Appendix L
Utilities Technical Report

PSOMAS

1111 Hill Street Project
Utilities Technical Memorandum

August 26, 2021

Prepared by:

David J. Curtis, P.E., ENV SP
PSOMAS
555 South Flower Street, Suite 4300
Los Angeles, California 90071
(213) 223-1400
(213) 223-1444 Fax

Prepared for:

Crown International Holdings Group

TABLE OF CONTENTS

1.0 OVERVIEW

The proposed 1111 South Hill Street Project ("Project") would develop a 40-story mixed-use building on an approximately 0.63-acre site (project site) located within the South Park area of the Central City Community Plan ("Community Plan") area of the City of Los Angeles (City).

The project site is currently developed with an 81,993 square foot warehouse that has been vacant since approximately 2013. The project proposes to remove the existing warehouse and construct up to 319 multi-family residential units, up to 3,429 square feet (sf) of ground floor commercial uses, up to 160 hotel rooms designated as Transient Occupancy Residential Structure (TORS) units. The development site is located at 1111 S. Hill Street (Project Site), and is bounded by 11th Street to the north, Hill Street to the east, an alley to the west, and an existing bank building to the south.

2.0 SCOPE OF ANALYSIS

This analysis provides supporting information for the Project's environmental review pursuant to the 2020 California Environmental Quality Act (CEQA) and documents the results of Psomas' research regarding existing nearby utility infrastructure for the Project.

3.0 EXISTING UTILITIES AND REGULATORY FRAMEWORK

3.1 Existing Utility Providers

The following is a list of existing utilities and their service providers that are within the proximity of the Project Site found from a DigAlert request:

- Storm Drain – City of Los Angeles Flood Control District
- Sanitary Sewer – City of Los Angeles
- Water – Los Angeles Department of Water and Power
- Electricity – Los Angeles Department of Water and Power
- Natural Gas – Southern California Gas Company
- Telecommunications -
    - ATT Distribution
    - Verizon
    - Zayo FNA Abovenet

- Crown Castle
- ATT
- Spectrum

Note that existing storm drain infrastructure, as well as the Project's potential impacts on this infrastructure, is discussed in the water resources technical report prepared for the Project by Psomas on August 20, 2021.

3.2 Regulatory Framework

3.2.1 Water

The City of Los Angeles Department of Water and Power (LADWP) is responsible for providing water supply to the City while complying with Local and State regulations.

Below are the State and Regional water supply regulations:

- California Code of Regulations, Title 20, Chapter 4, Article 4, Section 1605 establishes water efficiency standards for all new plumbing fixtures and Section 1608 prohibits the sale of fixtures that do not comply with the regulations.
- 2016 California Green Building Standards Code, CCR, Title 24, Part 11 (CALGreen), adopted on January 1, 2016, requires a water use reduction of 20 percent below the baseline cited in the CALGreen code book. The code applies to family homes, state buildings, health facilities, and commercial buildings.
- California Urban Water Management Planning Act of 1984 requires water suppliers to adopt an Urban Water Management Plan (UWMP).
- Metropolitan Water District (MWD) official reports and policies as outlined in its Regional UWMP, Water Surplus and Drought Management Plan, Water Supply Allocation Plan, and Integrated Resources Plan.
- LADWP's 2015 UWMP outlines the City's long-term water resources management strategy. The 2015 UWMP was approved by the LADWP Board of Commissioners on April 27, 2016.
- Senate Bill 610, approved on October 9, 2001, require land use agencies to perform a detailed analysis of available water supply when approving large developments. Historically, public water suppliers (PWS) simply provided a "will serve" letter to developers. For certain projects subject to CEQA review, SB 610 requires that urban water suppliers prepare a WSA to determine whether the

project water demand is included as part of the most recently adopted UWMP. All projects that meet any of the following criteria require a WSA:

- A proposed residential development of more than 500 dwelling units.
- A proposed shopping center or business establishment of more than 500,000 square feet of floor space or employing more than 1,000 persons
- A proposed commercial office building of more than 250,000 square feet of floor space or employing more than 1,000 persons
- A proposed hotel or motel of more than 500 rooms
- A proposed industrial, manufacturing, or processing plant or industrial park of more than 40 acres of land, more than 650,000 square feet of floor area, or employing more than 1,000 persons
- A mixed-use project that falls in one or more of the above-identified categories
- A project not falling in one of the above-identified categories but that would demand water equal or greater than the amount required by a 500-dwelling unit project.

Since the proposed Project does not meet or exceed any of the above thresholds, a WSA will not be required from LADWP.

3.2.2 Sewer

The Los Angeles sewer system is comprised of three systems: Hyperion Sanitary Sewer System, Terminal Island Water Reclamation Plant Sanitary Sewer System, and Regional Sanitary Sewer System. To comply with Waste Discharge Requirements (WDRs), a Sewer System Management Plan (SSMP) was prepared for each of these systems.

The Project Site lies within the Hyperion Sanitary Sewer System. In January 25, 2019, the LA Bureau of Sanitation completed its Sewer System Management Plan (SSMP) 3.0 which described the Hyperion Sanitary Sewer System in accordance with WDRs adopted by the State Water Resources Control Board (SWRCB) on May 2, 2006. Section 8 – System Evaluation and Capacity Assurance Plan states that the City's collection system has enough capacity to handle peak dry-weather flows. This SSMP also states that there have been significant reductions in wastewater flows conveyed by the City's collection system over the past 10 years. This report cites that Hyperion treatment facility has gone

from 350 million gallons of water per day (MGD) to 260 MGD within this 10-year period due to water conservation measures in conjunction with an ongoing drought condition in the State.

The City of Los Angeles Municipal Code (LAMC) includes regulations that allow the City to assure available sewer capacity for new projects and fees for improvements to the infrastructure system. LAMC Section 64.15 requires that the City perform a Sewer Availability Request (SCAR) when any person seeks a sewer permit to connect a property to the City's sewer collection system, proposes additional discharge through their existing public sewer connection, or proposes a future sewer connection or future development that is anticipated to generate 10,000 gallons or more of sewage per day. A SCAR is an analysis of the existing sewer collection system to determine if there is adequate capacity existing in the sewer collection system to safely convey the newly generated sewage to the appropriate sewage treatment plant.

During environmental and entitlement phases the City has determined that an alternative, but non-binding availability study can be performed which verifies the sewer capacity of the adjacent sewer mains through a process run by the Bureau of Sanitation called the Wastewater Services Information (WWSI) request. This preliminary evaluation reviews potential impacts to the wastewater system for the Project in the same manner as the SCAR would, is not binding, but does not expire. As stated in the WWSI the evaluation will determine cumulative impacts and guide the planning process for any future sewer improvement projects needed to provide future capacity as the City grows and develops. For the purpose of this Utilities Technical Memorandum the WWSI will be used in lieu of the SCAR for evaluating sewer impacts.

LAMC Section 64.11.2 requires the payment of fees for new connections to the sewer system to assure the sufficiency of sewer infrastructure. New connections to the sewer system are assessed a Sewerage Facilities Charge. The rate structure for the Sewage Facilities Charge is based upon wastewater flow strength, as well as volume. The determination of wastewater strength for each applicable project is based on City guidelines for the average wastewater concentrations of two parameters, biological oxygen demand and suspended solids, for each type of land use. Fees paid to the Sewerage Facilities Charge are deposited in the City's Sewer Construction and

Maintenance Fund for sewer and sewage-related purposes, including but not limited to industrial waste control and water reclamation purposes.

In addition, the City establishes design criteria for sewer systems to assure that new infrastructure provides sewer capacity and operating characteristics to meet City Standards (Bureau of Engineering Special Order No. S006-0691). Per this Special Order, lateral sewers, which are sewers 18 inches or less in diameter, must be designed for a planning period of 100 years. The Special Order also requires that sewers be designed so that the peak dry weather flow depth during their planning period shall not exceed one-half the pipe diameter.

In 2006 the City approved the City of Los Angeles Integrated Resources Plan, which incorporates a Wastewater Facilities Plan. The Integrated Resources Program was developed to meet future wastewater needs of more than 4.3 million residents expected to live within the City by 2020. To meet future demands posed by increased wastewater generation, the City has chosen to expand its current overall treatment capacity, while maximizing the potential to reuse recycled water through irrigation, and other approved uses. The City has completed its creation of the draft One Water Los Angeles 2040 Plan, which builds on the premise of the Integrated Resources Plan to maximize water resources and to develop a framework for managing the City's watersheds, water resources, and water facilities. As with the Integrated Resources Plan, such efforts would be organized in phases. Phase I of the One Water Los Angeles 2040 Plan included developing initial planning baselines and guiding principles for water management and citywide facilities planning in coordination with City departments, other agencies, and stakeholders. Phase II included development of technical studies and an updated facilities plan for stormwater and wastewater and was completed in 2018. Environmental review is currently ongoing.

3.2.3 Electricity

Title 24 of the California Code of Regulations regulates energy consumption in new construction. The standards regulate energy consumed in buildings for heating, cooling, ventilation, and lighting. Title 24 is implemented through the local plan check and permit process. The current (2016) standards effective date is January 1, 2017 and it applies for new construction of both residential and non-residential buildings.

Los Angeles Department of Water and Power (LADWP) has expanded the Power Integrated Resource Plan (IRP) into the Power Strategic Long-Term Resource Plan (SLTRP), approved April 2018. The SLTRP dictates strategies for meeting LADWP's regulatory requirements and environmental policy goals through 2037 and extending to 2050. The SLTRP establishes the groundwork for updating LADWP's infrastructure and power grid to meet the City's growing electricity demands. Therefore, the Project's expected electricity demands are in line with the SLTRP.

3.2.4 Natural Gas

As a public utility, the Southern California Gas Company (the Gas Co.) is under jurisdiction of the California Public Utilities Commission. As mentioned in section 3.2.3, Title 24 of the California Code of Regulations regulates energy consumption in new constructions. The standards regulate energy consumed in buildings for heating, cooling, ventilation, and lighting. Title 24 is implemented through the local plan check and permit process.

The Gas Co.'s 2018 Gas Report states that residential gas demand is expected to decrease at an annual average rate of 1.4 percent whereas commercial and industrial demand is expected to increase at an annual rate of 0.2 percent. This is mainly due to increased efficiency of power plants and the statewide efforts to use renewable sources of energy for electricity generation.

3.2.5 Telecommunications

As a private utility, telecommunications service providers operate jurisdiction of the California Public Utilities Commission. As mentioned in section 3.2.3, Title 24 of the California Code of Regulations regulates energy consumption in new constructions. The standards regulate energy consumed in buildings for heating, cooling, ventilation and lighting. Title 24 is implemented through the local plan check and permit process.

4.0 WATER

4.1 Existing Condition

The water infrastructure in the vicinity of the Project Site includes an existing 12" water main in 11th Street, and existing 6" and 12" water mains in Hill Street. There are 2 existing fire hydrants

adjacent to the Project Site. The first hydrant is located on the west side of Hill St., approximately 43 feet south of the centerline of 11th St. The second hydrant is located on the west side of Hill St., approximately 312 feet south of the centerline of 11th St. Due to the existing building being a vacant, unused warehouse, the current water demands are considered negligible.

4.2 Proposed Condition

The City calculates the Project's anticipated water demand using the City's approved sewer generation rates. The Project will have hotel rooms, called Transient Occupancy Residential Structure (TORS), that have kitchenettes since the rooms are intended for long-term guests. For comparison, two water demand tables have been generated; one table using the City's generation rate for hotel rooms and one table using the City's generation rate for apartment units for the TORS hotel rooms.

Using the City's generation rates for hotel rooms, the Project is expected to generate the following water demands:

Proposed Use	Proposed Number of Units	Unit	Sewer Generation Factor	Average Daily Flow (GPD) [a]
Residential: Studio	24	DU	75	1,800
Residential: 1-BDRM	144	DU	110	15,840
Residential: 2-BDRM	127	DU	150	19,050
Residential: 3-BDRM	20	DU	190	3,800
Residential: PH	4	DU	190	760
Hotel	160	DU	120	19,200
Pool [b]	1	POOL	205	205
Restaurant [d]	114	Seats	30 / Seat	3,420
Fitness Center	2,147	SF	0.2	429
Library	3,959	SF	0.05	198
Lounge space	14,762	SF	0.05	738
Landscape Irrigation [c]	-	-	-	422
20% Contingency [e]	-	-	-	13,088
Total	-	-		**78,950**

(a) The average daily flow based on City of Los Angeles' sewer generation factors dated April 6, 2012.
(b) A depth of 5' was assumed in order to calculate the GPD of the pool. The average daily pool water use is calculated using the volume of the pool and dividing that by 365, assuming that the pool is refilled once a year for maintenance.
(c) The average daily flow was based on the monthly irrigation demands study performed by RCH. Calculations for the monthly irrigation demands are in the appendix.
(d) The number of seats were calculated per the LA City Plumbing Code as an occupant load.
(e) An additional 20% contingency for overall water use has been included in this water demand table to provide a conservative estimate of water usage.

Using the City's generation rates for apartment units, the Project is expected to generate the following water demands:

Proposed Use	Proposed Number of Units	Unit	Sewer Generation Factor	Average Daily Flow (GPD) [a]
Residential: Studio	24	DU	75	1,800
Residential: 1-BDRM	144	DU	110	15,840
Residential: 2-BDRM	127	DU	150	19,050
Residential: 3-BDRM	20	DU	190	3,800
Residential: PH	4	DU	190	760
Residential Hotel/Apt: Studio	106	DU	75	7,950
Residential Hotel/Apt: 1 BDRM	46	DU	110	5,060
Residential Hotel/Apt: 2 BDRM	8	DU	150	1,200
Pool [b]	1	POOL	205	205
Restaurant [d]	114	Seats	30 / Seat	3,420
Fitness Center	2,147	SF	0.2	429
Library	3,959	SF	0.05	198
Lounge space	14,762	SF	0.05	738
Landscape Irrigation [c]	-	-	-	422
20% Contingency [e]	-	-	-	12,090
Total	-	-		**72,962**

(a) The average daily flow based on City of Los Angeles' sewer generation factors dated April 6, 2012.
(b) A depth of 5' was assumed in order to calculate the GPD of the pool. The average daily pool water use is calculated using the volume of the pool and dividing that by 365, assuming that the pool is refilled once a year for maintenance.
(c) The average daily flow was based on the monthly irrigation demands study performed by RCH. Calculations for the monthly irrigation demands are in the appendix.
(d) The number of seats were calculated per the LA City Plumbing Code as an occupant load.
(e) An additional 20% contingency for overall water use has been included in this water demand table to provide a conservative estimate of water usage.

Listing the TORS hotel rooms using the City's sewer generation rate for hotel rooms, the total expected water demand is 78,950 GPD. Listing the TORS hotel rooms using the City's sewer generation rate for apartment units, the total expected water demand is 72,962 GPD. At 319 dwelling units and 160 TORS units, the proposed Project does not meet or exceed any of the criteria stated in section 3.2.1; therefore, a WSA will not be required from LADWP.

Domestic water is expected to be the main contributor of water consumption for the Project; however, fire water demands will create a much greater immediate impact on the water network,

and therefore are the primary means for analyzing infrastructure capacity. Nevertheless, conservative analysis for both fire suppression and domestic water flows has been completed by LADWP for the Project. See Appendix for the results of the Information of Fire Flow Availability Report (IFFAR) and Service Availability Report (SAR), respectively.

4.3 Significance Thresholds – Water

In accordance with the 2019 CEQA Guidelines Appendix G (Appendix G), the Project would have a significant impact related to water supply and infrastructure if it would:

- Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which would cause significant environmental effects; or
- [Not] have enough water supplies available to serve the Project from existing entitlements and resources or require new or expanded entitlements.

The 2006 LA CEQA Thresholds Guide identifies the following criteria to evaluate water supply and infrastructure:

- The total estimated water demand for the project. Proposed Water Demand Proposed water demand includes proposed indoor and outdoor water uses as well as cooling towers and/or parking. For indoor uses, base demand is first estimated by applying sewer generation factors (SGFs), published by City of Los Angeles Bureau of Sanitation, to elements of the project scope such as square footage and use type (restaurant, office, etc.).
- Whether enough capacity exists in the water infrastructure that would serve the project, considering the anticipated conditions at project buildout;
- The amount by which the project would cause the projected growth in population, housing or employment for the Community Plan area to be exceeded in the year of the project completion; and
- The degree to which scheduled water infrastructure improvements or project design features would reduce or offset service impacts

In assessing impacts related to water supply and infrastructure, the City will use Appendix G as the thresholds of significance. The criteria identified above from the 2006 LA CEQA Thresholds Guide will be used where applicable and relevant to assist in analyzing the Appendix G thresholds.

4.4 Project Impacts

4.4.1 Construction

Water demand for construction of the Project would be required for dust control, cleaning of equipment, excavation/export, removal, and re-compaction, etc. The contractor will bring their own portable bathroom and wash stations which will have their own self-contained water source and wastewater storage. They will not connect to the adjacent sewer or water infrastructure for those uses. Based on a review of construction projects of similar size and duration, a conservative estimate of construction water use would be around 1,000 gallons per day (GPD). Considering that the Project demands are 149,455 GPD and that they have been approved by the LADWP through its water supply assessment review, the temporary water usage is far less than the proposed water demand and therefore poses no significant impacts.

The Project will require construction of new, on-site water laterals to serve the new building and facilities of the proposed Project. Construction impacts associated with the installation of water lateral lines would primarily involve trenching to place the water laterals and meters below surface and would be limited to on-site water distribution, and minor off-site work associated with connections to the public main. Prior to ground disturbance, Project contractors would coordinate with LADWP to identify the locations and depth of all lines. During such construction activities, emergency access to the Project Site as well as existing vehicular and non-vehicular traffic flow would be preserved by the construction management plan approved by the City for the Project. Further, LADWP would be notified in advance of proposed ground disturbance activities to avoid water lines and disruption of water service. Therefore, Project impacts on water infrastructure associated with construction activities would be less than significant.

4.4.2 Operation

According to the 2017 City of Los Angeles Fire Code Section 501.3, construction documents for proposed fire apparatus access, location of fire lanes, security gates across fire apparatus access roads and construction documents and hydraulic calculations for fire hydrant systems shall be submitted to the fire department for review and approval prior to construction. In addition, Section 507.3 indicates the Fire Flow requirements according to land use. High-density Residential and Neighborhood Commercial requires at least 4,000 gallons per minute (GPM) from four adjacent fire hydrants flowing simultaneously. Industrial and commercial land use requires 6,000 to 9,000 from four to six fire

hydrants flowing simultaneously. The maximum distance between hydrants should be 300 ft. To serve the project, two new public fire hydrants would be installed for a total of four hydrants ultimately serving the project. An Information of Fire Flow Availability Request (IFFAR) was submitted to LADWP for four hydrants flowing simultaneously at 6,000 GPM on May 7, 2020 to assess the pressures of multiple hydrants flowing simultaneously and to determine if any water main upgrades would be required to meet the Fire Department requirements. LADWP approved the IFFAR on May 20, 2020, which indicates that upgrades to the water mains are not expected. There are currently 2 hydrants within the vicinity of the Project Site. There is a hydrant on the west side of Hill St. 50 feet south of the centerline of 11th St. and a hydrant on the west side of Hill St. 311 feet south of the centerline of 11th St. Therefore, two new public fire hydrants will be installed.

In addition, a Service Availability Report (SAR) approved on August 26, 2021 for two proposed fire water connections to the building. The pressure reporting from the SARs indicates that the existing 12 inch water main on 11th Street can provide 51 psi of pressure from a single 5,000 GPM water service connection. It also demonstrates that the existing 12 inch main in South Hill Street also could provide 42 psi of pressure from a 5,000 GPM water service connection if additional water supply was required. These two results demonstrate that the adjacent water infrastructure is sufficient to meet the project's fire water demands.

5.0 SEWER

5.1 Existing Condition

There is an existing 8" public sewer main on 11th Street, and a 24" sewer main on Hill Street. The existing design capacity of the Hyperion Service Area is approximately 550 million gallons per day (consisting of 450 million gallons per day (MGD) at the Hyperion Water Reclamation Plant, 80 MGD at the Donald C. Tillman Water Reclamation Plant, and 20 MGD at the Los Angeles–Glendale Water Reclamation Plant). These figures for treatment plant capacity are referenced from the California Regional Water Quality Control Board Order R4-2005-0020 dated April 7, 2005.

The existing warehouse building on the site has been vacant for years, which indicates that it is unlikely to be producing any existing sewer discharge.

5.2 Proposed Condition

Using the Project architect's program summary as provided in the latest Plans 1111 South Hill on April 29, 2021, the table below shows the proposed Project's wastewater flows by land use type. The Project will have hotel rooms, called Transient Occupancy Residential Structure (TORS), that have kitchenettes since the rooms are intended for long-term guests. For comparison, two sewer demand tables have been generated: one table using the City's generation rate for hotel rooms and one table using the City's generation rate for apartment units for the TORS hotel rooms. Using the City's generation rates for hotel rooms, the Project is expected to generate the following water demands:

Proposed Use	Proposed Number of Units	Unit	Sewer Generation Factor	Average Daily Flow (GPD) [a]
Residential Condo: Studio	24	DU	75	1,800
Residential Condo: 1-BDRM	144	DU	110	15,840
Residential Condo: 2-BDRM	127	DU	150	19,050
Residential Condo: 3-BDRM	20	DU	190	3,800
Residential: PH	4	DU	190	760
Hotel	160	DU	120	19,200
Pool [b]	1	POOL	74,650	74,650
Restaurant [c]	114	Seats	30	3,420
Fitness Center	2,147	SF	0.2	429
Library	3,959	SF	0.05	198
Lounge space	14,762	SF	0.05	738
Total	-	-		**139,885**

(a) The average daily flow based on City of Los Angeles' sewer generation factors dated April 6, 2012.
(b) A depth of 5' was assumed in order to calculate the GPD of the pool. The maximum daily pool water use is conservatively assumed to be filled in a single day, and is therefore calculated to be the entire volume of the pool, in order to calculate the absolute maximum sewer demands that will be required from the public sewer system.
(c) The number of seats were calculated per the LA City Plumbing Code as an occupant load.

Using the City's generation rates for apartment units, the Project is expected to generate the following water demands:

Proposed Use	Proposed Number of Units	Unit	Sewer Generation Factor	Average Daily Flow (GPD) [(a)]
Residential Condo: Studio	24	DU	75	1,800
Residential Condo: 1-BDRM	144	DU	110	15,840
Residential Condo: 2-BDRM	127	DU	150	19,050
Residential Condo: 3-BDRM	20	DU	190	3,800
Residential: PH	4	DU	190	760
Residential Hotel/Apt: Studio	106	DU	75	7,950
Residential Hotel/Apt: 1 BDRM	46	DU	110	5,060
Residential Hotel/Apt: 2 BDRM	8	DU	150	1,200
Pool	1	POOL	74,650	74,650
Restaurant	114	Seats	30	3,420
Fitness Center	2,147	SF	0.2	429
Library	3,959	SF	0.05	198
Lounge space	14,762	SF	0.05	738
Total	-	-		**134,895**

(a) The average daily flow based on City of Los Angeles' sewer generation factors dated April 6, 2012.
(b) A depth of 5' was assumed in order to calculate the GPD of the pool. The maximum daily pool water use is conservatively assumed to be filled in a single day, and is therefore calculated to be the entire volume of the pool, in order to calculate the absolute maximum sewer demands that will be required from the public sewer system.
(c) The number of seats were calculated per the LA City Plumbing Code as an occupant load.

Listing the TORS hotel rooms using the City's sewer generation rate for hotel rooms, the maximum expected sewer demand is 139,885 GPD. Listing the TORS hotel rooms using the City's sewer generation rate for apartment units, the maximum expected sewer demand is 134,895 GPD. Using the most conservative sewer demand of 139,885 GPD, the Project will likely require multiple 6" and/or 8" sewer laterals to connect to main lines in the street. A Wastewater Services Information (WWSI) request was submitted to the City of Los Angeles Bureau of Sanitation (BOS) for discharge of 100% of the Project's sewer flowing to the 24" main line in Hill Street. The WWSI is a review that is performed by the City of Los Angeles Department of Public Works, Bureau of Sanitation to evaluate the existing sewer system and determine if there is

adequate capacity to safely convey sewage from proposed development projects, proposed construction projects, proposed groundwater dewatering projects and proposed increases of sewage from existing facilities. The maximum sewer demand for pool use was conservatively calculated using the total volume of the pool. This would ensure that if the entire volume of the pool were to be discharged, the City's public sewer system would be able to handle it. The approved WWSI was received from BOS on July 13, 2021 for the most conservative Project demand of 139,885 GPD.

5.3 Significant Thresholds – Sewer

In accordance with the 2006 LA CEQA Guidelines Appendix G (Appendix G), the Project would have a significant impact related to wastewater if it would:

- Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board;
- Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which would cause significant environmental effects; or
- Result in a determination by the wastewater treatment provider, which serves or may serve the project, that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments.

The 2006 LA CEQA Thresholds Guide identifies the following criteria to evaluate wastewater impacts:

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

In assessing impacts related to wastewater, the City will use Appendix G as the thresholds of significance. The criteria identified above from the 2006 LA CEQA Thresholds Guide will be used where applicable and relevant to assist in analyzing the Appendix G thresholds.

5.4 Project Impacts

5.4.1 Construction

Construction activities for the Project would not result in wastewater generation as construction workers would typically utilize portable restrooms, which would not contribute to wastewater flows to the local wastewater system. Thus, wastewater generation from Project construction activities is not anticipated to cause a measurable increase in wastewater flows. Therefore, the Project construction impacts to the wastewater system would be less than significant.

The Project will require construction of new wastewater infrastructure to serve the new buildings and facilities of the proposed Project. Construction impacts associated with wastewater infrastructure would primarily be confined to trenching for miscellaneous utility lines and connections to public infrastructure. Installation of wastewater infrastructure will be limited to on-site wastewater distribution, and minor off-site work associated with connections to the public main. Although no upgrades to the public main are anticipated, minor off-site work is required to connect to the public main. Therefore, as part of the Project, a construction management plan would be implemented to reduce any temporary pedestrian and traffic impacts during construction, including maintaining lanes of travel and ensuring safe pedestrian access and adequate emergency vehicle access. Should perched groundwater be encountered during construction, it would be directed to a dewatering system and discharged in accordance with all applicable rules and regulations under the NPDES CGP regulations and the City's grading permit conditions. Overall, when considering impacts resulting from the installation of any required wastewater infrastructure, all impacts are of a relatively short-term duration (i.e., months) and would cease to occur once the installation is complete. Therefore, Project impacts on wastewater associated with construction activities would be less than significant.

5.4.2 Operation

An approved WWSI was received from BOS on July 13, 2021 for the Project. BOS analyzed the Project demands in conjunction with existing conditions and forecasted growth, which allows the Project to discharge up to 139,895 GPD of wastewater to the existing sewer main in Hill St.

As discussed above, the existing design capacity of the Hyperion Service Area is approximately 550 million gallons per day (consisting of 450 MGD at the Hyperion Water Reclamation Plant, 80 MGD at the Donald C. Tillman Water Reclamation Plant, and 20 MGD at the Los Angeles–Glendale Water Reclamation Plant). The Project's proposed wastewater generation is approximately 139,895 GPD. This is equivalent to far less than one percent of the Hyperion Water Reclamation Plant's capacity where the Project's wastewater would be treated. Consequently, impacts on wastewater treatment capacity are less than significant.

The half full capacity of the 24-inch sewer line in Hill Street is 4,790,000 GPD with a current gauging at 20% full or 1,920,000 GPD. The Project's gross sewage generation is approximately 139,895 GPD. This represents approximately 2.9% of the pipe's half full capacity of the 24-inch line in Hill Street and is well below the remaining 30% of the pipes half full capacity. Due to this, impacts on wastewater infrastructure would be less than significant

6.0 ELECTRICITY

6.1 Existing Condition

The existing power service in the vicinity of the Project site is supplied by Los Angeles Department of Water and Power. Based on our substructure review, there are existing underground electric lines within the vicinity of the Project.

6.2 Proposed Condition

The following table provides the Project's electricity consumption with TORS hotel rooms modeled as multi-family residential dwellings.

Type Description	Annual Electricity Demand (kWh/Year)[a]
Residential Apartments – Electricity	1,242,460
Residential Apartments – Water and Wastewater [e]	441,244
TORS Hotel Rooms – Electricity [b]	623,178
TORS Hotel Rooms – Water and Wastewater [b,e]	221,314
Quality Restaurant – Electricity	151,356
Quality Restaurant – Water and Wastewater [e]	14,422
Swimming Pool – Electricity [c]	26,736

Swimming Pool – Water and Wastewater [d,e]	1,946
Enclosed Parking with Elevator	615,939
Total	**3,338,595**

Source: ICF 2021. Outputs are estimates and should not be used for forecasting purposes. Outputs conservatively assume that there is no electricity demand from the current industrial building at the project site.

a. Electricity demand values generated using CalEEMod version 2016.3.2.
b. Electricity and water usage for TORS Hotel Rooms were modeled using the "Apartment High Rise" land use in CalEEMod.
c. Electricity consumption based on Commercial Pump Calculator from Pentair and pool capacity of 74,650 gallons.
d. Water usage based on daily usage and one draining and filling event per year for maintenance purposes.
e. Water and wastewater electricity related to energy associated with water supply, distribution, and treatment.

The following table provides the Project's electricity consumption with TORS hotel rooms modeled as a hotel.

Type Description	Annual Electricity Demand (kWh/Year)[a]
Residential Apartments – Electricity	1,242,460
Residential Apartments – Water and Wastewater [e]	441,245
TORS Hotel Rooms – Electricity [b]	872,215
TORS Hotel Rooms – Water and Wastewater [b,e]	58,720
Quality Restaurant – Electricity	151,356
Quality Restaurant – Water and Wastewater [e]	14,422
Swimming Pool – Electricity [c]	26,736
Swimming Pool – Water and Wastewater [d,e]	1,946
Enclosed Parking with Elevator	615,939
Total	**3,425,038**

Source: ICF 2021. Outputs are estimates and should not be used for forecasting purposes. Outputs conservatively assume that there is no electricity demand from the current industrial building at the project site.

a. Electricity demand values generated using CalEEMod version 2016.3.2.
b. Electricity and water usage for TORS Hotel Rooms were modeled using the "Apartment High Rise" land use in CalEEMod.
c. Electricity consumption based on Commercial Pump Calculator from Pentair and pool capacity of 74,650 gallons.
d. Water usage based on daily usage and one draining and filling event per year for maintenance purposes.
e. Water and wastewater electricity related to energy associated with water supply, distribution, and treatment.

These figures are preliminary estimates of electricity usage. Outputs conservatively assume that there is no electricity demand from the current industrial building at the project site. The proposed energy could change as sustainability measures are incorporated.

6.3 Significance Thresholds – Electricity

Appendix G of the 2019 CEQA Guidelines was prepared in response to the requirement in Public Resources Code Section 21100(b)(3), which asks if the Project would require or result in the relocation of construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction of which could cause significant environmental effects.

In addition, regarding potential impacts to energy, the 2006 LA CEQA Thresholds Guide states that a determination of significance shall be made on a case-by-case basis, considering the following factors:

- The extent to which the project would require new (off-site) energy supply facilities and distribution infrastructure, or capacity enhancing alterations to existing facilities:
- Whether and when the needed infrastructure was anticipated by adopted plans; and
- The degree to which the project design and/or operations incorporate energy conservation measures, particularly those that go beyond City requirements.

The analysis herein focuses on impacts related to infrastructure capacity

6.4 Project Impacts

Based on the will serve letter dated January 14, 2019, LADWP has indicated it has enough capacity to provide electricity to the Project Site. LADWP states that the estimated power requirement for the Project is part of the total load growth forecast for the City and has been considered in the planned growth of the power system.

7.0 NATURAL GAS

7.1 Existing Condition

The existing natural gas service in the vicinity of the Project site is supplied by Southern California Gas Company (SoCal Gas). From record substructure maps it has been determined that there is one existing 3” gas line in 11th Street and a 6” gas line in Hill Street.

7.2 Proposed Condition

The lateral connection size and location for this site are unknown. No upgrades to the gas system are expected.

7.3 Significance Thresholds – Natural Gas

Appendix G of the 2019 CEQA Guidelines was prepared in response to the requirement in Public Resources Code Section 21100(b)(3), which asks if the Project would require or result in the relocation of construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction of which could cause significant environmental effects.

The determination of significance shall be made on a case-by-case basis, considering the following factors:

- The extent to which the project would require new (off-site) natural gas supply facilities and distribution infrastructure, or capacity enhancing alterations to existing facilities:
- Whether and when the needed infrastructure was anticipated by adopted plans; and
- The degree to which the project design and/or operations incorporate energy conservation measures, particularly those that go beyond City requirements.

Based on these factors, the Project would have a significant impact on energy use if it would:

- Cause wasteful, inefficient, and unnecessary consumption of energy during construction, operation, and/or maintenance;
- Result in an increase in demand for electricity or natural gas that exceeds available supply of distribution infrastructure capabilities that could result in the construction of new energy facilities or expansion of existing facilities, the construction of which could cause significant environmental effects;
- Conflict with adopted energy conservation plans; or
- Violate state or federal energy standards

The analysis herein focuses on impacts related to infrastructure capacity.

7.4 Project Impacts

A will serve letter request was sent to Southern California Gas Company. Southern California Gas Company confirmed that they do not have any transmission gas facilities within the vicinity of the

Project. Based on similar projects of this size, there are no service upgrades expected at this time.

8.0 TELECOMMUNICATIONS FACILITIES

8.1 Existing Condition

The existing telecommunications services in the vicinity of the Project site are supplied by various utilities providers such as AT&T Distribution, ATT, Spectrum, Verizon, Zayo FNA Abovenet, and Crown Castle. The companies were found through a DigAlert search and were reached out to for a Utilities Request. Spectrum is the only provider to date that has confirmed the existence of utilities that were owned and operated in the Project's limits. All other utility providers, except for AT&T Distribution, have confirmed that they do not have utilities present in the Project's vicinity. Any street improvement activities conducted as part of the Project, would protect the existing conduit in place unless it is required to be removed and replaced by AT&T during the design review process. There are no existing cellular towers located adjacent to the Project Site and no cellular towers are proposed by the Project.

8.2 Proposed Condition

The proposed connection size and locations for telecom connections for this site are unknown currently. No upgrades to the telecom systems are expected. These connections will be constructed by the private utility service provider and follow all appropriate regulatory requirements of such a connection. New service point connections to provide telecommunications services to the new buildings will be provided in conformance with all applicable federal, state, and County requirements. It is expected that the Project would not result in the relocation or expansion of telecommunication facilities.

8.3 Significance Thresholds – Telecommunications

Appendix F of the CEQA Guidelines was prepared in response to the requirement in Public Resources Code Section 21100(b)(3), which states that an EIR shall include a detailed statement setting forth "[m]itigation measures proposed to minimize significant effects of the environment, including, but not limited to, measures to reduce the wasteful, inefficient, and unnecessary consumption of energy. Although an EIR is not being prepared for the Project, this language may guide the analysis of potential impacts related to natural gas use.

In accordance with the State CEQA Guidelines Appendix G (Appendix G), the Project would have a significant impact related to telecommunications if it would:

- Require or result in the relocation or construction of new or expanded telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

The determination of significance shall be made on a case-by-case basis, considering the following factors:

- The extent to which the project would require new (off-site) telecommunication supply facilities and distribution infrastructure, or capacity enhancing alterations to existing facilities:
- Whether and when the needed infrastructure was anticipated by adopted plans; and
- The degree to which the project design and/or operations incorporate energy conservation measures, particularly those that go beyond City requirements.

Based on these factors, the Project would have a significant impact on energy use if it would:

- Cause wasteful, inefficient, and unnecessary consumption of energy during construction, operation, and/or maintenance;
- Result in an increase in demand for electricity, natural gas, or telecommunications services that exceeds available supply of distribution infrastructure capabilities that could result in the construction of new energy facilities or expansion of existing facilities, the construction of which could cause significant environmental effects;
- Conflict with adopted energy conservation plans; or
- Violate state or federal energy standards

The analysis herein focuses on impacts related to infrastructure capacity

8.4 Project Impacts

A will serve letter request has been sent to Charter Communications, LADWP, and Southern California Gas. Based on similar projects of this size, there are no service upgrades expected at this time. No telecom facilities exist on the site and therefore the construction of the project will have no direct impact to the existing telecom network’s capacity or functionality.

9.0 LEVEL OF SIGNIFICANCE

Based on the analysis of the proposed Project, no significant impacts have been identified for water, sewer, electrical, telecommunication, and natural gas facilities.

10.0 APPENDICIES

PROJECT INFORMATION

Site Address:
1111 S. Hill St. Los Angeles, CA 90015

OWNERSHIP:
Crown 1111 LLC
511 N. La Cienega Blvd. Suite 206
West Hollywood, CA 90048
Contact: Patrick Caruso
T. 323.518.9264

LANDSCAPE:
RIOS
3101 W. Exposition Place
Los Angeles, CA 90018
Contact: Nate Cormier
T. 323.785.1800 F. 323.785.1801

ARCHITECT:
MVE + Partners
888 S Figueroa Street, Suite 2170
Los Angeles, CA 90017
Contact: Sherwin Pineda
T. 213.805.7600

LAND USE CONSULTANT:
PSOMAS
555 S. Flower St. Suite 4300
Los Angeles, CA 90071
Contact: Katherine Casey
T. 213.223.1472

PROJECT DESCRIPTION

40 total story high-rise mixed use project including 36 stories Residential / Hotel over 3 story parking structure over ground floor Commercial and 1 level below grade parking.

LEGAL DESCRIPTION

Parcel 1:
Part of Block 77 of ORD's survey, in the city of Los Angeles, County of Los Angeles, State of California, as per map recorded in book 53, pages 66 to 73 inclusive of miscellaneous records, in the office of the county records of said county, described as follows:
Beginning at the northeasterly corner of said block at the southwest corner of Hill and Eleventh streets; thence westerly along the southerly line of Eleventh street, 165 feet; thence southerly parallel with Hill street, 120 feet; thence easterly parallel with Eleventh street, 165 feet to Hill street; thence northerly 120 feet to the point of beginning.

Parcel 2:
Lots A and B of Tract No. 1394, in the City of Los Angeles, county of Los Angeles, State of California, as per map recorded in book 18, page 106 of maps, in the office of the county recorder of said county.

ZONE

LOT	ZONE	GENERAL PLAN LAND USE DESIGNATION
APN 5139-019-022	**C2-4D-O**	REGIONAL CENTER COMMERCIAL

LOT AREA

Lot Area (Post-Dedicated)	26,683 sf (0.61 Acres)
Lot Area (Pre-Dedicated)	27,415 sf (0.63 Acres)
*Buildable Area (Per LAMC Section 14.5.3 Transit Area Mixed Use Project)	43,385 sf (0.99 Acres)

*Per LAMC Section 14.5.3, buildable area is lot area plus area between centerlines of adjacent streets and alley.

SETBACKS, SIDEWALK EASEMENTS, DEDICATIONS

REQUIRED (No setbacks required per LAMC 12.22.C.3.A)
Front Yard: 11th St. - 2'-0" R.O.W. dedication
3'-0" sidewalk easement per Downtown Street Standards
Side Yard: Hill St. - None
Alley - 2'-0" R.O.W. dedication
Rear Yard: None
PROVIDED
Front Yard: 11th St. - 2'-0" R.O.W. dedication
3'-0" sidewalk easement per Downtown Street Standards
Side Yard: Alley - 2'-0" alley R.O.W. dedication
Rear Yard: None provided
Tower Spacing: 40'-0" from interior property line and from alley centerline (Downtown Design Guide)

FLOOR AREA

By-right Floor Area (6:1 FAR) per Pre-Dedicated Lot Area	164,490 sf	
By-right Floor Area (6:1 FAR) per LAMC Sec. 14.5.3	260,310 sf	
Floor Area (13:1 FAR) per LAMC Sec. 14.5.3 (For Transit Area Mixed-Use Project)	564,005 sf	
Proposed Commercial (Restaurant)	**3,429 sf**	**(0.08 FAR)**
Proposed Hotel	**115,068 sf**	**(2.65 FAR)**
Proposed Residential	**373,480 sf**	**(8.61 FAR)**
Total Proposed Floor Area	**491,977 sf**	**(11.34 FAR)**

HEIGHT

Height District 4 Max. Height Allowed	No Limit
Proposed Top Of Roof	451' - 0"
Proposed Building Height (40 Total Stories)	492' - 0" (Top of Roof Appurtenances)

RESIDENTIAL - LEVELS 14-40

Studio	24
1 Bedroom	44
1 Bedroom + Den	100
2 Bedroom	127
3 Bedroom	20
Penthouse Units (3 Bedroom)	4
Total Residential (Condominium)	**319 Units**

HOTEL (TORS) - LEVELS 6-13

GUEST ROOMS	**160**

PARKING

REQUIRED

Residential - Per Central City Parking District (CCPD) Exception)
LAMC Section 12.21.A4. (p):

Units w/ 3 or less habitable rooms (24 stu + 44 one br)	1.00 x 68 units	= 68	Spaces
Units w/ more than 3 habitable rooms (100 one br/den + 127 two br + 20 three br + 4 ph)	1.25 x 251 units	= 314	Spaces
Total Residential Base Required Spaces		= *382*	*Spaces*
15% Bike Reduction**		- 57	Spaces
Total Residential Required Spaces		**= 325**	**Spaces**

TORS Units (Extended Stay Hotel): (LAMC Section 12.21.A4(p))

Studio	*1 Space x 56 Keys*	= 56	Spaces
Studio L	*1 Space x 50 Keys*	= 50	Spaces
1 BED	*1 Space x 46 Keys*	= 46	Spaces
2 BED	*1.25 Spaces x 8 Keys*	= 10	Spaces
Total Hotel Base Required Spaces		= *162*	*Spaces*
20% CUP Reduction****		- 32	Spaces
		= 130	Spaces
15% Bike Reduction**		- 19	Spaces
Total Hotel Required Spaces		**= 111**	**Spaces**

Commercial - Per Downtown Parking District (DPD):
(LAMC Section 12.21.A.4(i)(3) None Required For Less than 7,500 SF
Commercial 3429 SF **= 0 Spaces**
Total Required Spaces = 436 Spaces

PROPOSED

Residential*** **(with fully automated system)**
Standard (Prime) **Residential Proposed Spaces = 325 Spaces**
20 % EVR = 65 Spaces
10 % EVCS = 32 Spaces
Hotel (with Valet)
Standard (Prime) **Total Hotel Proposed** = 111 Spaces
20 % EVR = 22 Spaces
10 % EVCS = 11 Spaces
Total Proposed Spaces = 436 Spaces

** Per LAMC Section 12.21.A4 New or existing automobile parking spaces required by the code for all uses may be replaced by bicycle parking in accordance with maximum reductions allowed per LAMC & Zoning Code Interpretations Manual.
***Per LAMC Section 12.21.A5(c) not more than 40% of the required stalls may be designed as compact stalls to accomodate compact cars.
**** Per LAMC 12.24 S request approval to reduce parking by 20%.

BICYCLE PARKING

REQUIRED

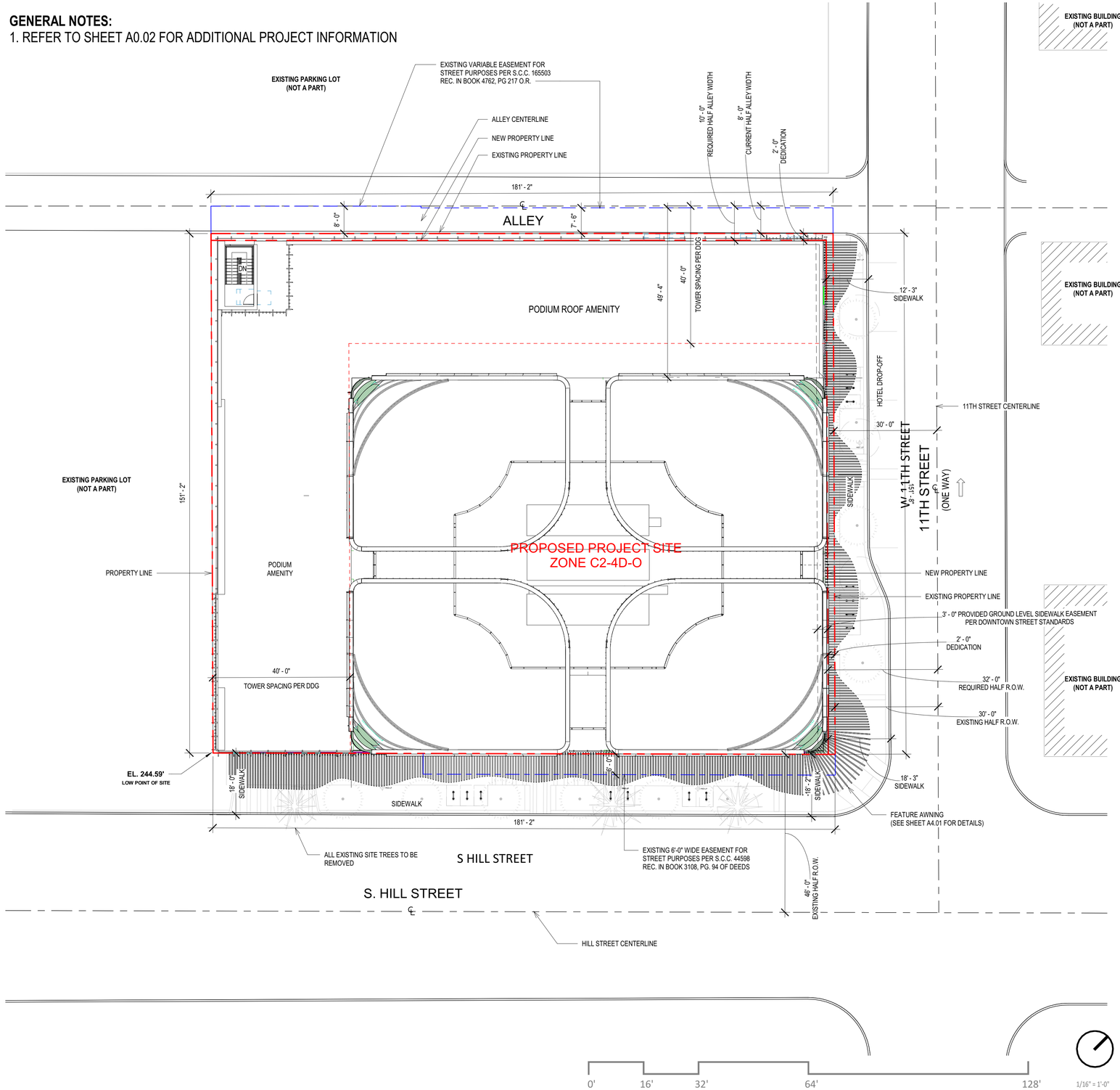
Residential	57 Spaces Replaced x 4 Bike Parking Spaces	=	228 Spaces
	*Min. 15 (Short Term) / Min. 155 (Long Term) / 56 (Long or Short)*****		
Hotel (TORS)	160 keys	=	115 Spaces
	*Min. 10 (Short Term) / Min. 105 (Long Term)*****		
Commercial	*Min. 2 (Short Term) / Min. 2 (Long Term)*****	=	4 Spaces
	Total Bike Parking Required	**=**	**347 Spaces**

PROPOSED

Residential	44 (Short Term) / 184 (Long Term)	=	228 Spaces
Hotel	10 (Short Term) / 105 (Long Term)	=	115 Spaces
Commercial	2 (Short Term) / 2 (Long Term)	=	4 Spaces
	Total Bike Parking Proposed	**=**	**347 Spaces**

***** Per LAMC Section 12.21.A16 (a)(1)(i) Required Short-term and Long-term Bicycle Parking Spaces by Residential Dwelling Unit and LAMC Section 12.21A16 (a)(2) Required Bicycle Parking Spaces per Building Floor Area as Defined under Section 12.03

GENERAL NOTES:
1. REFER TO SHEET A0.02 FOR ADDITIONAL PROJECT INFORMATION



STREET
PLACE
ELEVENTH
ALLEY
MIDWAY
HILL
STREET
ALLEY

WASTEWATER ENGINEERING
SERVICES DIVISION
2714 MEDIA CENTER DRIVE
LOS ANGELES, CA 90065
FAX: (323) 342-6210
WWW.LACITYSAN.ORG

July 13, 2021

Ms. Daisy Rosas, Civil Engineer Designer I
Psomas
555 South Flower Street, Suite 4300
Los Angeles, CA 90071-2405

Dear Ms. Rosas,

1111 S HILL STREET - REQUEST FOR WASTEWATER SERVICES INFORMATION

This is in response to your July 7, 2021 letter requesting a review of your proposed mixed-use project located at 1111 S Hill Street, Los Angeles, CA 90015. The project will consist of residential condo units and amenities. LA Sanitation has conducted a preliminary evaluation of the potential impacts to the wastewater and stormwater systems for the proposed project.

WASTEWATER REQUIREMENT

LA 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 improvement projects needed to provide future capacity as the City grows and develops.

Projected Wastewater Discharges for the Proposed Project:

Type Description	Average Daily Flow per Type Description (GPD/UNIT)	Proposed No. of Units	Average Daily Flow (GPD)
Proposed			
Residential:CONDO-STUDIO	75 GPD/DU	24 DU	1,800
Residential:CONDO-1 BDRM	110 GPD/DU	144 DU	15,840
Residential:CONDO-2 BDRM	150 GPD/DU	127 DU	19,050
Residential:CONDO-3 BDRM	190 GPD/DU	20 DU	3,800
Residential:CONDO-PENTHOUSE	190 GPD/DU	4 DU	760
Hotel	120 GPD/ROOM	160 ROOMS	19,200
Swimming Pool	N/A	N/A	74,650
Restaurant	30 GPD/SEAT	114 SEATS	3,420

Fitness Center	200 GPD/1000 SQ.FT	2,147 SQ.FT	429
Library	50 GPD/1000 SQ.FT	3,959 SQ.FT	198
Lounge	50 GPD/1000 SQ.FT	14,762 SQ.FT	738
Total			**139,885**

SEWER AVAILABILITY

The sewer infrastructure in the vicinity of the proposed project includes an existing 24-inch line on Hill St. The sewage from the existing 24-inch line feeds into a 27-inch line on 18th St before discharging into a 50-inch sewer line on Grand Ave. Figure 1 shows the details of the sewer system within the vicinity of the project.

The current approximate flow level (d/D) and the design capacities at d/D of 50% in the sewer system are as follows:

Pipe Diameter (in)	Pipe Location	Current Gauging d/D (%)	50% Design Capacity
24	Hill St.	20	4.80 MGD
27	18th St.	42	6.57 MGD
50	Grand Ave.	34	19.81 MGD

Based on estimated flows, it appears the sewer system might be able to accommodate the total flow for your proposed project. Further detailed gauging and evaluation will be needed as part of the permit process to identify a specific sewer connection point. If the public sewer lacks sufficient capacity, then the developer will be required to build sewer lines to a point in the sewer system with sufficient capacity. A final approval for sewer capacity and connection permit will be made at the time. Ultimately, this sewage flow will be conveyed to the Hyperion Water Reclamation Plant, which has sufficient capacity for the project.

All sanitary wastewater ejectors and fire tank overflow ejectors shall be designed, operated, and maintained as separate systems. All sanitary wastewater ejectors with ejection rates greater than 30 GPM shall be reviewed and must be approved by LASAN WESD staff prior to other City plan check approvals. Lateral connection of development shall adhere to Bureau of Engineering Sewer Design Manual Section F 480.

If you have any questions, please call Christopher DeMonbrun at (323) 342-1567 or email at chris.demonbrun@lacity.org.

STORMWATER REQUIREMENTS

LA Sanitation, Stormwater Program is charged with the task of ensuring the implementation of the Municipal Stormwater Permit requirements within the City of Los Angeles. We anticipate the following requirements would apply for this project.

POST-CONSTRUCTION MITIGATION REQUIREMENTS
In accordance with the Municipal Separate Storm Sewer (MS4) National Pollutant Discharge Elimination System (NPDES) Permit (Order No. R4-2012-0175, NPDES No. CAS004001) and the City of Los Angeles Stormwater and Urban Runoff Pollution Control requirements (Chapter VI, Article 4.4, of the Los Angeles Municipal Code), the Project shall comply with all mandatory provisions to the Stormwater Pollution Control Measures for Development Planning (also known as Low Impact Development [LID] Ordinance). Prior to issuance of grading or building permits, the

applicant shall submit a LID Plan to the City of Los Angeles, Public Works, LA Sanitation, Stormwater Program for review and approval. The LID Plan shall be prepared consistent with the requirements of the Planning and Land Development Handbook for Low Impact Development.

Current regulations prioritize infiltration, capture/use, and then biofiltration as the preferred stormwater control measures. The relevant documents can be found at: www.lacitysan.org. It is advised that input regarding LID requirements be received in the preliminary design phases of the project from plan-checking staff. Additional information regarding LID requirements can be found at: www.lacitysan.org or by visiting the stormwater public counter at 201 N. Figueroa, 2nd Fl, Suite 280.

GREEN STREETS

The City is developing a Green Street Initiative that will require projects to implement Green Street elements in the parkway areas between the roadway and sidewalk of the public right-of-way to capture and retain stormwater and urban runoff to mitigate the impact of stormwater runoff and other environmental concerns. The goals of the Green Street elements are to improve the water quality of stormwater runoff, recharge local groundwater basins, improve air quality, reduce the heat island effect of street pavement, enhance pedestrian use of sidewalks, and encourage alternate means of transportation. The Green Street elements may include infiltration systems, biofiltration swales, and permeable pavements where stormwater can be easily directed from the streets into the parkways and can be implemented in conjunction with the LID requirements. Green Street standard plans can be found at: www.eng2.lacity.org/techdocs/stdplans/

CONSTRUCTION REQUIREMENTS

All construction sites are required to implement a minimum set of BMPs for erosion control, sediment control, non-stormwater management, and waste management. In addition, construction sites with active grading permits are required to prepare and implement a Wet Weather Erosion Control Plan during the rainy season between October 1 and April 15. Construction sites that disturb more than one-acre of land are subject to the NPDES Construction General Permit issued by the State of California, and are required to prepare, submit, and implement the Storm Water Pollution Prevention Plan (SWPPP).

If there are questions regarding the stormwater requirements, please call WPP's plan-checking counter at (213) 482-7066. WPD's plan-checking counter can also be visited at 201 N. Figueroa, 2nd Fl, Suite 280.

GROUNDWATER DEWATERING REUSE OPTIONS

The Los Angeles Department of Water and Power (LADWP) is charged with the task of supplying water and power to the residents and businesses in the City of Los Angeles. One of the sources of water includes groundwater. The majority of groundwater in the City of Los Angeles is adjudicated, and the rights of which are owned and managed by various parties. Extraction of groundwater within the City from any depth by law requires metering and regular reporting to the appropriate Court-appointed Watermaster. LADWP facilitates this reporting process, and may assess and collect associated fees for the usage of the City's water rights. The party performing the dewatering should inform the property owners about the reporting requirement and associated usage fees.

On April 22, 2016 the City of Los Angeles Council passed Ordinance 184248 amending the City of Los Angeles Building Code, requiring developers to consider beneficial reuse of groundwater as a conservation measure and alternative to the common practice of discharging groundwater to the storm drain (SEC. 99.04.305.4). It reads as follows: "Where groundwater is being extracted and discharged,

a system for onsite reuse of the groundwater, shall be developed and constructed. Alternatively, the groundwater may be discharged to the sewer."

Groundwater may be beneficially used as landscape irrigation, cooling tower make-up, and construction (dust control, concrete mixing, soil compaction, etc.). Different applications may require various levels of treatment ranging from chemical additives to filtration systems. When onsite reuse is not available the groundwater may be discharged to the sewer system. This allows the water to be potentially reused as recycled water once it has been treated at a water reclamation plant. If groundwater is discharged into the storm drain it offers no potential for reuse. The onsite beneficial reuse of groundwater can reduce or eliminate costs associated with sewer and storm drain permitting and monitoring. Opting for onsite reuse or discharge to the sewer system are the preferred methods for disposing of groundwater.

To help offset costs of water conservation and reuse systems, LADWP offers a Technical Assistance Program (TAP), which provides engineering and technical assistance for qualified projects. Financial incentives are also available. Currently, LADWP provides an incentive of $1.75 for every 1,000 gallons of water saved during the first two years of a five-year conservation project. Conservation projects that last 10 years are eligible to receive the incentive during the first four years. Other water conservation assistance programs may be available from the Metropolitan Water District of Southern California. To learn more about available water conservation assistance programs, please contact LADWP Rebate Programs 1-888-376-3314 and LADWP TAP 1-800-544-4498, selection "3".

For more information related to beneficial reuse of groundwater, please contact Greg Reed, Manager of Water Rights and Groundwater Management, at (213)367-2117 or greg.reed@ladwp.com.

SOLID RESOURCE REQUIREMENTS

The City has a standard requirement that applies to all proposed residential developments of four or more units or where the addition of floor areas is 25 percent or more, and all other development projects where the addition of floor area is 30 percent or more. Such developments must set aside a recycling area or room for onsite recycling activities. For more details of this requirement, please contact LA Sanitation Solid Resources Recycling hotline 213-922-8300.

Sincerely,

Ali Poosti, Division Manager
Wastewater Engineering Services Division
LA Sanitation and Environment

AP/CD: ra

Attachment: Figure 1 - Sewer Map

c: Shahram Kharaghani, LASAN
Michael Scaduto, LASAN
Wing Tam, LASAN
Christopher DeMonbrun, LASAN

City of Los Angeles
Los Angeles Department of Water and Power - Water System

INFORMATION OF FIRE FLOW AVAILABILITY

LAFD Fire Flow Requirement: 6,000 GPM — 4 hydrants flowing simultaneously

Water Service Map No.: 126-207

LAFD Signature:

Date Signed:

Applicant: Matthew Gooden
Company Name: PSOMAS
Address: 555 South Flower Street STE 4300
Telephone: (213) 223-1423
Email Address: matthew.gooden@psomas.com

	F- 8934	F- 8970	F- new
Location:	SW Corner of 11th St. and Hill St.	West side of Hill St., 310' S of 11 St.	South Side of 11th St., 215' W of Hill St.
Distance from Neareast Pipe Location (feet):	11	52	15
Hydrant Size:	4D	4D	2 1/2 X4D
Water Main Size (in):	12	12	12
Static Pressure (psi):	68	69	68
Residual Pressure (psi):	48	48	48
Flow at 20 psi (gpm):	1500	1500	1500

CYNTHIA TAYLOR
MAY 20 2020

NOTE: Data obtained from hydraulic analysis using peak hour.

Remarks: W20200520023

Water Purveyor: **Los Angeles Department of Water & Power** *Date:*

Signtature: D. Strachan-DWP *Title:* Civil Engineering Associate

Requests must be made by submitting this completed application, along with a $230.00 check payable to:
"Los Angeles Department of Water and Power", and mailed to:
Los Angeles Department of Water and Power
Distribution Engineering Section - Water
Attn: Business Arrangements
P.O. Box 51111 - Room 1425
Los Angeles, CA 90051-5700

RECEIVED/WDE
MAY 18 2020

*** If you have any questions, please contact us at (213) 367-2130 or visit our web site at http://www.ladwp.com.**

City of Los Angeles

Los Angeles Department of Water and Power - Water System

INFORMATION OF FIRE FLOW AVAILABILITY

LAFD Fire Flow Requirement: 6,000 GPM — 4 hydrants flowing simultaneously

Water Service Map No.: 126-207

LAFD Signature:

Date Signed:

Applicant: Matthew Gooden

Company Name: PSOMAS

Address: 555 South Flower Street STE 4300

Telephone: (213) 223-1423

Email Address: matthew.gooden@psomas.com

	F- new	F-	F-
Location:	SE Corner of Olive St. and 11th St.		
Distance from Neareast Pipe Location (feet):	6		
Hydrant Size:	2 1/2 X4D		
Water Main Size (in):	12		
Static Pressure (psi):	68		
Residual Pressure (psi):	49		
Flow at 20 psi (gpm):	1500		

CYNTHIA TAYLOR
MAY 20 2020

NOTE: Data obtained from hydraulic analysis using peak hour.

Remarks: W2020052O023

Water Purveyor: **Los Angeles Department of Water & Power** *Date:*

Signtature: D. Strachan-DWP *Title:* Civil Engineering Associate

Requests must be made by submitting this completed application, along with a $230.00 check payable to:
"Los Angeles Department of Water and Power", and mailed to:
Los Angeles Department of Water and Power
Distribution Engineering Section - Water
Attn: Business Arrangements
P.O. Box 51111 - Room 1425
Los Angeles, CA 90051-5700

RECEIVED/WDE
MAY 18 2020

*** If you have any questions, please contact us at (213) 367-2130 or visit our web site at http://www.ladwp.com.**

Department Of Water & Power
City Of Los Angeles

Cash Memorandum Receipt

Receipt No. W20200520023

Water Revenue Fund

Office Issued By:	.WD 1425-CTaylor	**Date:**	5/20/2020
Office Issued To:	Accounting BU	**Assigned To:**	CTaylor
Amount:	NINE HUNDRED FORTY DOLLARS And 00/100 CENTS		
Received Of:	CROWN 1111 LLC	**Telephone No.:**	(000) 000-0000
Collection Address:	511 N La Cienega Blvd., Suite 206, West Hollywood, CA 90048		
Comments:	(2) Service Advisory Requests; (2) City LAFD Fire Flow Availability - F8934, F8970, and (2) proposed fire hydrants		

Fee Type	Size/other	Rate	Rate Per		Units		Amount	ID No. / Location / Map
Service Install-Service Advisory Req.	10" Fire	$235.00	SAR	x	2.00	=	$470.00	634278 / 1111 S Hill St / 126-207 634279 / 1111 S Hill St / 126-207
Hydrant Work-Hydrant Flow Tests		$235.00	Flow Test	x	2.00	=	$470.00	

Payment Method: Check **Payment Ref. No.:** 102 $940.00

Department Of Water & Power

Received By Cashier: _____ On: __/__/__ By: _____

Printed On: 5/21/2020

Internal Comments:

Processing and installation time for services 3-inches and smaller takes approximately 100 days, and approximately 140 days for services 4 inches and larger, from the time full payment and all required information is received. This time could vary based onthe Los Angeles Department of Public Works, Bureau of Engineering permitting conditions and requirements and the availability of the DWP construction crews.

To check the status of your job, log on to http://wmisweb.ladwp.com/waterwmis
(Water Services ONLY)

City of Los Angeles

Los Angeles Department of Water and Power - Water System

SAR NUMBER **93672**

Fire Service Pressure Flow Report

SERVICE NUMBER **634279**

For: **1111 S HILL ST** Approved Date: **8-26-2021**

Proposed Service **10 INCH** off of the

12 inch main in **11TH ST** on the **SOUTH** side approximately

120 feet **WEST** of **WEST** of **HILL ST** The System maximum pressure is

91 psi based on street curb elevation of **246** feet above sea level at this location.

The distance from the DWP street main to the property line is **19** feet

System maximum pressure should be used only for determining class of piping and fittings.

Residual Flow/Pressure Table for water system street main at this location

Flow (gpm)	Press. (psi)	Flow (gpm)	Press. (psi)	Flow (gpm)	Press. (psi)
0	65				
1200	64				
1750	63				
2175	62				
2540	61				
2870	60				
3165	59				
3440	58				
3695	57				
3940	56				
4170	55				
4390	54				
4600	53				
4805	52				
5000	51				

These values are subject to change due to changes in system facilities or demands.

Meter Assembly Capacities

Domestic Meters	
1 inch =	56 gpm
1-1/2 inch =	96 gpm
2 inch =	160 gpm
3 inch =	220 gpm
4 inch =	400 gpm
6 inch =	700 gpm
8 inch =	1500 gpm
10 inch =	2500 gpm

Fire Service	
2 inch =	250 gpm
4 inch =	600 gpm
6 inch =	1400 gpm
8 inch =	2500 gpm
10 inch =	5000 gpm

FM Services	
8 inch =	2500 gpm
10 inch =	5000 gpm

Notes: OK to sell 10-inch FS

This information will be sent to the Department of Building and Safety for plan checking.

This SAR is valid for one year from 08-26-21. Once the SAR expires, the applicant needs to re-apply and pay applicable processing fee.

For additional information contact the Water Distribution Services Section **CENTRAL (213) 367-1216**

SAMUEL OLIDEN	**SAMUEL OLIDEN**	**126-207**
Prepared by	**Approved by**	**Water Service Map**

City of Los Angeles

Los Angeles Department of Water and Power - Water System

SAR NUMBER **93692**

Fire Service Pressure Flow Report

SERVICE NUMBER **637545**

For: **1111 S HILL ST** Approved Date: **8-26-2021**

Proposed Service **10 INCH** off of the

12 inch main in **HILL ST** on the **WEST** side approximately

80 feet **SOUTH** of **SOUTH** of **11TH ST** The System maximum pressure is

91 psi based on street curb elevation of **244** feet above sea level at this location.

The distance from the DWP street main to the property line is **69** feet

System maximum pressure should be used only for determining class of piping and fittings.

Residual Flow/Pressure Table for water system street main at this location

Flow (gpm)	Press. (psi)	Flow (gpm)	Press. (psi)	Flow (gpm)	Press. (psi)
0	74	3665	56		
770	73	3775	55		
1120	72	3880	54		
1395	71	3985	53		
1625	70	4085	52		
1835	69	4185	51		
2025	68	4280	50		
2200	67	4375	49		
2365	66	4470	48		
2520	65	4560	47		
2670	64	4650	46		
2810	63	4740	45		
2945	62	4830	44		
3075	61	4915	43		
3200	60	5000	42		
3320	59				
3440	58				
3555	57				

These values are subject to change due to changes in system facilities or demands.

Meter Assembly Capacities

Domestic Meters	
1 inch =	56 gpm
1-1/2 inch =	96 gpm
2 inch =	160 gpm
3 inch =	220 gpm
4 inch =	400 gpm
6 inch =	700 gpm
8 inch =	1500 gpm
10 inch =	2500 gpm

Fire Service	
2 inch =	250 gpm
4 inch =	600 gpm
6 inch =	1400 gpm
8 inch =	2500 gpm
10 inch =	5000 gpm

FM Services	
8 inch =	2500 gpm
10 inch =	5000 gpm

Notes: OK to sell 10-inch FS

This information will be sent to the Department of Building and Safety for plan checking.

This SAR is valid for one year from 08-26-21. Once the SAR expires, the applicant needs to re-apply and pay applicable processing fee.

For additional information contact the Water Distribution Services Section **CENTRAL (213) 367-1216**

SAMUEL OLIDEN	**SAMUEL OLIDEN**	**126-207**
Prepared by	**Approved by**	**Water Service Map**

701 N. Bullis Rd.
Compton, CA 90224-9099

April 27, 2020

PSOMAS
555 S. Flower St Suite 4300
Los Angeles, CA 90071
Attn: Daisy Rosas

Subject: Will Serve - 1111 S. Hill St.

Thank you for inquiring about the availability of natural gas service for your project. We are pleased to inform you that Southern California Gas Company (SoCalGas) has facilities in the area where the above named project is being proposed. The service would be in accordance with SoCalGas' policies and extension rules on file with the California Public Utilities Commission (CPUC) at the time contractual arrangements are made.

This letter should not be considered a contractual commitment to serve the proposed project, and is only provided for informational purposes only. The availability of natural gas service is based upon natural gas supply conditions and is subject to changes in law or regulation. As a public utility, SoCalGas is under the jurisdiction of the Commission and certain federal regulatory agencies, and gas service will be provided in accordance with the rules and regulations in effect at the time service is provided. Natural gas service is also subject to environmental regulations, which could affect the construction of a main or service line extension (for example, if hazardous wastes were encountered in the process of installing the line). Applicable regulations will be determined once a contract with SoCalGas is executed.

If you need assistance choosing the appropriate gas equipment for your project, or would like to discuss the most effective applications of energy efficiency techniques, please contact our area Service Center at 800-427-2200.

Thank you again for choosing clean, reliable, and safe natural gas, your best energy value.

Sincerely,

William Perez

William Perez
Pipeline Planning Assistant
SoCalGas-Compton HQ

Will Serve Letter

4/2/2020

Matthew Gooden
PSOMAS
555 S Flower St Ste 4300
Los Angeles CA 90071

Project Name: WSL - 1111 S Hill St Los Angeles CA 90015
LOCATION: 1111 S Hill St Los Angeles CA 90015

Re: May Serve Letter by Charter Communications or an affiliate authorized to provide service ("Charter")

Thank you for your interest in receiving Charter service. The purpose of this letter is to confirm that the Property is within an area that Charter may lawfully serve. However, it is not a commitment to provide service to the Property. Prior to any determination as to whether service can or will be provided to the Property, Charter will conduct a survey of the Property and will need the following information from you:

- Exact site address and legal description
- Is this an existing building or new construction?
- Site plans, blue prints, plat maps or any similar data
- The location of any existing utilities or utility easements
- _____

Please forward this information to the construction manager listed below. Upon receipt, a Charter representative will be assigned to you to work through the process. Ultimately, a mutually acceptable service agreement for the Property will be required and your cooperation in the process is appreciated.

Construction Manager Contact:
Massarotti, Jeff R
Construction Manager - Zone 6
6357 Arizona Circle
Los Angeles, CA 90045
310-216-4197
Jeff.Massarotti@charter.com

Sincerely,

Jeff Massarotti

Los Angeles Department of Water & Power
CUSTOMERS FIRST

April 28, 2020

Map No. 126-207

Mr. Matthew Gooden
PSOMAS
555 South Flower Street, Suite 4300
Los Angeles, California 90071-2405

Dear Mr. Gooden:

Subject: Water Availability - Will Serve
1111 South Hill Street
APN: 5139-019-022, Ord's Survey Tract, Tract 1394, Block 77, Lots FR 5, FR LT B
APN: 5139-019-029, Ord's Survey Tract, Block 77, Lot FR 4

This is in reply to your request regarding water availability for the above-mentioned location. This property can be supplied with water from the municipal system subject to the Water System rules of the Los Angeles Department of Water and Power (LADWP). It is also subject to all conditions set by LADWP.

Should you require additional information, please contact Ms. Cynthia Taylor at (213) 367-1306. Correspondence may be addressed to:

LADWP
P.O. Box 51111, Room 1425
Los Angeles, California 90051-5700

Sincerely,

Liz Gonzalez
Manager-Business Arrangements
Water Distribution Engineering

CT:md
c: Ms. Cynthia Taylor

POWER NEW BUSINESS
DEVELOPMENT AND
TECHNOLOGY
APPLICATIONS DIVISION

SERVICE PLANNING & CUSTOMER
SUPPORT SUBSECTION

METROPOLITAN EAST SERVICE PLANNING
2633 Artesian Street, Suite 210, Los Angeles, CA 90031 (213) 367-6000 FAX: (213) 367-6027

Jeffrey T. Bergman
District Engineer

WILL SERVE

January 14, 2019

Mrs. Daisy Rosas
555 South Flower Street, Suite 4300
Los Angeles, CA 90071

Dear Mrs. Rosas:

1111 South Hill Street
63-Story Mixed-Use Building

This is in response to your email correspondence dated January 14th, 2019 regarding electric service for the proposed project at the above address.

Electric service is available and will be provided in accordance with the Los Angeles Department of Water and Power Rules and Regulations. The estimated power requirement for this proposed project is part of the total load growth forecast for the City and has been taken into account in the planned growth of the power system.

If you have any questions regarding this matter, please call Mr. Henry Nguyen at (213) 367-6005.

Sincerely,

Jeff Bergman/HN

Jeffrey T. Bergman
District Engineer, Metro East Service Planning

c: Henry Nguyen

22311 Brookhurst Street Suite203
Huntington Beach Ca 92646

NO CONFLICT

March 30, 2020

Psomas
Attn: Matthew Gooden
555 S. Flower St. #4300
Los Angeles, CA 90071

Re: 1111 S. Hill St. Los Angeles, CA

Dear Mr. Gooden,

This is in response to your Inquiry Letter dated March 30, 2020, regarding the above referenced project. After reviewing your location maps, please be advised that AT&T Network Services (long distance) has no active facilities (Transcontinental Fiber Optics Lines) within the vicinity of this project.

Thank you for notifying AT&T of the pending project referenced above. Notification of future proposed work, performed in this vicinity should be directed to:

AT&T INQUIRIES
22311 Brookhurst Street, Suite 203
Huntington Beach, CA 92646
joef@forkertengineering.com

Should you have any questions or concerns regarding this project, please contact Mr. Joseph Forkert at (714) 963-7964 or me at your earliest convenience.

Please Note

AT&T Drawings are Proprietary Information Pursuant to Company instructions–This Office does not distribute drawings for Pre–Planning and Design Engineering purposes.

Please contact your local City, County, Utility Notification Center or AT&T on Site Plant Protection Workforce to identify AT&T facilities prior to contacting AT&T Engineering. If you are referred to our office because of a possible conflict with AT&T lines, we will confirm and provide you with the appropriate drawings and pertinent information required to avoid a conflict with AT&T lines prior to the start of your construction project.

Sincerely,

Joseph Forkert for
Tanya Hernandez
OSP Maintenance Engineer
(619) 200-7896

Matthew Gooden

From: Belinsky, Nicholas <Nicholas.Belinsky@crowncastle.com>
Sent: Thursday, April 2, 2020 9:05 AM
To: Matthew Gooden
Subject: RE: Utility Request - 1111 S. Hill St
Attachments: 0006259-Utility Request - 1111 S. Hill St.docx

Hello Matthew Gooden,

With doing our review, Crown Castle's fiber facilities/equipment ARE NOT PRESENT within this project's work area. (Please see attachment)

If there are any questions or concerns, do follow up with us.

Sincerely,

Nick Belinsky
Utility Coordinator Fiber Records - 811 Services
724-416-2449

CROWN CASTLE
1500 Corporate Dr. l Canonsburg, PA 15317
1-888-632-0931 Option 2

Fiber.dig@CrownCastle.com

From: Foutz, Jeffrey <Jeffrey.Foutz@crowncastle.com>
Sent: Monday, March 30, 2020 12:16 PM
To: Fiber Dig Facilities <Fiber.dig@crowncastle.com>; Matthew Gooden <matthew.gooden@psomas.com>
Subject: FW: Utility Request - 1111 S. Hill St

Matthew,

Future utility requests should be sent to fiber.dig@crowncastle.com . The Fiber Dig Team is copied on this email. Please remove me from future submissions. Appreciate it.

Thank you,
Jeff Foutz
Asset Supervisor Fiber Records - 811 Services
T: (724) 416-2957

From: Matthew Gooden <matthew.gooden@psomas.com>
Sent: Monday, March 30, 2020 12:13 PM
To: Foutz, Jeffrey <Jeffrey.Foutz@crowncastle.com>
Subject: Utility Request - 1111 S. Hill St

To whom it may concern,

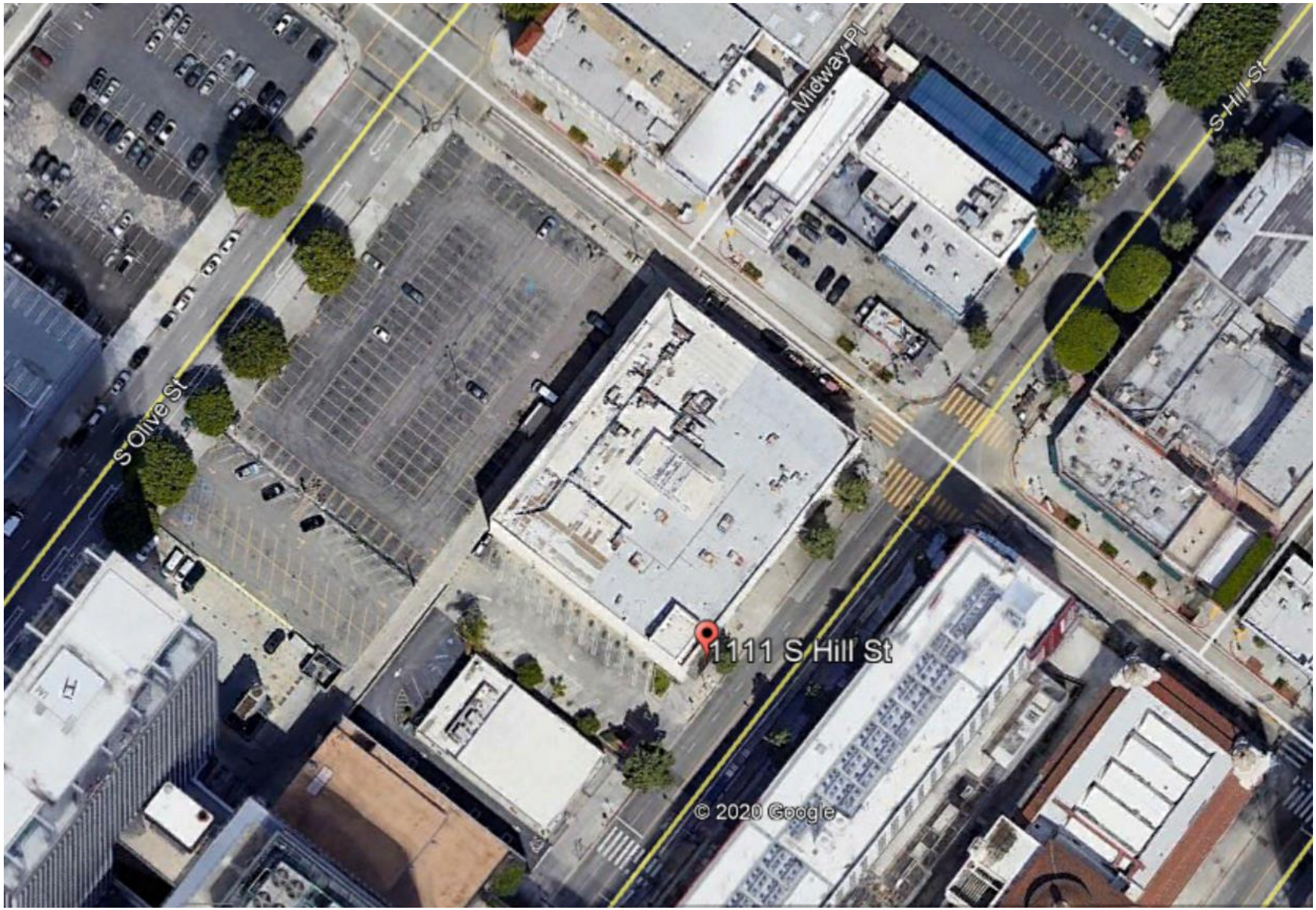
We are in the process of gathering as-built utility information on the subject location. In running a Dig Alert design lookup, we have you listed as a regional utility provider. Attached for your use please find a map indicating the project limits and location.

If you are not the person of contact for this request, please direct me to the appropriate contact. Thank you for your time.

Sincerely,

Matthew Gooden
P S O M A S | *Balancing the Natural and Built Environment*
Civil Engineering Designer I
555 S. Flower St. #4300
Los Angeles, CA 90071
M: 213.223.1423 | E: Matthew.Gooden@psomas.com
www.Psomas.com

CROWN CASTLE UTILITY REQUEST



Crown Castle Utilities *ARE NOT* present at this location

Request Number: 0006259

FIBER DIG SERVICES
1500 Corporate Dr., Canonsburg, PA 15317
1-888-632-0931 Option 2
Fiber.dig@CrownCastle.com

CROWN CASTLE COLOR KEY

- UNDERGROUND CONDUIT
- AERIAL FIBER
- UNDERGROUND FIBER

CROWN CASTLE

3/30/2020

Matthew Gooden
Psomas
555 S. Flower Street #4300
Los Angeles, CA 90071

Requester Project:	Map Request
Project Name	1111 S. Hill Street
DOCK/PRISM Project Name:	Hill Street & East 11th
Conflict:	YES

Thank you for your recent Utility Request to Charter Communications for: 1111 S. Hill Street

Please review the attached maps for any possible conflicts with Charter facilities.
There ***ARE*** existing Charter aerial/or underground facilities within the project limits.

We have provided maps showing where our services are located but cannot make any comment on how to deal with possible conflicts during construction. This type of information should come from the Construction Manager, Supervisor or Construction Coordinator for the area in question.

If you should require any field meet or any further coordination of the project with Charter please contact the Construction Manager listed below.

Construction Manager Contact:
Massarotti, Jeff R
Construction Manager - Zone 6
6357 Arizona Circle
Los Angeles, CA 90045
310-216-4197
Jeff.Massarotti@charter.com

If you have any questions about the maps provided, please contact DL-socal-charter-engineering@charter.com. This communication is for a project being handled by Charter Communications or Spectrum, a Charter Communications brand name, or Legacy Time Warner Cable.

Sincerely,

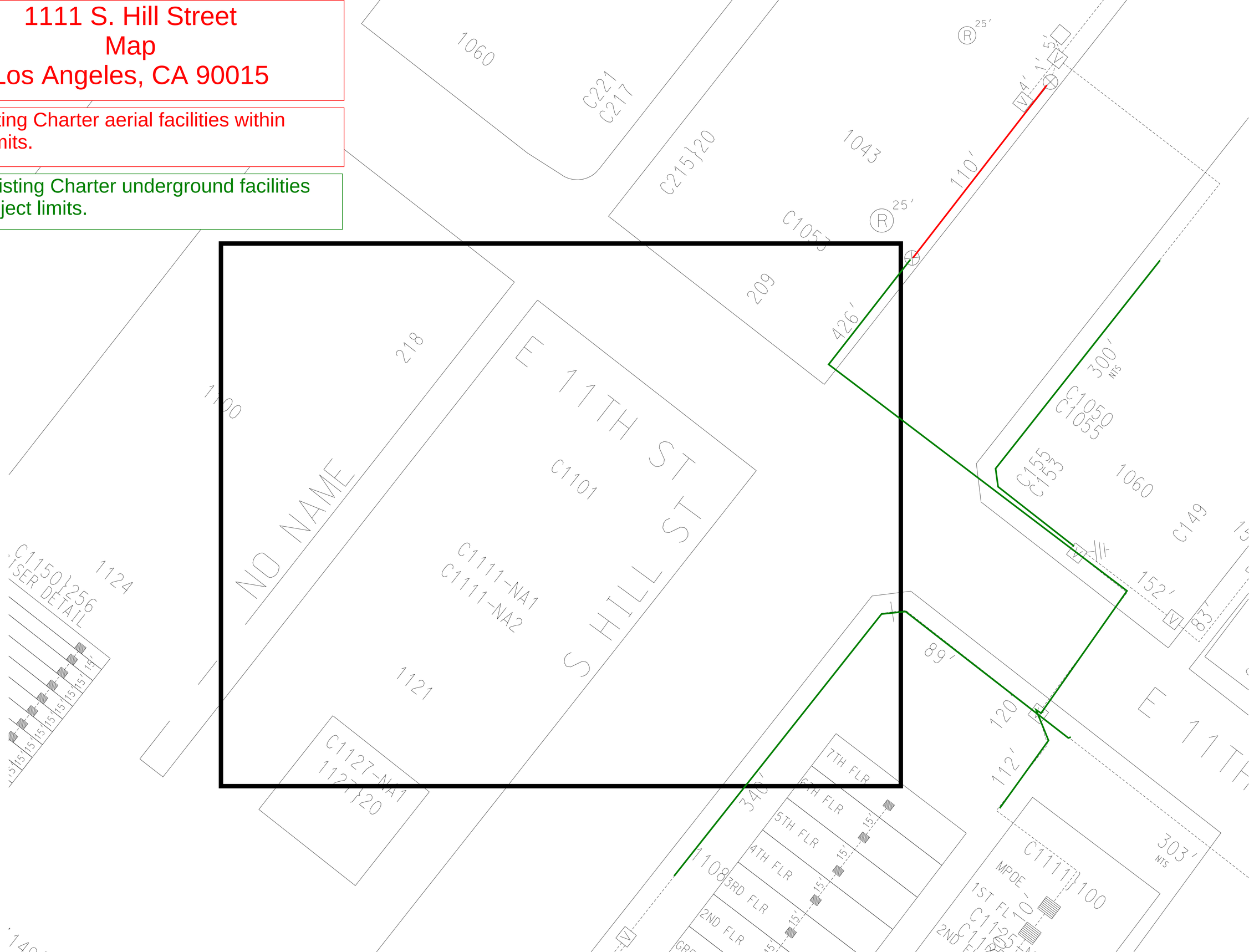
Dave Dolney

Dave Dolney
Sr. Manager, PACWEST Construction
Charter Communications
12051 Industry Street
Garden Grove, CA 92841

1111 S. Hill Street
Map
Los Angeles, CA 90015

Red-existing Charter aerial facilities within project limits.

Green-existing Charter underground facilities within project limits.



Matthew Gooden

From: pliney.lindsay@verizon.com
Sent: Friday, April 3, 2020 10:30 AM
To: Matthew Gooden
Subject: RE: Utility Request - 1111 S. Hill St

Verizonbusiness (MCI) has no facilities in the project area.
PLEASE DO NOT REPLY TO THIS MESSAGE. THIS E-MAIL DOES NOT ACCEPT MESSAGES.
PLEASE SEND INQUIRIES TO investigations@verizon.com

Thanks,
Pliney

From: Matthew Gooden [mailto:matthew.gooden@psomas.com]
Sent: Monday, March 30, 2020 11:23 AM
To: Investigations <Investigations@one.verizon.com>
Subject: Utility Request - 1111 S. Hill St

To whom it may concern,

We are in the process of gathering as-built utility information on the subject location. In running a Dig Alert design lookup, we have you listed as a regional utility provider. Attached for your use please find a map indicating the project limits and location.

If you are not the person of contact for this request, please direct me to the appropriate contact. Thank you for your time.

Sincerely,

Matthew Gooden
P S O M A S | *Balancing the Natural and Built Environment*
Civil Engineering Designer I
555 S. Flower St. #4300
Los Angeles, CA 90071
M: 213.223.1423 | E: Matthew.Gooden@psomas.com
www.Psomas.com

Matthew Gooden

From: Thomas Bruiniers <thomas.bruiniers@zayo.com>
Sent: Monday, April 27, 2020 12:08 PM
To: Matthew Gooden
Subject: RE: Utility Request - 1111 S. Hill St.

Zayo does not have facilities in the area noted.
Thank you.

Thomas Bruiniers
Zayo Fiber Solutions
Western Region OSP Project Manager
Southern California
thomas.bruiniers@zayo.com
(213) 283-3601 Office
(909) 319-1607 Mobile
530 W 6th St. Suite 720
Los Angeles, CA, 90014

From: Matthew Gooden <matthew.gooden@psomas.com>
Sent: Monday, March 30, 2020 9:07 AM
To: thomas.bruiniers@zayo.com
Subject: Utility Request - 1111 S. Hill St.

To whom it may concern,

We are in the process of gathering as-built utility information on the subject location. In running a Dig Alert design lookup, we have you listed as a regional utility provider. Attached for your use please find a map indicating the project limits and location.

If you are not the person of contact for this request, please direct me to the appropriate contact. Thank you for your time.

Sincerely,

Matthew Gooden
P S O M A S | *Balancing the Natural and Built Environment*
Civil Engineering Designer I
555 S. Flower St. #4300
Los Angeles, CA 90071
M: 213.223.1423 | E: Matthew.Gooden@psomas.com
www.Psomas.com

MAWA	MAWA = (ET_o) x (0.62) x [(0.45 x LA)+(1-.45 x SLA)]			
ANNUAL Eto	AREA	SLA	MAWA	
50.1	8,907.00	0	**124,501.16**	GALLONS / YEAR

ETWU	ETWU = (Eto x 0.62) x [PF HA/IE)+SLA)]	

DEFINITIONS	
Eto	Reference Evapotranspiration Rate, Based on City designation
LA	Landscaped area
SLA	Special landscaped area WITHIN the landscaped area
P.F.	Plant water use factor- WUCLOS
H.A.	Hydro zone area = Irrigated area
I.E.	Irrigation efficiency. Must exceed 0.71.

VALVE	HYDROZONE	HYDROZONE	WATER USE	PLANT FACTOR	AREA	IE	PFxHA/IE	IRRIGATION
	A	LOW WATER	LOW	0.26	2020	0.81	648.3950617	DRIP
	B	LOW WATER	LOW	0.25	815	0.81	251.5432099	DRIP
	C	LOW WATER	LOW	0.25	2608	0.81	804.9382716	DRIP
	D	WATER FEATURE	HIGH	0.8	2040	1	1632	DIRECT FILL
					7,483.00		3,336.88	

TOTALS **ETWU** **103,650.06** **GALLONS / YEAR**

IN COMPLIANCE

MAXIMUM APPLIED WATER ALLOWANCE

TOTAL GALLONS/YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
103,650	4,551	5,586	7,655	9,724	11,379	11,999	12,827	12,206	10,344	8,069	5,379	4,138
% of water per month	4%	5%	7%	9%	11%	12%	12%	12%	10%	8%	5%	4%

SEWERAGE FACILITIES CHARGE
SEWAGE GENERATION FACTOR FOR
RESIDENTIAL AND COMMERCIAL CATEGORIES

EFFECTIVE DATE: April 6, 2012

Line No.	FACILITY DESCRIPTION	PROPOSED SGF IN GPD	BOD (mg/l)	SS (mg/l)
1	Acupuncture Office/Clinic	120/1,000 Gr SF	265	275
2	Arcade - Video Games	50/1,000 Gr SF	265	275
3	Auditorium (a)	3/Seat	265	275
4	Auto Parking (a)	20/1,000 Gr SF	265	275
5	Auto Mfg., Service Maintenance (b)	Actual	1,260	1,165
6	Bakery	280/1,000 Gr SF	3,020	2,540
7	Bank: Headquarters	120/1,000 Gr SF	265	275
8	Bank: Branch	50/1,000 Gr SF	265	275
9	Ballroom	350/1,000 Gr SF	265	275
10	Banquet Room	350/1,000 Gr SF	265	275
11	Bar: Cocktail, Fixed Set (a) (c)	15/Seat	265	275
12	Bar: Juice, No Baking Facilities (d)	720/1,000 Gr SF	265	275
13	Bar: Juice, with Baking Facilities (d)	720/1,000 Gr SF	265	275
14	Bar: Cocktail, Public Table Area (c)	720/1,000 Gr SF	265	275
15	Barber Shop	120/1,000 Gr SF	265	275
16	Barber Shop (s)	15/Stall	265	275
17	Beauty Parlor	425/1,000 Gr SF	265	275
18	Beauty Parlor (s)	50/Stall	265	275
19	Bldg. Const/Field Office (e)	120/Office	265	275
20	Bowling Alley: Alley, Lanes & Lobby Area	50/1,000 Gr SF	265	275
21	Bowling Facility: Arcade/Bar/Restaurant/Dancing	Total	Average	Average
22	Cafeteria: Fixed Seat	30/Seat	1,000	600
23	Car Wash: Automatic (b)	Actual	265	285
24	Car Wash: Coin Operated Bays (b)	Actual	265	285
25	Car Wash: Hand Wash (b)	Actual	265	285
26	Car Wash: Counter & Sales Area	50/1,000 Gr SF	265	275
27	Chapel: Fixed Seat	3/Seat	265	275
28	Chiropractic Office	120/1,000 Gr SF	265	275
29	Church: Fixed Seat	3/Seat	265	275
30	Church School: Day Care/Elem	9/Occupant	265	275
31	Church School: One Day Use (s)	9/Occupant	265	275
32	Cocktail Lounge: Fixed Seat (f)	15/Seat	265	275
33	Coffee House: No Food Preparation (d)	720/1,000 Gr SF	265	275
34	Coffee House: Pastry Baking Only (d)	720/1,000 Gr SF	265	275
35	Coffee House: Serves Prepared Food (d)	25/Seat	1,000	600
36	Cold Storage: No Sales (g)	30/1,000 Gr SF	265	275
37	Cold Storage: Retail Sales (g)	50/1,000 Gr SF	265	275
38	Comfort Station: Public	80/Fixture	265	275
39	Commercial Use (a)	50/1,000 Gr SF	265	275

SEWERAGE FACILITIES CHARGE
SEWAGE GENERATION FACTOR FOR
RESIDENTIAL AND COMMERCIAL CATEGORIES

EFFECTIVE DATE: April 6, 2012

Line No.	FACILITY DESCRIPTION	PROPOSED SGF IN GPD	BOD (mg/l)	SS (mg/l)
40	Community Center	3/Occupant	265	275
41	Conference Room of Office Bldg.	120/1,000 Gr SF	265	275
42	Counseling Center (h)	120/1,000 Gr SF	265	275
43	Credit Union	120/1,000 Gr SF	265	275
44	Dairy	Average Flow	1,510	325
45	Dairy: Barn	Average Flow	1,510	325
46	Dairy: Retail Area	50/1,000 Gr SF	265	275
47	Dancing Area (of Bars or Nightclub) (c)	350/1,000 Gr SF	265	275
48	Dance Studio (i)	50/1,000 Gr SF	265	275
49	Dental Office/Clinic	250/1,000 Gr SF	265	275
50	Doughnut Shop	280/1,000 Gr SF	1,000	600
51	Drug Rehabilitation Center (h)	120/1,000 Gr SF	265	275
52	Equipment Booth	30/1,000 Gr SF	265	275
53	Film Processing (Retail)	50/1,000 Gr SF	265	275
54	Film Processing (Industrial)	Actual	265	275
55	Food Processing Plant (b)	Actual	2,210	1,450
56	Gas Station: Self Service	100/W.C.	265	275
57	Gas Station: Four Bays Max	430/Station	1,950	1,175
58	Golf Course Facility: Lobby/Office/Restaurant/Bar	Total	700	450
59	Gymnasium: Basketball, Volleyball (k)	200/1,000 Gr SF	265	275
60	Hanger (Aircraft)	50/1,000 Gr SF	265	275
61	Health Club/Spa (k)	650/1,000 Gr SF	265	275
62	Homeless Shelter	70/Bed	265	275
63	Hospital	70/Bed	820	1,230
64	Hospital: Convalescent (a)	70/Bed	265	275
65	Hospital: Animal	300/1,000 Gr SF	820	1,230
66	Hospital: Psychiatric	70/Bed	265	275
67	Hospital: Surgical (a)	360/Bed	265	275
68	Hotel: Use Guest Rooms Only (a)	120/Room	265	275
69	Jail	85/Inmate	265	275
70	Kennel: Dog Kennel/Open	100/1,000 Gr SF	265	275
71	Laboratory: Commercial	250/1,000 Gr SF	265	275
72	Laboratory: Industrial	Actual	265	275
73	Laundromat	185/Machine	550	370
74	Library: Public Area	50/1,000 Gr SF	265	275
75	Library: Stacks, Storage	30/1,000 Gr SF	265	275
76	Lobby of Retail Area (l)	50/1,000 Gr SF	265	275
77	Lodge Hall	3/Seat	265	275
78	Lounge (l)	50/1,000 Gr SF	265	275

SEWERAGE FACILITIES CHARGE
SEWAGE GENERATION FACTOR FOR
RESIDENTIAL AND COMMERCIAL CATEGORIES

EFFECTIVE DATE: April 6, 2012

Line No.	FACILITY DESCRIPTION	PROPOSED SGF IN GPD	BOD (mg/l)	SS (mg/l)
79	Machine Shop (No Industrial Waste Permit Required) (b)	50/1,000 Gr SF	265	275
80	Machine Shop (Industrial)	Actual	265	275
81	Mfg or Industrial Facility (No IW Permit Required) (b)	50/1,000 Gr SF	265	275
82	Mfg or Industrial Facility (Industrial)	Actual	265	275
83	Massage Parlor	250/1,000 Gr SF	265	275
84	Medical Building (a)	225/1,000 Gr SF	265	275
85	Medical: Lab in Hospital	250/1,000 Gr SF	340	275
86	Medical Office/Clinic	250/1,000 Gr SF	265	275
87	Mini-Mall (No Food)	50/1,000 Gr SF	265	275
88	Mortuary: Chapel	3/Seat	265	275
89	Mortuary: Embalming	300/1,000 Gr SF	800	800
90	Mortuary: Living Area	50/1,000 Gr SF	265	275
91	Motel: Use Guest Room Only (a)	120/Room	265	275
92	Museum: All Area	30/1,000 Gr SF	265	275
93	Museum: Office Over 15%	120/1,000 Gr SF	265	275
94	Museum: Sales Area	50/1,000 Gr SF	265	275
95	Office Building (a)	120/1,000 Gr SF	265	275
96	Office Bldg w/Cooling Tower	170/1,000 Gr SF	265	275
97	Plating Plant (No IW Permit Required) (b)	50/1,000 Gr SF	265	275
98	Plating Plant (Industrial) (b)	Actual	265	275
99	Pool Hall (No Alcohol)	50/1,000 Gr SF	265	275
100	Post Office: Full Service (m)	120/1,000 Gr SF	265	275
101	Post Office: Private Mail Box Rental	50/1,000 Gr SF	265	275
102	Prisons	175/Inmate	265	275
103	Residential Dorm: College or Residential (n)	70/Student	265	275
104	Residential: Boarding House	70/Bed	265	275
105	Residential: Apt - Bachelor (a)	75/DU	265	275
106	Residential: Apt - 1 BDR (a) (o)	110/DU	265	275
107	Residential: Apt - 2 BDR (a) (o)	150/DU	265	275
108	Residential: Apt - 3 BDR (a) (o)	190/DU	265	275
109	Residential: Apt - >3 BDR (o)	40/BDR	265	275
110	Residential: Condo - 1 BDR (o)	110/DU	265	275
111	Residential: Condo - 2 BDR (o)	150/DU	265	275
112	Residential: Condo - 3 BDR (o)	190/DU	265	275
113	Residential: Condo - >3 BDR (o)	40/BDR	265	275
114	Residential: Duplex/Townhouse - 1 BR (o)	110/DU	265	275
115	Residential: Duplex/Townhouse - 2 BR (o)	150/DU	265	275
116	Residential: Duplex/Townhouse - 3 BR (o)	190/DU	265	275
117	Residential: Duplex/Townhouse - >3 BR (o)	40/BDR	265	275

SEWERAGE FACILITIES CHARGE
SEWAGE GENERATION FACTOR FOR
RESIDENTIAL AND COMMERCIAL CATEGORIES

EFFECTIVE DATE: April 6, 2012

Line No.	FACILITY DESCRIPTION	PROPOSED SGF IN GPD	BOD (mg/l)	SS (mg/l)
118	Residential: SFD - 1 BR (o)	140/DU	265	275
119	Residential: SFD - 2 BR (o)	185/DU	265	275
120	Residential: SFD - 3 BR (o)	230/DU	265	275
121	Residential: SFD - >3 BR (o)	45/BDR	265	275
122	Residential Room Addition: Bedroom (o)	45/BDR	265	275
123	Residential Room Conversion: Into a Bedroom (o)	45/BDR	265	275
124	Residential: Mobile Home	Same as Apt	265	275
125	Residential: Artist (2/3 Area)	75/DU	265	275
126	Residential: Artist Residence	75/DU	265	275
127	Residential: Guest Home w/ Kitchen	Same as Apt	265	275
128	Residential: Guest Home w/o Kitchen	45/BDR	265	275
129	Rest Home	70/Bed	555	490
130	Restaurant: Drive-In	50/Stall	1000	600
131	Restaurant: Drive-In Seating Area	25/Seat	1000	600
132	Restaurant: Fast Food Indoor Seat	25/Seat	1000	600
133	Restaurant: Fast Food Outdoor Seat	25/Seat	1000	600
134	Restaurant: Full Service Indoor Seat (a)	30/Seat	1000	600
135	Restaurant: Full Service Outdoor Seat	30/Seat	1000	600
136	Restaurant: Take Out	300/1,000 Gr SF	1000	600
137	Retail Area (greater than 100,000 SF)	50/1,000 Gr SF	265	275
138	Retail Area (less than 100,000 SF)	25/1,000 Gr SF	265	275
139	Rifle Range: Shooting Stalls/Lanes, Lobby	50/1,000 Gr SF	265	275
140	Rifle Range Facility: Bar/Restaurant	Total	Average	Average
141	School: Arts/Dancing/Music (i)	11/Student	265	275
142	School: Elementary/Jr. High (a) (p)	9/Student	265	275
143	School: High School (a) (p)	11/Student	265	275
144	School: Kindergarten (s)	9/Student	265	275
145	School: Martial Arts (i)	9/Student	265	275
146	School: Nursery-Day Care (p)	9/Child	265	275
147	School: Special Class (p)	9/Student	265	275
148	School: Trade or Vocational (p)	11/Student	265	275
149	School: Training (p)	11/Student	265	275
150	School: University/College (a) (p)	16/Student	265	275
151	School: Dormitory (a) (n)	70/Student	265	275
152	School: Stadium, Pavilion	3/Seat	265	275
153	Spa/Jacuzzi (Commercial with backwash filters)	Total	265	275
154	Storage: Building/Warehouse	30/1,000 Gr SF	265	275
155	Storage: Self-Storage Bldg	30/1,000 Gr SF	265	275
156	Store: Ice Cream/Yogurt	25/1,000 Gr SF	1000	600

SEWERAGE FACILITIES CHARGE
SEWAGE GENERATION FACTOR FOR
RESIDENTIAL AND COMMERCIAL CATEGORIES

EFFECTIVE DATE: April 6, 2012

Line No.	FACILITY DESCRIPTION	PROPOSED SGF IN GPD	BOD (mg/l)	SS (mg/l)
157	Store: Retail (l)	50/1,000 Gr SF	265	275
158	Studio: Film/TV - Audience Viewing Room (q)	3/Seat	265	275
159	Studio: Film/TV - Regular Use Indoor Filming Area (q)	50/1,000 Gr SF	265	275
160	Studio: Film/TV - Ind. Use Film Process/Machine Shop (q)	50/1,000 Gr SF	265	275
161	Studio: Film/TV - Ind. Use Film Process/Machine Shop	Total	265	275
162	Studio: Recording	50/1,000 Gr SF	265	275
163	Swimming Pool (Commercial with backwash filters)	Total	265	275
164	Tanning Salon: Independent, No Shower (r)	50/1,000 Gr SF	265	275
165	Tanning Salon: Within a Health Spa/Club	640/1,000 Gr SF	265	275
166	Theater: Drive-In	6/Vehicle	265	275
167	Theater: Live/Music/Opera	3/Seat	265	275
168	Theater: Cinema	3/Seat	265	275
169	Tract: Commercial/Residential	1/Acre	265	275
170	Trailer: Const/Field Office (e)	120/Office	265	275
171	Veterinary Clinic/Office	250/1,000 Gr SF	265	275
172	Warehouse	30/1,000 Gr SF	265	275
173	Warehouse w/ Office	Total	265	275
174	Waste Dump: Recreational	400/Station	2650	2750
175	Wine Tasting Room: Kitchen	200/1,000 Gr SF	265	275
176	Wine Tasting Room: All Area	50/1,000 Gr SF	265	275

SEWERAGE FACILITIES CHARGE GUIDE
RESIDENTIAL AND COMMERCIAL CATEGORIES

(GR.SQ.FT.) = Gross Square Feet: area included within the exterior of the surrounding walls of a building excluding court.

EFFECTIVE DATE: April 6, 2012

Line No.	FACILITY DESCRIPTION	FEE RATE
1	Acupuncture Office/Clinic	$495/1000 GR.SQ.FT.
2	Arcade - Video Games	$206/1000 GR.SQ.FT.
3	Auditorium (a)	$12/SEAT
4	Auto Parking (a)	$83/1000 GR.SQ.FT.
5	Auto Mfg., Service Maintenance (b)	Actual
6	Bakery	$2956/1000 GR.SQ.FT.
7	Bank: Headquarters	$495/1000 GR.SQ.FT.
8	Bank: Branch	$206/1000 GR.SQ.FT.
9	Ballroom	$1445/1000 GR.SQ.FT.
10	Banquet Room	$1445/1000 GR.SQ.FT.
11	Bar: Cocktail, Fixed Seat (a) (c)	$62/SEAT
12	Bar: Juice, No Baking Facilities (d)	$2973/1000 GR.SQ.FT.
13	Bar: Juice, with Baking Facilities (d)	$2973/1000 GR.SQ.FT.
14	Bar: Cocktail, Public Table Area (c)	$2973/1000 GR.SQ.FT.
15	Barber Shop	$495/1000 GR.SQ.FT.
16	Barber Shop (s)	$62/STALL.
17	Beauty Parlor	$1755/1000 GR.SQ.FT.
18	Beauty Parlor (s)	$206/STALL.
19	Bldg. Const/Field Office (e)	$495/OFFICE
20	Bowling Alley: Alley, Lanes & Lobby Area	$206/1000 GR.SQ.FT.
21	Bowling Facility: Arcade/Bar/Restaurant/Dancing	Total
22	Cafeteria: Fixed Seat	$165/SEAT
23	Car Wash: Automatic (b)	Actual
24	Car Wash: Coin Operated Bays (b)	Actual
25	Car Wash: Hand Wash (b)	Actual
26	Car Wash: Counter & Sales Area	$206/1000 GR.SQ.FT.
27	Chapel: Fixed Seat	$12/SEAT
28	Chiropractic Office	$495/1000 GR.SQ.FT.
29	Church: Fixed Seat	$12/SEAT
30	Church School: Day Care/Elem	$37/OCCUPANT
31	Church School: One Day Use (s)	$37/OCCUPANT
32	Cocktail Lounge: Fixed Seat (f)	$62/SEAT
33	Coffee House: No Food Preparation (d)	$2973/1000 GR.SQ.FT.
34	Coffee House: Pastry Baking Only (d)	$2973/1000 GR.SQ.FT.
35	Coffee House: Serves Prepared Food (d)	$138/SEAT
36	Cold Storage: No Sales (g)	$124/1000 GR.SQ.FT.
37	Cold Storage: Retail Sales (g)	$206/1000 GR.SQ.FT.

SEWERAGE FACILITIES CHARGE GUIDE
RESIDENTIAL AND COMMERCIAL CATEGORIES

(GR.SQ.FT.) = Gross Square Feet: area included within the exterior of the surrounding walls of a building excluding court.

EFFECTIVE DATE: April 6, 2012

38	Comfort Station: Public	$330/FIXTURE
39	Commercial Use (a)	$206/1000 GR.SQ.FT.
40	Community Center	$12/OCCUPANT
41	Conference Room of Office Bldg.	$495/1000 GR.SQ.FT.
42	Counseling Center (h)	$495/1000 GR.SQ.FT.
43	Credit Union	$495/1000 GR.SQ.FT.
44	Dairy	Average Flow
45	Dairy: Barn	Average Flow
46	Dairy: Retail Area	$206/1000 GR.SQ.FT.
47	Dancing Area (of Bars or Nightclub) (c)	$1445/1000 GR.SQ.FT.
48	Dance Studio (i)	$206/1000 GR.SQ.FT.
49	Dental Office/Clinic	$1032/1000 GR.SQ.FT.
50	Doughnut Shop	$1540/1000 GR.SQ.FT.
51	Drug Rehabilitation Center (h)	$495/1000 GR.SQ.FT.
52	Equipment Booth	$124/1000 GR.SQ.FT.
53	Film Processing (Retail)	$206/1000 GR.SQ.FT.
54	Film Processing (Industrial)	Actual
55	Food Processing Plant (b)	Actual
56	Gas Station: Self Service	$413/W.C.
57	Gas Station: Four Bays Max	$3211/STATION
58	Golf Course Facility: Lobby/Office/Restaurant/Bar	Total
59	Gymnasium: Basketball, Volleyball (k)	$826/1000 GR.SQ.FT.
60	Hanger (Aircraft)	$206/1000 GR.SQ.FT.
61	Health Club/Spa (k)	$2684/1000 GR.SQ.FT.
62	Homeless Shelter	$289/BED
63	Hospital	$422/BED
64	Hospital: Convalescent (a)	$289/BED
65	Hospital: Animal	$1811/1000 GR.SQ.FT.
66	Hospital: Psychiatric	$289/BED
67	Hospital: Surgical (a)	$1486/BED
68	Hotel: Use Guest Rooms Only (a)	$495/ROOM
69	Jail	$351/INMATE
70	Kennel: Dog Kennel/Open	$413/1000 GR.SQ.FT.
71	Laboratory: Commercial	$1032/1000 GR.SQ.FT.
72	Laboratory: Industrial	Actual
73	Laundromat	$855/MACHINE
74	Library: Public Area	$206/1000 GR.SQ.FT.
75	Library: Stacks, Storage	$124/1000 GR.SQ.FT.
76	Lobby of Retail Area (l)	$206/1000 GR.SQ.FT.

SEWERAGE FACILITIES CHARGE GUIDE
RESIDENTIAL AND COMMERCIAL CATEGORIES

(GR.SQ.FT.) = Gross Square Feet: area included within the exterior of the surrounding walls of a building excluding court.

EFFECTIVE DATE: April 6, 2012

77	Lodge Hall	$12/SEAT
78	Lounge (l)	$206/1000 GR.SQ.FT.
79	Machine Shop (No Industrial Waste Permit Required) (b)	$206/1000 GR.SQ.FT.
80	Machine Shop (Industrial)	Actual
81	Mfg or Industrial Facility (No IW Permit Required) (b)	$206/1000 GR.SQ.FT.
82	Mfg or Industrial Facility (Industrial)	Actual
83	Massage Parlor	$1032/1000 GR.SQ.FT.
84	Medical Building (a)	$929/1000 GR.SQ.FT.
85	Medical: Lab in Hospital	$1057/1000 GR.SQ.FT.
86	Medical Office/Clinic	$1032/1000 GR.SQ.FT.
87	Mini-Mall (No Food)	$206/1000 GR.SQ.FT.
88	Mortuary: Chapel	$12/SEAT
89	Mortuary: Embalming	$1644/1000 GR.SQ.FT.
90	Mortuary: Living Area	$206/1000 GR.SQ.FT.
91	Motel: Use Guest Room Only (a)	$495/ROOM
92	Museum: All Area	$124/1000 GR.SQ.FT.
93	Museum: Office Over 15%	$495/1000 GR.SQ.FT.
94	Museum: Sales Area	$206/1000 GR.SQ.FT.
95	Office Building (a)	$495/1000 GR.SQ.FT.
96	Office Bldg w/Cooling Tower	$702/1000 GR.SQ.FT.
97	Plating Plant (No IW Permit Required) (b)	$206/1000 GR.SQ.FT.
98	Plating Plant (Industrial) (b)	Actual
99	Pool Hall (No Alcohol)	$206/1000 GR.SQ.FT.
100	Post Office: Full Service (m)	$495/1000 GR.SQ.FT.
101	Post Office: Private Mail Box Rental	$206/1000 GR.SQ.FT.
102	Prisons	$722/INMATE
103	Residential Dorm: College or Residential (n)	$289/STUDENT
104	Residential: Boarding House	$289/BED
105	Residential: Apt - Bachelor (a)	$310/DU
106	Residential: Apt - 1 BDR (a) (o)	$454/DU
107	Residential: Apt - 2 BDR (a) (o)	$619/DU
108	Residential: Apt - 3 BDR (a) (o)	$784/DU
109	Residential: Apt - >3 BDR (o)	$165 PER ADDITIONAL BEDROOM
110	Residential: Condo - 1 BDR (o)	$454/DU
111	Residential: Condo - 2 BDR (o)	$619/DU
112	Residential: Condo - 3 BDR (o)	$784/DU
113	Residential: Condo - >3 BDR (o)	$165 PER ADDITIONAL BEDROOM
114	Residential: Duplex/Townhouse - 1 BR (o)	$454/DU
115	Residential: Duplex/Townhouse - 2 BR (o)	$619/DU

SEWERAGE FACILITIES CHARGE GUIDE
RESIDENTIAL AND COMMERCIAL CATEGORIES

(GR.SQ.FT.) = Gross Square Feet: area included within the exterior of the surrounding walls of a building excluding court.

EFFECTIVE DATE: April 6, 2012

116	Residential: Duplex/Townhouse - 3 BR (o)	$784/DU
117	Residential: Duplex/Townhouse - >3 BR (o)	$165 PER ADDITIONAL BEDROOM
118	Residential: SFD - 1 BR (o)	$578/DU
119	Residential: SFD - 2 BR (o)	$764/DU
120	Residential: SFD - 3 BR (o)	$950/DU
121	Residential: SFD - >3 BR (o)	$186/BDR
122	Residential Room Addition: Bedroom (o)	$186/BDR
123	Residential Room Conversion: Into a Bedroom (o)	$186/BDR
124	Residential: Mobile Home	Same as Apt
125	Residential: Artist (2/3 Area)	$310/DU
126	Residential: Artist Residence	$310/DU
127	Residential: Guest Home w/ Kitchen	Same as Apt
128	Residential: Guest Home w/o Kitchen	$186/BDR
129	Rest Home	$334/BED
130	Restaurant: Drive-In	$275/STALL
131	Restaurant: Drive-In Seating Area	$138/SEAT
132	Restaurant: Fast Food Indoor Seat	$138/SEAT
133	Restaurant: Fast Food Outdoor Seat	$138/SEAT
134	Restaurant: Full Service Indoor Seat (a)	$165/SEAT
135	Restaurant: Full Service Outdoor Seat	$165/SEAT
136	Restaurant: Take Out	$1650/1000 GR.SQ.FT.
137	Retail Area (greater than 100,000 SF)	$206/1000 GR.SQ.FT.
138	Retail Area (less than 100,000 SF)	$103/1000 GR.SQ.FT.
139	Rifle Range: Shooting Stalls/Lanes, Lobby	$206/1000 GR.SQ.FT.
140	Rifle Range Facility: Bar/Restaurant	Total
141	School: Arts/Dancing/Music (i)	$45/1000 GR.SQ.FT.
142	School: Elementary/Jr. High (a) (p)	$37/STUDENT
143	School: High School (a) (p)	$45/STUDENT
144	School: Kindergarten (s)	$37/STUDENT
145	School: Martial Arts (i)	$37/STUDENT
146	School: Nursery-Day Care (p)	$37/CHILD
147	School: Special Class (p)	$37/STUDENT
148	School: Trade or Vocational (p)	$45/STUDENT
149	School: Training (p)	$45/STUDENT
150	School: University/College (a) (p)	$66/STUDENT
151	School: Dormitory (a) (n)	$289/STUDENT
152	School: Stadium, Pavilion	$12/SEAT
153	Spa/Jacuzzi (Commercial with backwash filters)	Total
154	Storage: Building/Warehouse	$124/1000 GR.SQ.FT.

SEWERAGE FACILITIES CHARGE GUIDE
RESIDENTIAL AND COMMERCIAL CATEGORIES

(GR.SQ.FT.) = Gross Square Feet: area included within the exterior of the surrounding walls of a building excluding court.

EFFECTIVE DATE: April 6, 2012

155	Storage: Self-Storage Bldg	$124/1000 GR.SQ.FT.
156	Store: Ice Cream/Yogurt	$138/1000 GR.SQ.FT.
157	Store: Retail (l)	$206/1000 GR.SQ.FT.
158	Studio: Film/TV - Audience Viewing Room (q)	$12/SEAT
159	Studio: Film/TV - Regular Use Indoor Filming Area (q)	$206/1000 GR.SQ.FT.
160	Studio: Film/TV - Ind. Use Film Process/Machine Shop (q)	$206/1000 GR.SQ.FT.
161	Studio: Film/TV - Ind. Use Film Process/Machine Shop	Total
162	Studio: Recording	$206/1000 GR.SQ.FT.
163	Swimming Pool (Commercial with backwash filters)	Total
164	Tanning Salon: Independent, No Shower (r)	$206/1000 GR.SQ.FT.
165	Tanning Salon: Within a Health Spa/Club	$2642/1000 GR.SQ.FT.
166	Theater: Drive-In	$25/VEHICLE
167	Theater: Live/Music/Opera	$12/SEAT
168	Theater: Cinema	$12/SEAT
169	Tract: Commercial/Residential	$4/ACRE
170	Trailer: Const/Field Office (e)	$495/OFFICE
171	Veterinary Clinic/Office	$1032/1000 GR.SQ.FT.
172	Warehouse	$124/1000 GR.SQ.FT.
173	Warehouse w/ Office	Total
174	Waste Dump: Recreational	$4130/STATION
175	Wine Tasting Room: Kitchen	$826/1000 GR.SQ.FT.
176	Wine Tasting Room: All Area	$206/1000 GR.SQ.FT.

TABLE A.
OCCUPANT LOAD FACTOR:
[DSA-SS & DSA-SS/CC]

OCCUPANCY*, **	OCCUPANT LOAD FACTOR (square feet)
Group A	
1. Auditoriums, convention halls, dance floors, lodge rooms, stadiums, and casinos (where no fixed seating is provided) (use ½ "one-half" the number of fixed seating)	*15*
2. Conference rooms, dining rooms, drinking establishments, exhibit rooms, gymnasiums, lounges, stages, and similar uses, including restaurants classified as Group B occupancies	*30*
3. Worship places; principal assembly area, educational and activity unit (where no fixed seating is provided) (use ½ "one-half" the number of fixed seating)	*30*
Group B *Office or public buildings (area accessible to the public)*	*200*
Group E *Schools for day care, elementary, secondary*	*50*
Educational Facilities Other than Group E *Colleges, universities, adult centers, etc.*	*50*
Group F *Workshops, foundries and similar establishments*	*2,000*
Group H *Hazardous materials fabrication and storage*	*2,000*
Group I *Hospital general use area, health care facilities*	*200*
Group M *Retail or wholesale stores*	*200*
Group R *Congregate residence, Group R-1*	*200*
Group S *Warehouse*	*5,000*

* *Any uses not specifically listed shall be based on similar uses listed in this table.*

** *For building or space with mixed occupancies, use appropriate occupancy group for each area (for example, a school may have an "A" occupancy for the gymnasium, a "B" occupancy for the office, an "E" occupancy for the classrooms, etc.) Accessory areas may be excluded (for example: hallway, restroom, stair enclosure)*

L-1: Utility Comparison for TORS Hotel Units Modeled as “Apartment High Rise” and “Hotel” land uses

Utility Consumption

Electricity[4,5]

Land Use	kWh/year	GWh/year
Apartments High Rise	1,242,460	1.242
Enclosed Parking with Elevator	615,939	0.616
Hotel	872,215	0.872
Quality Restaurant	151,356	0.151
Swimming Pool	26,736	0.027
Total	**2,908,706**	**2.909**

Comparison	GWh/year
LADWP Forecasted Sales for 2026[1]	23,807.00
Annual Project Consumption	3.425
Project % of Sales	0.0144%

Water Consumption[4,5]

Land Use	Mgal/yr	kWh/yr
Apartments High Rise	33.89	441244
Enclosed Parking with Elevator	0.00	0
Hotel	4.51	58720
Quality Restaurant	1.11	14422
Swimming Pool	0.149	1946
Total	40	516332

Electricity Intensity Factors	kWh/Mgal
Electricity Factor - Supply	9,727.00
Electricity Factor - Treat	111.00
Electricity Factor - Distribute	1,272.00
Electricity Factor - Wastewater Treatment	1,911.00
Total	**13,021.00**

Electricity from Water Demand	kWh/yr	GWh/yr
Total	**516,332.06**	**0.52**

Natural Gas

Land Use	kBTU/year	MMscf/year
Apartments High Rise	2,940,200	2.88
Enclosed Parking with Elevator	0	0.00
Hotel	2,759,330	2.71
Quality Restaurant	791,276	0.78
Total	**6,490,806**	**6.364**

Comparison	MMscf/year
SoCalGas Forecasted Capacity for 2026[2]	1,253,775.00
Annual Project Consumption	6.36
Project % of Sales	0.00051%

Natural Gas HHV (BTU/scf)[3] 1,020.00

Notes:

1 LADWP 2017 Strategic Long-Term Resource Plan, Appendix A, 2026-2027 p. A-6
file:///C:/Users/53797/Downloads/FINAL%202017%20SLTRP%20v2.pdf

2 2020 California Gas Report, Prepared by California Gas and Electric Utilities
https://www.socalgas.com/sites/default/files/2020-10/2020_California_Gas_Report_Joint_Utility_Biennial_Comprehensive_Filing.pdf

3 USEPA AP-42, 1.4 Natural Gas Combustion
https://www.epa.gov/sites/production/files/2020-09/documents/1.4_natural_gas_combustion.pdf

4 Electricity, water, and natural gas values from CalEEMod Annual Output file

5 Swimming pool values estimated CalEEMod Annual Output file

USED ONLY IN UTIITLIES ANALYSIS

Utility Consumption

Electricity[4,5]

Land Use	kWh/year	GWh/year
Apartments High Rise	1,242,460	1.242
Apartments High Rise	623,178	0.623
Enclosed Parking with Elevator	615,939	0.616
Quality Restaurant	151,356	0.151
Swimming Pool	26,736	0.027
Total	**2,659,669**	**2.660**

Comparison	GWh/year
LADWP Forecasted Sales for 2026[1]	23,807.00
Annual Project Consumption	3.339
Project % of Sales	0.0140%

Water Consumption[4,5]

Land Use	Mgal/yr	kWh/yr
Apartments High Rise	50.88	662559
Enclosed Parking with Elevator	0.00	0
Quality Restaurant	1.11	14422
Swimming Pool	0.149	1946
Total	52	678927

Electricity Intensity Factors	kWh/Mgal
Electricity Factor - Supply	9,727.00
Electricity Factor - Treat	111.00
Electricity Factor - Distribute	1,272.00
Electricity Factor - Wastewater Treatment	1,911.00
Total	**13021.0**

Electricity from Water Demand	kWh/yr	GWh/yr
Total	**678,927.30**	**0.68**

Natural Gas

Land Use	kBTU/year	MMscf/year
Apartments High Rise	1,474,710	1.45
Apartments High Rise	2,940,200	2.88
Enclosed Parking with Elevator	0	0.00
Quality Restaurant	791,276	0.78
Total	**5,206,186**	**5.104**

Comparison	MMscf/year
SoCalGas Forecasted Capacity for 2026[2]	1,253,775.00
Annual Project Consumption	5.10
Project % of Sales	0.00041%

Natural Gas HHV (BTU/scf)[3] 1,020.00

Notes:

1 LADWP 2017 Strategic Long-Term Resource Plan, Appendix A, 2026-2027 p. A-6
file:///C:/Users/53797/Downloads/FINAL%202017%20SLTRP%20v2.pdf

2 2020 California Gas Report, Prepared by California Gas and Electric Utilities
https://www.socalgas.com/sites/default/files/2020-10/2020_California_Gas_Report_Joint_Utility_Biennial_Comprehensive_Filing.pdf

3 USEPA AP-42, 1.4 Natural Gas Combustion
https://www.epa.gov/sites/production/files/2020-09/documents/1.4_natural_gas_combustion.pdf

4 Electricity, water, and natural gas values from CalEEMod Annual Output file

5 Swimming pool values estimated CalEEMod Annual Output file

Scenario modeling TORS as "Apartment High Rise"

Project Land Use	Annual Electricity Demand (kwh/year)[a]
Residential Apartments - Electricity	1,242,460
Residential Apartments - Water and Wastewater	441,245
TORS Hotel Rooms - Electricity[b]	623,178
TORS Hotel Rooms - Water and Wastewater[b]	221,314
Quality Restaurant - Electricity	151,356
Quality Restaurant - Water and Wastewater	14,422
Swimming Pool - Electricity[c]	26,736
Swimming Pool - Water and Wastewater[d]	1,946
Enclosed Parking with Elevator	615,939
Total	**3,338,596**

Source: ICF 2021. Outputs are estimates and should not be used for forecasting purposes. Outputs conservatively assume that there is no electricity demand from the current industrial building at the project site.

a Electricity demand values generated using CalEEMod version 2016.3.2

b Electricity and water usage for TORS Hotel Rooms were modeled using the "Apartment High Rise" land use in CalEEMod.

c Electricity consumption based on Commercial Pump Calculator from Pentair

d Water usage based on daily usage and one draining and filling event per year for maintenance purposes.

e Water and wastewater electricity related to energy associated with water supply, distribution, and treatment.

Scenario modeling TORS as "Hotel"

Project Land Use	Annual Electricity Demand (kwh/year)[a]
Residential Apartments - Electricity	1,242,460
Residential Apartments - Water and Wastewater	441,245
TORS Hotel Rooms - Electricity[b]	872,215
TORS Hotel Rooms - Water and Wastewater[b]	58,720
Quality Restaurant - Electricity	151,356
Quality Restaurant - Water and Wastewater	14,422
Swimming Pool - Electricity[c]	26,736
Swimming Pool - Water and Wastewater[d]	1,946
Enclosed Parking with Elevator	615,939
Total	**3,425,039**

Source: ICF 2021. Outputs are estimates and should not be used for forecasting purposes. Outputs conservatively assume that there is no electricity demand from the current industrial building at the project site.

a Electricity demand values generated using CalEEMod version 2016.3.2

b Electricity and water usage for TORS Hotel Rooms were modeled using the "Hotel" land use in CalEEMod.

c Electricity consumption based on Commercial Pump Calculator from Pentair

d Water usage based on daily usage and one draining and filling event per year for maintenance purposes.

e Water and wastewater electricity related to energy associated with water supply, distribution, and treatment.

1111 Hill St. Mixed-Use Project - Operations - Los Angeles-South Coast County, Annual

1111 Hill St. Mixed-Use Project - Operations

Los Angeles-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking with Elevator	436.00	Space	0.00	105,109.00	0
Quality Restaurant	3.43	1000sqft	0.00	3,429.00	0
Apartments High Rise	319.00	Dwelling Unit	0.00	373,480.00	912
Hotel	160.00	Room	0.63	115,068.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	11			**Operational Year**	2026
Utility Company	Los Angeles Department of Water & Power				
CO2 Intensity (lb/MWhr)	548	**CH4 Intensity (lb/MWhr)**	0.022	**N2O Intensity (lb/MWhr)**	0.003

1.3 User Entered Comments & Non-Default Data

Project Characteristics - LADWP intensity factors accounting for RPS

Land Use - Project land uses and square footages; Project's 160 hotel units modeled as HOTEL. Parking SF based on approximatley 26,277.2 SF per level.

Construction Phase - Operational emisisons only

Off-road Equipment - architectural coating equip

Off-road Equipment - Electric equip only for Building phase

Off-road Equipment - Demo equip

Off-road Equipment - Grading equip

Off-road Equipment - paving equip

Off-road Equipment - Site prep equip

Trips and VMT - Operational emissions only

Demolition -

Grading - Operational emissions only

Architectural Coating - Operational emissions only

Vehicle Trips - Mobile emissions estimated outside of CalEEMod model

Woodstoves - Gas fireplaces for 50% of the 319 residential units

Area Coating - 50 g/L coatings

Energy Use -

Water And Wastewater -

Construction Off-road Equipment Mitigation -

Energy Mitigation - Energy Star % improvement

Water Mitigation -

Waste Mitigation -

Stationary Sources - Emergency Generators and Fire Pumps - Based on Caterpillar C32 generator spec sheet: 1250 kVA @ 0.8 power factor (assumes 100% motor efficiency), which is approximately 1,341 HP

Stationary Sources - Emergency Generators and Fire Pumps EF - EF for CAT C32 Generator

Table Name	Column Name	Default Value	New Value
tblApplianceMitigation	PercentImprovement	30.00	25.00
tblApplianceMitigation	PercentImprovement	15.00	12.00
tblApplianceMitigation	PercentImprovement	50.00	60.00
tblApplianceMitigation	PercentImprovement	15.00	9.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	100	50
tblAreaCoating	Area_EF_Nonresidential_Interior	100	50
tblFireplaces	NumberGas	271.15	160.00
tblFireplaces	NumberNoFireplace	31.90	159.00
tblFireplaces	NumberWood	15.95	0.00
tblLandUse	LandUseSquareFeet	174,400.00	105,109.00
tblLandUse	LandUseSquareFeet	3,430.00	3,429.00
tblLandUse	LandUseSquareFeet	232,320.00	115,068.00
tblLandUse	LandUseSquareFeet	319,000.00	373,480.00
tblLandUse	LotAcreage	3.92	0.00
tblLandUse	LotAcreage	0.08	0.00
tblLandUse	LotAcreage	5.33	0.63
tblLandUse	LotAcreage	5.15	0.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.022
tblProjectCharacteristics	CO2IntensityFactor	1227.89	548
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.003
tblStationaryGeneratorsPumpsEF	CO_EF	2.60	0.44
tblStationaryGeneratorsPumpsEF	NOX_EF	4.56	7.57
tblStationaryGeneratorsPumpsEF	PM10_EF	0.15	0.04
tblStationaryGeneratorsPumpsEF	PM2_5_EF	0.15	0.04
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	1,341.00
tblStationaryGeneratorsPumpsUse	HoursPerDay	0.00	1.00
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	50.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	2.00
tblVehicleTrips	ST_TR	4.98	0.00

tblVehicleTrips	ST_TR	94.36	0.00
tblVehicleTrips	ST_TR	8.19	0.00
tblVehicleTrips	SU_TR	3.65	0.00
tblVehicleTrips	SU_TR	72.16	0.00
tblVehicleTrips	SU_TR	5.95	0.00
tblVehicleTrips	WD_TR	4.20	0.00
tblVehicleTrips	WD_TR	89.95	0.00
tblVehicleTrips	WD_TR	8.17	0.00
tblWoodstoves	NumberCatalytic	15.95	0.00
tblWoodstoves	NumberNoncatalytic	15.95	0.00

2.0 Emissions Summary

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	2.0336	0.0711	3.3084	3.9000e-004		0.0210	0.0210		0.0210	0.0210	0.0000	43.8106	43.8106	5.9200e-003	7.0000e-004	44.1685
Energy	0.0350	0.3095	0.2039	1.9100e-003		0.0242	0.0242		0.0242	0.0242	0.0000	1,067.9133	1,067.9133	0.0356	0.0103	1,071.8729
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Stationary	0.1100	0.8169	0.0475	5.3000e-004		4.3200e-003	4.3200e-003		4.3200e-003	4.3200e-003	0.0000	51.0649	51.0649	7.1600e-003	0.0000	51.2439
Waste						0.0000	0.0000		0.0000	0.0000	48.2043	0.0000	48.2043	2.8488	0.0000	119.4240
Water						0.0000	0.0000		0.0000	0.0000	8.2118	121.3905	129.6023	0.8483	0.0206	156.9426
Total	**2.1786**	**1.1975**	**3.5597**	**2.8300e-003**	**0.0000**	**0.0495**	**0.0495**	**0.0000**	**0.0495**	**0.0495**	**56.4160**	**1,284.1793**	**1,340.5953**	**3.7458**	**0.0316**	**1,443.6519**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	2.0336	0.0711	3.3084	3.9000e-004		0.0210	0.0210		0.0210	0.0210	0.0000	43.8106	43.8106	5.9200e-003	7.0000e-004	44.1685
Energy	0.0350	0.3095	0.2039	1.9100e-003		0.0242	0.0242		0.0242	0.0242	0.0000	1,062.7418	1,062.7418	0.0354	0.0103	1,066.6878
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Stationary	0.1100	0.8169	0.0475	5.3000e-004		4.3200e-003	4.3200e-003		4.3200e-003	4.3200e-003	0.0000	51.0649	51.0649	7.1600e-003	0.0000	51.2439
Waste						0.0000	0.0000		0.0000	0.0000	11.5690	0.0000	11.5690	0.6837	0.0000	28.6618
Water						0.0000	0.0000		0.0000	0.0000	6.5694	104.6352	111.2047	0.6789	0.0165	133.0967
Total	**2.1786**	**1.1975**	**3.5597**	**2.8300e-003**	**0.0000**	**0.0495**	**0.0495**	**0.0000**	**0.0495**	**0.0495**	**18.1384**	**1,262.2525**	**1,280.3910**	**1.4111**	**0.0275**	**1,323.8587**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**67.85**	**1.71**	**4.49**	**62.33**	**13.01**	**8.30**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments High Rise	0.00	0.00	0.00		
Enclosed Parking with Elevator	0.00	0.00	0.00		
Quality Restaurant	0.00	0.00	0.00		
Hotel	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments High Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Enclosed Parking with Elevator	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Quality Restaurant	16.60	8.40	6.90	12.00	69.00	19.00	38	18	44
Hotel	16.60	8.40	6.90	19.40	61.60	19.00	58	38	4

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments High Rise	0.544210	0.044379	0.208611	0.117175	0.014456	0.006301	0.020907	0.032661	0.002589	0.001903	0.005267	0.000705	0.000834
Enclosed Parking with Elevator	0.544210	0.044379	0.208611	0.117175	0.014456	0.006301	0.020907	0.032661	0.002589	0.001903	0.005267	0.000705	0.000834
Quality Restaurant	0.544210	0.044379	0.208611	0.117175	0.014456	0.006301	0.020907	0.032661	0.002589	0.001903	0.005267	0.000705	0.000834
Hotel	0.544210	0.044379	0.208611	0.117175	0.014456	0.006301	0.020907	0.032661	0.002589	0.001903	0.005267	0.000705	0.000834

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Install Energy Efficient Appliances

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	716.3675	716.3675	0.0288	3.9200e-003	718.2551
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	721.5390	721.5390	0.0290	3.9500e-003	723.4402
NaturalGas Mitigated	0.0350	0.3095	0.2039	1.9100e-003		0.0242	0.0242		0.0242	0.0242	0.0000	346.3744	346.3744	6.6400e-003	6.3500e-003	348.4327
NaturalGas Unmitigated	0.0350	0.3095	0.2039	1.9100e-003		0.0242	0.0242		0.0242	0.0242	0.0000	346.3744	346.3744	6.6400e-003	6.3500e-003	348.4327

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments High Rise	2.9402e+006	0.0159	0.1355	0.0577	8.6000e-004		0.0110	0.0110		0.0110	0.0110	0.0000	156.9005	156.9005	3.0100e-003	2.8800e-003	157.8329
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hotel	2.75933e+006	0.0149	0.1353	0.1136	8.1000e-004		0.0103	0.0103		0.0103	0.0103	0.0000	147.2484	147.2484	2.8200e-003	2.7000e-003	148.1234
Quality Restaurant	791276	4.2700e-003	0.0388	0.0326	2.3000e-004		2.9500e-003	2.9500e-003		2.9500e-003	2.9500e-003	0.0000	42.2255	42.2255	8.1000e-004	7.7000e-004	42.4764
Total		**0.0350**	**0.3095**	**0.2039**	**1.9000e-003**		**0.0242**	**0.0242**		**0.0242**	**0.0242**	**0.0000**	**346.3744**	**346.3744**	**6.6400e-003**	**6.3500e-003**	**348.4327**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments High Rise	2.9402e+006	0.0159	0.1355	0.0577	8.6000e-004		0.0110	0.0110		0.0110	0.0110	0.0000	156.9005	156.9005	3.0100e-003	2.8800e-003	157.8329
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hotel	2.75933e+006	0.0149	0.1353	0.1136	8.1000e-004		0.0103	0.0103		0.0103	0.0103	0.0000	147.2484	147.2484	2.8200e-003	2.7000e-003	148.1234
Quality Restaurant	791276	4.2700e-003	0.0388	0.0326	2.3000e-004		2.9500e-003	2.9500e-003		2.9500e-003	2.9500e-003	0.0000	42.2255	42.2255	8.1000e-004	7.7000e-004	42.4764
Total		**0.0350**	**0.3095**	**0.2039**	**1.9000e-003**		**0.0242**	**0.0242**		**0.0242**	**0.0242**	**0.0000**	**346.3744**	**346.3744**	**6.6400e-003**	**6.3500e-003**	**348.4327**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments High Rise	1.26327e+006	314.0082	0.0126	1.7200e-003	314.8356
Enclosed Parking with Elevator	615939	153.1030	6.1500e-003	8.4000e-004	153.5065
Hotel	872215	216.8054	8.7000e-003	1.1900e-003	217.3767
Quality Restaurant	151356	37.6224	1.5100e-003	2.1000e-004	37.7215
Total		**721.5390**	**0.0290**	**3.9600e-003**	**723.4402**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments High Rise	1.24246e+006	308.8367	0.0124	1.6900e-003	309.6505
Enclosed Parking with Elevator	615939	153.1030	6.1500e-003	8.4000e-004	153.5065
Hotel	872215	216.8054	8.7000e-003	1.1900e-003	217.3767
Quality Restaurant	151356	37.6224	1.5100e-003	2.1000e-004	37.7215
Total		**716.3675**	**0.0288**	**3.9300e-003**	**718.2551**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	2.0336	0.0711	3.3084	3.9000e-004		0.0210	0.0210		0.0210	0.0210	0.0000	43.8106	43.8106	5.9200e-003	7.0000e-004	44.1685
Unmitigated	2.0336	0.0711	3.3084	3.9000e-004		0.0210	0.0210		0.0210	0.0210	0.0000	43.8106	43.8106	5.9200e-003	7.0000e-004	44.1685

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1458					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.7846					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	3.8800e-003	0.0332	0.0141	2.1000e-004		2.6800e-003	2.6800e-003		2.6800e-003	2.6800e-003	0.0000	38.4219	38.4219	7.4000e-004	7.0000e-004	38.6503
Landscaping	0.0994	0.0379	3.2943	1.7000e-004		0.0183	0.0183		0.0183	0.0183	0.0000	5.3886	5.3886	5.1800e-003	0.0000	5.5182
Total	**2.0336**	**0.0711**	**3.3084**	**3.8000e-004**		**0.0209**	**0.0209**		**0.0209**	**0.0209**	**0.0000**	**43.8106**	**43.8106**	**5.9200e-003**	**7.0000e-004**	**44.1685**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1458					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.7846					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	3.8800e-003	0.0332	0.0141	2.1000e-004		2.6800e-003	2.6800e-003		2.6800e-003	2.6800e-003	0.0000	38.4219	38.4219	7.4000e-004	7.0000e-004	38.6503
Landscaping	0.0994	0.0379	3.2943	1.7000e-004		0.0183	0.0183		0.0183	0.0183	0.0000	5.3886	5.3886	5.1800e-003	0.0000	5.5182
Total	**2.0336**	**0.0711**	**3.3084**	**3.8000e-004**		**0.0209**	**0.0209**		**0.0209**	**0.0209**	**0.0000**	**43.8106**	**43.8106**	**5.9200e-003**	**7.0000e-004**	**44.1685**

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	111.2047	0.6789	0.0165	133.0967
Unmitigated	129.6023	0.8483	0.0206	156.9426

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments High Rise	20.7841 / 13.103	110.0494	0.6814	0.0166	132.0187
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Hotel	4.05868 / 0.450965	15.6694	0.1328	3.2000e-003	19.9442
Quality Restaurant	1.04112 / 0.0664545	3.8835	0.0341	8.2000e-004	4.9797
Total		**129.6023**	**0.8483**	**0.0206**	**156.9426**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments High Rise	16.6273 / 13.103	95.2765	0.5454	0.0133	112.8711
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Hotel	3.24695 / 0.450965	12.7846	0.1063	2.5600e-003	16.2051
Quality Restaurant	0.832897 / 0.0664545	3.1435	0.0273	6.6000e-004	4.0206
Total		**111.2047**	**0.6789**	**0.0165**	**133.0967**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	11.5690	0.6837	0.0000	28.6618
Unmitigated	48.2043	2.8488	0.0000	119.4240

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments High Rise	146.74	29.7869	1.7604	0.0000	73.7958
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Hotel	87.6	17.7820	1.0509	0.0000	44.0542
Quality Restaurant	3.13	0.6354	0.0376	0.0000	1.5741
Total		**48.2043**	**2.8488**	**0.0000**	**119.4240**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments High Rise	35.2176	7.1489	0.4225	0.0000	17.7110
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Hotel	21.024	4.2677	0.2522	0.0000	10.5730
Quality Restaurant	0.7512	0.1525	9.0100e-003	0.0000	0.3778
Total		**11.5690**	**0.6837**	**0.0000**	**28.6618**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
Emergency Generator	2	1	50	1341	0.73	Diesel

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

10.1 Stationary Sources

Unmitigated/Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	tons/yr										MT/yr					
Emergency Generator - Diesel (750 - 9999 HP)	0.1100	0.8169	0.0475	5.3000e-004		4.3200e-003	4.3200e-003		4.3200e-003	4.3200e-003	0.0000	51.0649	51.0649	7.1600e-003	0.0000	51.2439
Total	**0.1100**	**0.8169**	**0.0475**	**5.3000e-004**		**4.3200e-003**	**4.3200e-003**		**4.3200e-003**	**4.3200e-003**	**0.0000**	**51.0649**	**51.0649**	**7.1600e-003**	**0.0000**	**51.2439**

11.0 Vegetation

1111 Hill St. Mixed-Use Project - Operations - Los Angeles-South Coast County, Annual

1111 Hill St. Mixed-Use Project - Operations

Los Angeles-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking with Elevator	436.00	Space	0.00	105,109.00	0
Quality Restaurant	3.43	1000sqft	0.00	3,429.00	0
Apartments High Rise	319.00	Dwelling Unit	0.00	373,480.00	912
Apartments High Rise	160.00	Dwelling Unit	0.63	115,068.00	458

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	11			**Operational Year**	2026
Utility Company	Los Angeles Department of Water & Power				
CO2 Intensity (lb/MWhr)	548	**CH4 Intensity (lb/MWhr)**	0.022	**N2O Intensity (lb/MWhr)**	0.003

1.3 User Entered Comments & Non-Default Data

Project Characteristics - LADWP intensity factors accounting for RPS

Land Use - Project land uses and square footages; As project's 160 hotel units would be TORS units, they are modeled as multi-family residential units. Parking SF based on approximatley 26,277.2 SF per level.

Construction Phase - Operational emisisons only

Off-road Equipment - architectural coating equip

Off-road Equipment - Electric equip only for Building phase

Off-road Equipment - Demo equip

Off-road Equipment - Grading equip

Off-road Equipment - paving equip

Off-road Equipment - Site prep equip

Trips and VMT - Operational emissions only

Demolition -

Grading - Operational emissions only

Architectural Coating - Operational emissions only

Vehicle Trips - Mobile emissions estimated outside of CalEEMod model

Woodstoves - Gas fireplaces for 50% of the 319 residential units

Area Coating - 50 g/L coatings

Energy Use -

Water And Wastewater -

Construction Off-road Equipment Mitigation -

Energy Mitigation - Energy Star % improvement

Water Mitigation -

Waste Mitigation -

Stationary Sources - Emergency Generators and Fire Pumps - Based on Caterpillar C32 generator spec sheet: 1250 kVA @ 0.8 power factor (assumes 100% motor efficiency), which is approximately 1,341 HP

Stationary Sources - Emergency Generators and Fire Pumps EF - EF for CAT C32 Generator

Table Name	Column Name	Default Value	New Value
tblApplianceMitigation	PercentImprovement	30.00	25.00
tblApplianceMitigation	PercentImprovement	15.00	12.00
tblApplianceMitigation	PercentImprovement	50.00	60.00
tblApplianceMitigation	PercentImprovement	15.00	9.00
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	1,715.00	0.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	5,144.00	0.00
tblArchitecturalCoating	ConstArea_Parking	6,307.00	0.00
tblArchitecturalCoating	ConstArea_Residential_Exterior	329,770.00	0.00
tblArchitecturalCoating	ConstArea_Residential_Interior	989,310.00	0.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	100	50
tblAreaCoating	Area_EF_Nonresidential_Interior	100	50
tblConstructionPhase	NumDays	10.00	0.00
tblConstructionPhase	NumDays	1.00	0.00
tblConstructionPhase	NumDays	2.00	0.00
tblConstructionPhase	NumDays	100.00	0.00
tblConstructionPhase	NumDays	5.00	0.00
tblConstructionPhase	NumDays	5.00	0.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberGas	407.15	160.00
tblFireplaces	NumberNoFireplace	47.90	319.00
tblFireplaces	NumberWood	23.95	0.00
tblLandUse	LandUseSquareFeet	174,400.00	105,109.00
tblLandUse	LandUseSquareFeet	3,430.00	3,429.00
tblLandUse	LandUseSquareFeet	160,000.00	115,068.00
tblLandUse	LandUseSquareFeet	319,000.00	373,480.00
tblLandUse	LotAcreage	3.92	0.00
tblLandUse	LotAcreage	0.08	0.00
tblLandUse	LotAcreage	2.58	0.63
tblLandUse	LotAcreage	5.15	0.00

tblProjectCharacteristics	CH4IntensityFactor	0.029	0.022
tblProjectCharacteristics	CO2IntensityFactor	1227.89	548
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.003
tblStationaryGeneratorsPumpsEF	CO_EF	2.60	0.44
tblStationaryGeneratorsPumpsEF	NOX_EF	4.56	7.57
tblStationaryGeneratorsPumpsEF	PM10_EF	0.15	0.04
tblStationaryGeneratorsPumpsEF	PM2_5_EF	0.15	0.04
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	1,341.00
tblStationaryGeneratorsPumpsUse	HoursPerDay	0.00	1.00
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	50.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	2.00
tblTripsAndVMT	VendorTripNumber	69.00	0.00
tblTripsAndVMT	WorkerTripNumber	10.00	0.00
tblTripsAndVMT	WorkerTripNumber	5.00	0.00
tblTripsAndVMT	WorkerTripNumber	10.00	0.00
tblTripsAndVMT	WorkerTripNumber	390.00	0.00
tblTripsAndVMT	WorkerTripNumber	18.00	0.00
tblTripsAndVMT	WorkerTripNumber	78.00	0.00
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CC_TTP	69.00	0.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TTP	12.00	0.00
tblVehicleTrips	DV_TP	11.00	0.00
tblVehicleTrips	DV_TP	18.00	0.00
tblVehicleTrips	HO_TL	8.70	0.00

tblVehicleTrips	HO_TTP	40.60	0.00
tblVehicleTrips	HS_TL	5.90	0.00
tblVehicleTrips	HS_TTP	19.20	0.00
tblVehicleTrips	HW_TL	14.70	0.00
tblVehicleTrips	HW_TTP	40.20	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PB_TP	44.00	0.00
tblVehicleTrips	PR_TP	86.00	0.00
tblVehicleTrips	PR_TP	38.00	0.00
tblVehicleTrips	ST_TR	4.98	0.00
tblVehicleTrips	ST_TR	94.36	0.00
tblVehicleTrips	SU_TR	3.65	0.00
tblVehicleTrips	SU_TR	72.16	0.00
tblVehicleTrips	WD_TR	4.20	0.00
tblVehicleTrips	WD_TR	89.95	0.00
tblWoodstoves	NumberCatalytic	23.95	0.00
tblWoodstoves	NumberNoncatalytic	23.95	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

2.0 Emissions Summary

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	2.0961	0.1233	4.9689	6.8000e-004		0.0328	0.0328		0.0328	0.0328	0.0000	84.9238	84.9238	9.2300e-003	1.4100e-003	85.5743
Energy	0.0281	0.2422	0.1192	1.5300e-003		0.0194	0.0194		0.0194	0.0194	0.0000	940.0520	940.0520	0.0319	8.7200e-003	943.4479
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Stationary	0.1100	0.8169	0.0475	5.3000e-004		4.3200e-003	4.3200e-003		4.3200e-003	4.3200e-003	0.0000	51.0649	51.0649	7.1600e-003	0.0000	51.2439
Waste						0.0000	0.0000		0.0000	0.0000	45.3624	0.0000	45.3624	2.6808	0.0000	112.3834
Water						0.0000	0.0000		0.0000	0.0000	10.2314	158.8986	169.1300	1.0572	0.0257	203.2147
Total	**2.2342**	**1.1823**	**5.1355**	**2.7400e-003**	**0.0000**	**0.0565**	**0.0565**	**0.0000**	**0.0565**	**0.0565**	**55.5938**	**1,234.9393**	**1,290.5331**	**3.7864**	**0.0358**	**1,395.8642**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	2.0961	0.1233	4.9689	6.8000e-004		0.0328	0.0328		0.0328	0.0328	0.0000	84.9238	84.9238	9.2300e-003	1.4100e-003	85.5743
Energy	0.0281	0.2422	0.1192	1.5300e-003		0.0194	0.0194		0.0194	0.0194	0.0000	932.2866	932.2866	0.0316	8.6800e-003	935.6621
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Stationary	0.1100	0.8169	0.0475	5.3000e-004		4.3200e-003	4.3200e-003		4.3200e-003	4.3200e-003	0.0000	51.0649	51.0649	7.1600e-003	0.0000	51.2439
Waste						0.0000	0.0000		0.0000	0.0000	10.8870	0.0000	10.8870	0.6434	0.0000	26.9720
Water						0.0000	0.0000		0.0000	0.0000	8.1851	138.0226	146.2077	0.8462	0.0206	173.5041
Total	**2.2342**	**1.1823**	**5.1355**	**2.7400e-003**	**0.0000**	**0.0565**	**0.0565**	**0.0000**	**0.0565**	**0.0565**	**19.0721**	**1,206.2979**	**1,225.3700**	**1.5376**	**0.0307**	**1,272.9564**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**65.69**	**2.32**	**5.05**	**59.39**	**14.27**	**8.81**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments High Rise	0.00	0.00	0.00		
Apartments High Rise	0.00	0.00	0.00		
Enclosed Parking with Elevator	0.00	0.00	0.00		
Quality Restaurant	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments High Rise	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0
Apartments High Rise	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0
Quality Restaurant	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments High Rise	0.544210	0.044379	0.208611	0.117175	0.014456	0.006301	0.020907	0.032661	0.002589	0.001903	0.005267	0.000705	0.000834
Enclosed Parking with Elevator	0.544210	0.044379	0.208611	0.117175	0.014456	0.006301	0.020907	0.032661	0.002589	0.001903	0.005267	0.000705	0.000834
Quality Restaurant	0.544210	0.044379	0.208611	0.117175	0.014456	0.006301	0.020907	0.032661	0.002589	0.001903	0.005267	0.000705	0.000834

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Install Energy Efficient Appliances

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	654.4645	654.4645	0.0263	3.5800e-003	656.1890
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	662.2298	662.2298	0.0266	3.6300e-003	663.9748
NaturalGas Mitigated	0.0281	0.2422	0.1192	1.5300e-003		0.0194	0.0194		0.0194	0.0194	0.0000	277.8221	277.8221	5.3200e-003	5.0900e-003	279.4731
NaturalGas Unmitigated	0.0281	0.2422	0.1192	1.5300e-003		0.0194	0.0194		0.0194	0.0194	0.0000	277.8221	277.8221	5.3200e-003	5.0900e-003	279.4731

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments High Rise	1.47471e+006	7.9500e-003	0.0680	0.0289	4.3000e-004		5.4900e-003	5.4900e-003		5.4900e-003	5.4900e-003	0.0000	78.6962	78.6962	1.5100e-003	1.4400e-003	79.1638
Apartments High Rise	2.9402e+006	0.0159	0.1355	0.0577	8.6000e-004		0.0110	0.0110		0.0110	0.0110	0.0000	156.9005	156.9005	3.0100e-003	2.8800e-003	157.8329
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Quality Restaurant	791276	4.2700e-003	0.0388	0.0326	2.3000e-004		2.9500e-003	2.9500e-003		2.9500e-003	2.9500e-003	0.0000	42.2255	42.2255	8.1000e-004	7.7000e-004	42.4764
Total		**0.0281**	**0.2422**	**0.1192**	**1.5200e-003**		**0.0194**	**0.0194**		**0.0194**	**0.0194**	**0.0000**	**277.8221**	**277.8221**	**5.3300e-003**	**5.0900e-003**	**279.4731**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments High Rise	1.47471e+006	7.9500e-003	0.0680	0.0289	4.3000e-004		5.4900e-003	5.4900e-003		5.4900e-003	5.4900e-003	0.0000	78.6962	78.6962	1.5100e-003	1.4400e-003	79.1638
Apartments High Rise	2.9402e+006	0.0159	0.1355	0.0577	8.6000e-004		0.0110	0.0110		0.0110	0.0110	0.0000	156.9005	156.9005	3.0100e-003	2.8800e-003	157.8329
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Quality Restaurant	791276	4.2700e-003	0.0388	0.0326	2.3000e-004		2.9500e-003	2.9500e-003		2.9500e-003	2.9500e-003	0.0000	42.2255	42.2255	8.1000e-004	7.7000e-004	42.4764
Total		**0.0281**	**0.2422**	**0.1192**	**1.5200e-003**		**0.0194**	**0.0194**		**0.0194**	**0.0194**	**0.0000**	**277.8221**	**277.8221**	**5.3300e-003**	**5.0900e-003**	**279.4731**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments High Rise	1.26327e+006	314.0082	0.0126	1.7200e-003	314.8356
Apartments High Rise	633613	157.4963	6.3200e-003	8.6000e-004	157.9113
Enclosed Parking with Elevator	615939	153.1030	6.1500e-003	8.4000e-004	153.5065
Quality Restaurant	151356	37.6224	1.5100e-003	2.1000e-004	37.7215
Total		**662.2298**	**0.0266**	**3.6300e-003**	**663.9748**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments High Rise	1.24246e+006	308.8367	0.0124	1.6900e-003	309.6505
Apartments High Rise	623178	154.9024	6.2200e-003	8.5000e-004	155.3106
Enclosed Parking with Elevator	615939	153.1030	6.1500e-003	8.4000e-004	153.5065
Quality Restaurant	151356	37.6224	1.5100e-003	2.1000e-004	37.7215
Total		**654.4645**	**0.0263**	**3.5900e-003**	**656.1890**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	2.0961	0.1233	4.9689	6.8000e-004		0.0328	0.0328		0.0328	0.0328	0.0000	84.9238	84.9238	9.2300e-003	1.4100e-003	85.5743
Unmitigated	2.0961	0.1233	4.9689	6.8000e-004		0.0328	0.0328		0.0328	0.0328	0.0000	84.9238	84.9238	9.2300e-003	1.4100e-003	85.5743

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1551					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.7846					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	7.7600e-003	0.0664	0.0282	4.2000e-004		5.3600e-003	5.3600e-003		5.3600e-003	5.3600e-003	0.0000	76.8439	76.8439	1.4700e-003	1.4100e-003	77.3005
Landscaping	0.1487	0.0569	4.9407	2.6000e-004		0.0274	0.0274		0.0274	0.0274	0.0000	8.0799	8.0799	7.7600e-003	0.0000	8.2738
Total	**2.0961**	**0.1233**	**4.9689**	**6.8000e-004**		**0.0328**	**0.0328**		**0.0328**	**0.0328**	**0.0000**	**84.9238**	**84.9238**	**9.2300e-003**	**1.4100e-003**	**85.5743**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1551					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.7846					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	7.7600e-003	0.0664	0.0282	4.2000e-004		5.3600e-003	5.3600e-003		5.3600e-003	5.3600e-003	0.0000	76.8439	76.8439	1.4700e-003	1.4100e-003	77.3005
Landscaping	0.1487	0.0569	4.9407	2.6000e-004		0.0274	0.0274		0.0274	0.0274	0.0000	8.0799	8.0799	7.7600e-003	0.0000	8.2738
Total	**2.0961**	**0.1233**	**4.9689**	**6.8000e-004**		**0.0328**	**0.0328**		**0.0328**	**0.0328**	**0.0000**	**84.9238**	**84.9238**	**9.2300e-003**	**1.4100e-003**	**85.5743**

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	146.2077	0.8462	0.0206	173.5041
Unmitigated	169.1300	1.0572	0.0257	203.2147

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments High Rise	31.2088 / 19.6751	165.2465	1.0232	0.0249	198.2349
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Quality Restaurant	1.04112 / 0.0664545	3.8835	0.0341	8.2000e-004	4.9797
Total		**169.1300**	**1.0572**	**0.0257**	**203.2147**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments High Rise	24.967 / 19.6751	143.0642	0.8190	0.0200	169.4835
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Quality Restaurant	0.832897 / 0.0664545	3.1435	0.0273	6.6000e-004	4.0206
Total		**146.2077**	**0.8462**	**0.0206**	**173.5041**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	10.8870	0.6434	0.0000	26.9720
Unmitigated	45.3624	2.6808	0.0000	112.3834

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments High Rise	220.34	44.7270	2.6433	0.0000	110.8093
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Quality Restaurant	3.13	0.6354	0.0376	0.0000	1.5741
Total		**45.3624**	**2.6808**	**0.0000**	**112.3834**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments High Rise	52.8816	10.7345	0.6344	0.0000	26.5942
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Quality Restaurant	0.7512	0.1525	9.0100e-003	0.0000	0.3778
Total		**10.8870**	**0.6434**	**0.0000**	**26.9720**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
Emergency Generator	2	1	50	1341	0.73	Diesel

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

10.1 Stationary Sources

Unmitigated/Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	tons/yr										MT/yr					
Emergency Generator - Diesel (750 - 9999 HP)	0.1100	0.8169	0.0475	5.3000e-004		4.3200e-003	4.3200e-003		4.3200e-003	4.3200e-003	0.0000	51.0649	51.0649	7.1600e-003	0.0000	51.2439
Total	**0.1100**	**0.8169**	**0.0475**	**5.3000e-004**		**4.3200e-003**	**4.3200e-003**		**4.3200e-003**	**4.3200e-003**	**0.0000**	**51.0649**	**51.0649**	**7.1600e-003**	**0.0000**	**51.2439**

11.0 Vegetation

L-2: Solid Waste Generation Rate

Solid Waste

TORS HOTEL Units modeled as "Apartments High Rise" without any reductions

	Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Solid Waste Generation (tons/year)	Solid Waste Generation (tons/year)	tons/unit	unit
	Enclosed Parking with Elevator	436.00	Space	0.00	105,109.00	0	0	0	0
	Quality Restaurant	3.43	1000sqft	0.00	3,429.00	3.13	3.13	0.000913	SF
	Apartments High Rise	319.00	Dwelling Unit	0.00	373,480.00		146.74	0.46	Dwelling Unit
TORS Hotel Units->	Apartments High Rise	160.00	Dwelling Unit	0.63	115,068.00	220.34	73.6	0.46	Dwelling Unit

TORS HOTEL Units modeled as "Hotel" without any reductions

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Solid Waste Generation (tons/year)	Solid Waste Generation (tons/year)	tons/unit	unit
Enclosed Parking with Elevator	436.00	Space	0.00	105,109.00	0	0	0	0
Quality Restaurant	3.43	1000sqft	0.00	3,429.00	3.13	3.13	0.000913	SF
Apartments High Rise	319.00	Dwelling Unit	0.00	373,480.00	146.74	146.74	0.46	Dwelling Unit
Hotel	160.00	Rooms	0.63	115,068.00	87.6	87.6	0.5475	Rooms