districts are a confederation of independent special districts serving about 5.4 million people in Los Angeles County. The Sanitation Districts' service area covers approximately 800 square miles and encompasses 78 cities and unincorporated territory within the County.

The proposed project is located within the jurisdictional boundaries of the LACSD District 3. The Sanitation Districts provide for the conveyance, treatment, and disposal of wastewater. As shown in Figure 4.7.4, the wastewater flow originating from the proposed project discharges to local sewer lines in California Avenue and Spring Street that are not maintained by the Sanitation Districts but rather by the LBWD. From the local sewer lines, the wastewater flow is conveyed to the Sanitation Districts' Joint Outfall "C" Unit 3E Trunk Sewer, located in Long Beach Boulevard south of Columbia Street. This 18-inch-diameter trunk sewer has a design capacity of 11.9 mgd and conveyed a peak flow of 8.8 mgd when last measured in 2000.

Currently, the wastewater generated by the project site is treated at the Joint Water Pollution Control Plant (JWPCP) located in the City of Carson, which has a design capacity of 385 mgd and currently processes an average flow of 322.7 mgd. The JWPCP provides full secondary treatment to all wastewater received.

As shown in Table 4.7.F, average sewage flows for existing conditions were estimated based on expected land use and square footage of structures. The average daily flow from the project site is approximately 3,430 gallons per day (gpd).

Table 4.7.F: Existing Project Site Wastewater Generation

Land Use	Floor Area (sf)	Factor	Flow (gpd)
Auto Service Repair*	13,305	100 gal/1,000 sf/day	1,331
Manufacturing**	9,906	200 gal/1,000 sf/day	1,981
Office Building***	592	200 gal/1,000 sf/day	118
Total	23,803	—	3,430

* John and Bob's Autobody and Nate Jones Tire

** Guardian Fence, Long Beach Spring, McPherson's Sandblasting, and Pacific Striping

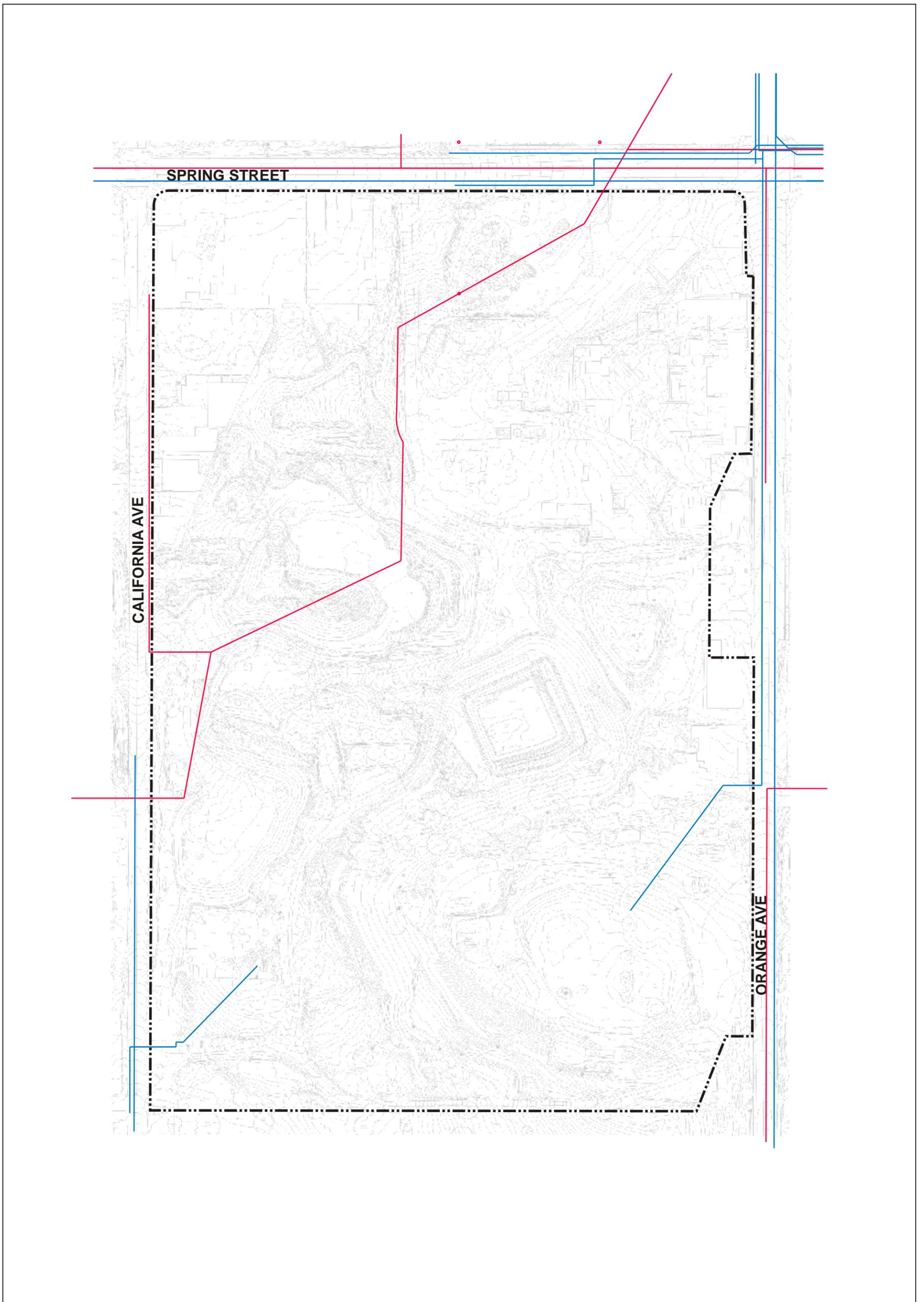
*** Kruger Tow

Sources: City of Long Beach Property Services Bureau.

LACSD, Table 1, Loadings for Each Class of Land Use, October 2003.

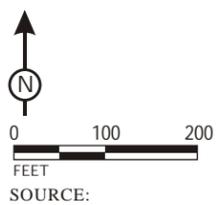
Solid Waste

As previously stated, the City of Long Beach is a member of the Sanitation Districts of Los Angeles County, a confederation of independent special districts that provide wastewater and solid waste services in Los Angeles County. The LACSD works to commit all waste to the County landfill



LSA

FIGURE 4.7.4



- LEGEND
- - Water
 - - Sewer
 - Project Boundary

Long Beach Sports Park
Existing Water and Sewer Lines

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system. There are numerous public and private landfills and transfer stations in Los Angeles County that could potentially receive waste collected from the proposed project. For this reason, the provision of solid waste disposal services should be considered in the context of the regional and local landfills.

Solid waste in Los Angeles County is collected by over 250 waste haulers and several city governments and disposed of at landfills in the County, transformation (i.e., refuse-to-energy) facilities, or intermodal facilities that transport the waste by rail to facilities outside Los Angeles County. There are two primary classifications of land disposal facilities, Class III landfills and Unclassified (inert) landfills. Class III landfills accept all types of nonhazardous solid waste, with major Class III facilities permitted to receive 250,000 tons or more of waste per year and minor facilities permitted to receive less than 250,000 tons per year. Unclassified landfills accept only inert waste, including soil, concrete, asphalt, and other construction and demolition debris (as defined by California Code of Regulations, Title 23, Section 2524).

Within the City of Long Beach, solid waste collection services are provided by the City's Environmental Services Bureau and 21 private permitted waste haulers. In 2002, residents and businesses in the City of Long Beach disposed of 675,741 tons of solid waste. This disposal amount reflects a diversion rate of approximately 44 percent.

The Puente Hills Landfill is the closest Class III landfill, operated by LACSD, that could be used by the proposed project. The conditional use permit for the Puente Hills Landfill authorizes the disposal of a maximum of 13,200 tons per day. Typically, the landfill closes early due to this permit-imposed tonnage restriction. Disposal operations will continue under the conditional use permit until October 31, 2013, at which time the site will stop accepting waste for disposal. As indicated in Table 4.7.G, 241,923 tons, or 36 percent of the solid waste disposed of by City residents and businesses, were disposed of at the Puente Hills Landfill.

The Puente Hills Materials Recovery Facilities (MRF), located close to the landfill, is also owned and operated by LACSD. The purpose of the MRF is to recover recyclable materials from commercial waste and to provide for the efficient transfer to the residual waste to permitted landfills for proper disposal. The MRF is currently under construction and is scheduled for completion in late 2004. The facility is permitted to accept 4,400 tons per day or 24,000 tons per week of municipal solid waste. It is likely that the MRF will start operating at 2,000 tons per day and, as market demand necessitates, increase to full capacity.

Other solid waste management facilities operated by LACSD that are available to accept solid waste from the proposed project site include the South Gate Transfer Station, the Commerce Refuse to Energy Facility (CREF), and the Downey Area Recycling and Transfer Facility (DART). The South Gate Transfer Station is permitted to accept up to 1,000 tons per day of refuse and currently receives approximately 545 tons per day of refuse. CREF is a transformation facility (i.e., refuse-to-energy) that is permitted to accept up to 1,000 tons per day, not to exceed 2,800 tons per week. CREF currently receives approximately 360 tons per day of refuse. DART is a materials recovery/transfer facility that is permitted to accept up to 5,000 tons per day and currently receives approximately 1,000 tons per day of refuse.

Table 4.7.G: Solid Waste Disposal by Facility, 2002

Facility Name (County)	Disposal Amount (tons)	Percent of Total
Arvin Sanitary Landfill (Kern)	152	0.02%
CWMI-B18 Nonhazardous Codisposal (Kings Waste and Recycling Authority)	441	0.07%
Antelope Valley Public Landfill (Los Angeles)	259	0.04%
Azusa Land Reclamation Co., Inc. (Los Angeles)	3,196	0.47%
Waste Management of Lancaster S LF (Los Angeles)	54	0.01%
Chiquita Canyon Sanitary Landfill (Los Angeles)	17,517	2.59%
Puente Hills Landfill #6 (Los Angeles)	241,923	35.80%
Commerce Refuse to Energy Facility (Los Angeles)	696	0.10%
Sunshine Canyon SLF County Extension (Los Angeles)	5,923	0.88%
Southeast Resource Recovery Facility (Los Angeles)	271,332	40.15%
Bradley Landfill West and West Extension (Los Angeles)	7,150	1.06%
Prima Deshecha Sanitary Landfill (Orange)	23,187	3.43%
Olinda Alpha Sanitary Landfill (Orange)	70,494	10.43%
Frank R. Bowerman Sanitary Landfill (Orange)	7,723	1.14%
El Sobrante Sanitary Landfill (Riverside)	19,520	2.89%
Colton Refuse Disposal Site (San Bernardino)	10	0.00%
Fontanta Refuse Disposal Site (San Bernardino)	7	0.00%
San Timoteo Solid Waste Disposal Site (San Bernardino)	19	0.00%
Simi Valley Landfill-Recycling Center (Ventura)	6,139	0.91%
Total	675,741	100.00%

Source: CIWMB, Disposal Reporting System, Jurisdiction Disposal and Alternative Daily Cover Tons by Facility for the City of Long Beach, 2004.

The Sanitation Districts also participate in ownership of the Southeast Resource Recovery Facility (SERRF) through a Joint Powers Agreement with the City of Long Beach. SERRF is a transformation facility operated by a contractor. SERRF is permitted to accept 2,240 tons of refuse per day or 500,000 tons per year and currently receives approximately 1,500 tons per day. Over 1.5 billion kilowatts of electricity generated by the facility have been sold to Southern California Edison (SCE). In 2002 approximately 271,332 tons of the solid waste (40 percent) disposed of by City of Long Beach residents and businesses was disposed of at SERRF.

Although the Sanitation Districts operate solid waste management facilities for the disposal of solid wastes in Los Angeles County, they do not provide solid waste collection services. The Refuse Collection Division of the City of Long Beach is responsible for the pickup of refuse for the proposed project. The California Integrated Waste Management Board (CIWMB) developed waste information for different business types based on the assumption that similar businesses have similar waste streams. Since there are many types of businesses, CIWMB used federal Standard Industrial Classification (SIC) codes to group businesses together. Generally, the larger the business, the more solid waste disposed. The number of employees can be used to indicate business size. Number of employees is used in the CIWMB disposal characterization database to develop waste disposal rates for businesses. The assumption of the database is that businesses of a certain type (e.g., restaurants) dispose similar wastes at similar rates (per employee), regardless of the location or size of the business. As shown in Table 4.7.H, based on the SIC codes for the existing tenants on the project site, business located on the project site dispose of approximately 52 tons of solid waste per year.

Table 4.7.H: Existing Solid Waste Disposal

	Full-Time Employees	Disposal Rate (tons/employee/year)	Standard Industrial Classification	Solid Waste Disposal (tons per year)
Guardian Fence Company	21	0.7	Manufacturing: Primary/Fabricated Metal	14.7
Hansen Aggregate	1.5	3.1	Construction	4.65
John and Bob's Auto Body	6	0.6	Retail Trade: Automotive Dealers and Service Station	3.6
Long Beach Spring	3.5	0.7	Manufacturing: Primary/Fabricated Metal	2.45
McPherson's Sandblasting	4	3.1	Construction	12.4
DBA Nate Jones Tire	2.5	0.6	Retail Trade: Automotive Dealers and Service Station	1.5
Pacific Striping	4	3.1	Construction	12.4
TOTAL				51.7

Note: Kruger Tow and Eversoft Water Products have no on-site employees and are therefore not included in this analysis.

Source: CIWMB, Waste Disposal Rates for Business, 2004.

State legislation (Assembly Bill AB 939) requires that every city and county in California implement programs to recycle, reduce refuse at the source, and compost solid waste in order to achieve a 50 percent reduction in solid waste disposed of at landfills. AB939 also requires that all cities conduct a Solid Waste Generation Study (SWGS) and prepare a Source Reduction Recycling Element (SRRE). In accordance with AB939, local agencies must submit an annual report to the CIWMB summarizing its progress in diverting solid waste disposal.

Senate Bill 1374 also requires that the annual report submitted to CIWMB include a summary of the progress made in diversion of construction and demolition waste materials. In addition, SB1374 requires the CIWMB to adopt a model ordinance suitable for adoption by any local agency to require 50 to 75 percent diversion of construction and demolition waste materials from landfills by March 1, 2004. Local jurisdictions are not required to adopt their own construction and demolition ordinances, nor are they required to adopt the CIWMB's model by default. However, adoption of such an ordinance may be considered by the CIWMB when determining whether to impose a fine on a jurisdiction that has failed to implement its SRRE.

Waste haulers are expected to contribute by recycling residential and commercial waste they collect, and project developers are expected to employ measures to reduce the amount of construction-generated waste by 50 percent or more. During reporting year 2000, the City of Long Beach was in full compliance with waste diversion goals set by the State of California. The CIWMB has not approved or accepted diversion rates reported by the City of Long Beach since it accepted the 2000 report in March 2002. Biennial Reviews indicate that diversion rates for 2002 and 2003 may be between 41 and 46 percent and 39 and 44 percent, respectively. However, the City of Long Beach receives a 10 percent waste diversion credit through use of the SERRF, thereby raising the City's waste diversion rate to an acceptable level.

The City of Long Beach has increased efforts to divert refuse through waste reduction, recycling, and composting programs. Source reduction programs in place include xeriscaping/grasscycling, backyard and on-site composting/mulching, and business waste and government source reduction program. The City provides recycling services such as residential curbside recycling and commercial pickup service through a private contractor. In addition, each of the 21 permitted private waste haulers operating in the City is required to have a City-approved recycling program in order to meet applicable waste diversion requirements. In order to maintain compliance goals, contractors will be required to reuse construction forms where practicable or applicable, attempt to balance soils on site, minimize overcutting of lumber and polyvinyl chloride (PVC) piping where feasible, and reuse landscape containers to the extent feasible.

Telephone

Verizon provides telephone service to the project site through a system of underground telephone cabling. Verizon maintains two conduit systems on California Avenue that run both north and south on both the east and west sides of the street. Aerial, or aboveground facilities, on the project site or adjacent streets that will be improved as part of the project will need to be removed or relocated. Verizon does not have plans for expansion of its current facilities in the vicinity of the project site.

Cable Television

The cable television provider service is currently provided by Charter Communications, located at 2931 Redondo Avenue in Long Beach, through a network of underground and overhead cabling. As of December 2002, Charter Communications was serving approximately 451,500 customers in the greater Los Angeles area, and facilities are located southeast and west of the project site.

4.7.3 METHODOLOGY

Public service and utility providers were sent a Notice of Preparation (NOP) and questionnaire that requested current levels of service to the project site and information on possible constraints or impacts to their services at project built out. The impact analyses are based upon the NOP comments and responses to the questionnaires or information obtained through subsequent phone conversations with service provider representatives. Correspondence from the public service and utility providers is included in Appendix A.

4.7.4 THRESHOLDS OF SIGNIFICANCE CRITERIA

The effects of a project on public services, utilities, and infrastructure are considered to be significant if the proposed project would:

- result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for public services including fire protection, police protection, schools, libraries, or other public facilities;
- generate demand for service that would require 10 or more additional personnel to maintain acceptable service ratios, response times, or other performance objectives for public services including fire protection, police protection, schools, libraries, or other public services;
- generate demand for electricity, natural gas, telephone service, or cable service that exceeds the capacity of existing public service systems or otherwise requires expansion or construction of major new facilities leading to a significant physical impact;
- cause significant disruption of service(s) that creates a significant physical impact or threat to human health;
- require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects;
- require new or expanded water entitlements to have sufficient water supplies available to serve the project;
- result in a determination by the wastewater treatment provider that serves or may serve the project that it has inadequate capacity to serve projected demand in addition to the provider's existing commitments;

- be served by a landfill with insufficient permitted capacity to accommodate the project's solid waste disposal needs; or
- not be in compliance with federal, State, and local statutes and regulations related to solid waste.

4.7.5 IMPACTS AND MITIGATION MEASURES

Less Than Significant

Police Protection. The proposed project does not include the construction of new residential units that would generate additional population in the area. The project will generate up to approximately 114 full-time positions and 123 part-time (181 full-time equivalent) jobs on the project site as described in Section 4.2, Housing and Population. The nature of the proposed project will also lead to an increase in the number of visitors, or patrons, on the site who may generate additional calls for police services. In particular, police resources needed for large events may require officers from neighboring beats or stations to maintain adequate and appropriate response capabilities. Close supervision by park employees will help ensure that conduct and behavior stays within park safety rules. On-site security for the Sports Park will be provided by regular staff or by a professional security firm, if warranted. Operational conditions regarding security will be enforced through the City's lease with the contract operator (See Mitigation Measure 4.7.1). The City of Long Beach Police Department recommended that Crime Prevention Through Environmental Design (CPTED) guidelines be applied during final site plan refinement to further reduce potential increases in demand for police services to the extent feasible (March 31, 2004).

Although the increase in on-site employees and visitors has the potential to result in an increase in calls for police services, the increased demand for service will not require 10 or more additional personnel to maintain acceptable service ratios, response times, or other performance objectives, as defined by the City's Environmental Officer as the Project Thresholds of Significance (November 26, 2003). Similarly, the increased demand for police protection services will not require new or expanded police facilities.

Mitigation Measure 4.7.1 requires the City of Long Beach to incorporate CPTED design guidelines and public safety measures to further reduce possible impacts to LBPD services and personnel.

Fire Protection. The proposed project will increase the number of on-site visitors and employees. An increase in floor area and population (i.e., employees and project patrons) can result in an increase in calls for emergency fire and medical services. The project will comply with all LBFD and CFC requirements, including access requirements, the placement of fire hydrants, and the use of sprinkler and standpipe systems. Project compliance with requirements set forth in the City of Long Beach Building and Safety Code, the CFC, and current ISO Guidelines will provide fire protection for people and structures, as well as the provision of medical services on site.

It is anticipated that the proposed project will not significantly impact emergency response times. In a letter dated March 2, 2004, the City of Long Beach Fire Department indicated that the additional call volume generated by the proposed project will impact Fire Station No. 7, which currently responds to over 5,400 calls for service per year. The proposed project will not require 10 or more additional personnel to maintain acceptable service ratios, response times, or other performance objectives.

Although preliminary planning has begun to address the need to refurbish or construct new fire facilities, including the stations that serve the proposed site, the proposed project itself does not create a substantial need to increase personnel levels or expand or construct new facilities. Regardless of the type and nature of activities, the City of Long Beach Fire Department will be able to service the proposed project at the same levels provided to the remainder of the City, and no significant impacts to fire protection services are expected as a result of project implementation (March 2, 2004).

Per the Uniform Fire Code (UFC), fire flow requirements are based on building type and floor area and range from 1,250 to 5,000 gpm at a pressure of 20 psi. Based on an analysis of the domestic water system, it was determined that the required 5,000 gpm can be delivered to all of the on-site project areas. As such, water system capacity within the City of Long Beach will be adequate to handle fire flow requirements for the proposed project. The project will include a new water system for water delivery throughout the site. Infrastructure will be sized to accommodate the required fire flows, and the City of Long Beach Fire Department will determine the required flow for individual structures based on type of construction, building size, and occupancy. No improvements to the existing water system will be required, and no significant impacts related to fire flow will occur as a result of project implementation. Please refer to Section 4.13 of this EIR for more information regarding UFC Requirements and potential hazards associated with oil wells.

Schools. Generally, analysis of potential impacts to school facilities focuses on impacts associated with demand for new or expanded public education facilities resulting from construction of new housing units. The proposed project does not contain a residential element or involve the construction of residential units. As such, the proposed project will not increase demand or negatively impact capacity in the LBUSD. Moreover, the project site is not located in an area with an identified future growth need. The closest schools to the proposed project are several miles away and will not be impacted by the proposed project. Mitigation is not required to reduce project impacts on schools to below a level of significance.

Libraries. Impacts to libraries are typically associated with development projects that include the construction of residential units since new residential units generate a permanent increase in residential population. Conversely, nonresidential projects are typically viewed as having relatively limited impacts attributable to occasional and incidental use of area library facilities.

The proposed project is not a residential development, and no increase in population is expected to occur as a result of project implementation. The proposed project is not expected to have a significant impact on library services in the City of Long Beach or to create a need for the expansion of library facilities or staffing levels. No mitigation is necessary to reduce project impacts to below a level of significance.

Natural Gas. The proposed project includes the construction and installation of a new on-site natural gas distribution system that will connect to existing facilities. These facilities have adequate capacity to handle the natural gas demand of the proposed project because the proposed project uses are considered incidental to overall system demand. The distribution system will incorporate the most up-to-date design, construction, operational, and conservation standards to most efficiently meet the

project's energy needs. New facilities will be installed per the construction standards and tariffs set by LBE. The installation of gas meters will be completed in accordance with the specifications of LBE, and to the extent feasible, gas meters will be installed outside structures.

As shown in Table 4.7.I, development of the proposed project will generate a demand for approximately 132,400 cubic feet of natural gas per month, an increase of approximately 32,700 cubic feet per month from existing conditions. As shown in the table, retail consumption factors were used to estimate natural gas demand for the Sports Park facilities. Retail usage factors, when applied to the proposed project, provide a conservative (i.e., higher than what may actually occur) estimate of on-site project natural gas demand.

Table 4.7.I: Estimated Natural Gas Usage

Land Use	Floor Area	Consumption Factor (cu. feet/square foot/month)	Monthly Gas Consumption (cu. feet/month)
Office	32,300	2.0	64,600
Retail*	23,380	2.9	67,802
Total	55,680	—	132,402

* Includes restaurants and concessions and the youth golf center training facility.
Source: SCAQMD Natural Gas Usage Rate (G), Table A9-12-A.

Project gas demand represents approximately 0.01 percent of LBE's total daily delivery capacity. LBE presently uses approximately 47 percent of its daily delivery capacity, leaving 53 percent of its capacity available. In addition, the Southern California Gas Company is in the process of increasing the availability of natural gas through transmission expansion projects and withdrawals from several of its storage fields. Consequently, the supply and distribution of natural gas within the area surrounding the project site will not be reduced or inhibited as a result of project implementation, and levels of service to off-site users will not be adversely affected.

The Building Energy Efficiency Standards found in Title 24 of the California Administrative Code regulate energy consumption in new construction. These standards are typically updated every three years by the CEC and are enforced through the local building permit process. Title 24 regulates building energy consumption for heating, cooling, ventilation, water heating, and lighting. It may be met in one of the following two ways: by meeting performance criteria (measured in British Thermal Units [BTU] per square foot per year) or by installing a prescriptive list of energy conservation measures.

In addition to compliance with Title 24 requirements, the City of Long Beach has also developed a Green Building Policy. It is the policy of the City to plan, design, construct, manage, renovate, and maintain its facilities and buildings in a sustainable manner. The U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED) Rating System and Reference Guide is used to determine what constitutes sustainable building under this policy. LEED provides four award levels based on the number of environmentally related points achieved by a new building project. The City of Long Beach has set a policy goal of LEED Silver (the second highest award level) for all new municipal construction projects. This policy applies to new construction and additions to new buildings and facilities whenever the gross area of the new construction is over 7,500 square feet. The financial benefits of green buildings include lower energy, waste disposal, and water costs,

lower environmental and emissions costs, lower operations and maintenance costs, and savings from increased productivity and health.¹ During the design phase for the proposed project, the City will incorporate green building principles and practices into the planning, design, construction, and management of the proposed project facilities. Project compliance with Title 24 standards and incorporation of green building strategies will further reduce any potential impacts on natural gas resources. Based on the above, substantial adverse impacts related to the provision of natural gas services to the project site will not occur, and the proposed project will not result in the use of substantial amounts of natural gas. Therefore, no significant impacts to local or regional supplies of natural gas will occur as a result of the proposed project.

Electricity. The proposed project includes the construction and installation of a new on-site electricity distribution system that will connect to existing facilities. These facilities have adequate capacity to handle the electricity demand of the proposed project because the proposed project uses are considered incidental to overall system demand. The distribution system will incorporate the most up-to-date design, construction, operational, and conservation standards to most efficiently meet the project's energy needs. New facilities will be installed per the construction standards and tariffs set by SCE.

An evaluation of project electricity needs in relation to future energy loads illustrates that project implementation will not result in substantial amounts of electricity usage. Using usage rates derived by SCAQMD, the project demand for electricity is estimated to be approximately 989 MWh annually (Table 4.7.J). In addition, the project is expected to demand approximately 1,400 MWh annually for field lighting.² This is a total increase of approximately 2,102 MWh annually compared to existing conditions. Based on CEC projections for SCE's service area in 2012, the maximum project-related annual consumption will represent less than 0.01 percent of forecasted growth. Based on these estimates, it can be concluded that sufficient transmission and distribution capacity exists, off-site improvements will not be necessary, and on-site improvements will occur in a logical, efficient manner utilizing the most up-to-date design, construction, and operational methods available. Compliance with Title 24 and incorporation of green building strategies will contribute to higher energy efficiency levels and will further reduce project electricity demand. Most buildings can reach energy efficiency levels far beyond Title 24 standards, although many construction projects strive only to meet the minimum standards. According to the CIWMB, it is reasonable to strive for an additional 40 percent reduction in energy demand. The following strategies may contribute to this goal.

- Passive design strategies can dramatically affect building energy performance. These measures include building shape and orientation, passive solar design, and the use of natural lighting.

¹ California Integrated Waste Management Board. The Costs and Financial Benefits of Green Buildings: A Report to California's Sustainable Building Task Force. October 2003.

² This estimate is based on energy consumption estimates for project lighting supplied by Musco Lighting (731.20 KW per hour) and estimated annual hours of lighted operation (1,916 hours) provided by the City of Long Beach, Department of Parks, Recreation, and Marine, August 23, 2004.

- Develop strategies to provide natural lighting. Studies have shown that it has a positive impact on productivity and well being.
- Install high-efficiency lighting systems with advanced lighting controls. Include motion sensors tied to dimmable lighting controls. Task lighting reduces general overhead light levels.
- Use a properly sized and energy-efficient heat/cooling system in conjunction with a thermally efficient building shell. Maximize light colors for roofing and wall finish materials; install high R-value wall and ceiling insulation; and use minimal glass on east and west exposures.
- Minimize the electric loads from lighting, equipment, and appliances.
- Consider alternative energy sources such as photovoltaics and fuel cells that are now available in new products and applications. Renewable energy sources provide a great symbol of emerging technologies for the future.
- Computer modeling is an extremely useful tool in optimizing design of electrical and mechanical systems and the building shell.

Although a precise estimate of the reduction in energy demand for the proposed project cannot be provided until the architectural design phase, green buildings generally contribute to a reduction in grid congestion and power reliability and availability problems.

Impacts associated with the provision of electricity will be less than significant. Therefore, the supply and distribution of electricity to the project site will not disrupt power to the surrounding area or adversely affect service levels. Impacts associated with project electricity demand will be less than significant.

Table 4.7.J: Estimated Project Electricity Usage

Land Use	Floor Area	Consumption Factor (KWh/square foot/year)	Electricity Consumption (KWh/year)*
Restaurants and Concessions	8,380	47.45	397,631
Commercial/Office	32,300	12.95	418,285
Youth Center	15,000	*11.55	173,250
Total	55,680	—	989,166

* Average for Southern California Edison and Los Angeles Department of Public Works

** Average Usage Rate for Colleges and Universities

Source: SCAQMD CEQA Handbook, Electric Usage Rate (G), Table A9-11-A.

Water. The proposed project is an urban in-fill project in an area presently served by all public services. Public services are in place and do not need to be extended in order to serve the project, with the exception of the extension of a reclaimed water line to the site. The proposed project includes the replacement of existing on-site infrastructure and provides connections to existing water mains under Spring Street and Orange Avenue. Existing on-site lines will be abandoned and removed, and new water lines will be constructed in coordination with the LBWD. Project water lines will include a 12-inch line connecting to the water main in Spring Street and a 6-inch joint water line connecting to the water line in Orange Avenue.

In addition to the on-site water system to be installed as part of the project, a reclaimed water line will be extended to the project site from north of I-405 on Walnut Avenue. Refer to Figure 3.7, Reclaimed Water Line Extension, for an illustration of the proposed reclaimed water line extension route. The system will consist of one 6-inch reclaimed water line connected to the line at the intersection of Spring Street and Orange Avenue. The 6-inch water line will connect to an on-site distribution system. Reclaimed water used for irrigation throughout the site will be provided by the LBWD from the LACSD's Long Beach Water Reclamation Plan. Figure 4.7.5 provides a conceptual map of the on-site water distribution system for both potable and reclaimed water lines. The supply and distribution of water and reclaimed water to the project site will not result in disruption of service to the surrounding area or adversely affect service levels.

New development on the site will result in both short-term and long-term increases in water demand. A short-term demand for water may occur during demolition, excavation, grading, and construction activities on site. Water demand for soil watering (fugitive dust control), cleanup, masonry, painting, and other activity will be temporary. The demand for water during grading and construction activities is assumed to be similar to irrigation demand, or approximately 2,660 gallons per acre per day. Overall, demolition and construction activities require minimal water and are not expected to have any adverse impacts on the existing water system or available water supplies. Therefore, impacts associated with short-term construction activities will be less than significant.

New development on the project site will result in an increase in long-term water demand for landscaping, field areas, operations, and maintenance. As previously mentioned, potable water used for human consumption will be obtained from the LBWD. Water used for irrigation and landscaping purposes will be provided by the LBWD via the proposed extension of the reclaimed water distribution system. Environmental impacts associated with the physical extension of the reclaimed water line (i.e., construction impacts) are addressed in Sections 4.8, Air Quality, 4.9, Traffic and Circulation, and 4.11, Noise. As reported in these sections, impacts associated with construction of the reclaimed water line south of I-405 are considered short-term impacts and are not significant.

Although all new development will be required to comply with State laws regarding water conservation measures, including pertinent provisions of Title 20 and Title 24 of the California Government Code regarding the use of water efficient appliances, the proposed project will still result in an increase in water demand. As previously stated, estimated project water demand was calculated using sewer demand coefficients to provide a more conservative analysis of project impacts related to water. Use of sewer demand coefficients allows for water demand calculations based on multiple site uses (e.g., park, restaurant, youth center) and the square footage attributable to each use. As indicated on Table 4.7.K, the total average daily potable water demand for the proposed project is estimated to be approximately 22,935 gpd, representing an increase of approximately 18,174 gpd when compared with existing conditions. Demand for reclaimed water is factored separately; the demand for reclaimed water will be approximately 109 acre-feet per year.

Table 4.7.K: Estimated Project Water Demand

Proposed Land Use	Floor Area (sf)	Demand Coefficient	Projected Water Demand (gpd)
Restaurants and Concessions	8,380	1,200 gallons per 1,000 sf per day	10,475
Commercial/Office*	47,300	200 gallons per 1,000 sf per day	9,460
Youth Golf Center	15,000	200 gallons per 1,000 sf per day	3,000
Average Daily Demand	—	—	22,935
Maximum Daily Demand**	—	—	39,448.20

* Includes 30,000-square-foot office building and Sports Park Administration Building.

** Maximum daily demand = 1.72 x Average Daily Demand

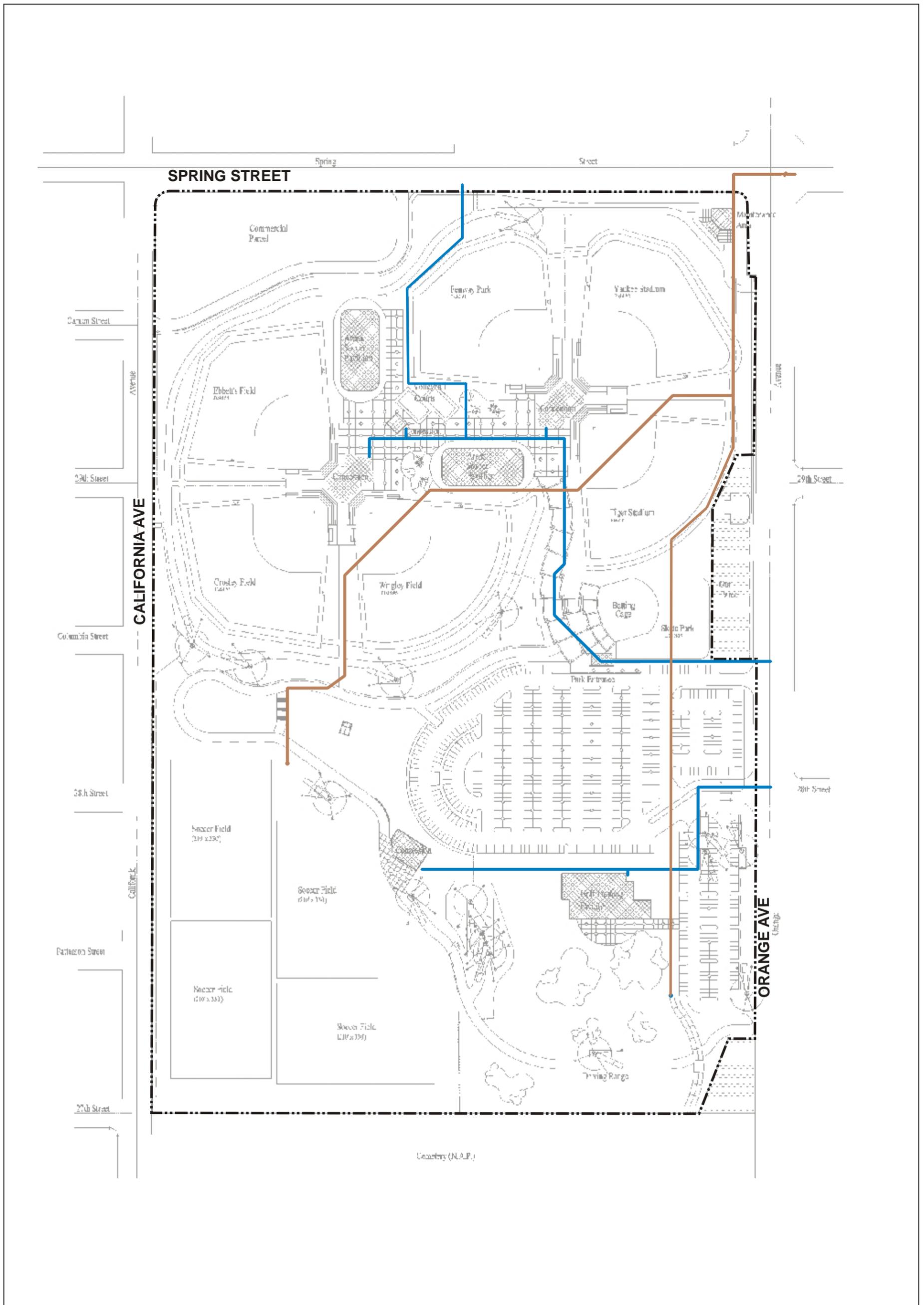
Sources: City of Long Beach Water Department and LACSD, Table 1, Loadings for Each Class of Land Use, October 2003.

This is generally consistent with the average daily flow that would be derived using the water use factors found in the 1994 Domestic Water Demand Study. Using the water use factors in that report, the proposed project would be expected to generate an average daily demand of 21,600 gpd and a maximum daily demand of 37,152 gpd. Because the estimated demand for reclaimed water was factored separately, it remains 109 acre-feet per year.

Based on consultation with the LBWD, the project will not necessitate new or expanded water entitlements. Sufficient water supplies are available to serve the project, and the LBWD will be able to accommodate the increased demand for potable water. The LBWD has also determined that it has sufficient supplies to provide the necessary reclaimed water for the project site, because it currently utilizes only approximately one-quarter of the total amount of reclaimed water produced. Therefore, project impacts associated with an increase in potable water demand are considered less than significant.

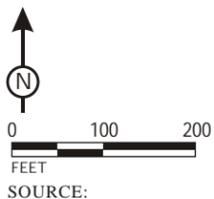
On-site water systems will be designed and constructed to provide adequate water service and flows for the proposed project, and project implementation will not disrupt or inhibit service currently provided in the area surrounding the project site or in other areas of the Cities of Long Beach or Signal Hill. Project impacts related to the provision of potable and reclaimed water are considered less than significant.

Sewer. The project site will be regraded to accommodate the proposed project and a new sewer system installed on site. As shown in Figure 4.7.6, the proposed sewer system will consist of City maintained 8- to 21-inch pipelines connected to existing pipelines in California Avenue. The proposed system will be designed in accordance with the LBWD standards for all sewer pipelines located within the City. Wastewater flow originating from the proposed project will continue to discharge to a local sewer line, which is not maintained by the Sanitation Districts but rather by the LBWD, for conveyance to the Sanitation Districts' Joint Outfall "C" Unit 3E Trunk Sewer, located in Long Beach Boulevard south of Columbia Street. As previously mentioned, the Trunk Sewer is not used to its full capacity and will be able to accommodate the additional sewer flows from the project site. Specifically, this 18-inch-diameter trunk sewer has a design capacity of 11.9 mgd and conveyed a peak flow of 8.8 mgd (2000), leaving 3.1 mgd as available capacity.



LSA

FIGURE 4.7.5



- LEGEND**
- - Water
 - - Reclaimed Water
 - - - - - Project Boundary

Long Beach Sports Park
Conceptual On-Site Water Distribution System

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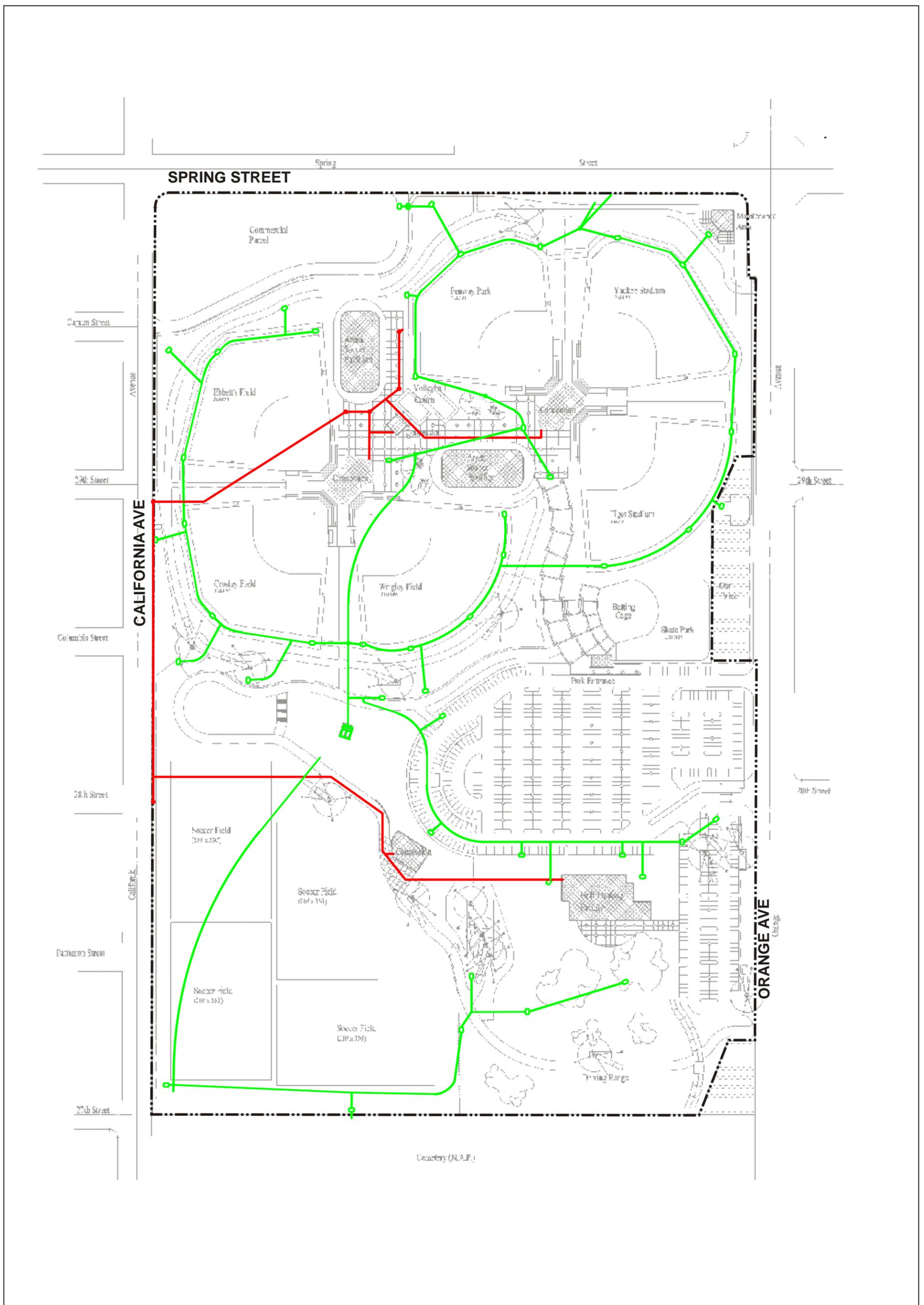
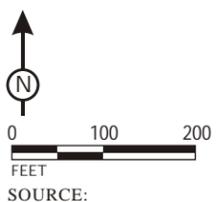


FIGURE 4.7.6

LSA



- LEGEND**
- - Sewer
 - - Storm Drain
 - - - - - Project Boundary

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In order for the Sanitation Districts to conform to the requirements of the Federal Clean Air Act, the design capacities of the Sanitation Districts' wastewater treatment facilities are based on the regional growth forecast adopted by the Southern California Association of Governments (SCAG). Any future expansions of Sanitation District facilities must be sized and service phased in a manner that is consistent with SCAG regional growth forecasts for Los Angeles County. The available capacity of the Sanitation Districts' treatment facilities will, therefore, be limited to levels associated with the approved growth identified by SCAG.

Based on the Sanitation Districts' average wastewater generation factors as shown in Table 4.7.L, the proposed project is estimated to generate 16,340 gpd, leaving 3.08 mgd capacity available the Sanitation Districts' Joint Outfall "C" Unit 3E Trunk Sewer. Project-generated wastewater will not exceed the existing capacity of the sewer delivery system and will not require the construction of new sewer delivery facilities, other than those to be constructed on site. Payment of a connection fee will be required before a permit to connect to existing facilities is issued. In addition, the project will be required to comply with all LBWD and LACSD requirements for design and construction of new sewer infrastructure and will not result in disruption of service to the surrounding area or adversely affect service levels.

Table 4.7.L: Estimated Project Wastewater Generation

Land Use	Floor Area (sf)	Factor	Projected Flow (gpd)
Restaurants and Concessions	8,380	1,000 gal/1,000 sf/day	8,380
Commercial Office Building*	32,300	200 gal/1,000 sf/day	6,460
Youth Golf Center	15,000	100 gal/1,000 sf/day	1,500
Average Daily Flow Total	55,680	—	16,340

* Includes 30,000-square-foot office building and Sports Park Administration Building.

Source: LACSD, Table 1, Loadings for Each Class of Land Use, October 2003.

The project will result in an increase in wastewater generation from existing conditions. As shown in Tables 4.7.F and 4.7.L, the project will generate an additional 12,910 gpd when compared to existing conditions. It is likely that wastewater from the project site will continue to be treated at the JWPCP located in the City of Carson, which has a design capacity of 385 mgd and currently processes an average flow of 322.7 mgd. Therefore, the proposed project will not result in or require the construction of new wastewater treatment facilities or the expansion of existing facilities.

Implementation of water conservation measures such as those required by Titles 20 and 24 of the California Administrative Code may further reduce wastewater flows from the project site. According to LACSD (February 4, 2004), project-generated wastewater will not exceed the existing capacity of the sewer delivery system or the existing capacity of the JWPCP. Project impacts related to the provision of wastewater services are considered less than significant.

Solid Waste. The proposed project will result in additional solid waste during construction and during operation of project components. Project construction would involve the demolition and

removal of existing on-site buildings, which would generate approximately 4,120 cubic yards of debris.¹ The majority of solid waste generated during construction would include scrap lumber, plastics, and inert waste. All asbestos-containing materials will be removed by a California State licensed contractor and disposed of in accordance with applicable laws and regulations prior to commencement of other demolition activities. (Refer to section 4.13.) Most of the demolition material will be disposed of at unclassified landfills. The unclassified landfills that accept such materials have sufficient capacity to accommodate the disposal materials that will be generated by demolition of existing on-site structures. Impacts to unclassified landfills due to project implementation will be less than significant.

As shown in Table 4.7.M, project operation will result in approximately 334 tons of solid waste per year. When compared to existing conditions, the proposed project will result in a net increase of approximately 283 annual tons of solid waste to be committed to Class III landfills or other waste disposal facilities. This represents a less than 0.01 percent increase in the total solid waste disposed of within the City of Long Beach (2002).

Table 4.7.M: Estimated Solid Waste Disposal for the Proposed Project

	Full-Time Employees	Disposal Rate (tons/employee/year)	Standard Industrial Classification	Solid Waste Disposal (tons per year)
Sports Park				
Restaurants/Concessions	30	3.1	Restaurants	93
Maintenance	15	0.9	Services, Other Misc.	13.5
Administration	30	1.7	Business Services	51
Youth Golf Center	7	1.2	Services, Other Professional	8.4
Commercial Parcel*	99	1.7	Business Services	168.3
Total	181	—	—	334.2

* Employee estimated based on a ratio of 3.29 employees per 1,000 square feet.

Source: CIWMB, Waste Disposal Rates for Business Types, 2004.

Given the percentage increase of solid waste disposal as a result of project implementation, the regional landfills and SERRF have sufficient short-term capacity to accommodate the additional demand for solid waste disposal facilities. SERRF, for example, has a permitted capacity of 2,240 tpd, with an average daily intake of 1,290 tpd.

As previously stated, California State Assembly Bill (AB) 939 requires that every city and county in California implement programs to recycle, reduce refuse at the source, and compost waste to achieve a 50 percent reduction in solid waste being taken to landfills. In order to assist in meeting this goal, the proposed development will be required to incorporate storage and collection of recyclable materials into project design and to include provisions for collection of recyclables in refuse

¹ Assumes 10 percent of the total volume of existing buildings is equal to the amount of demolition debris.

collection contracts. Mitigation Measures 4.7.2 and 4.7.3 will assist the City in its effort to meet its waste reduction goals by facilitating recycling on site.

Telephone. Existing telephone utility lines located on California Avenue can serve the proposed project. Service demand is based on the needs of particular buildings and users. There may be a need to upsize existing cables depending on service requirements. However, telephone service currently exists on the project site, and Verizon has indicated that it can provide service to accommodate the proposed project. Therefore, the impact is considered less than significant.

Cable. Charter Communications will extend cable television service to the project site on an as-needed basis. Services can be extended to the site from existing facilities in Orange and California Avenues with no adverse impacts.

Mitigation Measures

- 4.7.1 The City of Long Beach, in cooperation with the LBPD, shall develop and implement a security plan prior to commercial operation of the proposed project. The applicant shall incorporate CPTED principles and other crime prevention features that may include, but are not limited to, strategically placed lighting, the use of vines or planted coverings on walls to discourage graffiti, and video surveillance. The safety plan may also include clearly defined rules of play and conduct to be enforced by park employees. The Director of Planning and Building shall verify inclusion of physical public safety measures at the time of plan check. Operational conditions will be specified in the lease agreement
- 4.7.2 A solid waste management plan for the proposed project shall be developed and submitted to the City of Long Beach Director of Public Works for review and approval prior to issuance of grading permits. The plan shall identify methods to promote recycling and reuse of construction materials as well as safe disposal consistent with the policies and programs outlined by the City of Long Beach. The plan shall identify methods of incorporating source reduction and recycling techniques into project construction and operation in compliance with State and local requirements such as those described in Chapter 14 of the California Code of Regulations and AB939.
- 4.7.3 Prior to issuance of building permits, the Director of Planning and Building shall verify that adequate storage space for the collection and loading of recyclable materials has been included in the design of buildings and waste collection points throughout the project site to encourage recycling.

4.7.6 CUMULATIVE IMPACTS

Police Protection

The geographic area for cumulative analysis of police protection services is defined as the service territory for the LBPD. A net increase of up to approximately 56,827 residents and 29,428 jobs is

forecast for the City by 2020.¹ These growth projections are generated by the SCAG using the latest census data, local input, and historical growth trends and reflect reasonably foreseeable developments and growth.

Any future projects will likely include specific features designed to reduce impacts on police protection services and may be assessed additional mitigation measures specific to the given project's impacts. The need for additional police protection services associated with cumulative growth will be addressed through the annual budgeting process when budget adjustments may be made to meet changes in service demand. Therefore, the combined cumulative impact associated with the project's incremental effect and the effects of other projects in the area is considered less than significant.

Fire Protection

Similar to the cumulative analysis area for police protection services, the geographic area for cumulative analysis of fire protection services is defined as the service territory for the Long Beach Fire Department. As stated above, a net increase of up to approximately 57,000 residents and 29,000 jobs is forecast for the City by 2020.² The proposed project, however, will not result in a significant demand for additional fire protection and emergency medical services.

As stated above, the Long Beach Fire Department confirmed that the project could be accommodated with adequate fire protection and emergency medical services. The Fire Department anticipates cumulative demand in order to plan for overall service. Therefore, the Fire Department's determination that adequate service can be provided includes consideration of area demand in light of cumulative planned or anticipated projects. The proposed project will not generate a significant cumulative increase in demand for fire protection and emergency medical services.

Public Schools

The geographic boundary for the cumulative analysis for schools is the area within the LBUSD. Although the proposed project is not expected to have a significant adverse impact on the school system, it will be required to pay the statutory school impact fee of \$0.34 per square foot of accessible space, which would generate approximately \$18,931.20 in revenue for the LBUSD (June 2002). This revenue could be used to construct new school facilities or to replace old facilities at the LBUSD's discretion. Although the project does not contribute to an adverse direct or cumulative impact to schools and therefore does not require additional mitigation, school impact fees are required and will be used to address existing and future needs of the LBUSD.

Libraries

The geographic area for the cumulative analysis of impacts to library facilities is the City of Long Beach. The proposed project is not expected to have a significant impact on the provision of library

¹ The change in the number of residents and jobs was measured using year 2000 baseline population and employment numbers as reported in Southern California Association of Governments, RTP Growth Forecast, City Projections 2001.

² *ibid.*

services in the City of Long Beach or the area surrounding the project site. Any increase that does result from implementation of the proposed project would be incidental and not cumulatively considerable because library services would not be adversely impacted by the in-fill growth represented by the proposed project.

Natural Gas

The geographic area for the cumulative analysis of impacts to the provision of natural gas is the service territory for LBE. As stated above, development of the proposed project will generate a demand for approximately 132,400 cubic feet of natural gas per month. This will account for approximately 0.09 percent of LBE's total daily delivery capacity. Sufficient gas supplies and infrastructure capacity are available, or have already been planned, to serve the project and future development. Further, all future projects will be subject to Title 24 requirements and will be evaluated on a case-by-case basis to determine the need for specific distribution infrastructure improvements. The proposed project does not contribute to a significant cumulative impact associated with the provision of natural gas and natural gas delivery capacity.

Electricity

The geographic area for the cumulative analysis of impacts to the provision of electricity is the service territory for SCE in the City of Long Beach. SCE, the electricity provider for the proposed project site, has confirmed that the project could be accommodated with adequate service to meet the projected service demand of the project site. Estimated project electricity demand accounts for less than 0.01 percent of SCE service area's forecasted growth. There may be a need to underground utility cables currently crossing the site; however, this will not result in long-term service disruption. Furthermore, such improvements will not prevent service extensions to future developments. Therefore, the proposed project, in relation to the cumulative study area, would not generate a significant cumulative increase in demand for electricity.

Water

The geographic area for the cumulative analysis for the supply of potable and reclaimed water is defined as the LBWD service territory. As previously stated, the project includes the extension of a reclaimed water line to the project site. Currently, there are no identified projects that will tie into the reclaimed water line, but future extensions are possible. The LBWD currently only uses about 25 percent of the available reclaimed water, so sufficient supplies exist to serve the project and future planned development. Therefore, no significant cumulative impacts to the distribution or supply of reclaimed water are expected.

Although the proposed project and future planned development projects may increase demand for potable water, the LBWD has sufficient water supplies to accommodate the growth and may also exercise its right to supplement current supplies with additional water from the MWD. Therefore, no significant cumulative impacts on potable water services are expected to occur as a result of project implementation.

Sewer

The geographic area for the cumulative analysis for sewer treatment is defined as the LACSD service territory. Within its service area, the LACSD uses SCAG forecasts for future population and employment growth to project needed capacity. Because the LACSD projects that its existing and programmed wastewater treatment capacity will be sufficient to accommodate the growth forecasted by SCAG within its service area, development that is generally consistent with this forecast can be adequately served by LACSD facilities. The proposed project falls within the forecasted employment growth for the City of Long Beach and the County of Los Angeles. Therefore, the proposed project will not contribute to a significant cumulative impact to wastewater services.

Solid Waste

Development associated with future projects in the City of Long Beach will contribute to increased demand for landfill capacity for solid waste from construction activities and operations. Unclassified landfills that accept inert waste (construction debris) face no capacity shortfall.

There is, however, insufficient permitted capacity within the existing system serving Los Angeles County to provide for long-term nonhazardous solid waste disposal needs. Additional capacity is potentially available within Los Angeles County through the expansion of local landfills and outside of Los Angeles County through the use of waste by rail disposal at Eagle Mountain Landfill in Riverside County and the Mesquite Regional Landfill in Imperial County. While it is known that additional capacity is needed, the necessary permits and approvals have not yet been issued to access and/or use these facilities. Although the project's contribution is not the sole cause of the shortfall, when coupled with solid waste generated by future projects, the impact to solid waste disposal capacity is significant. As previously stated, Mitigation Measures 4.7.2 and 4.7.3 will reduce project impacts to regional waste disposal capacity to the extent feasible; however, even with recycling, additional regional long-term disposal capacity is needed to accommodate new developments. Due to the existing deficiency in long-term waste disposal capacity, cumulative project impacts will remain significant.

Telephone

The geographic area for the cumulative analysis of impacts to the provision of telephone services is the service territory for Verizon in the City of Long Beach. Verizon, the telephone service provider for the proposed project site, has confirmed that the project could be accommodated with adequate service to meet the projected service demand of the project site. If there is a need to upsize existing cables, the City of Long Beach will be responsible for a fair-share portion of the improvements. Such improvements will not prevent service extensions to future developments or disrupt existing services for an extended period of time. Therefore, the proposed project, in relation to the cumulative study area, would not generate a significant cumulative increase in demand for telephone services.

Cable

The geographic area for the cumulative analysis of impacts to the provision of cable services is the service territory for Charter Communications in the City of Long Beach. Charter Communications,

the cable television service provider for the proposed project site, has confirmed that the project could be accommodated with adequate service to meet the projected service demand of the project site. If there is a need to install cables, the City of Long Beach will be responsible for a fair-share portion of the improvements. Such improvements will not prevent service extensions to future developments or disrupt existing services for an extended period of time. Therefore, the proposed project, in relation to the cumulative study area, would not generate a significant cumulative increase in demand for cable television services.

4.7.7 LEVEL OF SIGNIFICANCE AFTER MITIGATION

As discussed above, the project may result in potentially significant project and cumulative impacts to solid waste disposal capacity in the County of Los Angeles. Implementation of the above mentioned mitigation measures will facilitate recycling of solid waste generated by project site land uses to the extent feasible. However, because there is an existing identified long-term capacity shortfall at waste disposal facilities in Los Angeles County, cumulative project impacts associated with solid waste disposal capacity at Class III landfills will remain significant and unavoidable.

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