5.8 PUBLIC SERVICES AND UTILITIES

Information in this section was based upon information from public service and utility agencies; refer to Appendix 15.1, *Initial Study and Notice of Preparation*, Appendix 15.8, *Correspondence* and other references. Public services include fire protection, police protection, schools and library services, as well as recreation. Utilities include water, wastewater (sewers), solid waste, electricity and natural gas.

This section provides existing conditions and background information necessary to determine potential impacts of the proposed project. Criteria by which an impact may be considered potentially significant is provided, along with discussion of impacts pursuant to Appendix G of the *CEQA Guidelines*. Mitigation measures are identified to avoid or reduce potential impacts to less than significant levels.

5.8.1 ENVIRONMENTAL SETTING

FIRE PROTECTION

The Long Beach Fire Department (LBFD) provides fire protection and emergency medical services to a 55 square mile area from 23 fire stations in the community. Fire Stations 1, 2 and 3 serve the project site. Table 5.8-1, *Fire Station Information*, details fire and paramedic resources serving the project area.

Table 5.8-1
Fire Station Information

Equipment	Manpower	Response Distance (miles)	Response Time (minutes)
Fire Station 1 237 Magnolia Avenue (90802) 2 Engines, 1 Truck, 1 Paramedic Vehicle	14 (2 Paramedics, 12 EMT's)	1.1	1-2
Fire Station 2 1645 E. 3 Street (90802) 1 Engine, 1 Paramedic Vehicle	6 (4 EMT's, 2 Paramedics)	0.9	2-3
Fire Station 3 1222 Daisy Avenue (90813) 1 Engine	4 (4 EMT's)	2.1	2-4
Source: Steve Lewis (Deputy Chief of Operations), City of Long Beach, December 20, 2005.			
EMT = Emergency Medical Technician.			

FIRE HAZARDS

The *City of Long Beach General Plan (General Plan)* includes a Public Safety Element (1975), which identifies potential safety hazards and establishes policies to protect life and property from natural and man-made hazards. The element establishes goals for public safety, addresses various public safety topics and makes recommendations for attaining public safety goals. It establishes a decision-making framework for City leaders to evaluate land use issues for their safety impact. The Public Safety Element provides recommendations for hazard mitigation and ensures that adequate emergency response can be provided when needed.

Fires are generally categorized as either urban fires or brush fires. The City of Long Beach is primarily built out and as a result does not typically experience brush fires. The downtown area of Long Beach is highly urbanized with several high-rise buildings and older and sometimes deteriorated structures. The Public Safety Element of the *General Plan* identifies the project site and surrounding area as a "critical" fire hazard area. The "critical" classification is based upon categories established by the LBFD, which include multiple dwellings, accumulation of small businesses, mixed occupancies, two to three story wood frame buildings, small manufacturing, car lots, railroad and wharf property and schools.[1]

FIRE PREVENTION

Fire prevention laws and regulations at the State and local levels are considered adequate. Hazardous fire conditions are regulated within the City through the permit issuance program and the business licenses approval required by the Fire Prevention Bureau. Special permits are required for most hazardous materials and all business license applications are required to be filed annually and approved by the Fire Prevention Bureau. Additionally, the Fire Prevention Bureau assures that newly constructed buildings are designed with correct fire protection and life safety systems built into them and that existing structures meet Fire Code requirements and standards.

FIRE CODE

Chapter 18.48, Fire Code, of the *City of Long Beach Municipal Code (Municipal Code)* adopts the California Fire Code (CFC) with amendments and modifications, and portions of the Uniform Fire Code (UFC) not included as part of the CFC. These codes are adopted by reference and collectively comprise the *Long Beach Fire Code* (*Fire Code*). The *Fire Code* includes provisions for fire department access, water supply, plan approval, fire protection systems and equipment, hazardous materials management and permits. Fire-flow requirements are based on building types and floor area and are determined by the LBFD on a project-by-project basis.

The City's *Fire Code* defines a high-rise structure as any "building of any type of construction or occupancy having floors used for human occupancy located more than seventy-five feet above the lowest level of Fire Department vehicle access". The *Fire Code* requires that each high-rise building have an emergency helicopter

[1] *City of Long Beach General Plan*, Public Safety Element, May 1975 (Reprint 2004).

landing facility located on the roof of the building in an area approved by the LBFD and that the landing facility be for emergency operations only. Additionally, depending upon the height and size of the structure, additional provisions such as sprinklers and on-site fire hydrants, may be required in accordance with the *Fire Code*.

POLICE PROTECTION

The Long Beach Police Department (LBPD) provides police protection to the City. Currently located at 400 West Broadway, the LBPD is comprised of four bureaus: Investigations, Support, Patrol and Administration.

The Patrol Bureau of the LBPD is divided into four patrol divisions (South, West, East and North). The South Patrol Division (400 West Broadway) responds to calls for service and coordinates the Tourist Police Bicycle Unit. This unit polices the downtown and oceanfront recreation areas. Opened in 1997, the West Patrol Substation (1835 Santa Fe Avenue) responds to calls for service in the western quadrant of the City. Opened in 1994, the East Patrol Substation (4800 Los Coyotes Diagonal) responds to calls for service in the eastern quadrant of the City, including Belmont Shore and several outdoor entertainment centers. Reopened in 2004, the North Patrol Substation (4891 Atlantic Avenue) works with Los Angeles County Parole and Probation Departments, developing joint task forces to address parole or probation violations. Additionally, officers in the North Division work closely with the California Highway Patrol and adjacent law enforcement agencies to manage criminal activity that crosses jurisdictions.[2]

According to the LBPD, the South Division serves a geographic area of 3.2 square miles (including the project site), and currently has approximately 40 patrol vehicles assigned. The approximate response time to the project site is 4.2 minutes for priority one calls (immediate and/or life threatening), 19.9 minutes for priority 2 calls (immediate, but not life threatening) and 28.3 minutes for priority 3 calls (crime has already occurred or is not immediate and/or life threatening).[3] The LBPD goal for responding to priority one calls is under five minutes.

SCHOOLS

The project site is served by the Long Beach Unified School District (LBUSD). As the third largest school district in California, LBUSD educates more than 95,000 students in 95 public schools in the cities of Long Beach, Lakewood, Signal Hill and Avalon (Catalina Island). Children residing within the project area are within the jurisdiction of Stevenson Elementary School, Franklin Middle School and Polytechnic High School. Table 5.8-2, *School Information*, provides the location, capacity and enrollment of the schools serving the project site.

[2] City of Long Beach, "Long Beach Police Department", http://www.ci.long-beach.ca.us/police/ default.asp, (accessed on August 2, 2005).

[3] Based on March 2006 data as provided by Steven L. Ditmars (Lieutenant), Long Beach Police Department, Information Technology Division, March 3, 2006.

Table 5.8-2
School Information

School	Capacity	Enrollment[1]
Chavez Elementary School 730 West 3rd Street	775	519
Franklin Middle School 540 Cerritos Avenue	1,704	1,270
Polytechnic High School 1600 Atlantic Avenue	3,562	4,399
Source: Telephone conversation/e-mail with Cliff Bagget, Long Beach Unified School District, January 12, 2006 and June 19, 2006.		
[1] Enrollment numbers as of September 23, 2005.		

SCHOOL FUNDING

The State of California has traditionally been responsible for the funding of local public schools. To assist in providing facilities to serve students generated by new development projects, the State passed Assembly Bill 2926 (AB 2926) in 1986. This bill allowed school districts to collect impact fees from developers of new residential and commercial/industrial building space. Development impact fees were also referenced in the 1987 Leroy Greene Lease-Purchase Act, which required school districts to contribute a matching share of project costs for construction, modernization or reconstruction.

Senate Bill 50 (SB 50) and Proposition 1A (both of which passed in 1998) provided a comprehensive school facilities financing and reform program by, among other methods, authorizing a $9.2 billion school facilities bond issue, school construction cost containment provisions and an eight-year suspension of the Mira, Hart and Murrieta court cases. Specifically, the bond funds are to provide $2.9 billion for new construction and $2.1 billion for reconstruction/modernization needs. The provisions of SB 50 prohibit local agencies from denying either legislative or adjudicative land use approvals on the basis that school facilities are inadequate and reinstate the school facility fee cap for legislative actions (e.g., general plan amendments, specific plan adoption, zoning plan amendments) as was allowed under the Mira, Hart and Murrieta court cases. According to Government Code Section 65996, the development fees authorized by SB 50 are deemed to be "full and complete school facilities mitigation." These provisions are in effect until 2006 and will remain in place as long as subsequent state bonds are approved and available.

SB 50 establishes three levels of Developer Fees that may be imposed upon new development by the governing board of a school district depending upon certain conditions within a district. These three levels are described below:

Level 1: Level 1 fees are the base statutory fees. These amounts are the maximum that can be legally imposed upon new development projects by a school district unless the district qualifies for a higher level of funding.

Level 2: Level 2 fees allow the school district to impose developer fees above the statutory levels, up to 50 percent of certain costs under designated circumstances. The State would match the 50 percent funding if funds are available. Under Level 2, the governing board of a school district may require a developer to finance up to 50 percent of new school construction costs. However, in order to qualify for Level 2 funding the district must satisfy at least one of the following four requirements until January 1, 2000, or satisfy at least two of the four requirements after January 1, 2000:

- Impose a Multi Track Year Round Education (MTYRE) with:
  - At least 30 percent of K-6 enrollment in the high school attendance area on MTYRE for unified and elementary school districts; or
  - At least 30 percent of high school district enrollment on MTYRE; or
  - At least 40 percent of K-12 enrollment on MTYRE within boundaries of the high school attendance area for which the district is applying for funding.
- Place a local bond measure on the ballot in the last four years which received at least 50 percent plus 1 of the votes.
- District has issued debt or incurred obligations for capital outlay equal to a specified (under Government Code 65995.5(b)(3)(C)) percentage of its local bonding capacity.
- At least 20 percent of teaching stations within the district are portable classrooms.

Level 3: Level 3 fees apply if the State runs out of bond funds after 2006, allowing the school district to impose 100 percent of the cost of the school facility or mitigation minus any local dedicated school moneys.

In order to accommodate students from new development projects, school districts may alternatively finance new schools through special school construction funding resolutions and/or agreements between developers, the affected school districts and occasionally, other local governmental agencies. These special resolutions and agreements often allow school districts to realize school mitigation funds in excess of the developer fees allowed under SB 50.

According to the LBUSD, current "Statutory School Fees (Developer Fees)" are $2.24 per square foot for residential and $0.36 per square foot for commercial/ industrial uses.[4] However, it should be noted that the State Allocation Board would be meeting in early 2006 for a possible recommendation of a fee increase. Additionally, LBUSD is currently in the planning stages of developing a Master Plan, which will evaluate the need for new schools depending upon student growth and available funding.

[4] Carri M. Matsumoto (Executive Director), Long Beach Unified School District, October 18, 2005.

LIBRARIES

The Main Branch of the Long Beach Public Library is located at 101 Pacific Avenue and serves the City of Long Beach as well as the project site. The Library is 135,000 square feet with seating capacity for 300 people. There are currently 30 public access computers and a wireless (WiFi) environment available to library patrons. The library offers computers with Internet access, the library catalog, a community resource file, and various on-line reference resources. Additionally, the library has a meeting room, auditorium and auditorium lobby available for rent. Various programs provided by the Long Beach Public Library include free Internet classes and the Family Learning Center, which provides homework assistance for students in grades K - 8. The center is staffed with homework helpers to provide help with homework assignments and computer instruction.

PARKS AND RECREATION

The Long Beach Parks, Recreation and Marine Department operates approximately 3,100 acres of recreation area, including 92 parks with 25 community centers, two major tennis centers, five municipal golf courses, 3,800 boat slips and 11 miles of beaches.[5] Six parks are located within an approximately one-mile radius of the project site and comprise over 100 acres of cumulative park or open space. The parks consist of a greenbelt/passive park, a mini-park, two community parks and special use parks, as described below.[6]

Victory Park. Victory Park is situated south of Ocean Boulevard, approximately 120 feet south of the project site. The 80-foot wide linear park totals 4.43 acres, and stretches from Alamitos Avenue to Magnolia Avenue. Approximately 1.28 acres is located on the block immediately across from the project site. Victory Park is categorized as a greenbelt and is passive in use.

East Village Arts Park. East Village Arts Park is located approximately 0.23 mile from the project site near Broadway and Elm Avenue. The 0.09-acre park is categorized as a mini-park and is a passive park designed for art displays and neighborhood events.

Marina Green. Located south of Ocean Boulevard and Shoreline Drive (approximately 870 feet from the project site), Marina Green is a special use park comprised of 9.39 acres. Marina Green was designed as a visual buffer between the downtown and the Long Beach Shoreline Marina parking lot. It is a mounded lawn area with minimal trees and no recreational amenities. The park has evolved into an area utilized during large outdoor events including Grand Prix bleachers, Boat Show displays and Gay Pride Parade retail vendors.

[5] City of Long Beach, "Parks, Recreation and Marine"/About the Department, http://www.ci.long-beach.ca.us/park/about/default.asp (accessed February 24, 2006).

[6] Dennis Eschen (Manager of Planning and Development), City of Long Beach Department of Parks, Recreation and Marine, December 28, 2005.

Alamitos Beach. Located southeast of the project site (approximately 900 feet), Alamitos Beach is a 47.42-acre ocean front beach. The beach is categorized as a regional park and contains a paved bicycle path, paved parking and a concession stand/restroom.

Cesar E. Chavez Park. Cesar E. Chavez Park is a community park located approximately one mile northwest of the project site. The park is comprised of approximately 32.43-acres, of which 9.66 acres are categorized as an active park with the remaining area having restricted public access. The park contains a community recreation center, two playgrounds, basketball court, amphitheater, picnic areas and open lawn areas where informal field sport activities occur.

Bixby Park. Bixby Park is 16.68 acres located approximately one mile east of the project site. Categorized as a community park, it contains a community recreation center building, bandstand, playground, basketball court, picnic tables, fountain and open lawn area where informal field sport activities occur. Existing approved plans will restore the bandstand to its historic character and construct an amphitheater, skate plaza and picnic area at the base of the ocean bluff.

Although Cesar E. Chavez and Bixby Parks are categorized as community parks, the lack of sports fields prevent them from being full service community parks. Bixby Park is the nearest site that functions as a neighborhood park with a playground. It is currently drawing residents for this function from almost four times the service radius standard of 0.25 mile, and is therefore considered severely overcrowded.[7] The total population served by the park (63,359 persons) is the second highest of any park in the City. Additionally, the population served per acre (4,499 persons) is also the second highest in the City. Cesar E. Chavez Park is only slightly less impacted, as it currently serves 3,421 persons per acre.

PARK STANDARDS

The City of Long Beach has established a standard of 8.0 acres of recreational open space per 1,000 residents. Recreational open space is defined to include parks, golf courses, nature preserves, beaches and recreational water areas (Alamitos Bay and the water inside the Long Beach Shoreline Marina). Based on the January 2005 population of 491,564[8] persons, the City of Long Beach should maintain approximately 3,933 acres of recreational open space. With approximately 3,100 acres of recreational open space within the City, the City is currently deficient in providing recreational open space by approximately 833 acres.

In addition to the recreational open space standard, the City has established standards for the type and size of parkland that should occur within a given distance from each residence, as indicated in Table 5.8-3, *Standards for Park Facilities*. Based upon the 2005 population estimates, a shortage of facilities currently exists within the City.

[7] *Ibid*.

[8] California Department of Finance, E-1 Report: City/County Population Estimates, January 2005.

Table 5.8-3
Standards for Park Facilities

Facility	Population Served	Service Area (mile)	Shortage[1] (acres)
Playground	5,000	0.25	25
Swimming Pool	50,000	1.0	6
Tennis Court	7,500	0.5	5
Basketball Court	2,000	0.25	29
Football/Soccer Field	5,000	1.0	55
Baseball/Softball	5,000	1.0	32
Community Center	1 square foot/resident	1.0	330,936 sq.ft.

Source: Dennis Eschen (Manager of Planning and Development), City of Long Beach Department of Parks, Recreation and Marine, December 28, 2005.

[1] Based on 2005 population estimates of the California Department of Finance. All other figures are from the 2000 U.S. Census.

PARK FEES

Chapter 18.18 of the *Long Beach Municipal Code* requires payment of park fees for parkland acquisition and recreation improvements, prior to the issuance of certificate of occupancy for residential developments, as defined in the *Municipal Code*. The park fee imposed on residential development projects reflects the specific project's share of the cost of providing parkland and improvements to meet the needs created by the residential development at established City service level standards.

WATER

WATER SUPPLY

The project site is served by the Long Beach Water Department (LBWD). The LBWD meets its water demand needs through four main sources: Metropolitan Water District, groundwater from the Central Basin, conservation efforts and reclaimed water. Approximately 42 percent of the water supply consists of imported water obtained from the Metropolitan Water District (MWD), approximately 38 percent is from groundwater, conservation efforts are responsible for 14 percent and recycled water represents approximately six percent.[9] Reclaimed water is primarily used to irrigate large municipal landscapes such as City parks and golf courses.

The MWD recalculates each of its member agency's preferential rights on an annual basis. According to the 2005 calculation, LBWD's right to MWD imported water is 39,150 acre-feet (AF) per year. This represents a worse case scenario of harsh hydrological conditions that limit imported water supplies over an extended period of

[9] Long Beach Water Department, water supply portfolio 2006, www.lbwater.org, http://www.lbwater.org/drinking_ water/wtr_supply_portf_04.html (November 30, 2005).

time. However, the amount of water represented by LBWD's preferential rights (39,150 AF/year) typically exceeds the demand for water during these conditions.

At this time, the LBWD continues to meet the water demands of its customers and has programs in place to add additional supply sources and increase water conservation. The LBWD is currently in the process of developing its 2005 Urban Water Management Plan.

WATER SUPPLY ASSESSMENT

Senate Bills 221 and 610. Senate Bills 221 and 610 were signed into law in 2001 and took effect January 1, 2002. The two bills amended State law to better link information on water supply availability to certain land use decisions by cities and counties. The two companion bills provide a regulatory forum that requires more collaborative planning between local water suppliers and cities and counties. All SB 610 and 221 reports are generated and adopted by the public water supplier.

Senate Bill (SB) 610 requires a detailed report regarding water availability and planning for additional water supplies that is included with the environmental document for specified projects. All projects that meet any of the following criteria require the water availability assessment:

- A proposed residential development of more than 500 dwelling units;
- A proposed shopping center or business establishment employing more than 1,000 persons or having more than 500,000 square feet of floor space;
- A proposed commercial office building employing more than 1,000 persons or having more than 250,000 square feet of floor space;
- A proposed hotel and motel having more than 500 rooms;
- A proposed industrial, manufacturing, or processing plant, or an industrial park planned to house more than 1,000 persons, occupying more than 40 acres of land, or having more than 650,000 square feet of floor area;
- A mixed-use project that includes one or more of the projects specified in this subdivision; or
- A project that would demand an amount of water equivalent to or greater than the amount of water required by a 500 dwelling unit project.

While SB 610 primarily affects the Water Code, SB 221 principally applies to the Subdivision Map Act. The primary effect of SB 221 is to condition every tentative map for an applicable subdivision on the applicant by verifying that the public water supplier (PWS) has sufficient water supply available to serve it. Under SB 221, approval by a city or county of certain residential subdivisions requires a written verification of sufficient water supply. SB 221 applies to any subdivision, defined as:

- A proposed residential development of more than 500 dwelling units (if the PWS has more than 5,000 service connections); or

- Any proposed development that increases connections by 10 percent or more (if the PWS has fewer than 5,000 connections).

The project proposes the development of 358 residential units and 13,561 square feet of retail/gallery space. The project would not demand an amount of water equivalent to or greater than the amount of water required by a 500 dwelling unit project. Therefore, the proposed project would not be subject to SB 610 or SB 221.

Existing Water Demand and Facilities

According to the Long Beach Water Department, annual water use averages 70,000 acre feet (AF) with an average daily flow of 96 cubic feet per second (cfs).[10] Since January 2000, peak demand has been 87.21 million gallons (MG).[11]

The project site is currently developed with 63 residential units and approximately 20,981 square feet of retail, restaurant and office uses. As indicated in Table 5.8-4, *Existing Water Demand*, existing water demand for the project site is approximately 20.38 AF/year.

Table 5.8-4
Existing Water Demand

Land Use	Building Area (s.f.)	Dwelling Units (du)	Demand Factor[1]		Existing Demand (AF/year)
			AF/year/du	AF/year/1 million s.f.	
Residential	--	63	0.249	--	15.69
Retail/restaurant/office	20,981	--	--	224	4.69
Totals	**20,981**	**63**			**20.38**

s.f. = square feet; du = dwelling unit(s); AF = acre feet.

[1] Demand factors based on Water Availability Assessment for the PacifiCenter @ Long Beach, Prepared by LBWD, December 2002.

EXISTING WATER FACILITIES

Existing water system facilities are located adjacent to the project site, which include a 6-inch line in Broadway Court, 8-inch lines in Bronce Way and Medio Street, a 12-inch line in Ocean Boulevard and a 20-inch water main in Alamitos Avenue.[12]

[10] Matthew P. Lyons (Manager of Planning and Conservation), Long Beach Water Department, January 20, 2006.

[11] *Ibid.*

[12] Robert Villanueva, P.E. (Division Engineer), Long Beach Water Department, November 28, 2005.

WASTEWATER (SEWERS)

WASTEWATER SERVICE

In 1988 the Long Beach Water Department assumed the responsibility of the various functions of the City's sanitary sewer system, including operations and maintenance. The Long Beach Water Department operates and maintains nearly 765 miles of sanitary sewer line, delivering over 40 million gallons per day (mgd) to Los Angeles County Sanitation Districts facilities located on the north and south sides of the City of Long Beach.[13]

Wastewater flow from the project area is discharged to local sewer lines (maintained by the LBWD for conveyance to the Districts' DeForest Avenue Trunk Sewer, located in the right of way along the west side of the Long Beach Freeway at Broadway. The 36-inch diameter trunk sewer has a design capacity of 20 mgd and conveyed a peak flow of 5.7 mgd when last measured in 2003.[14]

Wastewater generated from the project area is treated at the Joint Water Pollution Control Plant (JWPCP) located in the City of Carson. The JWPCP is the largest of the Districts' wastewater treatment plants, providing advanced primary and partial secondary treatment with a design capacity of 385 mgd of wastewater. The plant currently processes an average flow of 324.9 mgd of wastewater.[15]

At the JWPCP, the treated wastewater is disinfected with chlorine and sent to the Pacific Ocean through networks of outfalls that extend two miles off the Palos Verdes Peninsula to a depth of 200 feet.[16]

The design capacities of the Sanitation Districts' wastewater treatment facilities are based on the regional growth forecast adopted by SCAG. In order to conform to the Federal Clean Air Act (FCAA), all expansions of facilities must be sized and service phased in a manner consistent with SCAG regional growth forecasts. The available capacity of the treatment facilities is therefore limited to levels associated with approved growth identified by SCAG.

The Sanitation Districts are empowered by the California Health and Safety Code to charge a fee for the privilege of connecting (directly or indirectly) to the Sanitation Districts' sewerage system or increasing the existing strength and/or quantity of wastewater attributable to a particular parcel or operation already connected. This connection fee is required to construct an incremental expansion of the sewerage system to accommodate future development, which will mitigate the impact of development projects on the present sewerage system.

[13] Long Beach Water Department, http://www.lbwater.org/sewers/sewage_treatment.html (November 30, 2005).

[14] Ruth I. Frazen (Engineering Technician), Finance & Property Management Section, County Sanitation Districts of Los Angeles County.

[15] *Ibid.*

[16] Long Beach Water Department, http://www.lbwater.org/sewers/sewage_treatment.html (November 30, 2005).

EXISTING WASTEWATER GENERATION AND FACILITIES

The project site is currently developed with 63 residential units and approximately 20,981 square feet of retail, restaurant and office uses. As indicated in Table 5.8-5, *Existing Wastewater Generation*, existing wastewater generated from the project site is approximately 19,795 gallons per day.

Table 5.8-5
Existing Wastewater Generation

Land Use	Building Area (s.f.)	Dwelling Units (du)	Demand Factor[1]		Existing Generation gpd
			Gallons/person/day	Gallons/tsf/day	
Residential	--	63	85 x 2.913 persons per du[2]	--	15,599
Retail/restaurant/Office	20,981	--	--	200	4,196
Totals	**20,981**	**63**			**19,795**

s.f. = square feet; du = dwelling unit; tsf = thousand square feet; gpd = gallons per day.

1 Demand factors based on the Comprehensive Sewer System Master Plan and Management Program provided by the LBWD.

2 2.913 persons per household per the State of California Department of Finance, 2005.

Wastewater lines currently existing near the project site include 8-inch sewer lines within Broadway Court, Ocean Boulevard, Medio Street and Alamitos Avenue.

ELECTRICITY

REGULATORY FRAMEWORK

The California Public Utilities Commission (CPUC) regulates investor-owned electric power and natural gas utility companies in the State of California. Assembly Bill 1890, enacted in 1996, deregulated the power generation industry, allowing customers to purchase electricity on the open market. Under deregulation, the production and distribution of power that was under the control of investor-owned utilities (e.g., Southern California Edison) was decoupled.

All new construction in the State of California is subject to the energy conservation standards set forth in Title 24, Part 6, Article 2 of the California Administrative Code. These are prescriptive standards that establish maximum energy consumption levels for the heating and cooling of new buildings.

The utilization of alternative energy applications in development projects (including the proposed project), while encouraged, is not required as a development condition. Such applications may include installation of photovoltaic solar panels, active solar water heating systems or integrated pool deck water heating systems, all of which serve to displace consumption of conventional energy sources (i.e., electricity and natural gas). Incentives, primarily in the form of state and federal tax credits, as well as reduced energy bills, provide a favorable basis for individual builders, property owners and occupants to install such alternative energy systems.

ELECTRICITY SUPPLY

Southern California Edison (SCE) provides electrical service to the City of Long Beach and the project area. SCE maintains and operates transmission and distribution infrastructure to provide purchased power to end users throughout its service area. A variety of power generation sources provide electricity to SCE, including, coal, nuclear and hydroelectric plants throughout the western states. High voltage electrical lines are typically utilized to transmit power from these plants. This power subsequently passes through a substation, from which it is distributed to individual consumers via lower voltage lines. SCE maintains a high voltage system (12,000 volts) and various low voltage systems within the project area.

According to the California Energy Commission (CEC), SCE is projected to deliver 100.8 million megawatt-hours (MWh) to its customers during 2004.[17] By 2010, SCE's demand is expected to increase to 113.1 million MWh.[18]

NATURAL GAS

CALIFORNIA NATURAL GAS REGULATION AND INFRASTRUCTURE

The California Public Utilities Commission (CPUC) regulates natural gas utility service for approximately 10.5 million customers that receive natural gas from Pacific Gas and Electric Company (PG&E), Southern California Gas Company (SCGC), San Diego Gas & Electric Company (SDG&E), Southwest Gas and several smaller natural gas utilities. Most of California's natural gas customers are residential and small commercial customers (referred to as "core" customers) who accounted for approximately 40 percent of the natural gas delivered by California utilities in 2003. Large consumers, like electric generators and industrial customers (referred to as "non-core" customers) accounted for approximately 60 percent of the natural gas delivered by California utilities in 2003. The CPUC regulates the California utilities' natural gas rates and natural gas services, including in-state transportation over the utilities' transmission and distribution pipeline systems, storage, procurement, metering and billing.

Most of the natural gas used in California comes from out-of-state natural gas basins. In 2003, California customers received 42 percent of their natural gas supply from basins located in the Southwest, 26 percent from Canada, 14 percent from the Rocky Mountains and 18 percent from basins located within California.

Natural gas from out-of-state production basins is delivered into California via the interstate natural gas pipeline system. The five major interstate pipelines that deliver out-of-state natural gas to California consumers are the Gas Transmission Northwest Pipeline, Kern River Pipeline, Transwestern Pipeline, El Paso Pipeline and Mojave Pipeline. Another pipeline, the North Baja Pipeline, takes gas off the El Paso Pipeline at the California/Arizona border and delivers that gas through California into Mexico. While the Federal Energy Regulatory Commission (FERC) regulates the

[17] California Energy Commission. California Energy Demand 2000-2010. Technical Report to California Energy Outlook 2000. Docket #99-CEO-1. June 2000.

[18] *Ibid.*

transportation of natural gas on the interstate pipelines, the CPUC often participates in FERC regulatory proceedings to represent the interests of California natural gas consumers.

2001 TITLE 24, PART 6 CALIFORNIA'S ENERGY EFFICIENCY STANDARDS FOR RESIDENTIAL AND NON-RESIDENTIAL BUILDINGS

The Energy Efficiency Standards for Residential and Nonresidential Buildings were established in 1978 in response to a legislative mandate to reduce California's energy consumption. The standards are updated periodically to allow consideration and possible incorporation of new energy efficiency technologies and methods. New standards were adopted by the Commission in 2001 as mandated by Assembly Bill 970 to reduce California's electricity demand. The new standards went into effect on June 1, 2001. The standards (along with standards for energy efficient appliances) have saved more than $20 billion in electricity and natural gas costs. It is estimated the standards will save $57 billion by 2011.

LONG BEACH ENERGY

Through the purchase of natural gas from Southern California Gas Company, Long Beach Energy provides natural gas to the City of Long Beach, including the project site. Long Beach Energy has the capacity to deliver over 155 million cubic feet (cf) of natural gas per day. Natural gas lines currently exist within the project area. However, due to lot consolidations and various development projects occurring within downtown Long Beach, Long Beach Energy is currently in the process of relocating gas lines from alleyways into roadways.[19]

According to Long Beach Energy, gas lines are planned to be relocated in three phases between 2006 and 2008. Phases one and two would occur within downtown and central Long Beach. The third phase is planned to occur in 2008 and would include relocating gas pipelines in the East Village.

SOLID WASTE

STATE PLANS AND POLICIES FOR SOLID WASTE DISPOSAL

California Integrated Waste Management Act

The California Integrated Waste Management Act of 1989 (AB 939) requires every city and county in the State to prepare a Source Reduction and Recycling Element (SRRE) to its Solid Waste Management Plan, that identifies how each jurisdiction will meet the mandatory State waste diversion goals of 25 percent by the year 1995 and 50 percent by the year 2000. The purpose of AB 939 is to "reduce, recycle, and re-use solid waste generated in the State to the maximum extent feasible." Noncompliance with the goals and timelines set forth within AB 939 can result in fines up to $10,000 per day on jurisdictions (cities and counties) not meeting the recycling and planning goals.

[19] Based on a telephone interview with Mike Zykuski of Long Beach Energy, January 6, 2006.

The term "integrated waste management" refers to the use of a variety of waste management practices to safely and effectively handle the municipal solid waste stream with the least adverse impact on human health and the environment. AB 939 established a waste management hierarchy as follows:

- Source Reduction;
- Recycling;
- Composting;
- Transformation; and
- Disposal.

As of January 2003, neither the California Integrated Waste Management Board nor the State Legislature have introduced new legislation to set diversion requirements beyond 2000.

REGIONAL PLANS AND POLICIES FOR SOLID WASTE DISPOSAL

Los Angeles Countywide Siting Element

In 1997, the County of Los Angeles prepared a countywide siting element that estimates the amount of solid wastes generated in the County and proposes various diversion and alternate disposal options.

The Los Angeles Countywide Siting Element identifies the Los Angeles County Department of Public Works (LACDPW) as the responsible agency to develop plans and strategies to manage and coordinate the solid waste generated (including hazardous waste) in the County unincorporated areas and address the disposal needs of Los Angeles County as a whole. The Siting Element is based upon the traditional practice of simply collecting solid waste and disposal of at landfills in the local vicinity. Therefore, currently many jurisdictions (such as the County of Los Angeles) are stating that existing local landfill space may reach capacity in the very near future.

LOCAL PLANS AND POLICIES FOR SOLID WASTE DISPOSAL

Source Reduction and Recycling Element

To meet the requirements of the California Integrated Waste Management Act, the City of Long Beach adopted a SRRE. The SRRE describes policies and programs that will be implemented by the City to achieve waste disposal reductions. Specifically, the City has identified goals to reduce waste at the source, increase the use of recyclable materials, encourage the use or reusable products and reduce green waste through on-site composting.

According to the Integrated Waste Management Board, the City of Long Beach has an approved solid waste diversion rate of 54 percent for 2002.[20]

[20] 2002 is the most current approved waste diversion rate.

EXISTING SOLID WASTE COLLECTION AND DISPOSAL

The Long Beach Environmental Services Bureau as well as private permitted waste haulers provide solid waste service for the City. Waste generated from the project area is disposed at various facilities, however the Puente Hills Landfill #6 and the Southeast Resource Recovery Facility, typically receive the greatest proportions of solid waste.

In 2004, approximately 653,546 tons of solid waste was generated by uses in the City of Long Beach (refer to Table 5.8-6, *Landfills Summary*). Approximately 38.9 percent (254,675 tons) of Long Beach's solid waste is sent to the Southeast Resource Recovery Facility and approximately 31.1 percent (203,127) is sent to the Puente Hills Landfill. The 18 landfills serving Long Beach have a total permitted capacity of 929.7 million tons and a remaining capacity of approximately 569.7 million tons.

Table 5.8-6
Landfill Summary

Facility	Amount Disposed from Long Beach (tons/year)[1]	Permitted Daily Capacity (tons/day)[2]	Permitted Total Capacity (cubic yards)[2]	Remaining Capacity (cubic yards)[2]
Bakersfield S.L.F.	34	4,500	53,000,000	2,985,888
CWMI – B18 Nonhazardous Codisposal (Kings Waste and Recycling Authority)	2,040	8,000	10,700,000	6,000,000
Antelope Valley Public Landfill	1,635	1,400	6,480,000	2,978,143
Azusa Land Reclamation Co, Inc.	11,886	6,500	66,670,000	34,100,000
Waste Management of Lancaster	1,684	1,700	22,645,000	22,645,000
Chiquita Canyon Sanitary Landfill	13,997	6,000	45,889,550	26,024,360
Puente Hills Landfill #6	203,127	13,200	106,400,000	62,291,000
Commerce Refuse-to-Energy Facility	260	1,000	1,000 tons/day	N/A
Sunshine Canyon SLF County Extension	16,231	5,500	13,441,300	13,441,300
Southeast Resource Recovery Facility	254,675	2,240	2,240 tons/day	N/A
Bradley Landfill West and West Extension	18	10,000	38,000,000	4,725,968
Prima Deshecha Sanitary Landfill	45,195	4,000	172,900,000	87,384,799
Olinda Alpha Sanitary Landfill	47,941	8,000	74,900,000	38,578,383
Frank R. Bowerman Sanitary Landfill	10,845	8,500	N/A	63,019,060
El Sobrante Sanitary Landfill	43,258	10,000	184,930,000	172,531,000
Fontana Refuse Disposal Site	7	7,500	62,000,000	694,058
B-J Dropbox Sanitary Landfill	0	2,400	28,240,000	22,815,505
Simi Valley Landfill – Recycling Center	712	3,000	43,500,000	9,473,131
Total	**653,546**	**103,440**	**929,695,850**	**569,687,595**

1 California Integrated Waste Management Board, Jurisdiction Disposal and Alternative Daily Cover (ADC) Tons by Facility, www.ciwmb.ca.gov, 2004 data.
2 California Integrated Waste Management Board, Solid Waste Information System (SWIS), www.ciwmb.ca.gov, Retrieved March 3, 2006.

Existing on-site uses include 63 multi-family residential units, 9,629 square feet of retail uses, 7,500 square feet of office uses and 3,852 square feet of restaurant uses. As indicated in Table 5.8-7, *Existing Solid Waste Generation*, existing uses on the project site generate approximately 759 pounds of solid waste per day or 139 tons per year. This represents approximately 0.02 percent of the City's solid waste disposed of per year.

Table 5.8-7
Existing Solid Waste Generation

Land Use	Building Area (s.f.)	Dwelling Units	Demand Factor[1]		Existing Generation (Pounds/day)
			Pounds/ du/ day	Pounds/ s.f./day	
Residential	-	63	4	-	252
Retail	9,629	-	-	0.046	443
Office	7,500	-	-	0.006	45
Restaurant	3,852	-	-	0.005	19
Totals	**20,981**	**63**	**-**	**-**	**759**

s.f. = square feet; du = dwelling units.

[1] Demand factors obtained from the California Integrated Waste Management Board, Estimated Solid Waste Generation Rates, (www.ciwmb.ca.gov) Retrieved March 3, 2006.

STORMWATER/WATER QUALITY

REGULATORY FRAMEWORK

Clean Water Act

In 1972, the Federal Water Pollution Control Act [later referred to as the Clean Water Act (CWA)] was amended to require National Pollutant Discharge Elimination System (NPDES) permits for the discharge of pollutants to waters of the United States from any point source. In 1987, the CWA was amended to require that the United States Environmental Protection Agency (EPA) establish regulations for permitting of municipal and industrial stormwater discharges under the NPDES permit program. The EPA published final regulations regarding stormwater discharges on November 16, 1990. The regulations require that municipal separate storm sewer system (MS4) discharges to surface waters be regulated by a NPDES permit.

In addition, the CWA requires the states to adopt water quality standards for receiving water bodies and to have those standards approved by the EPA. Water quality standards consist of designated beneficial uses for a particular receiving water body (e.g., wildlife habitat, agricultural supply, fishing, etc.), along with water quality criteria necessary to support those uses. Water quality criteria are prescribed concentrations or levels of constituents – such as lead, suspended sediment and fecal coliform bacteria – or narrative statements which represent the quality of water

that support a particular use. Because California had not established a complete list of acceptable water quality criteria, EPA established numeric water quality criteria for certain toxic constituents in receiving waters with human health or aquatic life designated uses in the form of the California Toxics Rule ("CTR") (40 CFR 131.38).

California Porter-Cologne Act

The Federal CWA places the primary responsibility for the control of surface water pollution and for planning the development and use of water resources with the states, although it does establish certain guidelines for the states to follow in developing their programs and allows the EPA to withdraw control from states with inadequate implementation mechanisms.

California's primary statute governing water quality and water pollution issues with respect to both surface waters and groundwater is the Porter-Cologne Water Quality Control Act of 1970 (Porter-Cologne Act). The Porter-Cologne Act grants the State Water Resource Control Board (SWRCB) and each of the Regional Water Quality Control Boards (RWQCBs) power to protect water quality, and is the primary vehicle for implementation of California's responsibilities under the Federal CWA. The Porter-Cologne Act grants the SWRCB and the RWQCBs authority and responsibility to adopt plans and policies, to regulate discharges to surface and groundwater, to regulate waste disposal sites and to require cleanup of discharges of hazardous materials and other pollutants. The Porter-Cologne Act also establishes reporting requirements for unintended discharges of any hazardous substance, sewage, or oil or petroleum product.

Each RWQCB must formulate and adopt a water quality control plan for its region. The regional plans are to conform to the policies set forth in the Porter-Cologne Act and established by the SWRCB in its state water policy. The Porter-Cologne Act also provides that a RWQCB may include within its regional plan water discharge prohibitions applicable to particular conditions, areas or types of waste.

Basin Plan

The Los Angeles RWQCB's Basin Plan provides quantitative and narrative criteria for a range of water quality constituents applicable to certain receiving water bodies and groundwater basins within the Los Angeles Region. Specific criteria are provided for the larger, designated water bodies within the region, as well as general criteria or guidelines for ocean waters, bays and estuaries, inland surface waters and groundwater basins. In general, the narrative criteria require that degradation of water quality does not occur due to increases in pollutant loads that would adversely impact the designated beneficial uses of a water body. For example, the Los Angeles Basin Plan (Basin Plan) requires that "Inland surface waters shall not contain suspended or settleable solids in amounts which cause a nuisance or adversely affect beneficial uses as a result of controllable water quality factors." Water quality criteria apply within receiving waters as opposed to applying directly to runoff; therefore, water quality criteria from the Basin Plan are utilized as benchmarks as one method to evaluate the potential ecological impacts of runoff on receiving waters.

The Basin Plan also contains water quality criteria for groundwater basins. For example, the Basin Plan requires that "Ground waters shall not contain taste or odor producing substances in concentrations that cause nuisance or adversely affect beneficial uses."

National Pollutant Discharge Elimination System (NPDES)

The Los Angeles RWQCB has jurisdiction over the NPDES permits and other regulatory programs. The General Permit for Discharges of Storm Water Associated with Construction Activity regulates discharges whose projects disturb one or more acres of soil or disturb less than one acre, but are part of a larger common development plan that disturbs one or more acres. The Construction General Permit requires the development and implementation of a Storm Water Pollution Prevention Plan (SWPPP). The SWPPP is required to list Best Management Practices (BMPs) to protect stormwater runoff quality.

NPDES permits are also required for stormwater discharges from municipal separate storm water systems. The MS4 permit requires the discharger to develop and implement a Storm Water Management Plan (SWMP) to reduce the discharge of pollutants to the maximum extent practicable (MEP). The SWMP identifies what BMPs will be used to address certain program areas.

The City of Long Beach has its own NPDES permit (NPDES Permit No. 99-060; CAS004003/CI 8052). To obtain its permit, the City of Long Beach submitted a Report of Waste Discharge (ROWD), which included a SWMP. The SWMP identifies practices and activities to reduce or eliminate pollutants to the MEP. Chapter 18.95, NPDES and SUSMP Regulations, of the City's *Municipal Code*, establishes regulations to "effectively prohibit non-storm water discharges into the storm drain systems or watercourses and controls to reduce the discharge of pollutants into the storm water to the maximum extent practicable." In accordance with the *Municipal Code*, a SWPPP is required to be prepared for construction projects of one or more acres.

EXISTING STORMWATER RUNOFF AND WATER QUALITY

The project site is currently developed and is almost completely impervious. Stormwater runoff from the site is conveyed in the City's local street system. The project site lacks any measured data on stormwater runoff quality. In the absence of site-specific data, expected storm water quality can be qualitatively discussed by relating typical pollutants to specific land uses.

Currently, the site contains residential dwellings, commercial/retail and office buildings. The expected existing pollutants in the existing condition stormwater runoff from the project site are oil and grease from automobile use. Other pollutants associated with residential, commercial and office development includes trash, nutrients, bacteria, oil and grease and household hazardous wastes.

RESIDENTIAL ACTIVITIES AND DEVELOPMENT

Residential and urban development is often a significant source of stormwater pollution. Development and redevelopment activities have two primary effects on

water quality; they are sources of erosion and sedimentation during the construction phase and they have long-term effects on runoff once the development is complete. Residential and urban development can affect water quality in three ways:

- Impervious surfaces associated with development increase the rate and volume of stormwater runoff, which increase downstream erosion potential;
- Urban activities generate dry-weather ("nuisance") flows, which may contain pollutants and/or may change the ephemeral nature of streams and the degradation of certain habitats; and
- Impervious surfaces increase the concentration of pollutants during wet weather flows.

The potential for negative water quality effects is generally correlated to the density of development and the amount of impervious area associated with development. Detached residential development has the potential to generate sediments such as nutrients and organic substances (including fertilizers), pesticides (from landscape application), trash and debris (including household hazardous waste), oxygen demand, oil and grease (from driveways and roads), and bacteria and viruses.

Municipal Activities and Development

Infrastructure and facilities (roads, streets, highways, parking facilities, storm drains and flood management facilities) present a threat to water quality. Other facilities such as parks, airfields, water treatment plants, wastewater reclamation plants, landfills and transfer centers and corporate yards also present water quality issues. Municipalities may also own and administer areas and activities tributary to impaired water bodies and/or water quality sensitive areas that might be harmful to water quality.

Commercial Activities and Development

Certain commercial activities have the potential to generate pollutants that can negatively affect stormwater quality. Restaurants have the potential to generate pollutants such as grease, trash and other oxygen-demanding substances.

5.8.2 SIGNIFICANCE THRESHOLD CRITERIA

Appendix G of the *CEQA Guidelines* contains the Initial Study Environmental Checklist form used during preparation of the project Initial Study, which is contained in Appendix 15.1 of this EIR. The Initial Study includes questions relating to public services and utilities. The issues presented in the Initial Study Checklist have been utilized as thresholds of significance in this section. Accordingly, a project may create a significant environmental impact if one or more of the following occurs:

PUBLIC SERVICES

FIRE AND POLICE PROTECTION, SCHOOLS AND LIBRARIES

A significant impact would occur if the project would result in a:

- Substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives.

RECREATION

A significant impact would occur if the project:

- Increases the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated; or

- Includes recreational facilities or requires the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.

UTILITIES AND SERVICE SYSTEMS

WATER, WASTEWATER/SEWERS, SOLID WASTE AND STORMWATER

A significant impact would occur if the project:

- Exceeds wastewater treatment requirements of the applicable Regional Water Quality Control Board;

- Requires or results 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 or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects;

- Has insufficient water supplies available to serve the project from existing entitlement and resources, and new or expanded entitlement is needed;

- Results in a determination by the wastewater treatment provider which serves or may serve the project that it does not have adequate capacity to serve the project's projected demand in addition to the provider's existing commitments;

- Is served by a landfill that does not have sufficient permitted capacity to accommodate the project's solid waste disposal needs; and/or

- Does not comply with Federal, State, and local statutes and regulations related to solid waste.

STORMWATER/WATER QUALITY

A significant impact would occur if the project would:

- Violate any water quality standards or waste discharge requirements.
- Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff.

Based on these standards, the effects of the proposed project have been categorized as either a "less than significant impact" or a potentially significant impact." Mitigation measures are recommended for potentially significant impacts. If a potentially significant impact cannot be reduced to a less than significant level through the application of mitigation, it is categorized as a significant and unavoidable impact.

5.8.3 IMPACTS AND MITIGATION MEASURES

FIRE PROTECTION

- **DEVELOPMENT ASSOCIATED WITH THE PROPOSED PROJECT WOULD RESULT IN AN INCREASED DEMAND FOR FIRE SERVICES.**

Level of Significance Prior to Mitigation: Potentially Significant Impact.

Impact Analysis: The proposed project would involve the construction of 358 residential units and 13,561 square feet of retail/gallery space, resulting in an increased need for fire protection services to the project site. As stated, Fire Stations 1, 2 and 3 currently serve the project site and surrounding area. The stations are located approximately one to two miles from the project site and have a current response time of one to four minutes, depending upon the responding fire station. Implementation of the proposed project would not impact the response time to the project site.

The proposed project would be required to comply with all Fire Prevention Bureau codes and regulations, including access, sprinklers, placement of fire hydrants and fire flows, in accordance with the City's *Municipal Code*. The LBFD would review the project to ensure compliance with all requirements and may impose additional requirements based on the scale and nature of the proposed project. The LBFD has advised that they would assess their ability to handle the increased occupant load to the downtown area and at this time does not anticipate that the project would result in the need for any new fire stations.[21] Therefore, no significant impacts would occur in this regard.

The proposed project would be required to provide emergency access to the site. Consistent with applicable building and fire codes, the proposed structures would be required to design adequate access by fire and emergency service vehicles and

[21] Steve Lewis (Deputy Chief of Operations), Long Beach Fire Department, December 20, 2005.

equipment. The project proposes relocating the exiting Bronce Way alley northward to the edge of the project site, which would serve as a one-way street. Additionally, Lime Avenue between Medio Street and Ocean Boulevard would be vacated. The project applicant would be required to obtain approval of the vacation from the City Council. Additionally, the City of Long Beach and LBFD would review any plans for the relocation, vacation and improvements of streets to ensure adequate emergency access or emergency response to the project site. LBFD's standard plan check review procedures and requirements would assure that potential impacts would be below thresholds for significance.

Construction activities could potentially affect emergency access to various locations within the project site on a short-term basis. However, the incorporation of temporary traffic controls in accordance with the City's requirements would reduce the potential short-term impacts to emergency access within the project area to a less than significant level. Additionally, prior to off-site construction activities, the project would be required to submit a construction plan for pedestrian protection, street lane closers, construction staging, shoring excavations and the routing of construction vehicles. Plans would require approval from the City Engineer, City Traffic Engineer, LBFD, LBPD, public utility agencies and Long Beach Transit, further reducing impacts to a less than significant level. To review project plans, the LBFD Fire Prevention Bureau would require a one-half full time equivalent (essentially a part-time position) Fire Inspector for a 24 month time frame, or until completion of the proposed project, commencing at the beginning of construction.

Following compliance with the City's standards/codes and/or conditions of approval set forth by the LBFD, payment of applicable development fees and taxes and implementation of recommended mitigation measures, impacts to fire protection services would be reduced to less than significant levels.

Mitigation Measures:

PSU-1 Prior to the issuance of building permits, the developer shall provide verification that the project complies with all Fire Prevention Bureau provisions required by the LBFD.

PSU-2 Prior to the commencement of construction activities, the applicant shall make a fair share contribution to the cost of obtaining a one-half full time equivalent (FTE) Fire Inspector for a 24-month time frame, or until completion of the proposed project.

PSU-3 Prior to the issuance of building permits, the developer shall provide verification that the proposed project would meet all fire flow requirements determined by the LBFD.

Level of Significance After Mitigation: Less Than Significant Impact.

POLICE PROTECTION

- **DEVELOPMENT ASSOCIATED WITH THE PROPOSED PROJECT WOULD RESULT IN AN INCREASED DEMAND FOR POLICE SERVICES.**

Level of Significance Prior to Mitigation: Potentially Significant Impact.

Impact Analysis: The proposed project would involve the construction of 358 residential units and 13,561 square feet of retail/gallery space, resulting in an increased need for police protection services to the project site. As stated, the South Division serves the project site and surrounding area. The LBPD currently maintains a response time of 4.2 minutes for priority one calls (immediate and/or life threatening) within the South Division, which complies with the LBPD goal of under five minutes for responding to priority one calls.

According to the LBPD, implementation of the proposed project would not result in significant impacts to police protection services and would not require additional staffing or facilities.[22] The LBPD would have adequate resources to serve the proposed project.

As previously stated, construction activities could potentially affect emergency access to various locations within the project site on a short-term basis. Incorporation of temporary traffic controls, in accordance with the City's requirements, would reduce the potential short-term impacts to emergency access within the project area to a less than significant level. As stated, the City of Long Beach, LBFD and LBPD would review plans for the relocation, vacation and improvements of streets within the area to ensure the proposed project would not interfere with emergency access or emergency response to the project site, resulting in a less than significant impact.

The LBPD would review site-specific development plans and provide recommendations for public safety and crime prevention. Recommendations may include, providing appropriate security lighting for proposed uses, including garages, clearly marked addresses and units, security systems and clear views of delivery areas, mailboxes and landscaped areas. Mitigation requiring compliance with recommended public safety and crime prevention measures would assist in reducing project-related calls for service.

Mitigation Measures:

PSU-4 Prior to issuance of building permits, the project developer shall incorporate the LBPD's required public safety and crime prevention measures, subject to the approval and verification of the Planning and Building Department.

Level of Significance After Mitigation: Less Than Significant Impact**.**

SCHOOLS

- **DEVELOPMENT ASSOCIATED WITH THE PROPOSED PROJECT WOULD INCREASE STUDENT ENROLLMENT WITHIN THE LONG BEACH UNIFIED SCHOOL DISTRICT.**

[22] Steven L. Ditmars (Lieutenant), Long Beach Police Department, Information Technology Division, March 3, 2006.

Level of Significance Prior to Mitigation: Potentially Significant Impact.

Impact Analysis: The proposed project would result in a net increase of residents to the project area. Although, the population growth would be consistent with SCAG's 2010 population projections for the City, the additional residents could place increased demands on local school facilities.

As stated, students within the project area would be within the service area of Chavez Elementary School, Franklin Middle School and Polytechnic High School. Based upon the generation rates provided by the LBUSD, Table 5.8-8, *Estimated Student Generation*, provides the number of students that could potentially be generated as a result of the proposed project. As indicated in Table 5.8-8, new residential development resulting from the proposed project would add a total of four elementary school students, two middle school students and two high school students to the LBUSD.

Table 5.8-8
Estimated Student Generation

School	Student Generation Factor Multi-Family[1]	Number of Multi-Family Units	Number of Students Generated From Project
K-6	0.013	295	4
7-8	0.005	295	2
9-12	0.005	295	2

Source: Carri M. Matsumoto (Executive Director), Long Beach Unified School District, October 18, 2005.

1 Student generation numbers are from the Long Beach Unified School District Development Impact Fee Nexus Study, May 10, 2004, as provided by Carri M. Matsumoto (Executive Director), Long Beach Unified School District, October 18, 2005.

As shown in Table 5.8-9, *Estimated Increase in School Enrollment*, this would result in a less than one percent increase in the number of students at Chavez Elementary School, Franklin Middle School and Polytechnic High School.

Table 5.8-9
Estimated Increase in School Enrollment

School	Capacity[1]	Enrollment[2]	Number of Students Generated From Project	Percent Increase in Enrollment
Chavez Elementary School	775	519	4	0.77
Franklin Middle School	1,704	1,270	2	0.16
Polytechnic High School	3,562	4,399	2	0.05

1 Capacity information provided by Cliff Bagget, Long Beach Unified School District, June 19, 2006.

2 Enrollment numbers as of September 23, 2005 provided by Carri M. Matsumoto (Executive Director), Long Beach Unified School District, October 18, 2005.

The proposed project would be required to pay fees to the LBUSD to compensate for the impacts of the residential and commercial development on local school capacities, in order to maintain adequate classroom seating and facilities standards. As stated, development of the proposed project is currently subject to developer fees of $2.24 per square foot for residential and $0.36 per square foot for commercial/ industrial uses.

Pursuant to SB 50, payment of fees to the LBUSD is considered full mitigation for project impacts, including impacts related to the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, or other performance objectives for schools. Therefore, the project applicant would be required to pay the statutory fees, so that space can be constructed, if necessary, at the nearest sites to accommodate the impact of project-generated students, reducing impacts to a less than significant level.

Mitigation Measures:

PSU-5 Prior to certificates of occupancy, the project applicant shall pay the required mitigation fees in place at time of payment to the LBUSD. Proof of payment shall be provided to the City of Long Beach.

Level of Significance After Mitigation: Less Than Significant Impact.

LIBRARIES

- **DEVELOPMENT ASSOCIATED WITH THE PROPOSED PROJECT WOULD RESULT IN AN INCREASED DEMAND FOR LIBRARY SERVICES.**

Level of Significance Prior to Mitigation: Less Than Significant Impact.

Impact Analysis: Development of the proposed project would result in a net increase of residents to the project area. The increase in residents may result in increased demand for library services. Although increased demand on library facilities may occur, the City of Long Beach Public Library and Information Center does not anticipate a significant impact to library operations as a result of the proposed project. It is expected that the library's current resources would be able to serve the proposed project. Additionally, the Long Beach Public Library has advised that it is currently addressing an increased demand for computer resources that currently exists within the City. Therefore, a less than significant impact is anticipated in this regard.

Mitigation Measures: No mitigation measures are required.

Level of Significance After Mitigation: Not applicable.

PARKS AND RECREATION

- **DEVELOPMENT ASSOCIATED WITH THE PROPOSED PROJECT WOULD RESULT IN AN INCREASED DEMAND FOR PARK AND RECREATION FACILITIES.**

Level of Significance Prior to Mitigation: Potentially Significant Impact.

Impact Analysis: Bixby Park and Cesar E. Chavez Park are the nearest neighborhood/community parks serving the project site. At this time, no future park sites have been identified within the neighborhood park service radius of the proposed project. Therefore, an existing impacted park would most conveniently serve many of the recreational needs of the proposed project residents.

The proposed project would result in a net increase of 295 residential units to the project site. Based upon typical City standards, there would be a need for 256,133 square feet (5.88 acres) of additional recreational open space for the project residents.[23] Further, based upon City standards, the increase in residents would result in the need for 0.15 acres of additional playground, 0.015 acres of additional swimming pool, 0.37 acres of additional basketball court, 0.10 acres of additional tennis court, 0.15 acres of additional football/soccer field, 0.15 acres of additional baseball/softball field and an additional 735 square feet of community recreation center building.[24] According to the Department of Parks, Recreation and Marine, the project would not be required to dedicate parkland as part of the proposed project to mitigate potential impacts.[25]

The project proposes recreational and leisure amenities for potential residents including a podium garden with a swimming pool, lawn, garden alcove and clubhouse. Additionally, the townhouse units fronting the terrace garden would have private yards. A workout room and gym would be situated on the first and second floors of the Gateway Tower and a lap pool and sun deck would be provided on the roof. Additionally, the project would incorporate passive open space areas, including an elliptical paseo and forecourt area. Provision of recreational amenities would reduce the demand on park and recreational facilities in the area.

Due to the scope and nature of the proposed project (i.e., high-rise residential within downtown Long Beach with on-site recreational amenities) and potential project residents, it is likely that demand for park and recreational facilities would be less than demand typically associated with single family and lower density multiple-family residential uses. The project site is located within proximity to several regional recreational facilities including beaches and marinas.

The Parks, Recreation and Marine Department acknowledges that the project is located within the Central Redevelopment Project Area and the Redevelopment

[23] Based upon a population increase of 735 additional residents as provided by Dennis Eschen (Manager of Planning and Development), City of Long Beach Department of Parks, Recreation and Marine, December 28, 2005.

[24] Dennis Eschen (Manager of Planning and Development), City of Long Beach Department of Parks, Recreation and Marine, December 28, 2005.

[25] *Ibid.*

Agency has funded the acquisition and development of parklands. Because the proposed project is within a redevelopment project area and contributes to the tax increment for the project area, future Redevelopment Agency contributions to parks and park facilities should be considered indirect mitigation.[26] While no future park sites have been identified within the one-mile neighborhood park service radius of the project site, the Redevelopment Agency has included in the Central Long Beach Redevelopment Project Area's budget more than $10.25 million for parks through Fiscal Year 2007; additional funding for parks is expected to be budgeted in future years. This funding is targeted at five recreational facilities within a three-mile radius of the project site: Drake Park expansion (1.7 miles), a future park at Alamitos and 15th Street (1.85 miles), Officer Daryle Black Memorial Park expansion (2 miles), Orizaba park expansion (3 miles) and California Recreation Senior Center (1.55 miles)

The proposed project would be required to pay park impact fees, as established by the City, to compensate for the impacts of the proposed project on park and recreational facilities, in order to maintain adequate recreation standards. According to the Parks, Recreation and Marine Department, payment of the fees would not fully mitigate the impact of the proposed project on park and recreational facilities.[27] However, the inclusion of on-site recreational amenities and payment of the park impact fees would reduce project impacts to below the significance threshold established for recreation and therefore project impacts would be less than significant.

Mitigation Measures:

PSU-6 Prior to certificates of occupancy, the project applicant shall pay the required park impact fees in place at time of payment to the City of Long Beach.

Level of Significance After Mitigation: Less Than Significant Impact.

WATER

- **DEVELOPMENT ASSOCIATED WITH THE PROPOSED PROJECT COULD CREATE DEMAND FOR WATER THAT EXCEEDS AVAILABLE SUPPLIES.**

Level of Significance Prior to Mitigation: Potentially Significant Impact.

Impact Analysis: Implementation of the proposed project would create additional demand for water. The project proposes 358 residential units and 13,561 square feet of retail/gallery space. As indicated in Table 5.8-10, *Proposed Project Water Demand*, the proposed project would create a demand of 92.18 AF/year, compared to an existing water demand of 20.38 AF/year.

The proposed water system would be required to support the fire flow as well as the Maximum Day Demand. Adverse pressures would need to be corrected by the

[26] *Ibid.*

[27] *Ibid.*

applicant's engineer under any flow condition. At the time of design, the applicant would be required to prove, to the satisfaction of the LBWD, that the additional flow would not impact the City water system.

Table 5.8-10
Proposed Project Water Demand

Land Use	Building Area (s.f.)	Dwelling Units (du)	Demand Factor[1]		Proposed Project Demand (AF/year)
			AF/year /du	AF/year/ 1 million s.f.	
Residential	--	358	0.249	--	89.14
Retail	13,561	--	--	224	3.04
Totals	**13,561**	**358**			**92.18**

s.f. = square feet; du = dwelling unit(s); AF = acre feet.

1 Demand factors based on Water Availability Assessment for the PacifiCenter @ Long Beach, Prepared by LBWD, December 2002.

The demand for potable water within the City of Long Beach is not expected to increase significantly over the next 15 years; however, the demand for less-expensive reclaimed water is expected to increase significantly as the distribution system is expanded. With the expansion of the reclaimed system, increase in conservation and acquisition of additional supply sources, it is anticipated that the LBWD will be able to successfully fulfill the future water demands of the City, including the proposed project.

The project proposes relocating the existing Bronce Way alley northward to the edge of the project site. Additionally, development of the project, as proposed, would require the vacation of a portion of Broadway Court located within the project site. According to the LBWD, the project would be required to pay the cost to relocate the existing water line in Bronce Way north of its present location and to relocate the existing water line in Broadway Court (between Bronce Way and Ocean Boulevard) to allow development of the project and maintain the hydraulic grid system.[28]

The project's water improvement plans would be submitted to and approved by the LBWD and LBFD. The project would be subject to all applicable LBFD requirements regarding fire flows to the project site. All on-site water facilities would be constructed in accordance with the Uniform Plumbing Code and City design standards. Additionally, prior to issuance of a connection permit, the project would be required to pay water connection fees according to the fee schedule in place at the time of permitting.

Compliance with all applicable State and City development requirements and construction of water-related facilities in accordance with the Uniform Plumbing Code and City design standards would ensure that impacts to water service and facilities are less than significant.

[28] Robert Villanueva, P.E., (Division Engineer), Long Beach Water Department, November 28, 2005.

Mitigation Measures:

PSU-7 Prior to the issuance of building permits, the applicant shall pay the fees required to relocate the existing water line in Broadway Court between Bronce Way and Ocean Boulevard and to relocate the existing water line in Bronce Way north of its present location.

PSU-8 Prior to the issuance of building permits, the applicant shall submit engineering studies to the LBWD verifying that adequate capacity exists to convey additional flow to the proposed project. If additional improvements are required, the applicant shall pay the necessary fees required for the water system improvements.

Level of Significance After Mitigation: Less Than Significant Impact.

WASTEWATER (SEWER)

- **DEVELOPMENT OF THE PROPOSED PROJECT WOULD GENERATE WASTEWATER THAT COULD EXCEED THE CAPACITY OF CONVEYANCE AND TREATMENT FACILITIES THAT SERVE THE PROJECT AREA.**

Level of Significance Prior to Mitigation: Potentially Significant Impact.

Impact Analysis: Project implementation would result in increased wastewater generated from the project site. The project proposes 358 residential units and 13,561 square feet of retail/gallery space. As indicated in Table 5.8-11, *Proposed Project Wastewater Generation*, the proposed project would generate approximately 78,966 gallons per day of wastewater, compared to existing wastewater generation of 19,795 gallons per day for a net increase of 59,171 gallons per day.

Table 5.8-11
Proposed Project Wastewater Generation

Land Use	Building Area (s.f.)	Dwelling Units (du)	Demand Factor[1]		Existing Generation gpd
			Gallons/day[2]	Gallons/tsf/day	
Residential	--	358	213	--	76,254
Retail/restaurant/office	13,561	--	--	200	2,712
Totals	**13,561**	**358**			**78,966**

s.f. = square feet; du= dwelling unit(s); tsf = thousand square feet; gpd = gallons per day.

1 Demand factors based on the Comprehensive Sewer System Master Plan and Management Program provided by the LBWD.

2 Demand factor for high-rise residential units.

At the time of design, the applicant would be required to prove, to the satisfaction of the LBWD, that the existing sewer mains would support the project. Wastewater generated by the proposed project would be treated at the JWPCP. The project

would be required to pay a connection fee to mitigate impacts of the project on the sewerage system, reducing impacts to a less than significant level.

The legally permitted levels of sewer service are contingent upon the available capacity of the Districts' treatment facilities, which is in turn limited to levels associated with approved growth identified by SCAG. The wastewater flow associated with the proposed project is not anticipated to exceed levels associated with approved growth, as identified by SCAG's regional growth forecasts; refer to Section 6.0.

Development of the project, as proposed, would encroach into the existing sewer line located within Broadway Court (between Bronce Way and Ocean Boulevard). According to the LBWD, this sewer line would be abandoned and the project would be required to pay the fees necessary to construct a new sewer manhole on a portion of the remaining existing sewer line.[29] The applicant's engineer would be required to prove that the City's sewer system has adequate capacity to accept the additional sewage flow.

Compliance with existing State and City development requirements would ensure that adequate and sufficient wastewater service is provided to the proposed project. The project's sewer improvement plans would be reviewed by the City's Water Department. All on-site sewer facilities would be constructed in accordance with the Uniform Plumbing Code and City design standards. Additionally, prior to issuance of a connection permit, the project Applicant would be required to pay sewer connection fees according to the fee schedule in place at the time of permitting.

Compliance with all applicable State and City development requirements and construction of wastewater-related facilities in accordance with the Uniform Plumbing Code and City design standards would ensure that impacts regarding wastewater service and facilities are less than significant.

Mitigation Measures:

PSU-9 Prior to the issuance of building permits, the developer shall pay the fees required to construct a new sewer manhole on a portion of the remaining Broadway Court sewer line.

PSU-10 Prior to issuance of building permits, the project applicant shall provide evidence that the County Sanitation Districts of Los Angeles County has sufficient wastewater transmission and treatment plant capacity to accept sewage flows from the buildings for which building permits are being requested.

PSU-11 Prior to the issuance of building permits, the project applicant shall provide engineering studies to the LBWD verifying that the sewer system has adequate capacity to serve the project. If additional improvements are required, the applicant shall pay the necessary fees required for the sewer system improvements.

[29] *Ibid.*

Level of Significance After Mitigation: Less Than Significant Impact.

ELECTRICITY

- **DEVELOPMENT ASSOCIATED WITH THE PROPOSED PROJECT WOULD RESULT IN AN INCREASED DEMAND FOR ELECTRIC SERVICES.**

Level of Significance Prior to Mitigation: Less Than Significant Impact.

Impact Analysis: Implementation of the proposed project would result in an increased demand for electricity service to the project site. As indicated in Table 5.8-12, *Proposed Project Electricity Consumption*, the proposed project would consume approximately 2,198 megawatt-hours per year of electricity. This represents 0.002 percent of SCE's annual power deliveries in 2010, which is not considered a significant impact.

Table 5.8-12
Proposed Project Electricity Consumption

Land Use	Building Area (s.f.)	Dwelling Units (du)	Usage Factor[1]	Electricity Consumption (MWh/year)
Residential	--	358	5,626.5 kWh/du/year	2,014.3
Retail/Gallery	13,561	--	13.55 kWh/s.f./year	183.7
Total	**13,561**	**358**		**2,198**

s.f. = square feet; du = dwelling unit(s); MWh = megawatt-hour; KWh = kilowatt-hour.

1 Usage factors are from South Coast Air Quality Management District *CEQA Air Quality Handbook*, April 1993.

Although the total system demand is expected to increase annually, SCE has indicated that their plans for new distribution resources would be adequate to serve all customer loads in accordance with SCE rules and tariffs.[30] Additionally SCE has advised that the electrical loads associated with the proposed project are within the parameters of projected load growth, which SCE is planning to meet in the project area.[31] The project applicant would be responsible for the costs associated with any new facilities and/or relocation of existing SCE facilities to accommodate the proposed project. The project's electrical distribution plans would be submitted to and approved by SCE and all electrical facilities would be constructed in accordance with SCE and City design standards. Thus, impacts would be less than significant in this regard.

Mitigation Measures: No mitigation measures are required.

Level of Significance After Mitigation: Not applicable.

[30] Jim Matthei (Service Planner), Southern California Edison, January 5, 2006.

[31] *Ibid.*

NATURAL GAS

- **DEVELOPMENT ASSOCIATED WITH THE PROPOSED PROJECT WOULD INCREMENTALLY INCREASE DEMANDS ON NATURAL SUPPLIES AND DISTRIBUTION INFRASTRUCTURE.**

Level of Significance Prior to Mitigation: Less Than Significant Impact.

Impact Analysis: Implementation of the proposed project would result in an increased demand for natural gas service to the project site. As indicated in Table 5.8-13, *Proposed Project Natural Gas Consumption*, the proposed project would consume approximately 1,475,443.9 cubic feet of natural gas per month. This represents 0.0032 percent of Long Beach Energy's daily capacity, which is not considered a significant impact.

Table 5.8-13
Proposed Project Natural Gas Consumption

Land Use	Building Area (s.f.)	Dwelling Units (du)	Usage Factor[1]	Natural Gas Consumption (cf/month)
Residential	--	358	4,011.5 cf/du/month	1,436,117
Retail/Gallery	13,561	--	2.9 cf/s.f./month	39,326.9
Total	**13,561**	**358**		**1,475,443.9**

s.f. = square feet; du = dwelling unit(s); cf = cubic feet.

[1] Usage factors are from South Coast Air Quality Management District *CEQA Air Quality Handbook*, April 1993.

Although demand for natural gas would increase as a result of the proposed project, Long Beach Energy would have sufficient supplies to support the increased demand, resulting in a less than significant impact. Additionally, gas service, including any new facilities, would require coordination with Long Beach Energy. The project applicant would be responsible for the costs associated with any new facilities and/or relocation of existing facilities to accommodate the proposed project. The project's natural gas distribution plans would be submitted to and approved by the City and all facilities would be constructed in accordance with the City's design standards. Thus, impacts would be less than significant in this regard.

Mitigation Measures: No mitigation measures are required.

Level of Significance After Mitigation: Not applicable.

SOLID WASTE

- **DEVELOPMENT ASSOCIATED WITH BUILDOUT OF THE PROPOSED PROJECT WOULD GENERATE SOLID WASTE THAT WOULD INCREMENTALLY DECREASE THE CAPACITY AND LIFESPAN OF LANDFILLS.**

Level of Significance Prior to Mitigation: Potentially Significant Impact.

Impact Analysis: The proposed project would require demolition of approximately 49,270 square feet of existing facilities during construction. Site preparation (vegetation removal and grading activities) and construction activities would generate typical construction debris, including wood, paper, glass, plastic, metals, cardboard, and green wastes. Construction activities could also generate hazardous waste products. The wastes generated would result in an incremental and intermittent increase in solid waste disposal at landfills and other waste disposal facilities within Los Angeles County, resulting in a potentially significant impact.

As shown in Table 5.8-14, *Proposed Project Solid Waste Generation (No Recycling)*, implementation of the proposed project would generate a total of 2,056 lbs/day of solid waste, or 375 tons/year before recycling and other waste diversion activities.

The project currently generates approximately 759 pounds of solid waste per day. Therefore, the proposed project would result in a net increase in solid waste generation of 1,297 pounds per day or 236.7 tons per year. This represents approximately 0.04 percent of the City's solid waste disposed of per year. The proposed project would be required to comply with applicable State and local regulations, thus reducing the amount of landfill waste by at least 50 percent.

Table 5.8-14
Proposed Project Solid Waste Generation (No Recycling)

Land Use	Building Area (s.f.)	Dwelling Units	Demand Factor[1]		Proposed Generation (Pounds/day)
			Pounds/ du/ day	Pounds/ s.f./ day	
Residential	-	358	4	-	1,432
Retail/Gallery	13,561	-	-	0.046	624
Totals	**13,561**	**358**			**2,056**

s.f. = square feet; du = dwelling unit(s).

[1] Demand factor obtained from the California Integrated Waste Management Board, Estimated Solid Waste Generation Rates (www.ciwmb.ca.gov), Retrieved March 3, 2006.

The landfills serving the project area have available permitted capacity, and therefore would accommodate the proposed project's solid waste disposal needs. Specifically, as depicted in Table 5.8-6, the landfills serving the City have a daily permitted tonnage of 103,440 tons per day. The proposed project would represent 0.00099 percent of the total daily permitted tonnage. With implementation of recommended mitigation measures as well as compliance with Federal, State and local statutes or regulations, a less than significant impact would occur.

Mitigation Measures:

PSU-12 The project applicant shall adhere to all source reduction programs for the disposal of construction materials and solid waste, as required by the City

of Long Beach. Prior to issuance of building permits, a source reduction program shall be prepared and submitted to the Environmental Services Bureau for each structure constructed on the subject property to achieve a minimum 50 percent reduction in waste disposal rates.

PSU-13 The applicant shall comply with all applicable City, County and State regulations and procedures for the use, collection and disposal of solid and hazardous wastes.

Level of Significance After Mitigation: Less Than Significant Impact.

STORMWATER/WATER QUALITY

- **DEVELOPMENT OF THE PROPOSED PROJECT MAY INCREASE RUNOFF FROM THE PROJECT SITE, RESULTING IN IMPACTS TO WATER QUALITY.**

Level of Significance Prior to Mitigation: Potentially Significant Impact.

Impact Analysis: Impacts related to water quality would range over three different periods: 1) during the earthwork and construction phase, when the potential for erosion, siltation and sedimentation would be the greatest; 2) following construction, prior to the establishment of ground cover, when the erosion potential may remain relatively high; and 3) following completion of the project, when impacts related to sedimentation would decrease markedly, but those associated with urban runoff would increase.

Construction of the proposed project has the potential to produce typical pollutants such as nutrients, suspended solids, heavy metals, pesticides and herbicides, toxic chemicals related to construction and cleaning, waste materials (including wash water), paints, wood, paper, concrete, food containers, sanitary wastes, fuel and lubricants. The project would be required to comply with the City's *Municipal Code* which requires construction plans for the project to include features that would meet the applicable construction BMPs and erosion and sediment control BMPs.

Additionally, the project would be required to comply with Chapter 18.95, NPDES and SUSMP Regulations, of the City's *Municipal Code*, which establishes regulations to "effectively prohibit non-storm water discharges into the storm drain systems or watercourses and controls to reduce the discharge of pollutants into the storm water to the maximum extent practicable." In accordance with the *Municipal Code*, a SWPPP is required to be prepared for construction projects of one or more acres. The SWPPP would include appropriate construction site BMPs. Water quality impacts would be less than significant in this regard.

A reduction in permeable surfaces would be considered to be a water quality impact because permeable surfaces allow for rain and runoff to infiltrate into the ground. The project proposes development of residential and ground floor retail/gallery and civic space uses. As the site is currently developed with residential, retail, restaurant, office and parking uses, the amount of impervious surfaces would not be significantly altered as a result of project implementation. It is expected that the net change in impervious area and associated runoff flow volumes resulting from project

implementation would not result in significant surface drainage impacts on- or off-site. Additionally, the project would be required to submit hydrology and hydraulic calculations for approval by the City, further reducing impacts to a less than significant level.

Mitigation Measures:

PSU-14 A Storm Water Pollution Prevention Plan (SWPPP) shall be completed for the construction activities on-site and submitted to the Department of Public Works, Engineering Bureau for review and approval. A copy of the SWPPP shall be available and implemented at the construction site at all times. The SWPPP shall outline the source control and/or treatment control BMPs to avoid or mitigate runoff pollutants at the construction site to the maximum extent practicable.

Level of Significance After Mitigation: Less Than Significant Impact.

5.8.4 CUMULATIVE IMPACTS

- **DEVELOPMENT ASSOCIATED WITH THE PROPOSED PROJECT AND OTHER RELATED CUMULATIVE PROJECTS COULD RESULT IN CUMULATIVELY CONSIDERABLE PUBLIC SERVICES AND UTILITIES IMPACTS.**

Level of Significance Prior to Mitigation: Less Than Significant Impact.

Impact Analysis: Development within the City associated with the proposed project and related cumulative projects identified in Section 4.0, *Cumulative Projects*, would not result in significant cumulative impacts to public services and utilities.

FIRE PROTECTION

Development of the project and related cumulative projects would result in new residential, retail, hotel, restaurant, institutional and parking uses to the area. Additionally, several of the related cumulative projects include high-rise structures within the downtown. The increase in population and density would significantly increase the demand on fire protection services to the area. The LBFD would assess their ability to serve development projects within the City on a project-by-project basis. Individual projects would be required to comply with the City's standards/codes and/or conditions of approval set forth by the LBFD and any recommended mitigation measures applicable to the project. The LBFD has advised that the proposed project would not result in significant impacts to fire protection services. Therefore, development of the proposed project would not result in significant cumulative impacts in regards to fire protection services.

POLICE PROTECTION

As stated, development of the project and related cumulative projects would result in new residential, retail, hotel, restaurant, institutional and parking uses to the area. The increase in population and density would significantly increase the demand on

police protection services to the area. The LBPD would assess their ability to serve development projects within the City on a project-by-project basis. Individual projects would be required to comply with the City's standards/codes and/or conditions of approval set forth by the LBPD and any recommended mitigation measures applicable to the project. The LBPD has advised that the proposed project would not result in significant impacts to police protection services. Therefore, development of the proposed project would not result in significant cumulative impacts in regards to police protection services.

SCHOOLS

Development of the proposed project and related cumulative projects would potentially generate new students to the City. Individual development projects would be required to pay school impact fees based on the type and size of development proposed. Pursuant to SB 50, payment of fees to the LBUSD is considered full mitigation for project impacts, including impacts related to the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, or other performance objectives for schools. Therefore, individual project applicants would be required to pay the statutory fees, so that space can be constructed, if necessary, at the nearest sites to accommodate the impact of project-generated students. Therefore, development of the proposed project would not result in significant cumulative impacts in regards to school services and facilities.

LIBRARIES

Development of the proposed project and related cumulative projects would result in increased demand to library facilities within the City. The Long Beach Public Library has advised that the proposed project would not result in significant impacts to library services and facilities. Therefore, the proposed project would not contribute to cumulative impacts in regards to library services and facilities.

PARKS AND RECREATION

Park and recreation facilities within the project area are currently deficient. Development of the proposed project and related cumulative projects would further contribute to the existing parkland deficiency. Although individual projects would be required to pay park impact fees, the City has advised that payment of these fees would not fully mitigate impacts on existing facilities. However, the inclusion of on-site recreational amenities and payment of park impact fees would reduce project impacts to a less than significant level. Residential developments within the downtown are anticipated to include recreational amenities and would be required to pay park impact fees. The inclusion of recreational amenities into the development of related cumulative projects would be assessed on a project-by-project basis. Therefore, the proposed project would not contribute to cumulative impacts in regards to park and recreation facilities.

WATER

At the time of project design, the applicant would be required to prove to the LBWD that the additional flow would not impact the water system or provide adequate funds for necessary improvements to the water system. The City's UWMP takes into account the future water demands of proposed development projects based on housing, population and employment growth forecasts for the City. Adequate water supply would be available in normal and dry years to serve the proposed project. Water availability for individual development projects would be determined on a case-by-case basis. In accordance with SB 610, a water supply assessment would be required for projects exceeding established development thresholds. The LBWD would review site-specific development plans to determine the impact on existing water mains. Individual projects would be required to pay the cost to relocate existing water mains impacted by new development. Development of the proposed project would not result in significant cumulative impacts in regards to water services.

WASTEWATER (SEWERS)

At the time of project design, the applicant would be required to prove to the LBWD that the additional flow would not impact the sewer system or provide adequate funds for necessary improvements to the sewer system. Due to this requirement, the proposed project would not result in significant impacts to wastewater service and facilities. It is anticipated that the existing network of sewer mains would be able to support the proposed project and related cumulative projects. The legally permitted levels of sewer service are contingent upon the available capacity of the Districts' treatment facilities, which is in turn limited to levels associated with approved growth identified by SCAG. The wastewater flow associated with the proposed project and related cumulative projects are not anticipated to exceed levels associated with approved growth, as identified by SCAG's regional growth forecasts. The proposed project and related cumulative projects would be required to pay a connection fee to mitigate impacts of the development on the sewerage system.

The LBWD would review site-specific development plans to determine the impact on existing sewer mains. Individual projects would be required to pay the cost to relocate existing sewer mains impacted by new development. Development of the proposed project would not result in significant cumulative impacts in regards to wastewater services.

ELECTRICITY

Electrical loads of the proposed project and related cumulative projects are within the parameters of projected load growth, which SCE is planning to meet in the area. All electrical lines and other system improvements would be installed, in whole or in part, at the expense of development project applicants, and would serve to avoid adverse impacts to the electricity distribution system.

Although the proposed project and related cumulative projects would create additional demands on electricity supplies and distribution infrastructure, these demands are within the service capabilities of SCE. Thus, cumulative impacts would be less than significant.

NATURAL GAS

Implementation of the proposed project would not result in significant impacts as a result of increased demand for natural gas. Long Beach Energy has the capacity to deliver over 155 million cubic feet (cf) of natural gas per day and existing gas lines are located within the area. Although development of the proposed project and related cumulative projects would result in increased demand for natural gas, the demand would be within existing capacity. Due to lot consolidations and various development projects occurring within the area, Long Beach Energy is currently in the process of relocating gas lines from alleyways into roadways. Where necessary, natural gas distribution pipelines would be installed or upsized to serve development associated with the proposed project and related cumulative projects at the expense of the project applicants. The proposed project would not result in significant cumulative impacts in this regard.

SOLID WASTE

Development associated with the proposed project and related cumulative projects would contribute to the reduction of landfill capacity within the County. Although the proposed project would not significantly impact existing landfill capacity, the increase in solid waste generation from the project and related cumulative projects together, could significantly impact the finite resources associated with solid waste disposal. The proposed project and related cumulative projects would be required to meet current recycling goals, reducing the amount of solid waste requiring disposal at landfills. The proposed project would not result in significant cumulative impacts in this regard.

STORMWATER/WATER QUALITY

Development associated with the proposed project and related cumulative projects could result in significant stormwater runoff and water quality impacts. The proposed project and related cumulative projects would be required to comply with the City's *Municipal Code*, which establishes regulations to "effectively prohibit non-storm water discharges into the storm drain systems or watercourses and controls to reduce the discharge of pollutants into the storm water to the maximum extent practicable." In accordance with the *Municipal Code*, a SWPPP is required to be prepared for construction projects of one or more acres. The SWPPP would include appropriate construction site BMPs. The proposed project and related cumulative projects would be required to submit hydrology and hydraulic calculations to the City for review and approval. Projects would be evaluated on a case-by-case basis and mitigation would be developed as appropriate. The proposed project would not result in significant cumulative impacts in this regard.

Mitigation Measures: No mitigation measures are recommended.

Level of Significance After Mitigation: Not applicable.

5.8.5 SIGNIFICANT UNAVOIDABLE IMPACTS

Implementation of the proposed Shoreline Gateway Project would not result in significant unavoidable impacts to public services and utilities for project buildout and cumulative conditions.