III.L. UTILITIES AND SERVICE SYSTEMS

The purpose of this section is to assess the potential impacts to utilities and service systems serving the project site, including the local sewer system, regional wastewater treatment facilities, solid waste disposal facilities, and energy consumption. Demand generation for the proposed project were calculated based on rates presented in the Los Angeles CEQA Thresholds Guide (City of Los Angeles 2006), and rates provided or used by other agencies including the City of Los Angeles Bureau of Sanitation and South Coast Air Quality Management District (SCAQMD).

EXISTING CONDITIONS

WASTEWATER

The City of Los Angeles Department of Public Works Bureau of Sanitation (LABS) provides sewer conveyance infrastructure and wastewater treatment services to the project site. The LABS operates four treatment and water reclamation plants that serve over four million people. These facilities include the Hyperion Treatment Plant (HTP), Terminal Island Treatment Plant, Donald C. Tillman Water Reclamation Plant, and the Los Angeles-Glendale Water Reclamation Plant.

Wastewater generated by the project site would be treated at the Hyperion Treatment Plant (HTP). The HTP, which has been designed to treat 450 million gallons per day (mgd) and currently treats an average of about 362 mgd to primary and secondary treatment standards, using three levels of filtration treatment before discharging the treated wastewater five miles offshore.[1] The remaining capacity of the HTP is, therefore, approximately 88 mgd.

The Bureau of Sanitation Wastewater Engineering Services Division (WESD) is charged with the task of evaluating the local sewer conditions and to determine if available wastewater capacity exists for future developments. The evaluation will determine cumulative sewer impacts and guide the planning process for any future sewer improvements projects needed to provide future capacity as the City of Los Angeles grows and develops.[2]

Local Sewer System

The existing property and building facilities are serviced through an on-site sewer network. The sewer network is comprised of 8-inch vitrified clay pipes (VCP). The Los Angeles Times building connects to the sewer network at three known locations. The existing “fire service” building connects at the most westerly point of the sewer network. The 8-inch on-site sewer line flows east to Manhole #39111053, a City of Los Angeles owned and maintained structure located within a utility easement. This manhole discharges to a City of Los Angeles 8-inch VCP line, which then connects to a 10-inch sewer main located in Oakdale Avenue, east of the project property.

It should be noted that although the project property is only serviced by the sewer main described above, two separate sewer mains are located within the vicinity of the property. The first sewer system is located in Prairie Street. The sewer main begins north of Prairie Street on

[1] http://www.lacitysan.org/wastewater/index.htm Accessed June 26, 2014.
[2] Correspondence received from the City of Los Angeles, Bureau of Sanitation, May 23, 2014.

Penfield Avenue as an 8-inch main and which flows south to Prairie Street, then east on Prairie Street. This sewer system ultimately flows to the 10-inch sewer main located in Oakdale Avenue, described above. The second sewer main fronting the project property is located on Winnetka Avenue as a 21- inch VCP. The sewer main originates north of Prairie Street then flows south along Winnetka Avenue.[3]

The existing uses on the project site currently discharge wastewater into the existing sewer system. **Table III.L-1**, below, shows the wastewater generated from the existing uses on-site would be less than the measured water use from LADWP billing data. The project site is currently only lightly occupied and sewage generation is unknown but anticipated to be relatively minimal. Therefore, for purposes of this EIR, in the interests of presenting a conservative analysis zero existing generation is assumed.

TABLE III.L-1
EXISTING WASTEWATER GENERATION

Use	Unit Count/Size	Average Daily Flow per Type Description (GPD/UNIT)	Average Daily Flow (GPD)
Auto Parking	192,393 GSF	20/1,000 GSF	*
Manufacturing/Industrial	255,815 GSF	50/1,000 GSF	*
		TOTAL	**<14,217**

* Number is for water demand from LADWP billing data; some of this demand is be for irrigation and will not enter the sewers.
SOURCE: Flow rates are from correspondence from the City of Los Angeles Bureau of Sanitation, May 23, 2014; water use from Water Supply Assessment, September 2, 2014 (see **Appendix J**).

The current approximate flow level and 50 percent design capacity of the sewer system is shown in **Table III.L-2**.

TABLE III.L-2
EXISTING FLOW AND DESIGN CAPACITY OF THE LOCAL WASTERWATER CONVEYANCE SYSTEM SERVING THE PROJECT SITE

Pipe Diameter (inches)	Pipe Location	Current Gauging (Percent in use)	50 Percent Design Capacity (GPD)
8	Prairie Street	35	307,669
8	Oakdale Avenue Right-of-Way	33	362,591
12	Nordhoff Place	22	907,110
18	Nordhoff Street	23	1,993,427
18	Tampa Avenue	20	2,819,132

SOURCE: Correspondence received from the City of Los Angeles, Bureau of Sanitation, May 23, 2014.

WATER SUPPLY

The City of Los Angeles Department of Water and Power (LADWP) is responsible for ensuring that water demand in the City is met and that State and federal water quality standards are achieved. City of Los Angeles water supplies are derived from the following sources: 1) approximately 36 percent from the Los Angeles Aqueduct; 2) approximately 12 percent from groundwater and recycled water; and 3) approximately 52 percent from purchases from the

[3] Sewer & Water Infrastructure Summary, Hall & Foreman, Inc., 2014. See Appendix I.

Metropolitan Water District (MWD).[4] The amount of water obtained from these sources varies from year to year, and is dependent on weather conditions and demand. In addition, reclamation of wastewater is utilized for certain irrigation purposes.

In response to water supply uncertainties, including those impacting the MWD, the City and LADWP released a Water Supply Action Plan (Action Plan) on May 17, 2008. The plan, entitled "Securing L.A.'s Water Supply," serves as a blueprint for creating sustainable sources of water for the future of Los Angeles to reduce dependence on imported supplies.[5] The Action Plan's approach includes the following:

- investments in state-of-the-art technology;
- a combination of rebates and incentives;
- the installation of smart sprinklers,
- efficient washers and urinals;
- and long-term measures such as expansion of water recycling and investment in cleaning up the local groundwater supply.

The Action Plan also takes into account the realities of climate change and the dangers of drought and dry weather. (See Appendix H-MWD and LADWP Plans and Programs to Secure Future Water Supplies for further detail.)

Water Storage is essential for LADWP to supply water during high demand conditions and for firefighting and emergencies. The City Water System includes 104 tanks and reservoirs ranging in size from 10,000 to 60 billion gallons with a total capacity of 109 billion gallons.[6] In addition to state regulation, LADWP has instituted its own water conservation measures, including:

- "The Emergency Water Conservation Plan of the City of Los Angeles" (LAMC Sections 121.00-121.11) – Provides for the implementation for citywide phases water conservation program to respond to dry weather periods based on the LADWP's evaluation of the projected supply and demand of City water supplies. The phased conservation program provides for mandatory water conservation measures at the user level and customer curtailment of normal water usage.

- "Water Closet, Urinal, and Showerhead Regulations" (LAMC Sections 122.00-122.10) – Reduces Water Consumption by requiring new buildings to include water conservation fixtures, such as ultra-low flush toilets, urinals, taps, and showerheads and plumbing fixtures that reduce water loss from leakage in order to obtain City building permits.

- "The Landscape Ordinance" (Ordinance No. 170,978) Includes provisions requiring xeriscaping (i.e., the use of low maintenance, drought resistant plants).

Local Water System

There are currently two 12-inch water mains fronting the project site along Winnetka Avenue and Prairie Street. Service is currently obtained from Prairie Street via a 12-inch service lateral to a 6-inch water meter. After the water meter, service is split between fire and domestic water.

[4] City of Los Angeles Department of Water and Power, 2010 Urban Water Management Plan.
[5] City of Los Angeles. MWD and LADWP Plans and Programs to Secure Future Water Supplies, Appendix H.
[6] City of Los Angeles, Draft L.A. CEQA Thresholds Guide, 2006.

The domestic water line is reduced to an 8-inch service line connecting the existing LA Times facility and the existing "garage" located west of the main building.[7]

The existing water use on the project site is shown in **Table III.L-3 (**based on water billing data).

TABLE III.L-3
EXISTING WATER USE

Existing Use	Unit Count/Size (Units/GSF)	Water Demand Rate (GPD per Unit/GSF)	Total Water Demand (GPD)
Auto Parking	192,393		*
Manufacturing/Industrial	255,815		*
Landscaping	418,895		*
		TOTAL	**14,217**

* breakdown of existing water use is not available from billing data.
SOURCE: Water Supply Assessment, September 2, 2014

Activity on the project site is currently limited, and therefore, water use is minimal and limited to incidental use and landscape maintenance. In addition, it should be noted that much of the on-site landscaping is mature and irrigation use is minor.

SOLID WASTE

Within the City of Los Angeles, the Los Angeles Bureau of Sanitation (LABS) administers solid waste management, including collection and disposal services and landfill operation. The LABS collects single-family residential and limited multi-family residential refuse. Private contractors collect waste generated by most multi-family residential sources and all commercial and industrial sources. Construction waste is also collected by private contractors.

Waste disposal sites, or landfills, are operated by both the City and the County of Los Angeles (County) as well as by private companies. In addition, transfer stations are utilized to temporarily store debris until larger hauling trucks are available to transport the materials directly to the landfills. A materials recovery facility or materials reclamation facility (MRF) is a specialized plant that receives, separates and prepares recyclable materials for marketing to end-user manufacturers. Landfill availability is limited by several factors, including: (1) restrictions to accepting waste generated only within a landfill's particular jurisdiction and/or watershed boundary; (2) tonnage permit limitations; and (3) operational constraints.

Sunshine Canyon Landfill, located in Sylmar, has been handling the solid waste disposal needs for City and County of Los Angeles residents for approximately 50 years. The Sunshine Landfill is jointly operated by the City and the County (each operates separate portions of the landfill). In December 1999, the City approved Ordinance 172,933, which amended the Los Angeles Municipal Code to allow the City to expand the Sunshine Canyon Landfill and combine the City and County portions of the landfill.[8] The plan (approved in Ordinance 172,933) allows the City to: (1) work with the County to combine the City and County portions of the landfill;[9] (2) expand the landfill footprint to 194 acres in the City and 257 acres in the County; (3) increase capacity to 55 million tons in the City portion and increase the combined capacity of the City/County landfill to 90 million tons; (4) permit a daily maximum intake of 5,500 tons per day to the

7 Sewer & Water Infrastructure Summary, Hall & Foreman, Inc., 2014.
8 City of Los Angeles Ordinance 172,933 and its [Q] Qualified Conditions of Approval, December 10, 1999.
9 Ibid.

combining of the City and County portions of the landfill; (5) permit a combined City/County daily maximum intake of 11,000 tons following combining the City and County portions of the landfill; and (6) extend the estimated closure date to approximately 2029.[10] The City approved, and the California Integrated Waste Management Board (CIWMB) has concurred with, the solid waste facility permit for Phase I of that plan, which initially permits a maximum capacity of 17 million tons.[11] According to the permit, the maximum permitted capacity is 37,315,352 cubic yards. The maximum daily permitted throughput of the Sunshine Canyon landfill is 12,100 tons per day, although the average daily intake is approximately 6,000-7,000 tons per day.

On July 7, 2008, the California Integrated Waste Management issued a new solid waste facilities permit for the Sunshine Canyon City/County Landfill.[12] The permit allows a maximum daily permitted tonnage of 12,100 and has a design capacity of 140,900,000 cubic yards. According to the permit, the estimated closure date for the landfill is 2037.

The existing solid waste generation on the project site is shown in **Table III.L-4** and assumes full occupancy.

TABLE III.L-4
CALCULATED SOLID WASTE – EXISTING USE

Use	Unit Count/Size GSF	Generation Rate (Lbs./Unit/Day)	Solid Waste (Lbs./Day)
Auto Parking	192,393	Not Applicable	Not Applicable
Manufacturing/Industrial	255,815	62.5/1,000 GSF	15,988
		TOTAL	**15,988**

SOURCE: CalRecycle, Solid Waste Generation Factors, 2014. Sirius Environmental 2014. http://www.calrecycle.ca.gov/WASTECHAR/WasteGenRates/Industrial.htm. Accessed June 25, 2014.

However, the project site is currently only lightly occupied and solid waste generation is unknown but anticipated to be relatively minimal. Therefore, for purposes of this EIR, in the interests of presenting a conservative analysis zero existing solid waste generation is assumed.

ENERGY

Electricity

Energy consumption including electricity, by new buildings in California, is regulated by the State Building Energy Efficiency Standards, embodied in Title 24 of the California Code of Regulations (CCR). The efficiency standards apply to new construction of both residential and non-residential buildings, and regulate energy consumed for heating, cooling, ventilation, water heating, and lighting. The building efficiency standards are enforced through the local building permit process. Local government agencies may adopt and enforce energy standards for new buildings, provided that these standards meet or exceed those provided in Title 24 guidelines.

[10] City of Los Angeles, Draft Subsequent Environmental Impact Report Sunshine Canyon Landfill, July 1997.
[11] California Integrated Waste Management Board, Facility Site Summary Details, http://www.ciwmb.ca.gov/SWIS/detail.asp?PG-DET&SITESCH=19-AA-0853&OUT=html, accessed on June 26, 2014.
[12] http://www.ciwmb.ca.gov/PermitToolbox/Notices/SunshineCnyn/Permits/July7Issued.pdf. Accessed June 26, 2014.

The LADWP supplies nearly 22 billion kilowatt (kW) hours of electricity a year for the city's 1.4 million electric customers.[13] The utility was established more than 100 years ago to provide water and electric needs to the City's businesses and residents. LADWP serves a 465-square-mile area and is the largest municipal utility in the nation. In total, LADWP operates 20 receiving stations and 174 distribution stations to provide electricity to LADWP customers, with additional facilities to be acquired as their load increases.

An existing overhead system located along Winnetka Avenue serves the project site. The current on-site electric facilities are provided from this overhead system to an off-site riser pole, which feeds an underground distribution system servicing the site.

The existing electricity consumption of the project site is shown in **Table III.L-5** and assumes full occupancy.

TABLE III.L-5
CALCULATED ELECTRICAL CONSUMPTION – EXISTING USE

Use	Unit Count/Size	Consumption Rate (kWh/GSF/year)	Electrical Consumption (kWh/ year)
Auto Parking (lighting)	192,393 GSF	*	*
Manufacturing/Industrial	255,815 GSF	5.3 kWh/GSF/Year	1.36 million
		TOTAL	**1.36 million**

***Note:** Consumption for parking lot is assumed in manufacturing/industrial total.
SOURCE: *AQMD Handbook for Preparing EIRs, rev. April 1993, South Coast Air Quality Management District.*

However, the project site is currently only lightly occupied and electrical use is unknown but anticipated to be relatively minimal. Therefore, for purposes of this EIR, in the interests of presenting a conservative analysis zero existing electrical use is assumed.

Natural Gas

The Gas Company, the nation's largest natural gas supplier, distributes natural gas to 19.5 million residential, commercial, and industrial customers throughout southern California. The Gas Company owns and operates 95,000 miles of gas distribution mains and service lines, as well as nearly 3,000 miles of transmission and storage pipeline. The utility also owns gas transmission stations and underground storage facilities. A 3-inch Medium Pressure pipe exist (PD 44039) along Prairie Street and serves the project site.[14]

The existing natural gas consumption of the project site is shown in **Table III.L-6** and assumes full occupancy.

[13] Los Angeles Department of Water and Power Website: https://www.ladwp.com/ladwp/faces/ladwp/aboutus/a-power/a-p-factandfigures?_adf.ctrl-state=15he93ohgu_4&_afrLoop=4818274990706. Accessed on June 26, 2014.

[14] Correspondence from The Gas Company, 2014.

TABLE III.L-6 CALCULATED NATURAL GAS CONSUMPTION – EXISTING USE			
Use	**Unit Count/Size**	**Consumption Rate (CF/GSF/Month)**	**Natural Gas Consumption (CF/Month)**
Auto Parking	192,393 GSF	Not Applicable	Not Applicable
Manufacturing/Industrial	255,815 GSF	3.3	844,190
		TOTAL	**844,190**
SOURCE: *AQMD Handbook for Preparing EIRs, rev. April 1993, South Coast Air Quality Management District.*			

However, the project site is currently only lightly occupied and gas consumption is unknown but anticipated to be relatively minimal. Therefore, for purposes of this EIR, in the interests of presenting a conservative analysis zero existing natural gas consumption is assumed.

Regulatory Framework

Wastewater

City of Los Angeles General Plan Framework Element

The General Plan Framework Element indicates that deteriorating physical condition and hydraulic capacity deficiencies of portions of the collection system will necessitate the rehabilitation or replacement of existing facilities, new sewers, new storage facilities, pumping plant modification and rehabilitation, and development of accessory and control structures. The results of ongoing assessment and inspection programs and the availability of funding will determine the scope and timing of system improvements. In addition, it also notes that the reuse of gray water offers an opportunity for demand side management and that gray water, as well as reclaimed water, can be used to supplant potable water for irrigation purposes in the urban forest. The Framework acknowledges that gray water systems can reduce the wastewater stream, although the extent of this potential is unknown and that every effort must be made to ensure that gray water does not enter the stormwater system through any means.[15]

Sewer System Management Plan

On May 2, 2006, the State Water Resources Control Board (SWRCB) adopted the Statewide General Waste Discharge Requirements (WDRs) for publicly owned sanitary sewer systems. Under the WDRs, the owners of such systems must implement a written Sewer System Management Plan (SSMP) and make it available to the public, including measures to control and mitigate sewer overflows. Los Angeles has one of the largest sewer systems in the world including more than 6,600 miles of sewers serving a population of more than four million in the following three Sanitary Sewer Systems. To comply with the WDRs, a Sewer System Management Plan was prepared for each of the City's three sanitary sewer systems.

Pursuant to the State WDRs, the City reviews its SSMPs periodically to ensure their continued compliance with the WDRs and effectiveness in controlling and responding to sewer overflows. The City's SSMPs were last updated in February 2014 and confirmed to be in full compliance with the WDRs and highly effective. Sewer overflows in Los Angeles are among the lowest in California and the United States.[16]

[15] http://cityplanning.lacity.org/cwd/framwk/chapters/09/09.htm#Wastewater. Accessed June 26, 2014.
[16] http://lasewers.org/ssmp/index.htm. Accessed June 26, 2014.

Water Supply

State

Urban Water Management Plans. Urban Water Management Plans (UWMP) are prepared by California's urban water suppliers to support their long-term resource planning and ensure adequate water supplies are available to meet existing and future water demands. Every urban water supplier that either provides over 3,000 acre-feet of water annually or serves more than 3,000 or more connections is required to assess the reliability of its water sources over a 20-year planning horizon considering normal, dry, and multiple dry years. This assessment is to be included in its UWMP, which are to be prepared every 5 years and submitted to the Department of Water Resources. DWR then reviews the submitted plans to make sure they have completed the requirements identified in the Urban Water Management Planning (UWMP) Act (Division 6 Part 2.6 of the Water Code §10610 - 10656).[17]

Senate Bill 610 and Senate Bill 221. Senate Bills 610 (Chapter 643, Statutes of 2001) and Senate Bill 221 (Chapter 642, Statutes of 2001) amended state law, effective January 1, 2002, to improve the link between information on water supply availability and certain land use decisions made by cities and counties. SB 610 and SB 221 are companion measures which seek to promote more collaborative planning between local water suppliers and cities and counties. Both statutes require detailed information regarding water availability to be provided to the city and county decision-makers prior to approval of specified large development projects. Both statutes also require this detailed information be included in the administrative record that serves as the evidentiary basis for an approval action by the city or county on such projects. Both measures recognize local control and decision making regarding the availability of water for projects and the approval of projects.

Under SB 610, water assessments must be furnished to local governments for inclusion in any environmental documentation for certain projects (as defined in Water Code 10912 [a]) subject to the California Environmental Quality Act. Under SB 221, approval by a city or county of certain residential subdivisions requires an affirmative written verification of sufficient water supply.

In accordance with SB 610 and Section 10912 of the CWC, projects subject to CEQA requiring submittal of a WSA include the following:

- Residential developments of more than 500 dwelling units;
- Shopping centers or business establishments employing more than 1,000 persons or having more than 500,000 square feet of floor space;
- Commercial office buildings employing more than 1,000 persons or having more than 250,000 square feet of floor space;
- Hotels, motels, or both, having more than 500 rooms;
- Industrial, manufacturing, or processing plants, or industrial parks 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;
- Mixed-use projects that include one or more of the projects specified in this subdivision; or

[17] http://www.water.ca.gov/urbanwatermanagement/. Accessed June 26, 2014.

- Projects that would demand an amount of water equivalent to or greater than the amount of water required by a 500 dwelling unit project.

City

The City of Los Angeles Municipal Code contains several ordinances designed to reduce water consumption and which are contained in Chapter IX, Article 4 and which include California Plumbing Code maximum flow rates for water fixtures. Water efficiency requirements for new development and renovation of existing buildings including residential and commercial buildings are also identified. A 10 percent reduction in irrigation for large turf areas (three acres of turf or greater), among other water-conserving measures is also required.

Solid Waste

State

The California Integrated Waste Management Act of 1989 (AB 939) was enacted to reduce, recycle, and reuse solid waste generated in the state to the maximum extent feasible. Specifically, the Act requires city and county jurisdictions to identify an implementation schedule to divert 50 percent of the total waste stream from landfill disposal by the year 2000. The Act also requires each city and county to promote source reduction, recycling, and safe disposal or transformation. Cities and counties are required to maintain the 50 percent diversion specified by AB 939 past the year 2000. In 1999, the Mayor directed City departments to develop strategies to achieve the citywide recycling goal of 70 percent by 2020.

AB 939 further requires each city to conduct a Solid Waste Generation Study and to prepare a Source Reduction and Recycling Element (SRRE) to describe how it would reach the goals. The SRRE contains programs and policies for fulfillment of the goals of the Act, including the above-noted diversion goals and must be updated annually to account for changing market and infrastructure conditions. As projects and programs are implemented, the characteristics of the waste stream, the capacities of the current solid waste disposal facilities, and the operational status of those facilities are upgraded, as appropriate. California cities and counties are required to submit annual reports to the CIWMB to update it on their progress toward the AB 939 goals. To date, implementation of AB 939 has proven to be a successful method of reducing landfill waste in the City by approximately 62 percent.

The California Solid Waste Reuse and the Recycling Access Act of 1991 requires each local jurisdiction to adopt an ordinance requiring commercial, industrial, or institutional building, marina, or residential buildings having five or more living units to provide an adequate storage area for the collection and removal of recyclable materials. The size of these storage areas are to be determined by the appropriate jurisdictions' ordinance. If no such ordinance exists within the jurisdiction, the CalRecycle model ordinance shall take effect.[18]

City

On March 5, 2010, the Los Angeles City Council approved Council File 09-3029 pertaining to a Citywide Construction and Demolition (C&D) Waste Recycling Ordinance that requires all mixed C&D waste generated within City limits be taken to City certified C&D waste processors. The

[18] http://www.calrecycle.ca.gov/LGCentral/Library/localdocs/policy.htm. Accessed June 26, 2014.

Bureau of Sanitation (BOS) is responsible for this new C&D waste recycling policy that is effective January 1, 2011.[19]

Energy

State

California Building Energy Efficiency Standards: Title 24. California established statewide building energy standards following legislative action. The legislation required the standards to achieve the following:

- Be cost effective;
- Be based on the building life cycle; and
- Include both prescriptive and performance-based approaches.

California's building efficiency standards (along with those of energy efficient appliances) have saved more than $56 billion in electricity and natural gas costs since 1978. It is estimated the standards saved an additional $23 billion by 2013.[20] As technology and design have evolved the standards have been periodically updated, generally, every 3 years.

Title 24 of the CCR comprises the State Building Standards Code. Part 6 of Title 24 is the California Energy Code that includes the building energy efficiency standards. The standards include provisions applicable to all buildings, residential and non-residential, which describe requirements for documentation and certificates that the building meets the standards. These provisions include mandatory requirements for efficiency and design of the following types of systems, equipment and appliances:

- Air conditioning systems
- Heat pumps
- Water chillers
- Gas and oil-fired boilers
- Cooling equipment
- Gas fired equipment including furnaces and stoves/ovens
- Windows and exterior doors
- Joints and other building structures openings
- Insulation and cool roofs
- Lighting control devices
- Water heaters and equipment
- Pool and spa heaters and equipment

The standards include additional mandatory requirements for space conditioning (cooling and heating) water heating, and indoor and outdoor lighting systems and equipment in non-residential, high-rise residential and hotel or motel buildings. Mandatory requirements for low-rise residential buildings cover indoor and outdoor lighting, fireplaces, space cooling and heating equipment (including ducts and fans), and insulation of the structure, foundation and water piping. In addition to the mandatory requirements, the standards call for further energy efficiency measures that can be provided through a choice between performance and prescriptive compliance approaches. In buildings designed for mixed-use (e.g., commercial and residential), each section must meet the standards applicable to that type of occupancy.[21]

[19] http://www.lacitysan.org/solid_resources/recycling/c&d.htm. Accessed June 26, 2014.
[20] CCR, Title 24, Part 6, 2013.
[21] CEC, *2008 Building Energy Efficiency Standards for Residential and Non Residential Buildings, Section 100(f)*, December 2008.

Regulations applicable to greenhouse gas reduction are relevant to energy conservation since reduction of greenhouse gas emissions is substantially dependent on reducing energy consumption and therefore reducing energy combustion by products, many of which are greenhouse gases. California's Building Energy Efficiency Standards are updated on an approximately three-year cycle. The 2016 Standards will continue to improve upon the current 2013 Standards[22] for new construction of, and additions and alterations to, residential and nonresidential buildings. The 2016 Standards will go into effect on January 1, 2017.

California Solar Initiative (CSI). On January 12, 2006, the California Public Utilities Commission (CPUC) approved the California Solar Initiative (R.04-03-017), which provides $2.9 billion in incentives between 2007 and 2017. The CPUC oversees a $2.5 billion program for commercial and existing residential customers, funded through revenues and collected from gas and electric utility distribution rates. Furthermore, the California Energy Commission (CEC) managed $350 million targeted for new residential building construction, utilizing funds already allocated to the CEC to foster renewable projects between 2007 and 2011.

On March 2, 2006, the CPUC opened a proceeding to develop rules and procedures for the California Solar Initiative and to continue consideration of policies for the development of cost effective, clean and reliable distributed generation (DG). On August 21, 2006, the Governor signed SB 1, which directs the CPUC and the CEC to implement the CSI program consistent with specific requirements and budget limits set forth in the legislation and directs the CPUC and the CEC to create 3,000 megawatts of new, solar produced electricity by 2017.
CEQA Guidelines Appendix F: Energy Conservation. CEQA Guidelines Appendix F provides a goal of conserving energy in the State of California. The appendix indicates the following methods to achieve this goal: (1) decreasing overall per capita energy consumption, (2) decreasing reliance on natural gas and oil, and (3) increasing reliance on renewable energy sources.

Local

City of Los Angeles

The City of Los Angeles GREEN LA Plan. On May 15, 2007, Los Angeles Mayor Antonio Villaraigosa released the "GREEN LA – An Action Plan to Lead the Nation in Fighting Global Warming" (GREEN LA Plan) that has an overall goal of reducing the City of Los Angeles' GHG emissions by 35 percent below 1990 levels by 2030. This goal exceeds the targets set by both California and the Kyoto Protocol, and is the greatest reduction target of any large United States City. The cornerstone of the GREEN LA Plan is increasing the City's use of renewable energy to 35 percent by 2020. Key strategies listed in the GREEN LA Plan related to energy and water include the following:

Green the Power from the Largest Municipal Utility in the United States

- Meet the goal to increase renewable energy from solar, wind, biomass, and geothermal sources to 20 percent by 2010;
- Increase use of renewable energy to 35 percent by 2020;
- Let contracts for power imports from coal-fired power plants expire;
- Increase the efficiency of natural gas-fired power plants; and

[22] The 2013 Standards went in to effect July 1, 2014

- Increase biogas co-firing of natural gas-fired power plants.

Make Los Angeles a Worldwide Leader In Green Buildings

- By July 2007, present a comprehensive set of green building policies to guide and support private sector development;
- Transform Los Angeles Into the Model of an Energy Efficient City; and
- Reduce energy use by all city departments to the maximum extent feasible.

Complete energy efficiency retrofits of all city-owned buildings to meet a 20 percent or more reduction in energy consumption

- Install the equivalent of 50 "cool roofs" per year by 2010 on new or remodeled city buildings;
- Install solar heating for all city-owned swimming pools;
- Improve energy efficiency at drinking water treatment and distribution facilities; and
- Maximize energy efficiency of wastewater treatment equipment.

Help Angelenos Be "Energy Misers"

- Distribute 2 compact fluorescent light (CFL) bulbs to each of the 1.4 million households in the City;
- Increase the level and types of customer rebates for energy efficient appliances, windows, lighting, and heating and cooling systems;
- Increase the distribution of energy efficient refrigerators to qualified customers; and

Create a fund to "acquire" energy savings as a resource from Los Angeles Department of Water and Power (LADWP) customers.

Los Angeles Green Building Code. On January 1, 2011 the Los Angeles Green building Code (LAGBC) became applicable to all new buildings, additions, alterations valued at $200,000 or more and residential alterations that increase building conditioned volume. The LAGBC is based on the 2013 California Green Building Standards Code (CALGreen) that was developed and mandated by the State to attain consistency among the various jurisdictions within the State; reduce the building's energy and water use; reduce waste; and reduce the carbon footprint. Requirements address: storm water drainage and retention during construction; light pollution reduction; electrical vehicle wiring, pre-wiring to allow future installation of solar system, reductions in water use of 20 percent from an established baseline, irrigation controllers, construction waste reduction, bicycle parking, light pollution reduction, exceedance of 2008 Energy Efficiency Standards by 15 percent, use of Energy Star appliances, reduced emissions from certain flooring materials, aerosol paints and coatings adhesives, sealants and caulks. The Code also addresses voluntary measures including reuse of materials, topsoil protection, window shading, use of pre-finished materials and materials from renewable sources, enhanced construction waste reduction, exceeding 2008 Energy Efficiency Standards by 30 percent.

ENVIRONMENTAL IMPACT

THRESHOLDS OF SIGNFICANCE

The following thresholds of significance are based on the *City of Los Angeles' CEQA Thresholds Guidelines* (2006). They were developed to evaluate potential impacts on utilities and services.

The proposed project would result in significant impacts to utilities and services if it:

Wastewater

- Requires the expansion of existing regional wastewater treatment facilities or requires the construction of new regional wastewater treatment facilities which could result in significant environmental effects; or

- Places a substantial burden on local wastewater infrastructure, such that increased demand could not be met by available facilities or feasible local improvements.

- Causes a measurable increase in wastewater flows where, and/or at a time when, a sewer's capacity is already constrained or that would cause a sewer's capacity to become constrained; or

- Additional wastewater flows would substantially or incrementally exceed the future scheduled capacity of any one treatment plant by generating flows greater than those anticipated in the Wastewater Facilities Plan or General Plan and its Elements.

Water Supply

- A project would require or result in the construction of new water facilities or expansion of existing facilities, the construction of which could cause significant environmental effects; or

- There were insufficient water supplies available to serve the project from existing entitlements and resources, or new or expanded entitlements were needed.

- The total estimated water demand for the project exceeds the planned amount for the area identified in the Urban Water Management Plan;

- Sufficient capacity does not exist in the water infrastructure that would serve the project, taking into account the anticipated conditions at project build out;

- The project would cause the projected growth in population, housing or employment for the Community Plan area to be exceeded in the year of project completion; and

- Scheduled water infrastructure improvements or project design features would not reduce or offset service impacts.

Solid Waste

- The landfill serving a project did not have sufficient permitted capacity to accommodate the project's solid waste disposal needs; and/or

- The project would not comply with federal, state, and local statues and regulations to solid waste;

- The amount of project waste generation, diversion, and disposal during demolition, construction and operation of the project, considering proposed design and operational features would exceed typical waste generation rates;

- The project would result in the need for additional solid waste collection route(s), or recycling or disposal facility to adequately handle project-generated waste; and

- The project could conflict with solid waste policies and objectives in the Source Reduction Recycling Element or its updates, City of Los Angeles Solid Waste Management Policy Plan Framework Element, or the Curbside Recycling Program, including consideration of land use specific waste diversion goals contained in Volume 4 of the SRRE.

Energy

- Create a need for new supply facilities, distribution infrastructure, or capacity enhancing alterations to existing facilities; or

- Conflict with adopted energy conservation plans.

METHODOLOGY

The assessment of impacts to utilities and services was based on information and/or requirements contained in applicable state regulations and the *City of Los Angeles' CEQA Thresholds Guide*. These resources in addition to the thresholds of significance formed the basis for the impact assessment.

PROJECT IMPACTS

Construction

Wastewater

During construction portable toilets would be provide on-site to serve the construction workers and regularly hauled away for disposal.

Water

During construction of the proposed project, a minimal amount of water consumption is anticipated. The main purpose of water consumption during the construction phase would be to comply with AQMD Rule 403 regarding fugitive dust containment. Water would also be used for mixing and pouring of concrete and other construction-related activities. Water usage for such purposes, however, would be temporary and would not exceed that of the proposed mixed-use development.

Solid Waste

Construction of the proposed mixed-use project would generate waste from demolition activities, materials used to construct buildings, and from construction employees (food waste). Because the City of Los Angeles has already achieved a 62 percent solid waste diversion rate, this percentage is assumed in this analysis. Additionally, the project is expected to recycle a minimum of 50% of construction waste in accordance with LEED Construction Waste Management Credits and CalGreen requirements.

Energy

The proposed project would result in both short-term and long-term energy consumption impacts. Short-term energy consumption, which would occur during construction of the proposed project, would result from demolition, excavation, grading, and building construction activities. Estimated fossil fuel use during the construction period would be approximately 77,598 gallons of diesel from construction/heavy equipment operation, 32,797 gallons of gasoline from construction worker travel, 37,503 gallons of diesel from construction vendors (i.e., materials delivery), and 2,257 gallons of diesel from haul truck trips.[23] The short-term energy consumption would not be significant due to the temporary duration of construction activities.

Operation

Wastewater

Table III.L-7 provides the estimated calculated daily sewer generation that would occur with the proposed project. As **Table III.L-7** shows, the proposed project is estimated to generate 133,347 gallons of wastewater per day (existing use is minimal and therefore this is assumed to be the net increase). This estimated wastewater generation does not reflect any benefits attributable to City of Los Angeles water conservation and sewer allocation ordinances, as well as benefits from application of LEED Reduced Use and Wastewater Management Credits as may implemented by the proposed project. Consequently, estimated wastewater generation for the proposed project is considered conservative. Actual wastewater generation of the project may be lower.

Per City of Los Angeles standards, sewer capacity availability analysis was completed for the sewer mains east of the project site, running through the existing utility easement and ultimately connecting to the main line in Oakdale Avenue and the sewer main located on Prairie Street. The report noted that there is capacity at this time for 59 percent of the project to connect to the 8-inch main east of the project site and 41 percent (Buildings C & D) can be serviced through Prairie Street. The flows to the two mains from the proposed project were approved by the City of Los Angeles Bureau of Sanitation.

[23] Construction assumptions were derived from CalEEMod, which utilizes the OFFROAD2011 model. Vehicle fuel use was estimated using the EPA fuel economy values.

TABLE III.L-7 CALCULATED WASTEWATER GENERATION – PROJECT			
Use	**Units/Area in GSF**	**Average Daily Flow (GPD/Unit)**	**Average Daily Flow (GPD)**
Residential Units			
1 Bedroom	304	110 GPD/DU	33,440
2 Bedroom	372	150 GPD/DU	55,800
3 Bedroom	24	190 GPD/DU	4,560
Community Center/Gym	440	3 Gallons/Occupant	1,320
Club House	2,000	65 GPD/1,000 GSF	1,320
Subtotal	***700***		***96,420***
Commercial Space			
Office /1/	255,815	150 GPD/1,000 GSF	38,372
Retail	11,000 GSF	25 GPD/1,000 GSF	275
Restaurant	200 seats	30 Gallons/seat	6,000
Cooling Tower	800 tons	21.060 Gallons/ton	16,848
Parking Structure	1,467 stalls	0.267 Gallons/stall	392
		Subtotal	***54,213***
		Total	**150,633/2/**

/1/ The MGA building would include day care and a cafeteria; these uses have different wastewater generation factors than office, but the building would have office as well as other space more like industrial space; assuming all the building is office is a conservative estimate of wastewater generation.
/2/ Does not include water conservation or subtract existing use.
SOURCE: Correspondence City of Los Angeles Bureau of Sanitation, May 23, 2014 and City of Los Angeles CEQA Threshold Guide, 2006 (Exhibit M.2-12 [Sewage Generation Factors]); Water Supply Assessment September 2, 2014 (see **Appendix J**).

Based upon the analysis provided above, the existing sewer system has adequate capacity to serve the site as determined by the Los Angeles Bureau of Sanitation. Thus, no significant impacts associated with wastewater capacity would result with implementation of the proposed project.

Water Supply

The California Water Code, Section 10910 requires the identification of any public water system that may supply water for projects that are subject to CEQA and provides guidelines to include in the water supply assessment. A water supply assessment is required if a project meets certain conditions (see above discussion of the Water Code).

The proposed project would include approximately 700 housing units and 269,815 square feet of combined commercial development (retail, restaurant and office). Based on the assessment guidelines, the proposed project required the preparation of a water supply assessment.

As summarized in Table **III.L-8**, water demand for project is estimated to be 133,275 gallons per day with required water conservation.

TABLE III.L-8
CALCULATED WATER USAGE – PROJECT

Use	Units/Area in GSF	Water Demand (GPD/Unit)/1/	Total Water Demand Flow (GPD)
Residential Units			
1 Bedroom	304	110 GPD/DU	33,440
2 Bedroom	372	150 GPD/DU	55,800
3 Bedroom	24	190 GPD/DU	4,560
Community Center/Gym	440	3 Gallons/Occupant	1,320
Club House	2,000	65 GPD/1,000 GSF	1,320
Subtotal	***700 units***		***96,420***
Commercial Space			
Office /2/	255,815 GSF	120 GPD/1,000 GSF	30,698
Retail	11,000 GSF	25 GPD/1,000 GSF	275
Restaurant	200 seats	30 Gallons/seat	6,000
Cooling Tower	800 tons	21.060 Gallons/ton	16,848
Parking Structure	1,467 stalls	0.267 Gallons/stall	392
Subtotal	***269,815***		***54,213***
Landscaping	256,000		**15,128**
		Total	**165,761**
		Net Total Water Use less Existing Use and With Water Conservation	**133,325**

/1/ City of Los Angeles department of Water and Power uses the sewer generation rates to estimate water demand.
/2/ The MGA building would include day care and a cafeteria; these uses have different water generation factors than office, but the building would have office as well as other space more like industrial space; assuming all the building is office is a conservative estimate of water use.
SOURCE: Department of Water and Power Water Supply Assessment, September 2, 2014 (see **Appendix J**)

In addition to the domestic and landscape demand, the proposed project would deliver on-site fire hydrant flow in accordance with Fire Department requirements. As noted in Section III.I (Public Services), the required fire flow for this project has been set at 6,000 to 9,000 gallons per minute (GPM) from four to six fire hydrants flowing simultaneously. The fire flow analysis for the proposed project achieved the residual pressure requirements under the fire flow demand. Therefore, the Fire Flow Report concluded that the water system delivers adequate fire flow under the required demand.

LADWP has worked with MWD in developing a framework for allocating water supplies during periods of shortage as well as surplus. MWD has a Water Surplus and Drought Management Plan that provides such a framework. LADWP intends to work within the framework established through the Water Surplus and Management Plan in acquiring its drought supplies from MWD in the future. Even during shortages, MWD expects that it will be able to meet its member agencies' long-term needs through a combination of actions, including water transfer programs, outdoor conservation measures, and development of additional local resources, such as recycling, brackish water desalination, and seawater desalination. Additionally, MWD has additional storage capacity available in reservoirs and banking/transfer programs.

As **Table III.L-8** shows, the proposed project, with water conservation, is estimated to use a net increase of 133,325 gallons of water per day.

The Water Supply Assessment (**Appendix J**) prepared for the project and approved by the DWP Board indicates that the LADWP can adequately supply the site.

Based upon the analysis above, implementation of the proposed project would result in less than significant impact related to water consumption and available supplies.

Solid Waste

The residences and retail, office, and restaurant uses that would operate under the proposed project would be required to contract with a private collection agency for the pick-up and disposal of solid waste. **Table K.III-9** shows the estimated amounts of solid waste to be generated by project uses.

TABLE III.L-8
CALCULATED SOLID WASTE -- PROJECT

Use	Units/Area in GSF	Generation Rate (Lbs./Day/Unit)	Solid Waste Generation (Lbs/Day)
Residential Units			
1 Bedroom	304	12.2/DU	3,709
2 Bedroom	372	12.2/DU	4,538
3 Bedroom	24	12.2/DU	293
Subtotal	***700***		***8,540***
Commercial Space			
Office/Retail/Restaurant	500 employees	10.53/Employee	5,265
Retail/Restaurant	14,000	0.005 lbs/GSF	70
		SUBTOTAL	
		TOTAL	**13,875**
		LESS 62% DIVERSION	**5,275**

SOURCE: *City of Los Angeles CEQA Guidelines, 2006, and Sirius Environmental 2014.*

The total calculated solid waste anticipated to be generated by the proposed project would be 13,875 lbs. per day; 62 percent of this solid waste produced at the site must be diverted from landfills. With 62 percent diverted, 5,275 lbs. of solid waste generated from the proposed project would be transported to landfills. The solid waste produced by the operation of the proposed project would not be in exceedance of the permitted throughput capacity of the Sunshine Canyon Landfill. The maximum daily permitted throughput of the Sunshine Canyon landfill is 12,100 tons per day, although the average daily intake is approximately 6,000-7,000 tons per day. On July 7, 2008, the California Integrated Waste Management issued a new solid waste facilities permit for the Sunshine Canyon City/County Landfill. The permit allows a maximum daily permitted tonnage of 12,100 and has a design capacity of 140,900,000 cubic yards. According to the permit, the estimated closure date for the landfill is 2037. Therefore, a less-than-significant impact with mitigation incorporation is associated with solid waste generation.

Energy

Long-term energy consumption would result from heating, cooling, lighting, driving, and other operational needs associated with the commercial, office, and residential land uses. **Table III.L-10** shows annual electrical consumption for the proposed project. Existing electrical consumption is minimal. Under the proposed project, electrical consumption is calculated to be approximately 9.75 million KWh/y using gross, dated (from 1993) assumptions for energy use.

A more precise, project-specific, assessment of total energy consumption using more recent consumption factors indicates that the project could use 11.6 million kWh/yr before mitigation (Business as Usual assumptions) and 9.3 million kWh/yr with proposed energy savings.[24]

The proposed project would include electricity reduction measures, such as a roof mounted solar photovoltaic system (solar panels) not accounted for in **Table III.L-10**. On-site electric service would be provided from the LADWP mainline system in Winnetka Avenue. This would be considered a less than significant impact with the implementation of **Regulatory Compliance Measures RC-III.L-9** through **RC-III.L-11**.

TABLE III.L-10
CALCULATED ELECTRICAL CONSUMPTION – PROJECT

Use	Unit Count/ Area in GSF	Consumption Rate (kWh/GSF/year)	Electrical Consumption (kWh/ year)
Residential Dwelling Units			
1-Bedroom	304	5,172 kWh/Unit/Year	1.57 million
2-Bedroom	372	5,172 kWh/Unit/Year	1.92 million
3-Bedroom	24	5,172 kWh/Unit/Year	124,128
Subtotal	***700***		***3.6 million***
Commercial Space			
Retail/Restaurant	14,000	15.3 kWh/GSF/Year	214,200
Office Building	255,815	17.1 kWh/GSF/Year	4,4 million
Subtotal			***4.6 million***
Parking			
Covered	588,995	0.3 kWh/GSF/Year	1.55 million
Exposed	7,837	0.092 kWh/GSF/Year	3,158
Subtotal	***596,832***		***1.55 million***
		TOTAL	**9.75 million**

SOURCE: *AQMD Handbook for Preparing EIRs, rev. April 1993, South Coast Air Quality Management District, Sirius Environmental 2014,* and *MGA Campus Building Greenhouse Gas Emissions Summary,* April 2014 (see Appendix K).

Table III.L-11 shows the monthly natural gas consumption by the proposed project. The existing natural gas consumption is minimal; under the proposed project, using gross, dated (from 1993) assumptions the project could consume 39.48 million cubic feet per year (cfy). A more precise, project-specific assessment of natural gas consumption, using more recent energy consumption data, indicates that the project could use 96,743 Therms (9.7 million cubic feet) and 91,653 Therms (9.1 million cubic feet) with proposed energy saving measures.[25] The Gas Company has indicated that they have sufficient supplies to serve the project site and as such, impacts to natural gas consumption would be less than significant.[26]

[24] *MGA Campus Building Greenhouse Gas Emissions Summary,* Brummitt Energy Associates Inc, April 2014. See **Appendix K**.

[25] Ibid

[26] Correspondence from Justino Rojas, P.E., Region Supervisor, Planning and Engineering – Northwest Region, Southern California Gas Company, e-mail dated April 30, 2014

TABLE III.L-11 CALCULATED NATURAL GAS CONSUMPTION -- PROJECT			
Use	**Unit Count/ Area in GSF**	**Consumption Rate (CF/Unit/GSF/Month)**	**Natural Gas Consumption (CF/Month)**
Residential Dwelling Units			
1-Bedroom	304	3,918 CF/Unit/Month	1.2 million
2-Bedroom	372	3,918 CF/Unit/Month	1.5 million
3-Bedroom	24	3,918 CF/Unit/Month	94,032
Subtotal	***700***		***2.74 million***
Commercial Space			
Retail/Restaurant	14,000	2.9 CF/GSF/Month	40,600
Office Building	255,815	2.0 CF/GSF/Month	511,630
Subtotal			***552,230***
		TOTAL	**3.29 million**
SOURCE: *AQMD Handbook for Preparing EIRs, rev. April 1993, South Coast Air Quality Management District.*			

During project operation, trips associated from the proposed mixed-use development would result in fossil fuel use of approximately 579,419 gallons of gasoline per year; vendor trips (e.g., truck deliveries) would result in fuel use of approximately 11,382 gallons of diesel per year.[27]

SCAG provides an estimate of the expected fossil fuel consumption within the region in 2011 and 2035.[28] According to SCAG, projected transportation fuel consumption was 6.8 billion gallons of fuel per year for 2011 and is projected to be 5.6 billion gallons of fuel per year for 2035. The total fossil fuel use during project operation would be less than 0.009 percent of the region's 2011 fuel consumption.

PROJECT DESIGN FEATURES

PDF-III.L-1 To reduce energy consumption, the applicant shall implement the following:

- The building design shall, at a minimum, meet the applicable Title 24 2013 standards with energy efficiency improvements consistent with a LEED v3 Certified project; and
- The applicant shall install a photovoltaic (PV) system of minimum size of 175 kilowatt (kW) direct current (DC).

REGULATORY COMPLIANCE MEASURES

WATER SUPPLY

RC-III.L-1 The applicant shall implement water conservation measures in new development that shall include but not be limited to the following:

[27] Assumptions were derived from CalEEMod, which utilizes the OFFROAD2011 model. Vehicle fuel use was estimated using the EPA fuel economy values. CalEEMod 2013 Appendix D and California's Water – Energy Relationship, California Energy Commission, November 2005- Assumed 13,021 kWh per million gallon water.

[28] SCAG, *2012-2035 RTP/SCS Final Program Environmental Impact Report*, April 2012.

- Installation of high-efficiency toilets (1.28 gallons per flush or less, includes dual flush
- High-efficiency urinals (0.5 gallons per flush includes waterless)
- Restroom faucet flow rate of 1.5 gallons per minute or less
- Public restroom self-closing faucets
- Showerhead flow rate of 2 gallons per minute or less
- Limit of one showerhead per shower stall
- High efficiency clothes washers (water factor of 6.0 or less)
- High efficiency dishwashers (Energy Star rated)
- Domestic water heating system located in close proximity to point(s) of use, as feasible; use of tankless and on-demand water heaters as feasible
- Cooling towers must be operated at a minimum of 5.5 cycles of concentration
- Install on-site water recycling as feasible
- Use of recycled water (if available) for appropriate end uses (irrigation, cooling towers, sanitary)
- Single pass cooling shall be prohibited (e.g. any vacuum pumps or ice machines)
- Irrigation shall include;

  - ✓ Weather-based irrigation controller with rain shutoff
  - ✓ Flow sensor and master valve shutoff (for large landscaped areas)
  - ✓ Matched precipitation (flow) rates for sprinkler heads
  - ✓ Drip/microspray/subsurface irrigation where appropriate
  - ✓ Minimum irrigation system distribution uniformity of 75%
  - ✓ Proper hydro-zoning, turf minimization and use of native/drought tolerant plant materials
  - ✓ Use of landscape contouring to minimize precipitation runoff

RC-III.L-2 Prior to the issuance of a building permit, the applicant shall consult with LADWP to identify feasible and reasonable measures that reduce water consumption, including, but not limited to, systems to use reclaimed water for landscaping (should reclaimed water become available to the City), drip irrigation, re-circulating hot water systems, water conserving landscape techniques (such as mulching, installation of drip irrigation systems, landscape design to group plants of similar water demand, soil moisture sensors, automatic irrigation systems, clustered landscaped areas to maximize the efficiency of the irrigation system), water conserving kitchen and bathroom fixtures and appliances, thermostatically controlled mixing valves for baths and showers, and insulated hot water lines, as per City adopted UBC requirements.

RC-III.L-3 The project shall incorporate Phase I of the City of Los Angeles Emergency Water Conservation Plan. The Plan prohibits hose watering of driveways and associated walkways, mandates decorative fountains to use recycled water, and provides that water leaks are repaired in a timely manner.

RC-III.L-4 The project shall comply with any additional mandatory water use restrictions imposed as a result of drought conditions.

RC-III.L-5 Automatic sprinkler systems shall be installed to irrigate landscaping during morning hours or during the evening to reduce water losses from evaporation. Sprinklers shall be reset to water less often in cooler months and during the rainfall season, so that water is not wasted in excessive landscape irrigation.

RC-III.L-6 Prior to issuance of building permits, the applicant shall pay any appropriate fees imposed by the Building and Safety Department. A percentage of building permit fees is contributed to the fire hydrant fund, which provides for Citywide fire protection improvements.

SOLID WASTE

RC-III.L-7 At a minimum, the proposed project shall recycle and/or salvage at least 50% of non-hazardous construction and demolition debris. A construction waste management plan that, at a minimum, identifies the materials to be diverted from disposal and whether the materials will be sorted on-site or comingled shall be developed and implemented. Excavated soil and land-clearing debris do not contribute to the amount of recycled/salvaged debris. Calculations can be done by weight or volume, but must be consistent throughout.

RC-III.L-8 The proposed project shall institute a recycling program to reduce the volume of solid waste going to landfills in compliance with the City's current goal of a 62 percent reduction in the amount of waste going to landfills, with the 2020 goal of a 70 percent reduction of waste going to landfills. Additionally, recycling bins shall be provided at an appropriate location on-site to promote recycling.

RC-III.L-9 The applicant shall include in the design plans a recycling area or room for on-site recycling elements.

ENERGY

RC-III.L-10 The proposed project would be required to comply with the applicable Title 24 of the California Code of Regulations and the City's Green Building Code. The proposed project would incorporate relevant sustainability features set forth in the City's Green Building Code or codes that are in place at the time permits for the proposed project are processed. Such features would include the following or equivalent measures capable of achieving the same results:

- Installation of energy efficient heating and cooling systems, equipment, and control systems;
- Installation of efficient lighting and lighting control systems;
- Installation of light colored "cool" roofs to more effectively reflect the sun's energy from the roof's surface to reduce the roof surface temperature, and use of shade structures to reduce the heat island effect;
- Incorporation of energy saving features into building design (e.g., use of passive controls, shading, solar energy, ventilation, appropriate building materials, etc.), as appropriate;
- Prohibition of HVAC, refrigeration, and fire suppression equipment that contains banned chlorofluorocarbons;
- Use of Energy Star appliances; and
- Use of photovoltaic technology on selected roofs.

RC-III.L-11 During the design process, the project applicant shall consult with the Department of Water and Power, Energy Services Subsection and The Gas Company, the Commercial, Industrial or Residential Staff Supervisor, regarding possible Energy Conservation Measures for the proposed project.

RC-III.L-12 The proposed project will comply with LADWP requirements and recommendations regarding on-site facilities. Improvements made shall be undertaken to the satisfaction and specifications of the LADWP and the Bureau of Engineering prior to issuance of a Certificate of Occupancy for any part of the project.

MITIGATION MEASURES

ENERGY

MM-III.L-1 Prior to construction, the applicant in consultation with The Gas Company will perform a natural gas load test. If the natural gas load to the new project area does not exceed 40 Million Standard Cubic Feet Per Hour, then no upgrade to the system will be needed. Any required upgrades will be coordinated with The Gas Company and the City of Los Angeles Bureau of Engineering.

Measures to reduce vehicle trips would also reduce energy consumption (see Section III.K).

LEVEL OF SIGNIFICANCE AFTER MITIGATION

With the implementation of regulatory compliance measures identified above, impacts associated with utilities and services would be less than significant.

CUMULATIVE IMPACTS

This analysis is based on the projects identified in **Table III.K-8, Related Projects**, in Section III.K Transportation and Circulation. The related projects include various commercial/mixed-use, office, and residential projects located in the vicinity of the project that are currently under construction, approved but not built, or proposed for development.

WASTEWATER

The proposed project, in conjunction with the related projects, would increase wastewater generation in the area and in the City in general. Total estimated wastewater generation is estimated at 568,520 GPD. As with the proposed project, each individual related project will be evaluated by the Bureau of Engineering and/or Bureau of Sanitation to determine what, if any project specific improvements may be required to connect to the local system to ensure that sufficient capacity is available. Similar to anticipated development, specific improvements associated with the related projects will be required as conditions of approval which must be cleared by the City for that project to proceed. Although localized improvements may be necessary, the extent of such improvements can only be evaluated on a project-by-project basis. Each project will similarly be subject to connections fees and it is further anticipated that development in the Chatsworth area will provide the opportunity for the City to fund further area wide improvements. Consequently, the proposed and related projects would not result in

significant unmitigated cumulative impacts associated with wastewater generation or infrastructure.

WATER SUPPLY

The proposed project and the related projects would increase water usage in the project area. The total estimated water consumption is estimated at 623,425 GPD. Like the proposed project, related projects in the City of Los Angeles would not be permitted to connect LADWP's water conveyance unless sufficient capacity exists to accommodate the additional demands. The related projects are anticipated to be constructed in accordance with State water conservation regulations and within the limits of the applicable Community and General Plans. With implementation of **Regulatory Compliance Measures RC-III.L-1** through **RC-III.L-6**, the proposed project would have less than significant impacts on water supply. The UWMP accounts for existing development within the City as well as projected growth anticipated to occur through redevelopment of existing uses and the development of new uses. In addition, the UWMP evaluates the quality and reliability of existing ad projected water supplies, as well as alternative sources of water supply and how they would be secured if needed. As stated earlier, the Urban Water Management Planning Act states that urban water suppliers should make every effort to ensure that there is an appropriate level of reliability in its water service sufficient to meet the needs of customers. A critical part of this effort is the guarantee of future water supplies through increased conservation practices. Based on the availability of supply to meet the anticipated water demand as set forth in the 2010 UWMP, and that related projects and development in the surrounding area are largely infill on previously developed sites with associated infrastructure, cumulative impacts to water services would be less significant. Therefore, with the incorporation of **Regulatory Compliance Measures RC-III.L-1** through **RC-III.L-6**, the proposed project would not result in a cumulatively considerable contribution to impacts associated with water supply or infrastructure.

SOLID WASTE

Without waste diversion/recycling the proposed project and the related projects could increase the daily solid waste generation in the project area for a total of approximately 39,000 pounds per day. The Sunshine Canyon Landfill is permitted to receive up to 12,100 tons of solid waste each day from the City of Los Angeles, and it currently receives only 6,000-7,000 tons per day. As the City develops solutions to meet the future disposal needs at a regional level (i.e., expanding existing landfills, transporting waste to other landfills, converting waste to energy, recycling, and waste reduction), additional capacity to accommodate the cumulative disposal needs of the proposed project and the related projects may become available. Furthermore, all of the related projects would be required to comply with mandated waste diversion rates and would divert at least 62 percent of construction and operational solid waste through waste reduction, recycling, and composting. The 62 percent diversion would result in approximately 12,455 pounds per day being disposed of at the Sunshine Canyon Landfill. With implementation of **Regulatory Compliance Measures RC-III.L-7** through **RC-III.L-9**, the proposed project would have less than significant impacts on solid waste. As such, the proposed project would not result in a cumulatively considerable contribution to impacts associated with construction or operational solid waste.

ENERGY

The proposed project and the related projects would increase demand on energy resources in the project area. The total annual electricity consumed would be up to approximately 22.9 million kWh, while the total natural gas consumption per month would be 11.4 million cubic feet. The related projects would be served by the LADWP. Under the City Charter, LADWP has an obligation to serve the citizens of the City. Therefore, the projects within the City of Los Angeles have been factored in to the projected electricity demands. Similarly, the California Public Utilities Commission requires all energy suppliers to serve proposed development. Furthermore, all of the related projects would be required to comply with Title 24 of the CCR, which establishes energy conservation standards for new construction, as well as CalGreen. It is anticipated that construction of the related projects would also result in temporary energy consumption that would not be significant when compared to operational energy consumption. The proposed project would result in less than significant impacts associated with energy consumption with implementation of **Regulatory Compliance Measures RC-III.L-10** through **RC-III.L-12** and mitigation measure **MM-III.L-1**. Therefore, the proposed project would not result in a cumulatively considerable contribution to impacts associated with energy consumption.