

## **Appendix L**

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### Utility Infrastructure Technical Report

**UTILITY INFRASTRUCTURE TECHNICAL REPORT: WATER, WASTEWATER, AND ENERGY  
ANGELS LANDING MIXED-USE PROJECT**

**361 S HILL STREET, LOS ANGELES**

**DATE: DECEMBER 30, 2020**

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## **1. INTRODUCTION**

### **1.1. PROJECT DESCRIPTION**

The Angels Landing Project (Project) is a new mixed-use development proposed on a 97,631-square-foot (2.24-acre) site located at 332, 350, and 358 South Olive Street; 351 and 361 South Hill Street; 417 and 425 West 4th Street (Project Site) in the Central City Community Plan area of the City of Los Angeles (City).

The Project would involve a two-tower mixed-use development consisting of: 180 residential for-sale condominium units; 252 residential apartments (including a mix of market rate and affordable units, with affordable housing comprising five percent (e.g., 13) of the total for-rent units); two hotels with a combined total of 515 guest rooms, restaurants, ballrooms, meeting rooms, and amenities (fitness/spa); and 72,091 square feet of general commercial (retail/restaurant) uses. The proposed uses would be distributed through a series of terraced levels in a podium structure and two towers (Tower A and Tower B) that would be constructed above a three-level subterranean parking garage. The Project would also provide public and private open space areas totaling 56,881 square feet. The Project would result in up to 1,269,150 square feet of floor area with a maximum floor area ratio (FAR) of up to 13:1.

The proposed uses would be provided in two towers (referred to as Tower A and Tower B). Tower A would include 63 floors with a building height of up to 854 feet. Tower B would include 42 floors with a building height of up to 494 feet. Tower A and Tower B would be built on a podium structure over a three-level subterranean parking garage up to a depth of approximately 70 feet below ground surface as measured from the elevation of Hill Street adjacent to the Project Site. The existing Los Angeles County Metropolitan Transportation Authority (Metro) B/D Lines Pershing Square Station portal would be maintained on-site. The Project would require the removal of existing landscaping and the excavation and export of approximately 334,000 cubic yards of soil.

### **1.2. SCOPE OF WORK**

The purpose of this report is to analyze the potential impact of the Project to the existing water, wastewater, and energy infrastructure systems.

## **2. REGULATORY FRAMEWORK**

### **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, State, and Federal regulations.

Below are the State and Regional water supply regulations:

- Metropolitan Water District (MWD) official reports and policies as outlined in its Regional Urban Water Management Plan, Water Surplus and Drought Management Plan, Water Supply Allocation Plan, and Integrated Resources Plan.

- 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.
- 2019 California Green Building Standards Code, CCR, Title 24, Part 11, adopted on January 1, 2020, requires a water use reduction of 20% above 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). LADWP's 2015 Urban Water Management Plan outlines the City's long-term water resources management strategy. The Plan was approved by the LADWP Board of Water and Power Commissioners on June 7, 2016.
- Senate Bill 610 and Senate Bill 221, 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. SB 610, Public Resources Code (PRC) and Section 10910-10915 of the State Water Code requires lead agencies to request a Water Supply Assessment (WSA) from the local water purveyor prior to project approval. If the projected water demand associated with a proposed development is included in the most recent UWMP, the development is considered to have sufficient water supply per California Water Code Section 10910, and a WSA is not required. All projects that meet any of the following criteria require a WSA:
  - 1) A proposed residential development of more than 500 dwelling units.
  - 2) A proposed shopping center or business establishment of more than 500,000 square feet of floor space or employing more than 1,000 persons
  - 3) A proposed commercial office building of more than 250,000 square feet of floor space or employing more than 1,000 persons
  - 4) A proposed hotel or motel of more than 500 rooms
  - 5) 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
  - 6) A mixed-use project that falls in one or more of the above-identified categories
  - 7) 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.

Based on the proposed uses, the Project would require a WSA. The Project's WSA was prepared by LADWP on April 28, 2020 and concluded that LADWP has adequate water supply to service the Project. The WSA is appended to the Project's Draft EIR.

## **2.2. WASTEWATER**

The City of Los Angeles (City) has one of the largest sewer systems in the world including more than 6,600 miles of sewers serving a population of more than four million. The Los Angeles sewer system

is comprised of two systems: Hyperion Sanitary Sewer System, and Terminal Island Water Reclamation Plant 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 is within the Hyperion Service Area served by the Hyperion Sanitary Sewer System. In February 2017, an SSMP was prepared for the Hyperion Sanitary Sewer System pursuant to the State Water Resources Control Board's (SWRCB) May 2, 2006 Statewide General Waste Discharge Requirements (WDRs).<sup>1</sup>

Sewer permit allocation for projects that discharge into the Hyperion Treatment Plant is regulated by Ordinance No. 166,060 adopted by the City in 1990. The Ordinance established an additional annual allotment of 5.0 million gallons per day, of which 34.5 percent (1.725 million gallons per day) is allocated for priority projects, 8 percent (0.4 million gallons per day) for public benefit projects, and 57.5 percent (2.875 million gallons per day) for non-priority projects (of which 65 percent is for residential project and 35 percent for non-residential projects).

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 Capacity 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.

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 Sewerage 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 2006 the City approved the *Integrated Resources Plan* (IRP), which incorporates a Wastewater Facilities Plan.<sup>2</sup> 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. In 2018, the City approved the *One Water LA 2040 Plan* which builds on the success of the Water IRP and extends the planning horizon to year 2040.<sup>3</sup> In order 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.

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<sup>1</sup> City of Los Angeles Department of Public Works, Bureau of Sanitation, Sewer System Management Plan Hyperion Sanitary Sewer System, February 2017.

<sup>2</sup> City of Los Angeles, Department of Public Works, LA Sewers Website, Integrated Resources Plan Facilities Plan, Summary Report, December 2006.

<sup>3</sup> City of Los Angeles, Department of Public Works, LA Sanitation, One Water LA 2040 Plan, Executive Summary, April 2018.

## 2.3. ENERGY

### 2.3.1. ELECTRICITY

The *2017 Power Strategic Long-Term Resource Plan* (SLTRP)<sup>4</sup> document serves as a comprehensive 20 year roadmap that guides LADWP's Power System in its efforts to supply reliable electricity in an environmentally responsible and cost effective manner. The 2017 SLTRP re-examines and expands its analysis on the 2016 *Power Integrated Resource Plan* (IRP) resource cases with updates in line with latest regulatory framework, and updates to case scenario assumptions that include a 65 percent Renewable Portfolio Standard (RPS), advanced energy efficiency, and higher levels of local solar, energy storage, and transportation electrification.

The 2017 SLTRP update includes an updated 2016/17 Energy Efficiency Potential Study results with a target of 15 percent energy efficiency from 2017 through 2027, revised energy storage procurement targets, and completion of a distributed energy resources study titled, "Distributed Energy Resources Implementation Study (DERIS)." The 2017 SLTRP also includes updates including new renewable projects, and associated transmission upgrade cost and fuel cost assumptions. In analyzing the SLTRP cases and recommending a strategy to best meet the future electric needs of Los Angeles, the SLTRP uses system modeling tools to analyze and determine the long-term economic, environmental, and operational impact of alternative resource portfolios by simulating the integration of new resource alternatives within LADWP's existing mix of assets and providing the analytic results to inform the selection of a recommended case that is cost effective in reducing greenhouse gas emissions and maintains superior system reliability.

Early coal replacement and energy efficiency continue to be key strategies to reduce greenhouse gas emissions. Increasing RPS to 55 percent by 2030 and 65 percent by 2036, including increased amounts of energy efficiency, local solar energy, are other key initiatives to reduce greenhouse gas emissions. The 2017 SLTRP analyzed electrification of the transportation sector as a strategy to further reduce overall greenhouse gas emissions and to significantly reduce local emissions such as VOC, NOx, CO, and PM 2.5 that would result from electrifying local transportation and therefore recommends expanding existing programs to promote increased workplace and residential electric vehicle charging stations to support greater electric vehicle adoption while collaborating with regulatory agencies to develop mutually beneficial policies.

The SLTRP also includes a general assessment of the revenue requirements and rate impacts that support the recommended resource plan through 2037. While its assessment was not as detailed and extensive as the financial analysis that was completed for 2015/16 fiscal year and beyond, it clearly outlines the general requirements. As a long-term planning process, the SLTRP examines a 20-year horizon in order to secure adequate supplies of electricity. In that respect, it is LADWP's goal that the SLTRP contribute towards future rate actions, by presenting and discussing the programs and projects required to fulfill our City Charter mandate of delivering reliable electric power to the City.<sup>5</sup>

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<sup>4</sup> The 2017 Power Strategic Long-Term Resource Plan, December 2017.

<sup>5</sup> The 2017 Power Strategic Long-Term Resource Plan, December 2017.



### 2.3.2. NATURAL GAS

The *2018 California Gas Report*<sup>6</sup> presents a comprehensive outlook for natural gas requirements and supplies for California through the year 2035. This report is prepared in even-numbered years, followed by a supplemental report in odd-numbered years, in compliance with California Public Utilities Commission Decision D.95-01-039. The projections in the California Gas Report are for long-term planning and do not necessarily reflect the day-to-day operational plans of the utilities.

California natural gas demand, including volumes not served by utility systems, is expected to decrease at a rate of 0.5 percent per year from 2018 to 2035. The forecast decline is a combination of moderate growth in the Natural Gas Vehicle (NGV) market and across-the-board declines in all other market segments: residential, commercial, electric generation, and industrial markets.

Residential gas demand is expected to decrease at an annual average rate of 1.4 percent. Demand in the commercial and industrial markets are expected to decline at an annual rate of 0.2 percent. Aggressive energy efficiency programs make a significant impact in managing growth in the residential, commercial, and industrial markets. For the purpose of load-following as well as backstopping intermittent renewable resource generation, gas-fired generation will continue to be the primary technology to meet the ever-growing demand for electric power. However, overall gas demand for electric generation is expected to decline at 1.4 percent per year for the next 17 years due to more efficient power plants, statewide efforts to minimize greenhouse gas (GHG) emissions through aggressive programs pursuing demand-side reductions, and the acquisition of preferred power generation resources that produce little or no carbon emissions.

In 2015, California enacted legislation intended to improve air quality, provide aggressive reductions in energy dependency and boost the employment of renewable power. The first legislation, the 2015 Clean Energy and Pollution Reduction Act, also known as Senate Bill (SB) 350, requires the amount of electricity generated and sold to retail customers per year from eligible renewable energy resources be increased to 50 percent by December 31, 2030. SB 350 establishes annual targets for statewide energy efficiency savings and demand reduction that will achieve a cumulative doubling of statewide energy efficiency savings in electricity and natural gas final end uses by January 1, 2030. Second, the Energy Efficiency Act (AB 802) provides aggressive state directives to increase the energy efficiency of existing buildings, requires that access to building performance data for nonresidential buildings be provided by energy utilities and encourages pay-for performance incentive-based programs. This paradigm shift will allow California building owners a better and more effective way to access whole-building information and at the same time will help to address climate change, and deliver cost-effective savings for ratepayers.<sup>7</sup>

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<sup>6</sup> California Gas and Electric Utilities, 2018 California Gas Report, 2018.

<sup>7</sup> California Gas and Electric Utilities, 2018 California Gas Report, 2018.

### **3. ENVIRONMENTAL SETTING**

#### **3.1. WATER**

LADWP is responsible for providing water supply to the City while complying with Local, State, and Federal regulations.

##### **3.1.1. REGIONAL**

Primary sources of water for the LADWP service area are the Los Angeles Aqueducts (LAA), local groundwater, State Water Project (supplied by MWD). The Los Angeles Aqueduct has been the primary source of the City's water supply. In recent years, however, the amount of water supplies from the Los Angeles Aqueduct has been limited due to environmental concerns, and the City's water supply relied heavily (average of 57% in recent years) on the purchased water from MWD and delivered from the Colorado River or from the Sacramento-San Joaquin Delta. Local ground water has been reliable local water source, providing an average of 12% of the total water supply, but there have been concerns in recent years due to declining groundwater level and contamination issues. Lastly, the City's recycled water supply is limited to specific projects within the City at this time.<sup>8</sup>

##### **3.1.2. LOCAL**

LADWP maintains water infrastructure around the Project Site. Based on available record data and a water service map provided by LADWP, there is a 12-inch water main in Hill Street and Olive Street, and an 8-inch water line in 4<sup>th</sup> Street.

Additionally, there are 6 public hydrants in the vicinity of the Project Site. See Figure 1 for approximate hydrant locations.

##### **3.1.3. ON SITE**

The Project Site is currently composed of a paved area surrounding the Metro station portal and otherwise vacant land with unmaintained landscaping. It appears there are no existing domestic or fire water services from the water mains located in either Hill Street, Olive Street, or 4<sup>th</sup> Street to these portions. However, the Metro station portal appears to have existing water services from Hill Street. All new water demand associated with the Project would be a net increase.

#### **3.2. WASTEWATER**

##### **3.2.1. REGIONAL**

The Bureau of Sanitation (BOS) operates and maintains the wastewater treatment, reclamation and collection facilities serving most of the City incorporated areas as well as several other cities and unincorporated areas in the Los Angeles basin and San Fernando Valley. As stated above, the collection infrastructure consists of over 6,700 miles of local, trunk, mainline and major interceptor sewers, five major outfall sewers, and 47 pumping plants. The wastewater generated by the Project ultimately flows to the Hyperion Treatment Plant (HTP) System. The existing design capacity of the Hyperion Service Area is approximately 550 million gallons per day

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<sup>8</sup> LADWP, 2015 Urban Water Management Plan, June 2016.

(MGD) and the existing average daily flow for the system is estimated as approximately 323 MGD in the year 2020.<sup>9</sup>

### 3.2.2. LOCAL

Sanitary sewer service to the Project Site from the surrounding streets is provided by the Los Angeles Bureau of Sanitation. There are multiple sanitary sewer mains surrounding the project site:

- 15-inch sewer main in Olive Street which flows southwest to 4<sup>th</sup> Street and has a calculated capacity of 13.14 cfs (7.07 MGD) according to the online Navigate LA database, accessed December 9, 2020. According to the WWSI from the Bureau of Sanitation, dated November 2, 2020, the 15-inch pipe has a 50-percent design capacity of 4.25 MGD.
- 15-inch sewer main in Hill Street which flows southwest to 4<sup>th</sup> Street and has a calculated capacity of 8.05 cfs (4.33 MGD) according to the online Navigate LA database, accessed December 9, 2020. According to the WWSI from the Bureau of Sanitation, dated November 2, 2020, the 15-inch pipe has a 50-percent design capacity of 2.6 MGD.
- 12-inch sewer main in Hill Street which flows southwest to 4<sup>th</sup> Street and does not have a calculated capacity available on Navigate LA. The capacity of this 12-inch pipe was not provided in the WWSI.
- 18-inch sewer main in Hill Street which the 15-inch and 12-inch mains in Hill Street listed above connect into, and which flows southwest to 4<sup>th</sup> Street, does not have a calculated capacity available on Navigate LA. The capacity of this 18-inch pipe was not provided in the WWSI.
- 15-inch sewer main in 4<sup>th</sup> Street which flows southeast to Hill Street and does not have a calculated capacity available on Navigate LA. The capacity of this 15-inch pipe was not provided in the WWSI.
- 6-inch sewer main in 4<sup>th</sup> Street which flows southeast to Hill Street with a calculated capacity of 3.76 cfs (2.02 MGD) according to the online Navigate LA database, accessed December 9, 2020. The capacity of this 6-inch pipe was not provided in the WWSI.
- 30-inch sewer main in 4<sup>th</sup> Street which flows southeast to Hill Street and has a calculated capacity of 32.98 cfs. (17.7 MGD) according to the online Navigate LA database, accessed December 9, 2020. The capacity in this 30-inch pipe was not provided in the WWSI.
- 36-inch sewer main in 4<sup>th</sup> Street which all of the sewer mains listed above connect into, and which flows southeast to Hill Street, does not have a calculated capacity available on Navigate LA. According to the WWSI from the Bureau of Sanitation, dated November 2,

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<sup>9</sup> City of Los Angeles Department of Public Works, Bureau of Sanitation, Sewer System Management Plan Hyperion Sanitary Sewer System, February 2017; and LASAN, One Water LA 2040 Plan, Vol. 2—Final Draft Wastewater Facilities Plan, April 2018.

2020, this 36-inch pipe has a 50-percent design capacity of 16.14 MGD.

These sewer mains connect to a network of sewer lines which ultimately convey wastewater to the HTP System.

### **3.2.3. ON SITE**

As described above, the Project Site is currently composed of a paved area surrounding the Metro station portal and otherwise vacant land with unmaintained landscaping. There are no apparent existing sewer services. All new sewer demand associated with the Project would be a net increase.

## **3.3. ENERGY**

### **3.3.1. ELECTRICITY**

LADWP is responsible for providing power supply to the City while complying with local, state, and federal regulations.

#### **3.3.1.1. REGIONAL**

According to LADWP's 2017 SLTRP, LADWP's power system is the nation's largest municipal electric utility, and serves a 465-square-mile area in Los Angeles and much of the Owens Valley. The system supplies more than 23 million megawatt-hours (MWh) of electricity a year for the City's 1.5 million residential and business customers. LADWP has over 7,531 megawatts (MW) of generation capacity from a diverse mix of energy sources including Renewable energy, Natural Gas, Nuclear, Large Hydro, coal and other sources. The distribution network includes 6,752 miles of overhead distribution lines and 3,626 miles of underground distribution cables.<sup>10</sup>

#### **3.3.1.2. LOCAL**

Based on available record drawings, existing LADWP power infrastructure around the Project Site includes underground conduit in Hill, Olive, and 4<sup>th</sup> Streets.

#### **3.3.1.3. ON-SITE**

As described above, the Project Site is currently composed of a paved area surrounding the Metro station portal and otherwise vacant land with unmaintained landscaping. There are two existing LADWP vaults on site that temporarily served the Metro station during construction. They are abandoned and can be removed with further LADWP coordination.

### **3.3.2. NATURAL GAS**

Southern California Gas Company (SoCalGas) is responsible for providing natural gas supply to the City and is regulated by the California Public Utilities Commission and other state and federal agencies.

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<sup>10</sup> LADWP 2017 Power Strategic Long-Term Resource Plan, December 2017

### 3.3.2.1. REGIONAL

According to the 2018 California Gas Report, SoCalGas is the principal distributor of natural gas in Southern California, providing retail and wholesale customers with transportation, exchange and storage services and also procurement services to most retail core customers. SoCalGas is a gas-only utility and, in addition to serving the residential, commercial, and industrial markets, provides gas for enhanced oil recovery (EOR) and electric generation (EG) customers in Southern California. According to SoCalGas's company profile, SoCalGas's natural gas system is the nation's largest natural gas distribution utility, and serves a 24,000 square-mile area in Central and Southern California. The system supplies natural gas to 21.8 million customers through 5.9 million meters in more than 500 communities.<sup>11</sup>

### 3.3.2.2 LOCAL

Based on substructure maps provided by the City, existing SoCalGas infrastructure around the Project Site includes 4-inch gas mains in Hill and Olive Streets, and a 3-inch gas main in the 4<sup>th</sup> Street.

### 3.3.2.3 ON-SITE

As described above, the Project Site is currently composed of a paved area surrounding the Metro station portal and otherwise vacant land with unmaintained landscaping. Abandoned gas lines if found will be removed.

## 4. SIGNIFICANCE THRESHOLDS

### 4.1. WATER AND WASTEWATER

Appendix G of the CEQA Guidelines provides the following thresholds of significance:

Would the project:

- Require or result in the relocation or construction of new or expanded **water, wastewater treatment or storm water drainage**, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?
- Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?
- 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?

### 4.2. ENERGY

Appendix G of the CEQA Guidelines provides the following thresholds of significance:

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<sup>11</sup> SoCalGas. (n.d). *Company Profile*. Retrieved December 21, 2020 from SoCalGas: <https://www.socalgas.com/about-us/company-profile>

Would the project:

- Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, **electric power**, **natural gas**, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?
- Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation?
- Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

## 5. METHODOLOGY

### 5.1. WATER

This report analyzes the potential impacts of the Project on the existing public water supply and infrastructure by comparing the estimated water demand with anticipated supply and the calculated available capacity of the existing facilities.

A Water Supply Assessment prepared by LADWP on April 28, 2020 estimated the total base water demand for the Project to be 469,501 gpd. After water conservation is factored in, the net additional water demand projected by LADWP's WSA is 373,957 gpd. Refer to Exhibit 8 for the WSA Project water demand calculations. As noted in LADWP's WSA, the proposed water consumption is based upon the available site and occupation information, and the 2012 BOS sewerage generation rates. LADWP's WSA finds adequate water supplies will be available to meet the total additional maximum water demand of 419 acre-feet (AF) annually for the project. LADWP anticipates the project water demand from the Project can be met during normal, single-dry, and multiple-dry water years, in addition to the existing and planned future demands on LADWP.

The basis for approving WSAs for developments is LADWP's most recently adopted Los Angeles Department of Water and Power Urban Water Management Plan 2015 (UWMP). LADWP's water demand forecast, as contained in LADWP's UWMP, uses long-term demographic projections for population, housing, and employment. The California Urban Water Management Planning Act requires water suppliers to develop a UWMP every five years to identify short-term and long-term water resources management measures to meet growing water demands during normal, single-dry, and multiple-dry years. If the projected water demand associated with the Project was not accounted for in the most recently adopted LADWP 2015 UWMP, the WSA must include a discussion with regard to whether LADWP's total projected water supplies available during normal, single-dry, and multiple-dry water years during a 20-year projection will meet the projected water demand associated with the Project, in addition to LADWP's existing and planned future uses.

The City's water demand projection in LADWP's 2015 UWMP was developed based on the 2012 Regional Transportation Plan (RTP) demographic projection by the Southern California Association of Governments (SCAG) using the 2010 United States (U.S.) Census for the City. LADWP's 2015 UWMP concluded there are adequate water supplies to meet projected water

demands through 2040. Therefore, the City's water supply projections in LADWP's 2015 UWMP are sufficient to meet the water demand for projects that are determined by the CEQA lead agency to be consistent with the 2012 and subsequent 2016 and 2020 RTPs adopted by SCAG.

LADWP also performed a hydraulic analysis of their water system to determine if adequate fire flow is available from the fire hydrants surrounding the Project Site. LADWP's approach consists of analyzing their water system model in the vicinity of the Project Site. Based on the results, LADWP determines whether they can meet the Project fire hydrant flow needs based on existing infrastructure. See Exhibit 1 for the results of the Information of Fire Flow Availability Request (IFFAR).

In addition, LADWP performed a flow test to determine if sufficient water conveyance is available for the proposed Project. LADWP's approach provides data ranging from available static pressure (meaning how much pressure is available at the source before applying the project's demand), to the available pressure at the maximum demand needed for the project. Based on the results, LADWP determines whether they can meet the project needs based on existing infrastructure. See Exhibit 2 and 3 for the results of the Service Advisory Requests (SAR).

## **5.2. WASTEWATER**

This report analyzes the potential impacts of the Project on the existing public sewer infrastructure by comparing the estimated demand with the calculated available capacity of the existing facilities.

The Bureau of Sanitation, Wastewater Engineering Services Division (WESD) performed a preliminary Wastewater Service Information (WWSI) analysis of the local and regional sewer conditions to determine if available wastewater conveyance and treatment capacity exists for the Project. The Bureau of Sanitation's approach consisted of the study of a worst-case scenario envisioning peak demands from the relevant facilities occurring simultaneously on the wastewater system. A combination of flow gauging data and computed results from the City's hydrodynamic model were used to project current and future impacts due to additional sewer discharge from the proposed project demands. The data used in this report are based on the findings of the BOS preliminary analysis.

The BOS performed a SCAR review to determine the capacity of the adjacent wastewater infrastructure to accommodate the existing flow and the added Project demand. Based on the estimated flows, the sewer infrastructure can accommodate the wastewater generation for the Project flowing entirely to either 4<sup>th</sup> St. or Hill St. Refer to Exhibit 4 for results of the BOS preliminary analysis of the existing conditions around the project.

## **5.3. ENERGY**

This report analyzes the potential impacts of the Project on existing energy infrastructure by comparing the estimated energy demand with the available capacity. Will-serve letters from LADWP and SoCalGas (Exhibits 6 and 7) demonstrate the availability of sufficient energy resources to supply the Project's demand.

## **6. PROJECT IMPACTS**

### **6.1.CONSTRUCTION**

#### **6.1.1. WATER**

During the Project's construction period, water would be required intermittently for dust control, cleaning of equipment, excavation/export, removal and re-compaction during construction of the Project. Based on a review of construction projects of similar size and duration, a conservative estimate of construction water use ranges from 1,000 to 2,000 gallons per day (gpd). Since the anticipated water usage during construction would be significantly less than the water usage demand for Project operation (373,957 gpd), which has a less than significant impact, impacts to water supplies due to construction activities would be less than significant as well.

As a part of the proposed development of the Project, a new, on-site water distribution system will be required. The new water distribution system would connect to the existing infrastructure in surrounding streets and obtain water from a metered connection and distribute for the Project needs. Prior to the construction of the new water system, during construction, with the approval from LADWP and the City, temporary water supply needs during construction may be obtained from the existing metered water connections or fire hydrants. At the time when the new onsite water distribution lines would be constructed, the potential construction impacts would be limited to trenching for the placement of pipe, and connection into the existing water main. No upgrades to public water mains are anticipated.

Any work that may affect services to the existing water distribution line would be coordinated with LADWP. LADWP would review and approve all appropriate connection requirements, pipe depths, connection location(s), and all proposed construction activities, which would include onsite and offsite work, would be coordinated with LADWP and other City departments. Therefore, Project impacts on water infrastructure associated with construction activities would be less than significant.

#### **6.1.2. WASTEWATER**

The Project site does not have existing sewer facilities to be used during construction. Construction workers will need to utilize portable restrooms provided by the contractor, which would not contribute to wastewater flows to the City's wastewater system. Sewage from the temporary facilities will be collected and hauled offsite. Based on the geotechnical report dewatering wells will not be effective or required in collecting the localized seepage layers, should they be encountered during construction. Should any dewatering be required during construction, the quantity of flow will be significantly less than the proposed 373,382 gpd operational sewage flow generated by the Project. Therefore, since the anticipated additional sewage generation to the existing sewer facilitates during construction is minimal, the impacts to the wastewater system would be less than significant.

The Project will require construction of new on-site infrastructure. 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 connecting the new on-site wastewater system to the public main. When considering impacts resulting from the installation of any required wastewater infrastructure, all impacts are of a short-term duration and would cease to occur once the



installation is complete. Therefore, Project impacts on wastewater associated with construction activities would be less than significant.

### **6.1.3. ENERGY**

Electrical power would be consumed to construct the new building and facilities of the proposed Project. Typical uses include temporary power for lighting, equipment, construction trailers, etc. The demand would be supplied from existing electrical services within the Project Site, a new temporary service, or temporary mobile generators, which would not affect services to surrounding areas. The use of renewable energy sources during construction is not anticipated. Overall, demolition and construction activities would require minimal electrical consumption and would not have an adverse impact on available electricity supplies and infrastructure. Therefore, impacts on electricity supply associated with short-term construction activities would be less than significant.

No natural gas usage is expected to occur during construction. Therefore, impacts on natural gas supply associated with short-term construction activities would be less than significant.

Construction impacts associated with the Project's electrical and gas infrastructure upgrades would primarily consist of trenching that connects the new system to the existing utility corridors in adjacent streets. All infrastructure improvements will comply with all applicable LADWP, SoCalGas, and City of Los Angeles requirements, which would avoid potential impacts to the existing energy systems and adjacent properties. Therefore, Project impacts on energy infrastructure associated with construction activities would be less than significant.

## **6.2. OPERATION**

### **6.2.1. WATER**

#### **6.2.1.1. INFRASTRUCTURE CAPACITY**

When analyzing the Project for infrastructure capacity, the estimated operational demands for both fire suppression and domestic water are considered. Although domestic water demand is the Project's main contributor to water consumption in the long term, fire flow demands have a much greater instantaneous impact on infrastructure, and therefore are the primary means for analyzing infrastructure capacity. Conservative analysis for both fire suppression and domestic water flows has been completed by LADWP for the Project. See Exhibit 1 and Exhibit 2-3 for the results of the IFFAR and SAR, respectively, which together demonstrate that adequate water infrastructure capacity exists.

#### **6.2.1.2. FIRE WATER DEMAND**

Based on fire flow standards set forth in Section 57.507.3 of the LAMC, the Project falls within the Industrial and Commercial category, which has a required fire flow of 6,000 to 9,000 gallons per minute (gpm) from four to six hydrants flowing simultaneously with a residual pressure of 20 pounds per square inch. The Los Angeles Fire Department (LAFD) reviewed the Project and indicated that it requires at least 9,000 gpm for the two proposed towers. This demand translates to a required flow of approximately 1,500 gpm each from 6 hydrants. An IFFAR was submitted to LADWP regarding available fire hydrant flow to demonstrate compliance. The completed IFFAR, attached as Exhibit 1, shows six nearby hydrants flowing simultaneously for a combined

10,900 gpm. As shown by the IFFAR, the Project Site has adequate fire flow available to demonstrate compliance with Section 57.507.3 of the LAMC.

Furthermore, LAMC Section 57.513, Supplemental Fire Protection, states that:

Where the Chief determines that any or all of the supplemental fire protection equipment or systems described in this section may be substituted in lieu of the requirements of this chapter with respect to any facility, structure, group of structures or premises, the person owning or having control thereof shall either conform to the requirements of this chapter or shall install such supplemental equipment or systems. Where the Chief determines that any or all of such equipment or systems is necessary in addition to the requirements of this chapter as to any facility, structure, group of structures or premises, the owner thereof shall install such required equipment or systems.

The Project will incorporate a fire sprinkler suppression system to reduce or eliminate the public hydrant demands, which will be subject to Los Angeles Fire Department review and approval during the design and permitting of the Project. Fire service flows to serve sprinkler systems in the new building has been estimated as the maximum allowable fire flow through a new LADWP 10" fire service. Estimated fire flow demand from Plumbing Engineer to be updated as needed. Based on Section 94.2020.0 of the LAMC that adopts by reference NFPA 14-2013 including Section 7.10.1.1.5, the maximum allowable fire sprinkler demand for a fully or partially sprinklered building would be 1,250 gpm. Thus, the estimated fire service flows are compliant with the Fire Code.

In addition, an LADWP Service Advisory Report (SAR) was submitted in order to determine if the existing public infrastructure could meet the private water demands of the Project. The SAR for the 12-inch water main along Hill Street (Exhibit 2) shows a static pressure of 55 pounds per square inch and that a flow of 5,000 gpm can be delivered to the Project Site with a residual pressure of 39 pounds per square inch. The SAR for the 12-inch water main along Olive Street (Exhibit 3) shows a static pressure of 98 pounds per square inch and that a flow of 5,000 gpm can be delivered to the project site with a residual pressure of 61 pounds per square inch.

Per correspondence with IMEG Corp.<sup>12</sup> the estimated maximum fire service demand is 5,000 gpm with two 10-inch services, each from a different water main source, see Exhibit 7. Both SARs show that the available water pressure satisfies the private water system demands. With compliance with LAFD and LADWP requirements, fire flow impacts would be less than significant to water infrastructure.

#### **6.2.1.3. DOMESTIC WATER DEMAND**

Water consumption estimates have been prepared based upon the 2012 BOS sewerage generation rates and are summarized in Table 1 below.

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<sup>12</sup> E-mail from IMEG Corp. dated March 7, 2019.

Table 1a – Estimated Proposed Water Demand (Summary)			
Existing Use to be Removed	Unit	Quantity	Existing Water Use to be Removed (gpd)
Vacant Lot	-	-	0
Proposed Use	Unit	Quantity	Average Daily Water Generation (gpd)
Residential Units Total	DU	432	51,516
Hotel Rooms Total	Room	515	60,042
Amenities and Commercial Total	SF	85,850*	63,853
Landscaping Total	SF	13,308	575
Covered Parking Total	SF	178,145	117
Cooling Tower Total	Ton	7,000	199,584
Additional Conservation	-	-	-1,730
<b>Total Proposed Water Demand for Project Site</b>			<b>373,957 gpd</b>

\*Restaurant square footage not included in quantity, calculated by number of seats

Table 1b – Estimated Proposed Water Demand (Detailed)						
Existing Use to be Removed <sup>1</sup>		Unit	Quantity			Existing Water Use to be Removed (gpd)
Vacant Lot <sup>2</sup>		-	-			0
Proposed Use <sup>1</sup>	Water Use Factor (gpd) <sup>3</sup>	Unit	Quantity	Base Demand (gpd)	Required Ordinances Water Savings (gpd) <sup>4</sup>	Proposed Water Demand (gpd)
Residential: Apt - Bachelor	75	DU	42	3,150		
Residential: Apt – 1 Bedroom	110	DU	126	13,860		
Residential: Apt – 2 Bedrooms	150	DU	60	9,000		
Residential: Apt – 3 Bedrooms	190	DU	24	4,560		

Residential: Condo – 1 Bedroom	110	DU	51	5,610		
Residential: Condo – 2 Bedrooms	150	DU	91	13,650		
Residential: Condo – 3 Bedrooms	190	DU	38	7,220		
Residential Units – Base Demand Adjustment <sup>5</sup>	-	-	-	7,026		
<b>Residential Units Total</b>	-	<b>Units</b>	<b>432</b>	<b>64,076</b>	12,560	<b>51,516</b>
Hotel: Rooms	120	Rooms	515	61,800		
Hotel: Base Demand Adjustment <sup>5</sup>	-	-	-	5,597		
<b>Hotel Room Total</b>	-	<b>Rooms</b>	<b>515</b>	<b>67,397</b>	7,355	<b>60,042</b>
Residential Amenity: Lounge/Bar	0.72	SF	3,000	2,160		
Residential Amenity: Fitness Center	0.65	SF	3,800	2,470		
Residential Amenity: Community Dining Area	0.36	SF	1,475	527		
Residential Amenity: Game Room	0.10	SF	1,150	115		
Residential Amenity: Co-working space/ Business Center	0.12	SF	1,000	120		
Residential Amenity: Outdoor Dining Area	0.36	SF	2,400	857		
Residential Amenity: Dog Washing Area	0.425	SF	500	213		
Hotel Amenity: Full-Service Restaurant	30	Seats	541	16,230		
Hotel Amenity: Ballroom	0.12	SF	16,590	2,034		
Hotel Amenity: Meeting Rooms	0.12	SF	7,390	887		
Hotel Amenity: Fitness/Spa	0.65	SF	14,780	9,607		
General Commercial: Retail	25 KGsf	SF	30,466	762		

General Commercial: High Turnover Restaurant	25	Seats	925	23,125		
General Commercial: Quality Restaurant	30	Seats	926	27,780		
Swimming Pools and Spa	-	GPD	-	281		
<b>Amenities and Commercial Total</b>	-	-	-	<b>87,168</b>	23,315	<b>63,853</b>
<b>Landscaping</b> <sup>6</sup>	-	SF	<b>13,308</b>	<b>1,263</b>	688	<b>575</b>
<b>Covered Parking</b> <sup>7</sup>	<b>20 KGSF</b>	SF	<b>178,145</b>	<b>117</b>	0	<b>117</b>
<b>Cooling Towers</b>	<b>35.64</b>	ton	<b>7,000</b>	<b>249,480</b>	49,896	<b>199,584</b>
<b>Proposed Subtotal</b>				<b>469,501</b>	<b>93,814</b>	<b>375,687</b>
Less Additional Conservation <sup>8</sup>						-1,730
<b>Net Additional Water Demand</b>						<b>373,957 gpd</b>
<sup>1</sup> Provided by City of Los Angeles Department of City Planning in the Request for Water Supply Assessment letter and Scope Confirmation e-mail. <sup>2</sup> The project site is mostly vacant and landscaped, and there is no water billing record past 2013. Existing water demand is assumed to be 0. <sup>3</sup> Proposed indoor water uses are based on 2012 City of Los Angeles Department of Public Works, Bureau of Sanitation Sewer Generation Rates table available at <a href="https://www.lacitysan.org/fmd/pdf/sfcfeerates.pdf">https://www.lacitysan.org/fmd/pdf/sfcfeerates.pdf</a> . <sup>4</sup> The proposed development land uses will conform to City of Los Angeles Ordinance No. 184248, 2017 Los Angeles Plumbing Code, and 2017 Los Angeles Green Building Code. <sup>5</sup> Base Demand Adjustment is the estimated savings due to Ordinance No. 180822 accounted for in the current version of Bureau of Sanitation Sewer Generation Rates. <sup>6</sup> Landscaping water use is estimated per California Code of Regulations Title 23, Division 2, Chapter 2.7, Model Water Efficient Landscape Ordinance. <sup>7</sup> Auto parking water uses are based on City of Los Angeles Department of Public Works, Bureau of Sanitation Sewer Generation Rates table, and 12 times/year cleaning assumption. <sup>8</sup> Water conservation due to additional conservation commitments with LADWP. See Exhibit 8.						

The Project is estimated to increase the total net water demand by a maximum of 419 acre-feet annually. This amount takes into account savings due to water conservation ordinances which are approximately 105 AFY, and savings due to additional voluntary conservation measures which are approximately 2 AFY. According LADWP's WSA, adequate water supplies will be available to meet the total additional maximum water demand for the Project. LADWP anticipates the projected water demand from the Project can be met during normal, single-dry, and multiple-dry water years, in addition to the existing and planned future demands on LADWP. Therefore, impacts on water supply would be less than significant.

## 6.2.2. WASTEWATER

### 6.2.2.1. SEWER GENERATION

The base estimated sewer flows were based on the 2012 BOS sewerage generation factors (LA Sanitation) for commercial categories and are summarized in Table 2 below.

Table 2 – Estimated Proposed Wastewater Generation						
Facility	Average Daily Flow (gpd) <sup>1</sup>	Unit	Quantity	Base Demand (gpd)	Required Ordinances Water Savings (gpd) <sup>2</sup>	Average Daily Wastewater Generation (gpd) <sup>3</sup>
Residential: Apt - Bachelor	75	DU	42	3,150		
Residential: Apt – 1 Bedroom	110	DU	126	13,860		
Residential: Apt – 2 Bedrooms	150	DU	60	9,000		
Residential: Apt – 3 Bedrooms	190	DU	24	4,560		
Residential: Condo – 1 Bedroom	110	DU	51	5,610		
Residential: Condo – 2 Bedrooms	150	DU	91	13,650		
Residential: Condo – 3 Bedrooms	190	DU	38	7,220		
Residential Units – Base Demand Adjustment <sup>4</sup>	-	-	-	7,026		
<b>Residential Units Total</b>	-	<b>Units</b>	<b>432</b>	<b>64,076</b>	12,560	<b>51,516</b>
Hotel: Rooms	120	Rooms	515	61,800		
Hotel: Base Demand Adjustment <sup>4</sup>	-	-	-	5,597		
<b>Hotel Room Total</b>	-	<b>Rooms</b>	<b>515</b>	<b>67,397</b>	7,355	<b>60,042</b>
Residential Amenity: Lounge/Bar	0.72	SF	3,000	2,160		
Residential Amenity: Fitness Center	0.65	SF	3,800	2,470		
Residential Amenity: Community Dining Area	0.36	SF	1,475	527		

Residential Amenity: Game Room	0.10	SF	1,150	115		
Residential Amenity: Co- working space/ Business Center	0.12	SF	1,000	120		
Residential Amenity: Outdoor Dining Area	0.36	SF	2,400	857		
Residential Amenity: Dog Washing Area	0.425	SF	500	213		
Hotel Amenity: Full- Service Restaurant	30	Seats	541	16,230		
Hotel Amenity: Ballroom	0.12	SF	16,590	2,034		
Hotel Amenity: Meeting Rooms	0.12	SF	7,390	887		
Hotel Amenity: Fitness/Spa	0.65	SF	14,780	9,607		
General Commercial: Retail	25 KGSF	SF	30,466	762		
General Commercial: High Turnover Restaurant	25	Seats	925	23,125		
General Commercial: Quality Restaurant	30	Seats	926	27,780		
Swimming Pools and Spa	-	GPD	-	281		
<b>Amenities and Commercial Total</b>	-	-	-	<b>87,168</b>	<b>23,315</b>	<b>63,853</b>
<b>Covered Parking <sup>5</sup></b>	<b>20 KGSF</b>	<b>SF</b>	<b>178,145</b>	<b>117</b>	<b>0</b>	<b>117</b>
<b>Cooling Towers</b>	<b>35.64</b>	<b>ton</b>	<b>7,000</b>	<b>249,480</b>	<b>49,896</b>	<b>199,584</b>
<b>Proposed Subtotal</b>				<b>468,238</b>	<b>93,126</b>	<b>375,112</b>
Less Additional Conservation <sup>6</sup>						-1,730
<b>Net Additional Wastewater Generation</b>						<b>373,382 gpd</b>

<sup>1</sup> Proposed indoor water uses are based on 2012 City of Los Angeles Department of Public Works, Bureau of Sanitation Sewer Generation Rates table available at <https://www.lacitysan.org/fmd/pdf/sfcfeerates.pdf>.

<sup>2</sup> The proposed development land uses will conform to City of Los Angeles Ordinance No. 184248, 2017 Los Angeles Plumbing Code, and 2017 Los Angeles Green Building Code.

<sup>3</sup> Average daily wastewater generation = Average daily flow x Quantity (**Exhibit 4 – Approved WWSI results are based on previous estimate and considered conservative**).

<sup>4</sup> Base Demand Adjustment is the estimated savings due to Ordinance No. 180822 accounted for in the

current version of the Bureau of Sanitation Sewer Generation Rates.

<sup>5</sup> Auto parking water uses are based on City of Los Angeles Department of Public Works, Bureau of Sanitation Sewer Generation Rates table, and 12 times/year cleaning assumption.

<sup>6</sup> Water conservation due to additional conservation commitments with LADWP. See Exhibit 8.

Wastewater generated by the Project would be conveyed via LASAN's wastewater conveyance system within the Hyperion Sanitary Sewer System to the HWRP for treatment. The existing design capacity of the Hyperion Service Area is approximately 550 MGD (consisting of 450 MGD at the Hyperion Treatment Plant, 80 MGD at the Donald C. Tillman Water Reclamation Plant, and 20 MGD at the Los Angeles–Glendale Water Reclamation Plant).<sup>13</sup> The Project's proposed increase in wastewater generation is approximately 0.373 MGD, which is approximately 0.08% (less than one percent) of the Hyperion Treatment Plant's capacity. The Project's proportion of the remaining available capacity of the Hyperion Water Reclamation Plant of 175 MGD would be 0.21%. Consequently, wastewater generated by the Project would be accommodated by the existing remaining available capacity of the Hyperion Sanitary Sewer System and HWRP, and impacts on wastewater treatment capacity would be less than significant.

#### **6.2.2.2. INFRASTRUCTURE CAPACITY**

The Project's net increase in average sewer generation would be approximately 373,382 gpd (0.373 MGD).

Each of the sewer pipes in Olive Street, Hill Street, and 4<sup>th</sup> Street flow downhill in the southern direction, and eventually connect into the 36-inch pipe in 4<sup>th</sup> Street at the intersection of 4<sup>th</sup> Street and Hill Street, which eventually connects into the 42-inch pipe in Los Angeles Street. The Project is adjacent to and could make direct connections to each of these pipes except the 36-inch pipe in 4<sup>th</sup> Street and the 42-inch pipe in Los Angeles Street, which are further downstream and not adjacent to the Project.

The Project would have multiple sewer lateral connections to the local wastewater infrastructure, and the connections would likely be distributed across multiple street sewers, potentially to Olive Street, Hill Street, and 4<sup>th</sup> Street.

BOS prepared a WWSI on November 2, 2020 evaluating the sewer infrastructure in the vicinity of the Project. WESD evaluated a wastewater generation of 468,206 gpd, which is 125% of the Project's sewer generation estimate. This generation rate was used as a conservative estimate and is approximately equal to the Project's base wastewater generation before water conservation reductions. See Exhibit 4 for approved WWSI results.

The current approximate flow level (d/D) and the design capacities at d/D of 50% in the sewer system adjacent to the Project is set forth in Table 3 below from the WWSI. As indicated therein, the 15-inch Hill Street, 36-inch 4th Street, and 42-inch 4th Street sewer main all have adequate

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<sup>13</sup> City of Los Angeles Department of Public Works, Bureau of Sanitation, Water Reclamation Plants, [https://www.lacitysan.org/san/faces/home/portal/s-lsh-wwd/s-lsh-wwd-cw/s-lsh-wwd-cw-p?\\_adf.ctrl-state=oe81wkld\\_4&\\_afLoop=28344654751341747#!](https://www.lacitysan.org/san/faces/home/portal/s-lsh-wwd/s-lsh-wwd-cw/s-lsh-wwd-cw-p?_adf.ctrl-state=oe81wkld_4&_afLoop=28344654751341747#!), accessed June 19, 2018.



remaining available capacity to serve the Project. In addition, the WWSI states that: “Based on estimated flows, it appears the sewer system might be able to accommodate the total flow for your proposed project.” As is typical with development projects, the WSSI also notes that a final approval for sewer capacity will be made conjunction with the issuance of connection permits. In addition, it should be noted that further gauging and evaluation is required by LAMC Section 64.14 and would be conducted to obtain final approval of sewer capacity and a connection permit for the Project during the Project’s permitting process. Furthermore, sanitary sewer connections and on-site infrastructure must be designed and constructed in accordance with applicable LASAN and California Plumbing Code standards.

Table 3 – Sewer Capacities				
Pipe Diameter (in)	Pipe Location	Current Gauging d/D (%)	50% Design Capacity*	Additional Capacity Available
15	Olive St.	(No gauging available)	4.25 MGD	Unknown
15	Hill St.	(No gauging available)	2.6 MGD	>100% of Project Sewer Generation**
36	4 <sup>th</sup> St.	8	16.14 MGD	14.85 MGD
42	Los Angeles St.	26	17.6 MGD	13.02 MGD

\* See WWSI in Exhibit 4.

\*\*As determined by LA Bureau of Sanitation SCAR 62-4144-0418. See Exhibit 10.

BOS also performed a SCAR review on May 23, 2018, which determined the 15-inch pipe in Hill Street to have an available capacity of at least 388,405 gpd (0.388 MGD) demand from the Project, which exceeds the total Project wastewater generation estimate of 373,382 gpd (0.373 MGD). See Exhibit 10 for SCAR results.

Thus, based on existing conditions, expected sewer flows from the Project, and applicable regulatory compliance, the existing sewer mains that serve the Project Site are anticipated to have adequate available capacity to serve the Project., and impacts on wastewater infrastructure would be less than significant.

### 6.2.3. ENERGY

#### 6.2.3.1. ELECTRICITY

Buildout of the Project, and additional growth forecasted to occur in the City would increase electricity consumption during project construction and operation and, thus, increase the need for energy supplies and infrastructure capacity, such as new or expanded energy facilities. Based on LADWP’s 2017 Power Strategic Long-Term Resource Plan, LADWP forecasts that its peak demand in the 2026-2027 fiscal year (the Project’s buildout year) will be 6,129 MW of electricity.<sup>14</sup> Based on the Project’s estimated peak demand of 18.3 MW and LADWP’s forecast of 6,129 MW, the Project would account less than 0.30 percent of LADWP’s projected peak energy demand for the Project’s build-out year. Accordingly, the Project’s contribution to cumulative impacts related to electricity consumption would not be cumulatively considerable and, thus, would be less than significant.

<sup>14</sup> LADWP, 2017 Power Strategic Long-Term Resource Plan, Appendix A, Table A-1.

Electricity infrastructure is typically expanded in response to increasing demand, and system expansion and improvements by LADWP are ongoing. As described in LADWP's 2017 Power Strategic Long-Term Resource Plan, LADWP would continue to expand delivery capacity as needed to meet demand increases within its service area at the lowest cost and risk consistent with LADWP's environmental priorities and reliability standards. LADWP has indicated that the Power Strategic Long-Term Resource Plan incorporates the estimated electricity requirement for the Project. The Power Integrated Resource Plan takes into account future energy demand, advances in renewable energy resources and technology, energy efficiency, conservation, and forecast changes in regulatory requirements. Development projects within the LADWP service area would also be anticipated to incorporate site-specific infrastructure improvements, as necessary.

#### **6.2.3.2. NATURAL GAS**

As shown in Table IV.C 2 in Section IV.C, Energy, of this Draft EIR, Project operation would result in a net increase in natural gas usage at the Project Site of approximately 22,478,182 cf per year (61,584 cf per day). This would represent approximately 0.002 percent of the 2026 forecasted natural gas consumption in the SoCalGas service area of approximately 2.782 billion cf per day. Therefore, SoCalGas' existing and planned natural gas supplies would be sufficient to support the Project's net increase in demand for natural gas. Furthermore, SoCalGas has confirmed that the existing natural gas infrastructure in the Project area has adequate capacity to serve the Project's natural gas demand, which would generate an estimated peak natural gas load of 75,000 cubic feet per hour (CFH) at 5 pounds per square inch (psi) on the local natural gas infrastructure (see Exhibit 7). As such, the construction of new natural gas transmission lines or other major natural facilities would not be required to serve the Project. Operation of the Project would not result exceed the capacity of the distribution infrastructure such that the expansion or construction of new natural gas facilities would be required.

Based on the above, impacts with respect to natural gas infrastructure would be less than significant.

### **7. LEVEL OF SIGNIFICANCE**

Based on the analysis contained in this report, no significant impacts have been identified for water, wastewater, or energy for the Project.

## **APPENDIX**



# EXHIBIT 1: IFFAR RESULTS

## City of Los Angeles

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

#### INFORMATION OF FIRE FLOW AVAILABILITY

LAFD Fire Flow Requirement: 1800 X 3 FH's  
12,000 GPM available to any block

Water Service Map No.: 130-210  
LAFD Signature: \_\_\_\_\_  
Date Signed: \_\_\_\_\_

Applicant: Mary Creel  
Company Name: KPFF Consulting Engineers  
Address: 700 S Flower Street, Suite 2100, Los Angeles 90017  
Telephone: (213) 418-0201  
Email Address: mary.creel@kpff.com

	F- 9527	F-9528	F-9525- <u>9554</u>
Location:	S Hill Street	S Hill Street	S Olive Street
Distance from Nearest Pipe Location (feet):	<u>36'</u>	<u>54'</u>	<u>54'</u>
Hydrant Size:	4D	4D	4D
Water Main Size (in):	12"	12"	12"
Static Pressure (psi):	<u>152</u>	<u>153</u>	<u>153</u>
Residual Pressure (psi):	<u>123</u>	<u>124</u>	<u>124</u>
Flow at 20 psi (gpm):	<u>1800</u>	<u>1800</u>	<u>1800</u>

NOTE: Data obtained from hydraulic analysis using peak hour.

Remarks: \_\_\_\_\_ ECMR No. W20180510002  
This is the second of 2 requests for a new project located at 361 S Hill Street.

These results do not reflect any additional water demands for fire service & domestic service. Also we could not run all six fire hydrants simultaneously. These three belong to one system and the other three to another one.

Water Purveyor: Los Angeles Department of Water & Power Date: 5-23-2018

Signature: [Signature] Title: Civil Engineer Associate

Requests must be made by submitting this completed application, along with a \$215.00 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 03 2018

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

*Don't*



# City of Los Angeles

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

### INFORMATION OF FIRE FLOW AVAILABILITY

LAFD Fire Flow Requirement: 6000  
12,000 GPM available to any block

Water Service Map No.: 130-210  
LAFD Signature: \_\_\_\_\_  
Date Signed: \_\_\_\_\_

Applicant: Mary Creel  
Company Name: KPFF Consulting Engineers  
Address: 700 S Flower Street, Suite 2100, Los Angeles 90017  
Telephone: (213) 418-0201  
Email Address: mary.creel@kpff.com

	<u>9525</u> F- 9554	F-9522	F-15419
Location:	W 4th Street	W 4th Street	S Olive Street
Distance from Nearest Pipe Location (feet):	<u>30'</u>	<u>33'</u>	<u>60'</u>
Hydrant Size:	4D	4D	4D
Water Main Size (in):	<u>12"</u>	8"	12"
Static Pressure (psi):	<u>136</u>	<u>139</u>	<u>125</u>
Residual Pressure (psi):	<u>106</u>	<u>110</u>	<u>96</u>
Flow at 20 psi (gpm):	<u>2000</u>	<u>2000</u>	<u>1500</u>

NOTE: Data obtained from hydraulic analysis using peak hour.

Remarks: \_\_\_\_\_  
ECMR No. W20180510003  
*This is the first of 2 requests for a new project located at 361 S Hill Street.*  
These results do not reflect any additional water demands for fire service & domestic service. Also we could not run all six fire hydrant simultaneously. These three belong to one system and the other three to another one.  
Water Purveyor: Los Angeles Department of Water & Power Date: 5-25-2018  
Signature: [Signature] Title: Civil Engineer Associate

Requests must be made by submitting this completed application, along with a \$215.00 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 03 2018

\* 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

### EXHIBIT 2: HILL ST. SAR RESULTS



SAR NUMBER 82427

**Fire Service Pressure Flow Report**SERVICE NUMBER **627386**For: **361 S HILL ST** Approved Date: **12-23-2019**Proposed Service **10 INCH** off of the**12** inch main in **HILL ST** on the **WEST** side approximately**215** feet **NORTH** of **NORTH** of **4TH ST** The System maximum pressure is**73** psi based on street curb elevation of **287** feet above sea level at this location.The distance from the DWP street main to the property line is **38** 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	55				
1120	54				
1625	53				
2025	52				
2365	51				
2670	50				
2945	49				
3200	48				
3440	47				
3665	46				
3880	45				
4085	44				
4280	43				
4470	42				
4650	41				
4830	40				
5000	39				

**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

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

Notes: Ok to sell combo.

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

This SAR is valid for one year from 12-23-19. 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****DAJANI STRACHAN**

Prepared by

**DAJANI STRACHAN**

Approved by

**130-210**

Water Service Map



# City of Los Angeles

Los Angeles Department of Water and Power - Water System

## EXHIBIT 3: OLIVE ST. SAR RESULTS



SAR NUMBER 82426

### Fire Service Pressure Flow Report

SERVICE NUMBER **627383**

For: **361 S HILL ST** Approved Date: **12-23-2019**

Proposed Service **10 INCH** off of the

**12** inch main in **OLIVE ST** on the **EAST** side approximately

**215** feet **NORTH** of **NORTH** of **4TH ST** The System maximum pressure is

**127** psi based on street curb elevation of **347** feet above sea level at this location.

The distance from the DWP street main to the property line is **36** 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	98	3390	80	4925	62
710	97	3490	79	5000	61
1035	96	3585	78		
1290	95	3680	77		
1505	94	3775	76		
1695	93	3870	75		
1870	92	3960	74		
2035	91	4045	73		
2185	90	4135	72		
2330	89	4220	71		
2465	88	4300	70		
2595	87	4385	69		
2720	86	4465	68		
2840	85	4545	67		
2960	84	4625	66		
3070	83	4700	65		
3180	82	4775	64		
3285	81	4850	63		

### 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

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

Notes: Ok to sell combo.

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

This SAR is valid for one year from 12-23-19. 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**

**DAJANI STRACHAN**

Prepared by

**DAJANI STRACHAN**

Approved by

**130-210**

Water Service Map



# EXHIBIT 4: WWSI

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

November 2, 2020

Mr. Scott Ralston, Project Manager  
KPFF Consulting Engineers  
700 S Flower Street, #2100  
Los Angeles, CA 90071

Dear Mr. Ralston,

### **ANGELS LANDING UPDATE - REQUEST FOR WASTEWATER SERVICE INFORMATION**

This is in response to your October 27, 2020 letter requesting a review of your proposed mixed-use project located at 361 S. Hill Street, Los Angeles, CA 90013. The project will consist of residential condos and apartments, a hotel, restaurants, and retail areas. 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)
<b><i>Proposed</i></b>			
<b><i>Residential-Apartments:</i></b>			
Residential: APT- Bachelor	75 GPD/ DU	42 DU	3,150
Residential: APT-1 BDRM	110 GPD/ DU	126 DU	13,860
Residential: APT-2 BDRMS	150 GPD/ DU	60 DU	9,000

***zero waste • zero wasted water***

**AN EQUAL EMPLOYMENT OPPORTUNITY - AFFIRMATIVE ACTION EMPLOYER**

File Location: CEQA Review\FINAL CEQA Response LTRs\FINAL DRAFT\Angels Landing Update - Request for WWSI.docx

Residential: APT-3 BDRMS	190 GPD/ DU	24 DU	4,560
<i>Residential condominiums:</i>			
Residential: CONDO-1 BDRM	110 GPD/DU	51 DU	5,610
Residential: CONDO-2 BDRMS	150 GPD/DU	91 DU	13,650
Residential: CONDO-3 BDRMS	190 GPD/DU	38 DU	7,220
Base Demand Adjustment:			7,026
Hotel: Rooms	120 GPD/Room	515 Rooms	61,800
<i>Hotel-Base Demand Adjustment:</i>			
Lounge/Bar	720 GPD/1000 SQ.FT	3,000 SQ.FT	2,160
Fitness Center	650 GPD/1000 SQ.FT	3,800 SQ.FT	2,470
Community Dining Area	360 GPD/1000 SQ.FT	1,475 SQ.FT	531
Game Room	100 GPD/1000 SQ.FT	1,150 SQ.FT	115
Co-working Space	120 GPD/1000 SQ.FT	1,000 SQ.FT	120
Outdoor Dining Area	360 GPD/1000 SQ.FT	2,400 SQ.FT	864
Dog Washing Area	425 GPD/1000 SQ.FT	500 SQ.FT	213
<i>Hotel Amenity:</i>			
Restaurant	30 GPD/Seat	541 Seat	16,230
Ballroom	120 GPD/1000 SQ.FT	16,590 SQ.FT	1,991
Meeting Room	120 GPD/1000 SQ.FT	7,390 SQ.FT	887
Fitness/Spa	650 GPD/1000 SQ.FT	14,780 SQ.FT	9,607
<i>Commercial:</i>			
Retail	25 GPD/1000 SQ.FT	30,466 SQ.FT	762
Turnover Restaurant	25 GPD/Seat	925 Seat	23,125
Quality Restaurant	30 GPD/Seat	926 Seat	27,780
Swimming Pools and Spa			281
Cooling Tower:			249,480
Covered Parking:			117
<b>Total</b>			<b>468,206</b>

## SEWER AVAILABILITY

The sewer infrastructure in the vicinity of the proposed project includes two existing 15-inch lines on Olive St and on Hill St. The sewage from the two existing 15-inch lines join to feed into a 36 – inch line on 4<sup>th</sup> St before discharging into a 42-inch sewer line on Los Angeles St. Figure 1 and Figure 2 show the details of the sewer system within the vicinity of the project. The current flow level (d/D) in the 15-inch lines cannot be determined at this time without additional gauging.

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
15	Olive St.	*	4.25 MGD
15	Hill St.	*	2.6 MGD
36	4 <sup>TH</sup> St.	8	16.14 MGD
42	Los Angeles St.	26	17.6 MGD

\* No gauging available

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](mailto: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](http://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](http://www.lacitysan.org) or by visiting the stormwater public counter at 201 N. Figueroa, 2<sup>nd</sup> 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/](http://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, 2<sup>nd</sup> 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](mailto: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,

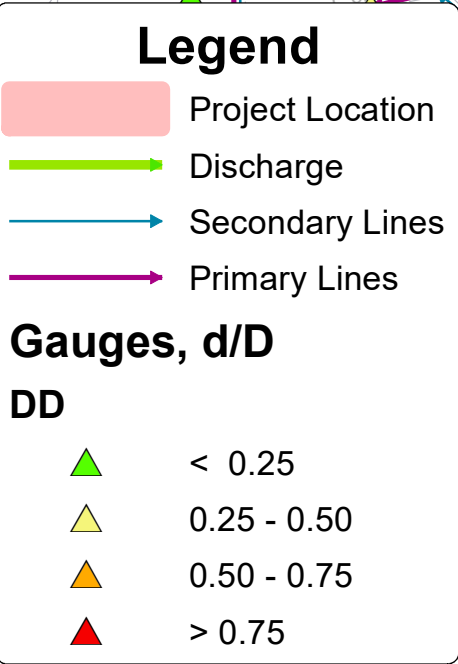


Ali Poosti, Division Manager  
Wastewater Engineering Services Division  
LA Sanitation and Environment

AP/CD: sa

Attachment: Figure 1 - Sewer Map  
Figure 2 - Sewer Map

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



Thomas Brother Data reproduced with permission granted by THOMAS BROS MAP





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DAVID H. WRIGHT  
*General Manager*

## EXHIBIT 5: ELECTRICAL "WILL SERVE" LETTER

May 17, 2018

Ms. Mary Creel  
KPFF  
700 South Flower Street, Suite 2100  
Los Angeles, CA 90017

Subject: 361 S Hill St

Dear Ms. Creel:

This is in response to your submittal regarding electric service for the proposed project located at the above address.

Electric Service is available and will be provided in accordance with the Los Angeles Department of Water and Power's Rules Governing Water and Electric Service. The availability of electricity is dependent upon adequate generating capacity and adequate fuel supplies. The estimated power requirement for this proposed project is part of the total load growth forecast for the City of Los Angeles and has been taken into account in the planned growth of the City's power system.

If you have any questions regarding this matter, please contact me at (213) 367-4290.

Sincerely,



RALPH JARAMILLO  
Engineer of Customer Station Design

RJ:sl

C/enc:  
ENGR: Mr. Ralph Jaramillo  
FileNet





## EXHIBIT 6: SOCAL GAS "WILL SERVE" LETTER



May 17, 2018

KPFF  
700 SOUTH FLOWER ST., SUITE 2100  
LOS ANGELES, CA 90017

RE: Will Serve Letter Request for – 361 S. Hill Street, Los Angeles, CA 900013

To whom it may concern:

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 (Commission) 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,

A handwritten signature in cursive script that reads "Gamaliel Vazquez".

Gamaliel Vazquez  
Planning Associate  
Compton Headquarters

# EXHIBIT 7: MEP Correspondence

**Mary Creel**

---

**From:** Naseer Ahmed <Naseer.Ahmed@imegcorp.com>  
**Sent:** Thursday, March 7, 2019 8:14 AM  
**To:** Jaime Sanchez  
**Cc:** Kevin Roberts; Scott Ralston; Paul Q. Dong; Al Saez; Jim Pugh; Mary Creel; Laura Rodriguez; f.tong@eyestoneeir.com; Scott R. Nelson; Ariel M. Mariano; Donald N. Gecoso  
**Subject:** RE: Fwd: Re: Angels Landing reports

Jaime,

Please see our responses in **red** below. Let me know if there are any questions.

Thank you,

**Naseer Ahmed, PE**  
Executive Principal, Client Executive



**IMEG Corp.**  
300 N. Lake Avenue | 14th Floor | Pasadena, CA 91101

(626) 463-2800 | phone  
(626) 463-2904 | single reach  
(909) 553-5073 | mobile

naseer.ahmed@imegcorp.com

[website](#) | [vCard](#) | [map](#) | [regional news](#)

[Learn more](#) about our firm history and transition to IMEG Corp.

This email may contain confidential and/or private information. If you received this email in error please delete and notify sender.

---

**From:** Jaime Sanchez <jsanchez@claridgeproperty.com>  
**Sent:** Friday, March 1, 2019 11:22 AM  
**To:** Naseer Ahmed <Naseer.Ahmed@imegcorp.com>  
**Cc:** Kevin Roberts <kroberts@macfarlanepartners.com>; Scott Ralston <Scott.Ralston@kpff.com>; Paul Q. Dong <Paul.Q.Dong@imegcorp.com>; Al Saez <Al.Saez@imegcorp.com>; Jim Pugh <jpugh@sheppardmullin.com>; mary.creel@kpff.com; Laura Rodriguez <l.rodriguez@eyestoneeir.com>; f.tong@eyestoneeir.com  
**Subject:** Re: Fwd: Re: Angels Landing reports

Good morning Naseer,

Thanks for the call. Given that your office is closed today, can you please take a look at the following when you can over the weekend and let's reconvene on Monday morning. Please refer the report I previously sent.

- Page 15: Confirm LADWP 10" fire service meter demand  
**IMEG Response: Estimated 5,000 GPM with (2) 8" services from different source on the streets (say one from 4<sup>th</sup>/Olive and other from Hill).**
- Page 23: Need estimated electricity loads based on prelim load calculations  
**IMEG Response: 15.3 MW connected with code allowed demand factors in Hotels and residential units.**  
**\*Assumption is electric range and dryer in residential units. This demand will reduce by about 20% if gas cooking/dryers are used.**

- Page 25: Need estimated MW electricity loads  
IMEG Response: 15.3 MW + 3 MW growth/spare capacity = 18.3 MW
- Page 26: Need updated estimated gas consumption for new building  
IMEG Response: the total estimated gas service demand is 75,000 cfh at 5 psi.

Let us know if you have any questions or if you need anything else to help you with these estimated calculations.

All the best,

---

**Jaime O. Sanchez**  
**Director of Development**  
 Claridge Properties  
 T: 213.500.6493  
 E: [jsanchez@claridgeproperty.com](mailto:jsanchez@claridgeproperty.com)

On 2019-03-01 13:40, Jaime Sanchez wrote:

Good morning Naseer,

Hope all is well! Our team is in the midst of submitting our initial study to the City for public review and comment. Our Civil design consultant, KPFF, put together a utility technical report and it looks like we need some input from MEP to fill in a few blanks. Would you or one of your team members be available this afternoon to get on a call to give us some feedback on these items?

I look forward to hearing from you.

All the best,

---

**Jaime O. Sanchez**  
**Director of Development**  
 Claridge Properties  
 T: 213.500.6493  
 E: [jsanchez@claridgeproperty.com](mailto:jsanchez@claridgeproperty.com)

----- Original Message -----

**Subject:**Re: Angels Landing reports

**Date:**2019-03-01 12:37

**From:**"Jaime O. Sanchez" <[jsanchez@claridgeproperty.com](mailto:jsanchez@claridgeproperty.com)>

**To:**Scott Ralston <[Scott.Ralston@kpff.com](mailto:Scott.Ralston@kpff.com)>

**Cc:**Frankie Tong <[f.tong@eyestoneeir.com](mailto:f.tong@eyestoneeir.com)>, Brian Powers <[Brian.Powers@kpff.com](mailto:Brian.Powers@kpff.com)>, Mary Creel <[mary.creel@kpff.com](mailto:mary.creel@kpff.com)>, Kevin Roberts <[kroberts@macfarlanepartners.com](mailto:kroberts@macfarlanepartners.com)>, Laura Rodriguez <[l.rodriguez@eyestoneeir.com](mailto:l.rodriguez@eyestoneeir.com)>, James Pugh <[JPugh@sheppardmullin.com](mailto:JPugh@sheppardmullin.com)>, Kira Teshima <[KTeshima@sheppardmullin.com](mailto:KTeshima@sheppardmullin.com)>

Hi Scott,

Thanks for sending over the updated reports. I noticed you needed a few key pieces of information to fill in a few of the blanks. Can we get on a call today to clarify and try and get these for you?

Best,

**Jaime O. Sanchez**  
**Director of Development**  
**M: 213.500.6493**

# EXHIBIT 8- LADWP WSA WATER DEMAND & ADDITIONAL WATER CONSERVATION

TABLE I-B The Angels Landing Project - Option B Calculated Total Additional Water Demand							
Existing Use to be Removed <sup>1</sup>	Quantity	Unit	Water Use Factor (gpd/unit)			Existing Water Use to be Removed	
						(gpd)	(af/y)
Vacant Lot						0	
Existing to be Removed Total <sup>2</sup>						0	0.00
Proposed Use <sup>1</sup>	Quantity	Unit	Water Use Factor <sup>3</sup> (gpd/unit)	Base Demand (gpd)	Required Ordinances Water Savings <sup>4</sup> (gpd)	Proposed Water Demand	
						(gpd)	(af/y)
Residential: 1 bd Condominium	51	du	110.00	5,610			
Residential: 2 bd Condominium	91	du	150.00	13,650			
Residential: 3 bd Condominium	38	du	190.00	7,220			
Residential: Bachelor Apartment	42	du	75.00	3,150			
Residential: 1 bd Apartment	126	du	110.00	13,860			
Residential: 2 bd Apartment	60	du	150.00	9,000			
Residential: 3 bd Apartment	24	du	190.00	4,560			
Base Demand Adjustment (Residential Units) <sup>5</sup>				7,026			
Residential Units Total	432	du		64,076	12,560	51,516	57.71
Hotel Room	515	room	120.00	61,800			
Base Demand Adjustment (Hotel Room) <sup>5</sup>				5,597			
Hotel Room Total	515	room		67,397	7,355	60,042	67.26
Residential Amenities:							
Lounge/Bar	3,000	sf	0.72	2,160			
Fitness Center	3,800	sf	0.65	2,470			
Community Dining Area	1,475	sf	0.36	527			
Game Room	1,150	sf	0.10	115			
Co-working space/Business Center	1,000	sf	0.12	120			
Outdoor Dining Area	2,400	sf	0.36	857			
Dog Washing Area	500	sf	0.425	213			
Pool/Spa	1,057	sf		101			
Hotel Amenities:							
Restaurant: Full Service	541	seat	30.00	16,230			
Ballroom	16,950	sf	0.12	2,034			
Meeting Rooms	7,390	sf	0.12	887			
Fitness/Spa	14,780	sf	0.65	9,607			
Pool/Spa	1,882	sf		180			
Commercial:							
Retail	30,466	sf	0.025	762			
Restaurant: High Turnover	925	seat	25.00	23,125			
Restaurant: Quality	926	seat	30.00	27,780			
Amenities and Commercial Total				87,168	23,315	63,853	71.53
Landscaping <sup>7</sup>	13,308	sf		1,263	688	575	0.64
Covered Parking <sup>8</sup>	178,145	sf	0.02	117	0	117	0.13
Cooling Tower Total	7,000	ton	35.64	249,480	49,896	199,584	223.58
Proposed Subtotal				469,501	93,814	375,687	420.85
Less Existing to be Removed Total						0	0.00
Less Additional Conservation <sup>9</sup>						-1,730	-1.94
Net Additional Water Demand						373,957	gpd 418.91 af/y

<sup>1</sup> Provided by City of Los Angeles Department of City Planning in the Request for Water Supply Assessment letter and Scope Confirmation e-mail. See Appendix A. Proposed Uses that do not have additional water demands are not shown here.

<sup>2</sup> The project site is mostly vacant and landscaped, and there is no water billing record past 2013. Existing water demand is assumed to be 0.

<sup>3</sup> Proposed indoor water uses are based on 2012 City of Los Angeles Department of Public Works, Bureau of Sanitation Sewer Generation Rates table available at <http://www.lacitysan.org/fmd/pdf/sfcfeerates.pdf>.

<sup>4</sup> The proposed development land uses will conform to City of Los Angeles Ordinance No. 184248, 2017 Los Angeles Plumbing Code, and 2017 Los Angeles Green Building Code.

<sup>5</sup> Base Demand Adjustment is the estimated savings due to Ordinance No. 180822 accounted for in the current version of Bureau of Sanitation Sewer Generation Rates.

<sup>6</sup> Landscaping water use is estimated per California Code of Regulations Title 23. Division 2. Chapter 2.7. Model Water Efficient Landscape Ordinance.

<sup>7</sup> Auto parking water uses are based on City of Los Angeles Department of Public Works, Bureau of Sanitation Sewer Generation Rates table, and 12 times/year cleaning assumption.

<sup>8</sup> Water conservation due to additional conservation commitments agreed by the Applicant. See Table II.

Abbreviations:

sf- square feet      du - dwelling unit      gpd - gallons per day      af/y - acre feet per year

<b>TABLE II-B</b> <b>The Angels Landing Project - Option B</b> <b>Estimated Additional Water Conservation</b>					
Conservation Measures <sup>1</sup>	Quantity <sup>2</sup>	Units	Water Saving Factor <sup>3</sup> (gpd/unit)	Water Saved (gpd)      (af/y)	
Showerhead - Residential: 1 bd Condominium	51	du	1.59	81	0.09
Showerhead - Residential: 2 bd Condominium	91	du	3.98	362	0.41
Showerhead - Residential: 3 bd Condominium	38	du	6.36	242	0.27
Showerhead - Residential: Bachelor Apartment	42	du	1.59	67	0.08
Showerhead - Residential: 1 bd Apartment	126	du	1.59	200	0.22
Showerhead - Residential: 2 bd Apartment	60	du	3.98	239	0.27
Showerhead - Residential: 3 bd Apartment	24	du	6.36	153	0.17
<b>Residential Unit Conservation Total</b>				<b>1,344</b>	<b>1.51</b>
Showerhead	51	ea	7.50	383	0.43
<b>Residential Amenities and Commercial Conservation Total</b>				<b>383</b>	<b>0.43</b>
<b>Landscaping Total Conservation<sup>4</sup></b>				<b>3</b>	<b>0.00</b>
<b>Total Additional Water Conserved =</b>				<b>1,730</b>	<b>1.94</b>

<sup>1</sup> Water conservation measures agreed to by the Applicant. See Appendix B.

<sup>2</sup> Plumbing fixture quantities were provided by the Applicant.

<sup>3</sup> Based on LADWP estimates.

<sup>4</sup> Landscaping water conservation is estimated per California Code of Regulations Title 23. Division 2. Chapter 2.7. Model Water Efficient Landscape Ordinance.

Abbreviations:      gpd - gallons per day      af/y - acre feet per year      ea – each

## EXHIBIT 9: LAFD FIRE FLOW CONFIRMATION

Mary Creel

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**From:** Robert Duff <robert.duff@lacity.org>  
**Sent:** Tuesday, July 31, 2018 9:26 AM  
**To:** Mary Creel  
**Cc:** Scott Ralston  
**Subject:** Re: 361 S Hill Street - Fire Flow Requirements  
  
**Categories:** Filed by Newforma

Your development according to the General Plan Land Use is listed as Commercial: Regional Center Commercial. City Planning separated Industrial/Commercial a few years back. Fire flow required for Regional Center Commercial is 6,000-9000 GPM's, for the two towers we are requiring 9,000 GPM.

On Thu, Jul 26, 2018 at 3:13 PM, Mary Creel <[mary.creel@kpff.com](mailto:mary.creel@kpff.com)> wrote:

Hi Robert,

Following up on this, could you please let us know what the required fire flow would be and if the fire hydrants tested meet this requirement?

Thanks!

Mary



**Mary Creel**

☎ 213.418.0201 📠 213.266.5202  
700 South Flower Street, Suite 2100  
Los Angeles, CA 90017

[mary.creel@kpff.com](mailto:mary.creel@kpff.com)

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**From:** Mary Creel  
**Sent:** Tuesday, July 24, 2018 8:26 PM  
**To:** 'robert.duff@lacity.org' <[robert.duff@lacity.org](mailto:robert.duff@lacity.org)>

**Cc:** Scott Ralston <[Scott.Ralston@kpff.com](mailto:Scott.Ralston@kpff.com)>  
**Subject:** 361 S Hill Street - Fire Flow Requirements

Hi Robert,

We are working on a new mixed-use development located at 361 S Hill Street in Downtown LA. The development consists of two high rise towers, 28 stories and 82 stories.

We received the fire flow availability results, see attached. I would like to confirm that the available fire flow of 10,900gpm (1,800gpm x3 FH and 2,000gpm x2 FH and 1,500gpm x1 FH) is sufficient for this development.

It was our understanding that our development is in the industrial and commercial zone. Can you please confirm if this the correct zone?

Thanks!

Mary



**Mary Creel**

O 213.418.0201 D 213.266.5202  
700 South Flower Street, Suite 2100  
Los Angeles, CA 90017

[mary.creel@kpff.com](mailto:mary.creel@kpff.com)

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Robert E. Duff, Fire Inspector II  
Fire Development Svcs/ Hydrants & Access  
Los Angeles Fire Department  
201 N. Figueroa St. Ste 300  
Los Angeles, CA 90012  
(213) 482-6502

[www.lafd.org/customer-survey](http://www.lafd.org/customer-survey)

# EXHIBIT 10: SCAR RESULTS

## Sewer Capacity Availability Request (SCAR)

To: Bureau of Sanitation

The following request is submitted to you on behalf of the applicant requesting to connect to the public sewer system. Please verify that the capacity exists at the requested location for the proposed developments shown below. The results are good for 180 days from the date the sewer capacity approval from the Bureau of Sanitation.

Job Address:	<b>351 S HILL ST</b>	Sanitation Scar ID:	<b>62-4144-0418</b>
Date Submitted	<b>04/25/2018</b>	Request Will Serve Letter?	<b>Yes</b>
BOE District:	<b>Central District</b>		
Applicant:	<b>Mary Creel, KPFF</b>		
Address:	<b>700 S FLOWER ST, #2100</b>	City :	<b>LOS ANGELES</b>
State:	<b>CA</b>	Zip:	<b>90017</b>
Phone:	<b>213-418-0201</b>	Fax:	
Email:	<b>mary.creel@kpff.com</b>	BPA No.	<b>pending</b>
S-Map:	<b>516</b>	Wye Map:	<b>129A209-B</b>

### SIMM Map - Maintenance Hole Locations

No.	Street Name	U/S MH	D/S MH	Diam. (in)	Approved Flow %	Notes
1	Hill St	51607096	51607288	15	100.00	

### Proposed Facility Description

No.	Proposed Use Description	Sewage Generation (GPD)	Unit	Qty	GPD
1	RESIDENTIAL: APT - BACHELOR	75	DU	54	4,050
2	RESIDENTIAL: APT - 1 BDRM. *6	110	DU	183	20,130
3	RESIDENTIAL: APT - 2 BDRMS *6	150	DU	183	27,450
4	RESIDENTIAL: APT - 3 BDRMS *6	190	DU	30	5,700
5	RESIDENTIAL: CONDO - 1 BDRM. *6	110	DU	20	2,200
6	RESIDENTIAL: CONDO - 2 BDRMS *6	150	DU	45	6,750
7	RESIDENTIAL: CONDO - 3 BDRMS *6	190	DU	30	5,700
8	SCHOOL: ELEMENTARY/JR. HIGH *8	9	STUDENT	576	5,184
9	RETAIL AREA (LESS THAN 100,000 SF)	25	KGSF	23,450	586
10	HOTEL: USE GUEST ROOMS ONLY	120	ROOM	480	57,600
11	CONFERENCE ROOM OF OFFICE BLDG.		GPD	840	840
12	BANQUET ROOM/BALLROOM	350	KGSF	11,000	3,850
13	THEATER: CINEMA	3	SEAT	100	300
14	RESTAURANT: FULL SERVICE INDOOR SEAT	30	SEAT	724	21,720
15	RESTAURANT: TAKE-OUT	300	KGSF	6,000	1,800
16	BAR: COCKTAIL, PUBLIC TABLE AREA *4	720	KGSF	23,170	16,682
17	SWIMMING POOL (COMMERCIAL WITH BACKWASH FILTERS)		GPD	201,362	201,362
18	HEALTH CLUB/SPA *10	650	KGSF	10,000	6,500

**Proposed Total Flow (gpd): 388,405**



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Remarks	1] Approved for the maximum allowable capacity of 388,405 GPD (269.72 gpm). 2] IWP is required.
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Note: Results are good for 180 days from the date of approval by the Bureau of Sanitation

Date Processed:	05/23/2018	Expires On:	11/19/2018
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Processed by:	Albert Lew Bureau of Sanitation Phone: 323-342-6207 Sanitation Status: Approved Reviewed by: Ricardo Avendano on 05/23/2018	Submitted by:	Avalyn Kamachi Bureau of Engineering Central District Phone: 213-482-7030
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Fees Collected	Yes	SCAR FEE (W:37 / QC:708)	\$2,860.00
Date Collected	04/27/2018	SCAR Status:	Completed

### **SEWER CAPACITY AVAILABILITY REVIEW FEE (SCARF) - Frequently Asked Questions**

SCAR stands for Sewer Capacity Availability Review that is performed by the Department of Public Works, Bureau of Sanitation. This review evaluates the existing sewer system to 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 SCAR Fee (SCARF) recovers the cost, incurred by the City, in performing the review for any SCAR request that is expected to generate 10,000 gallons per day (gpd) of sewage.

The SCARF is based on the effort required to perform data collection and engineering analysis in completing a SCAR. A brief summary of that effort includes, but is not limited to, the following:

1. Research and trace sewer flow levels upstream and downstream of the point of connection.
2. Conduct field surveys to observe and record flow levels. Coordinate with maintenance staff to inspect sewer maintenance holes and conduct smoke and dye testing if necessary.
3. Review recent gauging data and in some cases closed circuit TV inspection (CCTV) videos.
4. Perform gauging and CCTV inspection if recent data is not available.
5. Research the project location area for other recently approved SCARs to evaluate the cumulated impact of all known SCARs on the sewer system.
6. Calculate the impact of the proposed additional sewage discharge on the existing sewer system as it will be impacted from the approved SCARs from Item 6 above. This includes tracing the cumulative impacts of all known SCARs, along with the subject SCAR, downstream to insure sufficient capacity exist throughout the system.
7. Correspond with the applicant for additional information and project and clarification as necessary.
8. Work with the applicant to find alternative sewer connection points and solutions if sufficient capacity does not exist at the desired point of connection.

### **Questions and Answers:**

**1. When is the SCARF applied, or charged?**

*It applies to all applicants seeking a Sewer Capacity Availability Review (SCAR). SCARs are generally required for Sewer Facility Certificate applications exceeding 10,000 gpd, or request from a property owner seeking to increase their discharge thru their existing connection by 10,000 gpd or more, or any groundwater related project that discharges 10,000 gpd or more, or any proposed or future development for a project that could result in a discharge of 10,000 gpd.*

**2. Why is the SCARF being charged now when it has not been in the past?**

*The City has seen a dramatic increase in the number of SCARs over 10,000 gpd in the last few years and has needed to increase its resources, i.e., staff and gauging efforts, to respond to them. The funds collected thru SCARF will help the City pay for these additional resources and will be paid by developers and property owners that receive the benefit from the SCAR effort.*

**3. Where does the SCARF get paid?**

*The Department of Public Works, Bureau of Engineering (BOE) collects the fee at its public counters. Once the fee is paid then BOE prepares a SCAR request and forwards it to the BOS where it is reviewed and then returned to BOE. BOE then informs the applicant of the result. In some cases, BOS works directly with the applicant during the review of the SCAR to seek additional information and work out alternative solutions*

