

Appendix E

Utility Report



**ONNI VIOLET STREET PROJECT
(2143 VIOLET STREET, LOS ANGELES, CA 90021)**

UTILITY INFRASTRUCTURE TECHNICAL REPORT: WATER, WASTEWATER, AND ENERGY

MAY 11, 2020

PREPARED BY:

KPFF Consulting Engineers
700 S. Flower Street, Suite 2100
Los Angeles, CA 90017
(213) 418-0201

Table of Contents

Appendix	iii
1. INTRODUCTION.....	4
1.1. PROJECT DESCRIPTION.....	4
2. REGULATORY FRAMEWORK.....	4
2.1. WATER.....	4
2.2. WASTEWATER.....	6
2.3. ENERGY	7
3. ENVIRONMENTAL SETTING.....	9
3.1. WATER.....	10
3.2. WASTEWATER.....	11
3.3. ENERGY	12
4. SIGNIFICANCE THRESHOLDS.....	14
4.1. WATER.....	14
4.2. WASTEWATER.....	15
4.3. ENERGY	16
5. METHODOLOGY	17
5.1. WATER.....	17
5.2. WASTEWATER.....	18
5.3. ENERGY	19
6. PROJECT IMPACTS	20
6.1. CONSTRUCTION	20
6.1.1. WATER	20
6.1.2. WASTEWATER	21
6.1.3. ENERGY	21
6.2. OPERATION	22
6.2.1. WATER	22
6.2.2. WASTEWATER	24
6.2.3. ENERGY	26
6.3. CUMULATIVE IMPACTS	28
6.3.1 WATER	28
6.3.2 WASTEWATER	29
6.3.3 ENERGY	29

Appendix

Exhibit 1- LADWP “Information of Fire Flow Availability Request” (IFFAR) Results

Exhibit 2- LADWP “Service Advisory Report” (SAR) Results

Exhibit 3- City of Los Angeles “Sewer Capacity Availability Request” (SCAR) Results and
Wastewater Services Information Letter

Exhibit 4- LADWP Approved Will-Serve Letter

Exhibit 5- SoCal Gas Approved Will-Serve Letter

1. INTRODUCTION

1.1. PROJECT DESCRIPTION

ONNI Violet Development LP, the Applicant, proposes a new mixed-use development on a 96,523-square-foot site located in the Central City North Community Plan area of the City of Los Angeles (the Project). The Project includes 347 new live-work units, approximately 187,374 square feet of office space, 21,858 square feet of commercial floor area, and 926 square feet of artist production amenity space. These new uses would be located in a variable height building that would include 5 to 15-story elements with a maximum height of 179 feet. In addition, five existing buildings within the northern portion of the Project Site that comprise approximately 56,914 square feet would be retained. Two buildings and open sheds would be removed. Upon completion, approximately 569,676 square feet of floor area would be located within the Project Site, including the existing floor area to remain. Approximately 828 vehicular parking spaces and 461 bicycle parking spaces would be provided within six subterranean parking levels.

1.2. SCOPE OF WORK

As a part of the Environmental Impact Report for the Project, the purpose of this report is to analyze the potential impact of the Project to the existing water, wastewater, and energy infrastructure system.

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.
- 2013 California Green Building Standards Code, CCR, Title 24, Part 11, adopted on January 1, 2014, 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.

As this Project is a mixed-use development that meets item 7 above, a WSA will be required for this Project.

2.2. WASTEWATER

The City of Los Angeles has one of the largest sewer systems in the world including more than 6,600 miles of sewers serving a population of more than four million. The Los Angeles sewer system is comprised of three systems: Hyperion Sanitary Sewer System, Terminal Island Water Reclamation Plant Sanitary Sewer System, and Regional Sanitary Sewer System. To comply with Waste Discharge Requirements (WDRs), a Sewer System Management Plan (SSMP) was prepared for each of these systems.

The Project Site lies within the Hyperion Service Area served by the Hyperion Sanitary Sewer System. In January 2019, a Sewer System Management Plan (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)¹.

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

¹ City of Los Angeles Department of Public Works, Bureau of Sanitation, Sewer System Management Plan Hyperion Sanitary Sewer System, January 2019.

Sewerage Facilities Charge fees are deposited in the City's Sewer Construction and Maintenance Fund for sewer and sewage-related purposes, including but not limited to industrial waste control and water reclamation purposes.

In addition, the City establishes design criteria for sewer systems to assure that new infrastructure provides sewer capacity and operating characteristics to meet City Standards (Bureau of Engineering Special Order No. SO06-0691). Per the Special Order, laterals sewers, which are sewers 18 inches or less in diameter, must be designated for a planning period of 100 years. The Special Order also requires that sewers be designated so that the peak dry weather flow depth during their planning period shall not exceed one-half the pipe diameter.²

In 2006 the City approved the Integrated Resources Plan, which incorporates a Wastewater Facilities Plan.³ 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 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.

2.3. ENERGY

2.3.1. ELECTRICITY

The *2017 Power Integrated Resource Plan (IRP)*⁴ document serves as a comprehensive 20 year roadmap that guides the Los Angeles Department of Water and Power's (LADWP) 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 IRP recommended case with updates in line with latest regulatory framework, and updates to case scenario assumptions that include a 65 percent renewable portfolio standard by 2050.

The 2017 SLTRP provides detailed analysis and results of several new IRP resource cases which investigated the economic and environmental impact of increased local solar and various levels of transportation electrification. In analyzing the IRP 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

² City of Los Angeles, L.A. CEQA Thresholds Guide, Your Resource for Planning CEQA Analysis in Los Angeles, M-Public Utilities, 2006. <http://www.environmentla.org/programs/thresholds/M-Public%20Utilities.pdf>

³ City of Los Angeles, Department of Public Works, LA Sewers Website, Integrated Resources Plan Facilities Plan, Summary Report, December 2006. <https://www.lacitysan.org/san/sandocview?docname=CNT025148>

⁴ LADWP, 2016 Power Integrated Resource Plan, December 2017

integration of new resource alternatives within our existing mix of assets and providing the analytic results to inform the selection of a recommended case.

The SLTRP also includes a general assessment of the revenue requirements and rate impacts that support the recommended resource plan through 2037. While this assessment will not be as detailed and extensive as the financial analysis to be completed for the ongoing rate action for the 2018/19 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 desire 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 of Los Angeles.

Regulatory interpretations of primary regulations and state laws affecting the Power System, including AB 32, SB 1368, SB 1, SB 2 (1X), SB 350, SB 32, US EPA Rule 316(b), and US Clean Power Plan continue to evolve particularly with certification requirements of existing renewable projects and their applicability towards meeting in-state or out-of-state qualifications. 2017's SLTRP attempts to incorporate the latest interpretation of these major regulations and state laws as we understand them today.

2.3.2. NATURAL GAS

The *2018 California Gas Report*⁵ 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.

⁵ California Gas and Electric Utilities, 2018 California Gas Report, 2018.

In 2015, the state 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. Last, the Energy Efficiency Act (AB 793) is intended to promote and provide incentives to residential or small and medium-sized business utility customers that acquire energy management technology for use in their home or place of business. AB 793 requires energy utilities to develop a plan to educate residential customers and small and medium business customers about the incentive program.⁶

Last, California Global Warming Solutions Act of 2006 (SB 32) requires the state board to ensure that statewide greenhouse gas emissions are reduced to at least 40% below the 1990 level by 2030.⁷

3. ENVIRONMENTAL SETTING

The project site is currently bounded by Violet Street, 7th Place, an untitled Alley, and the Atchison, Topeka, and Santa Fe Railway. The site consists of eight lots along 7th Place and eight lots along Violet Street.

The project site is currently occupied by one city block in downtown Los Angeles. The Northern portion of the site is occupied by buildings ranging from one to three stories. The Southern portion of the site is mostly unoccupied with the remaining framework of metal sheds and a large, partially-paved lot.

⁶ C.A. Legislative Assembly, SB 32, 2015-2016.

⁷ C.A. Legislative Assembly, SB 32, 2015-2016.

3.1. WATER

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

3.1.1. REGIONAL

Primary sources of water for the LADWP service area are the Los Angeles Aqueducts (LAA), State Water Project (supplied by MWD) and local groundwater. 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 delivered from the Colorado River or from the Sacramento-San Joaquin Delta. Local ground water has been a reliable 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.⁸

3.1.2. LOCAL

LADWP maintains water infrastructure to the Project Site. Based on available record data provided by LADWP, there is a 6- inch water main in 7th Place and a 6-inch main in Violet Street. It appears that the project site has an active domestic water connection coming off 7th Place. The project will consist of connections to 7th Place and Violet Street to serve the proposed building.

Water consumption estimates have been prepared based on a Water Supply Assessment prepared by the Los Angeles Department of Water and Power (LADWP) dated February 6, 2019 and are summarized in Table 1 below⁹.

Table 1 – Estimated Existing Water Consumption				
Land Use	Quantity	Unit	Consumption Rate (gpd/unit) ^(a)	Total Water Consumption (gpd)
Existing				
Warehouse/Office (OFFICE)	6,844	SF		2,832
Total Estimated Existing Water Consumption				2,832
^(a) The average daily flow based on LADWP's Water Supply Assessment				

⁸ LADWP, 2015 Urban Water Management Plan, October 2016.

⁹ Water Supply Assessment – 2143 Violet Street Project, February 6, 2019.

It is unlikely that there are existing Fire Department Connections to charge fire sprinklers on the buildings to be demolished. It is expected that new connections will be installed to meet all Fire Department and Department of Building and Safety regulations to serve the proposed building. Multiple additional fire hydrants are in the greater vicinity of the Project Site.

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 of Los Angeles incorporated areas as well as several other cities and unincorporated areas in the Los Angeles basin and San Fernando Valley. The collection infrastructure consists of over 6,700 miles of local, trunk, mainline and major interceptor sewers, five major outfall sewers, and 46 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 (mgd) and the existing average daily flow for the system is approximately 260 mgd.¹⁰

3.2.2. LOCAL

Sanitary sewer is provided by the City of Los Angeles Bureau of Sanitation (BOS). The sanitary sewer connections to the proposed building will come from existing 8-inch Vitrified Clay Pipe (VCP) sewer line in 7th Place. Based on information provided by the Bureau of Sanitation, the aforementioned sewer main has a 50% d/D capacity of 0.307 cubic feet per second (198,904 gpd).

The City sewer network ultimately conveys wastewater to the Hyperion Sewage Treatment Plant.

Wastewater generation estimates have been prepared based on the City of LA Bureau of Sanitation sewerage generation factors for commercial categories, and are summarized in Table 2 below:

¹⁰ City of Los Angeles Department of Public Works, Bureau of Sanitation, Sewer System Management Plan Hyperion Sanitary Sewer System, January 2019.
ONNI VIOLET STREET PROJECT
Environmental Impact Report
May 11, 2020

Table 2 – Estimated Existing Wastewater Generation				
Land Use	Quantity	Unit	Generation Rate (gpd/unit) ^(a)	Total Sewage Generation (gpd)
Existing				
Warehouse/Office (OFFICE)	6,844	SF	50/1000 sf	342
Total Estimated Existing Water Consumption			342	
^(a) The average daily flow based on 100% of City of Los Angeles sewerage generation factors.				

3.3. ENERGY

3.3.1. ELECTRICITY

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

3.3.1.1. REGIONAL

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 26 million megawatt-hours (MWh) of electricity a year for the City of Los Angeles’ 1.5 million residential and business customers as well as over 5,000 customers in the Owens Valley. LADWP has over 6,502 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.¹¹

3.3.1.2. LOCAL

Based on available substructure maps from the City of LA Bureau of Engineering’s online Navigate LA database and images available from Google Maps, it appears that the Project Site receives electric power service from LADWP via above ground conduits on power poles via both 7th Place and Violet Street.

Electricity demand estimates have been prepared based on the existing building program and are summarized in Table 3 below.

¹¹ LADWP, 2015 Power Integrated Resource Plan, December 2015.

Table 3 – Estimated Existing Electricity Demand			
Existing Use Description	Quantity	Metric	Electricity Demand^(a) kWH/Year^(b)
General Office Building	6,983	SF	106,421
Strip Mall	25,739	SF	410,794
Unrefrigerated Warehouse	2,109	SF	9,638
Apartment Low Rise	10	DU	36,122
Total Existing Electricity Demand for Project Site			562,975
^(a) The average estimated load based on estimates from project MEP engineer.			
^(b) 1 kW (kilowatt) = 1,000 Watts			

3.3.2. NATURAL GAS

Southern California Gas Company (SoCal Gas) as 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.

3.3.2.1. REGIONAL

SoCal Gas 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. SoCal Gas 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. SoCal Gas’ natural gas system is the nation’s largest natural gas distribution utility and serves a 20,000 square-mile area in Central and Southern California. The system supplies natural gas to 21.6 million customers through 5.9 million meters in more than 500 communities.¹²

3.3.2.2. LOCAL

Based on substructure maps provided by the City’s Navigate LA database, it appears that the Project Site receives natural gas service via a Southern California Gas Company (SCG) service in Violet Street. Natural gas demand estimates have been prepared based on the existing equipment program and are summarized in Table 4 below.

¹² California Gas and Electric Utilities, 2018 California Gas Report.

Table 4 – Estimated Existing Natural Gas Demand			
Existing Use Description	Quantity	Metric	Natural Gas Demand ^(a) Cu. Ft./Year
General Office Building	6,983	SF	82,732
Strip Mall	25,739	SF	44,614
Unrefrigerated Warehouse	2,109	SF	2,089
Apartment Low Rise	10	DU	135,730
Total Existing Natural Gas Demand for Project Site			265,165
^(a) The average estimated load based on estimates derived using CalEEMod Software			

4. SIGNIFICANCE THRESHOLDS

4.1. WATER

Appendix G of the State of California’s California Environmental Quality Act (CEQA) Guidelines (CEQA Guidelines) provides a set of sample questions that address impacts regarding water supply. These questions are as follows:

Would the project:

- Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electrical 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?

In the context of the above questions from the Appendix G of the CEQA Guidelines, the City of Los Angeles CEQA Thresholds Guide (*L.A. CEQA Thresholds Guide*) states that the determination of significance regarding impacts on water shall be made on a case-by-case basis, considering the following factors:

- The total estimated water demand for the project;
- Whether sufficient capacity exists in the water infrastructure that would serve the project, considering the anticipated conditions at project buildout;

- The amount by which the project would cause the projected growth in population, housing or employment for the Community Plan area to be exceeded in the year of the project completion; and
- The degree to which scheduled water infrastructure improvements or project design features would reduce or offset service impacts.

These thresholds are applicable to the Project and as such are used to determine if the Project would have significant water infrastructure impacts.

4.2. WASTEWATER

Appendix G of the CEQA Guidelines provides a set of sample questions that address impacts regarding wastewater. These questions are as follows:

Would the project:

- Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electrical power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?
- 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?

In the context of the above questions from the CEQA Guidelines, the *L.A. CEQA Thresholds Guide* states that a project would normally have a significant wastewater impact if:

- The project would cause a measureable increase in wastewater flows at a point where, and a time when, a sewer's capacity is already constrained or that would cause a sewer's capacity to become constrained; or
- The project's additional wastewater flows would substantially or incrementally exceed the future scheduled capacity of any one treatment plant by generating flows greater than those anticipated in the Wastewater Facilities Plan or General Plan and its elements.

These thresholds are applicable to the Project and as such are used to determine if the Project would have significant wastewater infrastructure impacts.

4.3. ENERGY

Appendix F of the CEQA Guidelines states that the potentially significant energy implications of a project should be considered in an EIR. Environmental impacts, as noted in Appendix F, may include:

- The project's energy requirements and its energy use efficiencies by amount and fuel type for each stage of the project's life cycle including construction, operation, maintenance and/or removal. if appropriate, the energy intensiveness of materials may be discussed;
- The effects of the project on local and regional energy supplies and on requirements for additional capacity;
- The effects of the project on peak and base period demands for electricity and other forms of energy;
- The degree to which the project complies with existing energy standards;
- The effects of the project on energy resources;
- The project's projected transportation energy use requirements and its overall use of efficient transportation alternatives.

Appendix G of the CEQA Guidelines has the following questions:

- Would the project result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction.
- Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

In the context of the above thresholds, the *L.A. CEQA Thresholds Guide* states that a determination of significance shall be made on a case-by case basis, considering the following factors:

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

Based on these factors, the Project would have a significant impact on energy resources if the project would result in an increase in demand for electricity or natural gas that exceeds available supply or distribution infrastructure capabilities, or the design of the project fails to incorporate energy conservation measures that go beyond existing requirements.

5. METHODOLOGY

5.1. WATER

The methodology for determining the significance of a project as it relates to a project's impact on water supply and distribution infrastructure is based on the *L.A. CEQA Thresholds Guide*. This methodology involves a review of the project's environmental setting, project impacts, cumulative impacts, and mitigation measures (if required). The following has been considered as part of the determination for this Project:

Environmental Setting

- Description of major water infrastructure serving the Project site, including the type of facilities, location and sizes, and any planned improvements.
- Description of the water conditions for the Project area and known improvement plans.

Project Impacts

- Evaluate the Project's water demand, taking into account design or operational features that would reduce or offset water demand.
- Determine what improvements would be needed, if any, to adequately serve the Project.
- Describe the degree to which presently scheduled off-site improvements offset impacts.

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

The existing and proposed water demand is based upon available site and occupancy information and a Water Supply Assessment provided by LADWP.

LADWP performed a hydraulic analysis of their water system to determine if adequate fire flow is available to the fire hydrants surrounding the Project Site. LADWP's approach consists of analyzing their water system model near 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 available water conveyance exists for future development. LADWP's approach consists of 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 for the results of the Service Advisory Request (SAR).

5.2. WASTEWATER

The methodology for determining the significance of a project as it relates to a project's impact on wastewater collection and treatment infrastructure is based on the *L.A. CEQA Thresholds Guide*. This methodology involves a review of the project's environmental setting, project impacts, cumulative impacts, and mitigation measures (if required). The following has been considered as part of the determination for this Project:

Environmental Setting

- Location of the Project and appropriate points of connection to the wastewater collection system on the pertinent Wye Map;
- Description of the existing wastewater system which would serve the Project, including its capacity and current flows.
- Summary of adopted wastewater-related plans and policies that are relevant to the Project area.

Project Impacts

- Evaluate the Project wastewater needs (anticipated daily average wastewater flow), taking into account design or operational features that would reduce or offset service impacts;
- Compare the Project's wastewater needs to the appropriate sewer's capacity and/or the wastewater flows anticipated in the Wastewater Facilities Plan or General Plan.

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

Pursuant to LAMC Section 64.15 BOS Wastewater Engineering Division made a preliminary analysis of the local and regional sewer conditions to determine if available wastewater conveyance and treatment capacity exists for future development of the

Project Site. BOS'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. The data used in this report are based on the findings of the BOS preliminary analysis. Refer to Exhibit 3 for the SCAR prepared for the Project, which contains the results of the BOS preliminary analysis. Additionally, BOS has prepared a Wastewater Services Information Letter providing additional context and evaluation, showing feasibility in accommodating the project.

5.3. ENERGY

The methodology for determining the significance of a project as it relates to a project's impact on wastewater collection and treatment infrastructure is based on the *L.A. CEQA Thresholds Guide*. This methodology involves a review of the project's environmental setting, project impacts, cumulative impacts, and mitigation measures as required. The following has been considered as part of the determination for this Project:

Environmental Setting

- Description of the electricity and natural gas supply and distribution infrastructure serving the project site. Include plans for new transmission facilities or expansion of existing facilities; and
- Summary of adopted energy conservation plans and policies relevant to the project

Project Impacts

- Evaluation of the new energy supply and distribution systems which the project would require.
- Describe the energy conservation features that would be incorporated into project design and/or operation that go beyond City requirements, or that would reduce the energy demand typically expected for the type of project proposed.
- Consult with the DWP or The Gas Company, if necessary to gauge the anticipated supply and demand conditions at project buildout.

This report analyzes the potential impacts of the Project on existing energy infrastructure by comparing the estimated Project energy demand with the available capacity. Will-serve letters from LADWP and SoCalGas (Exhibits 4 and 5) demonstrate the availability of sufficient energy resources to supply the Project's demand.

In addition, potential energy impacts were analyzed by evaluating the energy demand and energy conserving features of the Project to determine whether the Project would involve the wasteful, inefficient, and unnecessary use of energy resources.

6. PROJECT IMPACTS

6.1. CONSTRUCTION

6.1.1. WATER

Water demand for construction of the Project would be required for dust control, cleaning of equipment, excavation/export, removal and re-compaction, etc. 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). Although temporary construction water use would be greater than the existing water consumption at the Project Site (estimated to be approximately 342 gpd), it is anticipated that the existing water infrastructure would meet the limited and temporary water demand associated with construction of the Project. Impacts on the water infrastructure due to construction activity would therefore be less than significant.

In order to provide the necessary water demands, the Project may require construction of new public water mains within the public right of way. This work would include replacing the existing 6" mains in both 7th Place and Violet Street, and may require supplementary water main construction in Santa Fe Avenue. Construction impacts associated with the installation of water mains would primarily involve trenching in order to place these lines. During the permit phase LADWP will confirm precise water system upgrades within the affected streets described above. LADWP will secure permits from City of Los Angeles Department of Public Works and comply with all standard City requirements during construction.

The Project will also require construction of new, on-site water distribution lines to serve new buildings and facilities of the proposed Project. Construction impacts associated with the installation of water distribution lines would primarily involve trenching in order to place the water distribution lines below surface and would be limited to on-site water distribution, and minor off-site work associated with connections to the public main. Prior to ground disturbance, Project contractors would coordinate with LADWP to identify the locations and depth of all lines. Further, LADWP would be notified in advance of proposed ground disturbance activities to avoid water lines and disruption of water service.

The Project may require work to the public water mains, and such work would result in temporary construction-related impacts to accommodate trenching. No permanent impacts are expected. In fact, improved infrastructure and water supply capacity would be considered a long-term benefit. Such construction would be nominal, its implementation would be limited to aforementioned trenching, and would not affect the

Project area after construction is completed. Therefore, Project impacts on water associated with construction activities would be less than significant.

6.1.2. WASTEWATER

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

The Project will require construction of new on-site infrastructure to serve the new buildings. Construction impacts associated with wastewater infrastructure would primarily be confined to trenching for connections to public infrastructure. Installation of wastewater infrastructure will be limited to on-site wastewater distribution, and minor off-site work associated with connections to the public main. No upgrades to the public main are anticipated. A Construction Management Plan would be implemented to reduce any temporary pedestrian and traffic impacts. The contractor would implement the Construction Management Plan, which would ensure safe pedestrian access and vehicle travel and emergency vehicle access throughout the construction phase. Overall, when considering impacts resulting from the installation of any required wastewater infrastructure, all impacts are of a relatively short-term duration (i.e., months) and would cease to occur once the installation is complete. Therefore, Project impacts on wastewater associated with construction activities would be less than significant.

6.1.3. ENERGY

Electrical power would be consumed to construct the new buildings and facilities of the proposed Project. Typical uses include temporary power for lighting, equipment, construction trailers, etc. Overall, demolition and construction activities would require minimal electricity consumption and would not be expected to have any 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 be confined to trenching. Infrastructure improvements will comply with all applicable LADWP, SoCalGas, and City of LA requirements, which are expected to and would in fact mitigate impact to existing energy systems and adjacent properties. As stated above, to reduce any temporary pedestrian access and traffic impacts during any necessary off-site energy infrastructure improvements, a construction management plan would be implemented to ensure safe pedestrian and vehicular travel.

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 projected demands for both fire suppression and domestic water are considered. Although domestic water demand is the Project's main contributor to water consumption, fire flow demands have a much greater instantaneous impact on infrastructure, and therefore are the primary means for analyzing infrastructure capacity. Nevertheless, conservative analysis for both fire suppression and domestic water flows has been completed by LADWP for the Project. See Exhibits 1 and 2 for the results of the IFFAR and SAR, respectively, which together demonstrate that adequate water infrastructure capacity currently does not exist. However, as discussed above, the Project would include necessary upgrades to the water main system that would improve flow, pressure, and capacity to Violet Street and 7th Place, the Project would represent a net benefit post-construction.

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 adjacent hydrants flowing simultaneously with a residual pressure of 20 pounds per square inch. This translates to a required flow of 1,500 gpm for each hydrant. An IFFAR was submitted to LADWP regarding available fire hydrant flow to demonstrate compliance. The completed IFFAR, attached as Exhibit 1, shows 6 nearby hydrants flowing simultaneously for a combined 7000 gpm. As shown by the IFFAR, the Project Site currently does not have adequate fire flow available to demonstrate compliance with Section 57.507.3 of the LAMC. However, as discussed above, the Project would include necessary upgrades to improve the surrounding water mains that would facilitate the necessary flow and pressure requirements.

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 Fire Department review and approval during the design and permitting of the Project. 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. As noted, an SAR was submitted to LADWP to determine if the existing public water infrastructure could meet the demands of the Project. Based upon the SAR results, LADWP has outlined potential improvements to the water supply infrastructure which may be necessary. As any improvements will be completed to ensure that the system will be able to provide the necessary flow and pressure, and through compliance with LAFD and LADWP requirements, the Project's fire flow impacts to water infrastructure would be less than significant. ,

6.2.1.3. DOMESTIC WATER DEMAND

Water consumption estimates have been provided via a LADWP Water Supply Assessment and are summarized in Table 5 below. As mentioned, the Project may be required to construct improvements to the water supply infrastructure to ensure adequate water supply will be available. The Project proposes to connect to mains in both Violet Street and 7th Place with laterals that will be adequately sized to simultaneously accommodate fire demand and domestic demand. In addition, the services will include backflows and be metered separately per City requirements. Additionally, per the Water Supply Assessment, "LADWP anticipates the projected water demand from the 2143 Violet Street 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, the Project's impacts on water supply would be less than significant.

Table 5 – 2143 Violet Street Estimated Proposed Water Consumption				
Building Use	Quantity	Units	Quantity Rate (gpd/unit) ^(a)	Total Generation (GPD)
1 BDR APT	144	DU	185	26,640
2 BDR APT	149	DU	225	33,525
3 BDR APT/PH	60	DU	265	15,900
OFFICE	120	KGSF	187,374	22,485
ARTIST PRODUCTION AMENITY SPACE	926	KGSF	30	28
SWIMMING POOL	1	EACH	-	169
SPA	1	EACH	-	22
INDOOR AMENITIES	9,601	KGSF	50	480
RESTAURANT	1077 ^(b)	SEAT	30	32,310
BASE DEMAND ADJUSTMENT (TOTAL)	1	N/A	-	9,736
LANDSCAPING	8,952	SF	-	836
PARKING STRUCTURE ^(c)	334,543	SF	-	220
COOLING TOWER ^(c)	1500	TON	-	39,690
Total Base Proposed Water Consumption				182,041
Less Conservation, Removals, and Savings ^(c)				(73,026)
Net Additional Water Demand				109,015
(a) Rates are as provided by LADWP in their WSA, and have been derived from Bureau of Sanitation Sewer Generation Rates.				
(b) 25 sf / seat is used to determine seat count.				
(c) Represents the sum of multiple values in WSA Table 1				

6.2.2. WASTEWATER

6.2.2.1. SEWER GENERATION

In accordance with the *L.A. CEQA Thresholds Guide*, the base estimated sewer flows were based on the sewer generation factors for the Project's uses. Based on the type of use and generation factors, the Project will generate approximately 99,833 gallons per day (gpd) of wastewater. Wastewater generation estimates have been prepared based on

the City of LA Bureau of Sanitation sewerage generation factors for residential and commercial categories, and are summarized in Table 6 below.

Table 6 – 2143 Violet Street Estimated Proposed Wastewater Generation				
Building Use	Quantity	Units	Quantity Rate (gpd/unit) ^(a)	Total Generation (GPD)
1 BDR APT	144	DU	110	15,840
2 BDR APT	149	DU	150	22,350
3 BDR APT/PH	60	DU	190	11,400
OFFICE	187,374	KGSF	120	22,485
SWIMMING POOL	1		1	500
SPA	1		1	500
RESTAURANT ^(b)	1077	SEAT	30 ^(b)	26,250
ARTIST SPACE	926	KGSF	30	28
AMENITY SPACES	9,601	KGSF	50	480
Total Estimated Proposed Wastewater Generation			Total GPD	99,833
(a) The average daily flow based on 100% of City of Los Angeles sewerage generation factors.				
(b) 25 sf / seat is used to determine seat count.				

A SCAR was submitted to see whether the existing public infrastructure can accommodate the Project. The Bureau of Sanitation has analyzed the Project demands in conjunction with existing conditions and forecasted growth, and has approved the Project to discharge up to 99,833 gpd of wastewater to the existing 8-inch Vitrified Clay Pipe (VCP) sewer lines in 7th Place. Additionally, it is understood that, should the project require improvements to the sewer system, any potential improvements are understood to be generally limited to the point of discharge and would be permitted and approved by the City of Los Angeles. Therefore, impacts on wastewater would be less than significant. See Exhibit 3 for the approved SCAR.

As further discussed below, the existing design capacity of the Hyperion Service Area is approximately 550 million gallons per day (consisting of 450 mgd at the Hyperion Treatment Plant, 80 mgd at the Donald C. Tillman Water Reclamation Plant, Reclamation Plant, and 20 mgd at the Los Angeles–Glendale Water Reclamation Plant).¹³ The Project’s proposed wastewater generation is approximately 0.1 mgd. This is equal to far less than one percent of the Hyperion Treatment Plant’s capacity where the Project’s wastewater would be treated. Based on the WWSI Response Letter, it is understood that

¹³ 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#!, accessed March 27, 2017.

the Hyperion Treatment Plant has sufficient capacity for this project. Consequently, impacts on wastewater treatment capacity are less than significant.

As stated above, the existing capacity of the sewer line along 7th Place has a capacity of 0.307cfs (198,904 gpd). The Project’s sewage generation is approximately 99,833 gpd, which represents 50.19% of the existing pipe’s capacity. Due to these facts, and the approved SCAR, impacts on wastewater infrastructure would be less than significant.

6.2.3. ENERGY

6.2.3.1. ELECTRICITY

The Project will increase the demand for electricity resources. Based on estimates developed using CalEEMod software, the estimated projected electrical loads are provided in Table 7 below.

Table 7 - Estimated Proposed Electrical Demand				
Facility	Quantity	Metric	Electricity Demand ^(a) (kWH)/Year ^(b)	
			Without Project Features	With Project Features
APARTMENTS HIGH RISE	347	DU	1,374,150	1,304,120
ENCLOSED PARKING W/ ELEVATOR	828	Space	996,912	787,759
GENERAL OFFICE BUILDING	187,374	KGSF	2,433,990	2,171,200
HIGH TURNOVER (SIT-DOWN RESTAURANT)	21,858	KGSF	964,812	904,080
Total Proposed Electricity Demand for Project Site			5,769,864	5,167,159
Existing Total Electricity Demand for Project Site			562,975	562,975
Net Increase in Electricity Demand for Project Site Due to Project			5,206,889	4,604,184
^(a) The average projected load based on estimates from CalEEMod.				
^(b) 1 kW (kilowatt) = 1,000 Watts.				

A will serve letter was sent to LADWP to determine if there is sufficient capacity to serve the Project. Based on the response from LADWP (see Exhibit 4), impacts related to electrical services would be less than significant.

6.2.3.2. NATURAL GAS.

The Project will increase demand for natural gas resources. Based on analysis the estimated projected natural gas loads are provided in Table 8 below.

A will serve letter was sent to the gas company to determine if there is sufficient capacity to serve the Project. Based on the response from SoCalGas (see Exhibit 5), impacts related to gas would be less than significant.

Table 7 - Estimated Proposed Gas Demand				
Facility	Quantity	Metric	Electricity Demand ^(a) (kBTU)/Year ^(b)	
			Without Project Features	With Project Features
APARTMENTS HIGH RISE	347	DU	3,045,981	2,901,038
ENCLOSED PARKING W/ ELEVATOR	828	Space	0	0
GENERAL OFFICE BUILDING	187,374	KGSF	1,857,676	1,678,867
HIGH TURNOVER (SIT-DOWN RESTAURANT)	21,858	KGSF	4,803,762	4,714,295
Total Proposed Gas Demand for Project Site			9,707,419	9,294,200
Existing Total Gas Demand for Project Site			265,165	265,165
Net Increase in Gas/100 Demand for Project Site Due to Project			9,442,254	9,029,035
^(a) The average projected load based on estimates from CalEEMod.				
^(b) 1 kBTU = 0.975 CF.				

6.3. CUMULATIVE IMPACTS

6.3.1 WATER

The geographic context for the cumulative impact analysis on water supply is the LADWP service area (i.e., the City). LADWP, as a public water service provider, is required to prepare and periodically update an Urban Water Management Plan to plan and provide for water supplies to serve existing and projected demands. The 2015 UWMP prepared by LADWP accounts for existing development within the City, as well as projected growth through the year 2040.

Additionally, under the provisions of Senate Bill 610, LADWP is required to prepare a comprehensive water supply assessment for every new development "project" (as defined by Section 10912 of the Water Code) within its service area that reaches certain thresholds. The types of projects that are subject to the requirements of Senate Bill 610 tend to be larger projects that may or may not have been included within the growth projections of the 2015 UWMP. The water supply assessment for projects would evaluate the quality and reliability of existing and projected water supplies, as well as alternative sources of water supply and measures to secure alternative sources if needed.

Furthermore, through LADWP's 2015 UWMP process and the City's Securing L.A.'s Water Supply, the City will meet all new demand for water due to projected population growth to the year of 2040, through a combination of water conservation and water recycling. These plans outline the creation of sustainable sources of water for the City of Los Angeles to reduce dependence on imported supplies. LADWP is planning to achieve these goals by expanding its water conservation program. To increase recycled water use, LADWP is expanding the recycled water distribution system to provide water for irrigation, industrial use, and groundwater recharge.

Compliance of the Project and future development projects with regulatory requirements that promote water conservation such as the Los Angeles Municipal Code, including the City's Green Building Code, as well as AB 32, would also assist in assuring that adequate water supply is available on a cumulative basis.

Based on the above, it is anticipated that LADWP would be able to supply the water demands of the Project as well as future growth. Additionally, per the Water Supply Assessment, "LADWP anticipates the projected water demand from the 2143 Violet Street 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, cumulative impacts on water supply would be less than significant.

6.3.2 WASTEWATER

The Proposed Project will result in the additional generation of sewer flow. However, as discussed above the Bureau of Sanitation will conduct an analysis of existing and planned capacity and will determine that adequate capacity exists to serve the Project. Related projects connecting to the same sewer system are required to obtain a sewer connection permit and submit a Sewer Capacity Availability Request to the Bureau of Sanitation as part of the related project's development review. Impact determination will be provided following the completion of the SCAR analysis. If system upgrades are required as a result of a given project's additional flow, arrangements would be made between the related project and the Bureau of Sanitation to construct the necessary improvements.

Wastewater generated by the Proposed Project would be conveyed via the existing wastewater conveyance systems for treatment at the Hyperion Treatment Plant system. As previously stated, based on information from the Bureau of Sanitation, the existing design capacity of the Hyperion Service Area is approximately 550 million gallons per day (mgd) and the existing average daily flow for the system is approximately 260 mgd.¹⁴ The estimated wastewater generation of the Proposed Project (99,833 gpd) is less than the available capacity in the system and roughly 2% of the allotted annual wastewater flow increase for the Hyperion Treatment Plant. It is expected that the related projects would also be required to adhere to the Bureau of Sanitation's annual wastewater flow increase allotment.

Based on these forecasts the Project's increase in wastewater generation would be adequately accommodated within the Hyperion Service Area. In addition, the City Bureau of Sanitation's analysis confirms that the Hyperion Treatment Plant has sufficient capacity and regulatory allotment for the Proposed Project. Thus, operation of the Project would have a less than significant impact on wastewater treatment facilities.

6.3.3 ENERGY

The geographic context for the cumulative analysis of electricity is LADWP's service area and the geographic context for the cumulative analysis of natural gas is SoCal Gas' service area. The geographic context for transportation energy use is the City of Los Angeles. Growth within these geographies is anticipated to increase the demand for electricity, natural gas, and transportation energy, as well as the need for energy infrastructure, such as new or expanded energy facilities.

Buildout of the Project, the related projects, and additional growth forecasted to occur in the City would increase electricity consumption during project construction and operation and, thus, cumulatively increase the need for energy supplies and infrastructure capacity, such as new or expanded energy facilities. LADWP forecasts that its total energy sales in

¹⁴ City of Los Angeles Department of Public Works, Bureau of Sanitation, Sewer System Management Plan Hyperion Sanitary Sewer System, January 2019.

the 2022-2023 fiscal year (the project buildout year) will be 22,802 gigawatt-hours (GWh) of electricity.¹⁵ Based on the Project's estimated net new electrical consumption of up to 5,769,864 KW/year, the project would account for approximately 0.02% of LADWP's projected sales for the Project's build-out year. Although future development would result in the irreversible use of renewable and non-renewable electricity resources during project construction and operation which could limit future availability, the use of such resources would be on a relatively small scale and would be consistent with growth expectations for LADWP's service area. Furthermore, like the Project, during construction and operation, other future development projects would be expected to incorporate energy conservation features, comply with applicable regulations including CALGreen and State energy standards under Title 24, and incorporate mitigation measures, as necessary. Accordingly, the Project's contribution to cumulative impacts related to electricity consumption would not be cumulatively considerable and, thus, would be less than significant.

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 Integrated 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 Integrated 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. Each of the related projects would be reviewed by LADWP to identify necessary power facilities and service connections to meet the needs of their respective projects. Project applicants would be required to provide for the needs of their individual projects, thereby contributing to the electrical infrastructure in the Project area. As such, the Project's contribution to cumulative impacts with respect to electricity infrastructure would not be cumulatively considerable and, thus, would be less than significant.

Buildout of the Project and related projects in SoCal Gas' service area is expected to increase natural gas consumption during project construction and operation and, thus, cumulatively increase the need for natural gas supplies and infrastructure capacity. Based on the 2018 California Gas Report, the California Energy Commission estimates natural gas capacity within SoCal Gas' planning area will be approximately 3,775 million cubic feet/day in 2022, of which 1,087 million cubic feet/day is currently unallocated.¹⁶ The Project would account for approximately 0.22 percent of the 2022 forecasted consumption in SoCalGas's planning area. SoCalGas' forecasts consider projected

¹⁵ LADWP, 2017 Power Integrated Resource Plan, Appendix A, Table A-1.

¹⁶ California Gas and Electric Utilities, 2018 California Gas Report, p. 104.

population growth and development based on local and regional plans. Although future development projects would result in the irreversible use of natural gas resources which could limit future availability, the use of such resources would be on a relatively small scale and would be consistent with regional and local growth expectations for SoCalGas' service area. Furthermore, like the Project, during project construction and operation other future development projects would be expected to incorporate energy conservation features, comply with applicable regulations including CALGreen and State energy standards under Title 24, and incorporate mitigation measures, as necessary. Accordingly, the Project's contribution to cumulative impacts related to natural gas consumption would not be cumulatively considerable and, thus, would be less than significant.

Natural gas infrastructure is typically expanded in response to increasing demand, and system expansion and improvements by SoCalGas occur as needed. It is expected that SoCalGas would continue to expand delivery capacity if necessary to meet demand increases within its service area. Development projects within its service area would also be anticipated to incorporate site-specific infrastructure improvements, as appropriate. As such, cumulative impacts with respect to natural gas infrastructure would not be cumulatively considerable and, thus, would be less than significant.

7. LEVEL OF SIGNIFICANCE

Based on the analysis contained in this report, it is expected that there will be temporary construction-related impacts to the municipal water system as water main upgrades may be installed which would result in the net benefit of improved water supply and pressure on the streets surrounding the Project. Therefore, no significant impacts have been identified for water, wastewater, or energy.

EXHIBITS



City of Los Angeles

Los Angeles Department of Water and Power - Water System

INFORMATION OF FIRE FLOW AVAILABILITY

LAFD Fire Flow Requirement 6000 to 9000 GPM from four to six fire hydrants flowing simultaneously Water Service Map No.: _____
 LAFD Signature: _____
 Date Signed: _____

Applicant: Carlo Banzil
 Company Name: KPFF Consulting Engineers
 Address: 700 South Flower St., Los Angeles, CA 90017
 Telephone: 213-418-0201
 Email Address: carlo.banzil@kpff.com

	F-8749	F-8503	F-17107
Location:	7th Place	Violet Street	S. Santa Fe Avenue
Distance from Nearest Pipe Location (feet):			
Hydrant Size:	2 1/2 x 4D	2 1/2 x 4D	4D
Water Main Size (in):	6"	6"	24"
Static Pressure (psi):	62	62	62
Residual Pressure (psi):	42	42	42
Flow at 20 psi (gpm):	600	800	1400

NOTE: Data obtained from hydraulic analysis using peak hour.

Remarks: _____ ECMR No. W20170824015
 Project Site Address: 2143 Violet Street, Los Angeles, CA
 Please run all 6 hydrants simultaneously. See application #2 for additional hydrant numbers.
Do not meet LAFD Flow Requirement

Water Purveyor: Los Angeles Department of Water & Power Date: 8-30-2017
 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 /ak
AUG 21 2017

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

CARI CASTRO
AUG 24 2017



City of Los Angeles

Los Angeles Department of Water and Power - Water System

INFORMATION OF FIRE FLOW AVAILABILITY

LAFD Fire Flow Requirement 6000 to 9000 GPM from four to six fire hydrants flowing simultaneously Water Service Map No.: _____
 LAFD Signature: _____
 Date Signed: _____

Applicant: Carlo Banzil
 Company Name: KPFF Consulting Engineers
 Address: 700 South Flower St., Los Angeles, CA 90017
 Telephone: 213-418-0201
 Email Address: carlo.banzil@kpff.com

	F-17108	F-8774	F-8526
Location:	S. Santa Fe Avenue	S. Santa Fe Avenue	S. Santa Fe Avenue
Distance from Nearest Pipe Location (feet):			
Hydrant Size:	4D	4D	4D
Water Main Size (in):	24	24"	24"
Static Pressure (psi):	62	62	62
Residual Pressure (psi):	42	42	42
Flow at 20 psi (gpm):	1400	1400	1400

NOTE: Data obtained from hydraulic analysis using peak hour.

Remarks: _____ ECMR No. W20170824015
 Project Site Address: 2143 Violet Street, Los Angeles, CA
 Please run all 6 hydrants simultaneously. See application #1 for additional hydrant numbers.

Do not meet LAFD Flow Requirement

Water Purveyor: Los Angeles Department of Water & Power Date: 8-30-2017

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 /ak
 AUG 21 2017

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

CARI CASTRO
 AUG 24 2017



City of Los Angeles

Los Angeles Department of Water and Power - Water System



SAR NUMBER 62245

Fire Service Pressure Flow ReportSERVICE NUMBER **624482**

For: 2143 VIOLET ST Approved Date: **9-11-2017**

Proposed Service 6 INCH off of the

6 inch main in VIOLET ST on the NORTH side approximately

295 feet EAST of EAST of SANTA FE AVE The System maximum pressure is

62 psi based on street curb elevation of 243 feet above sea level at this location.

The distance from the DWP street main to the property line is 40 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)
	-228	805	-462	1170	-696
170	-241	830	-475	1190	-709
245	-254	855	-488	1205	-722
305	-267	875	-501	1225	-735
360	-280	900	-514	1240	-748
405	-293	920	-527	1255	-761
445	-306	940	-540	1275	-774
485	-319	960	-553	1290	-787
520	-332	985	-566	1305	-800
555	-345	1005	-579	1320	-813
585	-358	1025	-592	1335	-826
620	-371	1040	-605	1355	-839
645	-384	1060	-618	1370	-852
675	-397	1080	-631	1385	-865
705	-410	1100	-644	1400	-878
730	-423	1120	-657	1400	-879
755	-436	1135	-670		
780	-449	1155	-683		

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: SAR does not pass due to unacceptable pipe velocity (velocity is higher than the standard of 15 feet per second) and unacceptable pressure. Minimum of 25 PSI. System upgrade are required. (about 645-ft of 12-in main.)

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

This SAR is valid for one year from 09-11-17. Once the SAR expires, the applicant needs to re-apply and pay applicable processing fee.

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

AIDA FITTON

Prepared by

AIDA FITTON

Approved by

124-216

Water Service Map

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:	2125-2147 VIOLET ST	Sanitation Scar ID:	61-3870-0917
Date Submitted	09/19/2017	Request Will Serve Letter?	Yes
BOE District:	Central District		
Applicant:	Carlo Banzil, KPFF		
Address:	700 S Flower St, Suite 2100	City :	Los Angeles
State:	CA	Zip:	90017
Phone:	213.418.0201	Fax:	
Email:	carlo.banzil@kpff.com	BPA No.	pending
S-Map:	51513	Wye Map:	123A217-C 123A217-A

SIMM Map - Maintenance Hole Locations

No.	Street Name	U/S MH	D/S MH	Diam. (in)	Approved Flow %	Notes
1	along 7th Place	51513066	51513065	8	100.00	Revised Proposed Facility description :Original paid under SCAR# 1957,ID: 61-3784-0717

Proposed Facility Description

No.	Proposed Use Description	Sewage Generation (GPD)	Unit	Qty	GPD
1	RESIDENTIAL: APT - 1 BDRM. *6	110	DU	232	25,520
2	RESIDENTIAL: APT - 2 BDRMS *6	150	DU	81	12,150
3	RESIDENTIAL: APT - 3 BDRMS *6	190	DU	7	1,330
4	OFFICE BUILDING	120	KGSF	202,566	24,308
5	COMMERCIAL USE	50	KGSF	24,440	1,222
6	SWIMMING POOL (COMMERCIAL WITH BACKWASH FILTERS)		GPD	500	500
7	RESTAURANT: FULL SERVICE INDOOR SEAT	30	SEAT	978	29,340

Proposed Total Flow (gpd): 94,370

Remarks 1] This SCAR will replace previous SCAR ID 61-3784-0717. 2] Approved for the maximum allowable capacity of 94,370 GPD (65.53 gpm). 3] IWP is required.

Note: Results are good for 180 days from the date of approval by the Bureau of Sanitation

Date Processed:	10/19/2017	Expires On:	04/17/2018
-----------------	-------------------	-------------	-------------------

CITY OF LOS ANGELES

CALIFORNIA



ERIC GARCETTI
MAYOR

BOARD OF PUBLIC WORKS MEMBERS

KEVIN JAMES
PRESIDENT

AURA GARCIA
VICE PRESIDENT

DR. MICHAEL R. DAVIS
PRESIDENT PRO TEMPORE

JESSICA M. CALOZA
COMMISSIONER

M. TERESA VILLEGAS
COMMISSIONER

BUREAU OF SANITATION

ENRIQUE C. ZALDIVAR
DIRECTOR

TRACI J. MINAMIDE
CHIEF OPERATING OFFICER

LISA B. MOWERY
CHIEF FINANCIAL OFFICER

MAS DOJIRI
JOSE P. GARCIA
ALEXANDER E. HELOU
ASSISTANT DIRECTORS

TIMEYIN DAFETA
HYPERION EXECUTIVE PLANT MANAGER

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

April 21, 2020

Daniel Haefeli
KPF Consulting Engineers
700 S Flower Street, #2100
Los Angeles, CA 90017

Dear Mr. Haefeli,

2143 VIOLET STREET - REQUEST FOR WASTEWATER SERVICES INFORMATION

This is an update to the April 15, 2020 letter in response to your April 13, 2020 request for a review of your proposed mixed-use project located at 2143 Violet Street, Los Angeles, CA 90021. The project will consist of residential studios, commercial space, and office space. LA Sanitation has conducted a preliminary evaluation of the potential impacts to the wastewater and stormwater systems for the proposed project.

WASTEWATER REQUIREMENT

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

Projected Wastewater Discharges for the Proposed Project:

Type Description	Average Daily Flow per Type Description (GPD/UNIT)	Proposed No. of Units	Average Daily Flow (GPD)
Proposed			
Residential: Apt – 1 BDR	110/DU	250	27,500
Residential: Apt – 2 BDR	150/DU	84	12,600
Residential: Apt – 3 BDR	190/DU	13	2,470
Office Building	120/KGSF	187,374	22,485
Restaurant: Full Service Indoor Seat	30/Seat	875	26,250
Total			91,305

zero waste • zero wasted water

AN EQUAL EMPLOYMENT OPPORTUNITY - AFFIRMATIVE ACTION EMPLOYER

File Location: CEQA Review\FINAL CEQA Response LTRs\FINAL DRAFT\2143 Violet Street - Request for WWSI.doc

SEWER AVAILABILITY

The sewer infrastructure in the vicinity of the proposed project includes an existing 8-inch line on 7th Place. The sewage from the existing 8-inch line feeds into a 10-inch line on Santa Fe Avenue before discharging into a 60-inch sewer line on Enterprise Street. Figure 1 shows the details of the sewer system within the vicinity of the project. The current flow level (d/D) in the 8-inch line 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
8	7 th Place	*	198,904 GPD
8	7 th Place	25	198,904 GPD
10	Santa Fe Avenue	55	600,578 GPD
60	Enterprise Street	25	8.67 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.

STORMWATER REQUIREMENTS

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

POST-CONSTRUCTION MITIGATION REQUIREMENTS

In accordance with the Municipal Separate Storm Sewer (MS4) National Pollutant Discharge Elimination System (NPDES) Permit (Order No. R4-2012-0175, NPDES No. CAS004001) and the City of Los Angeles Stormwater and Urban Runoff Pollution Control requirements (Chapter VI, Article 4.4, of the Los Angeles Municipal Code), the Project shall comply with all mandatory

provisions to the Stormwater Pollution Control Measures for Development Planning (also known as Low Impact Development [LID] Ordinance). Prior to issuance of grading or building permits, the applicant shall submit a LID Plan to the City of Los Angeles, Public Works, LA Sanitation, Stormwater Program for review and approval. The LID Plan shall be prepared consistent with the requirements of the Planning and Land Development Handbook for Low Impact Development.

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

GREEN STREETS

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

CONSTRUCTION REQUIREMENTS

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

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

GROUNDWATER DEWATERING REUSE OPTIONS

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

On April 22, 2016 the City of Los Angeles Council passed Ordinance 184248 amending the City of Los Angeles Building Code, requiring developers to consider beneficial reuse of groundwater as a conservation measure and alternative to the common practice of discharging groundwater to the storm drain (SEC. 99.04.305.4). It reads as follows: “Where groundwater is being extracted and discharged, a system for onsite reuse of the groundwater, shall be developed and constructed. Alternatively, the groundwater may be discharged to the sewer.”

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

To help offset costs of water conservation and reuse systems, LADWP offers 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 Metropolitan Water District of Southern California. To learn more about available water conservation assistance programs, please contact LADWP Rebate Programs 1-888-376-3314 and LADWP TAP 1-800-544-4498, selection “3”.

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

SOLID RESOURCE REQUIREMENTS

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

Sincerely,

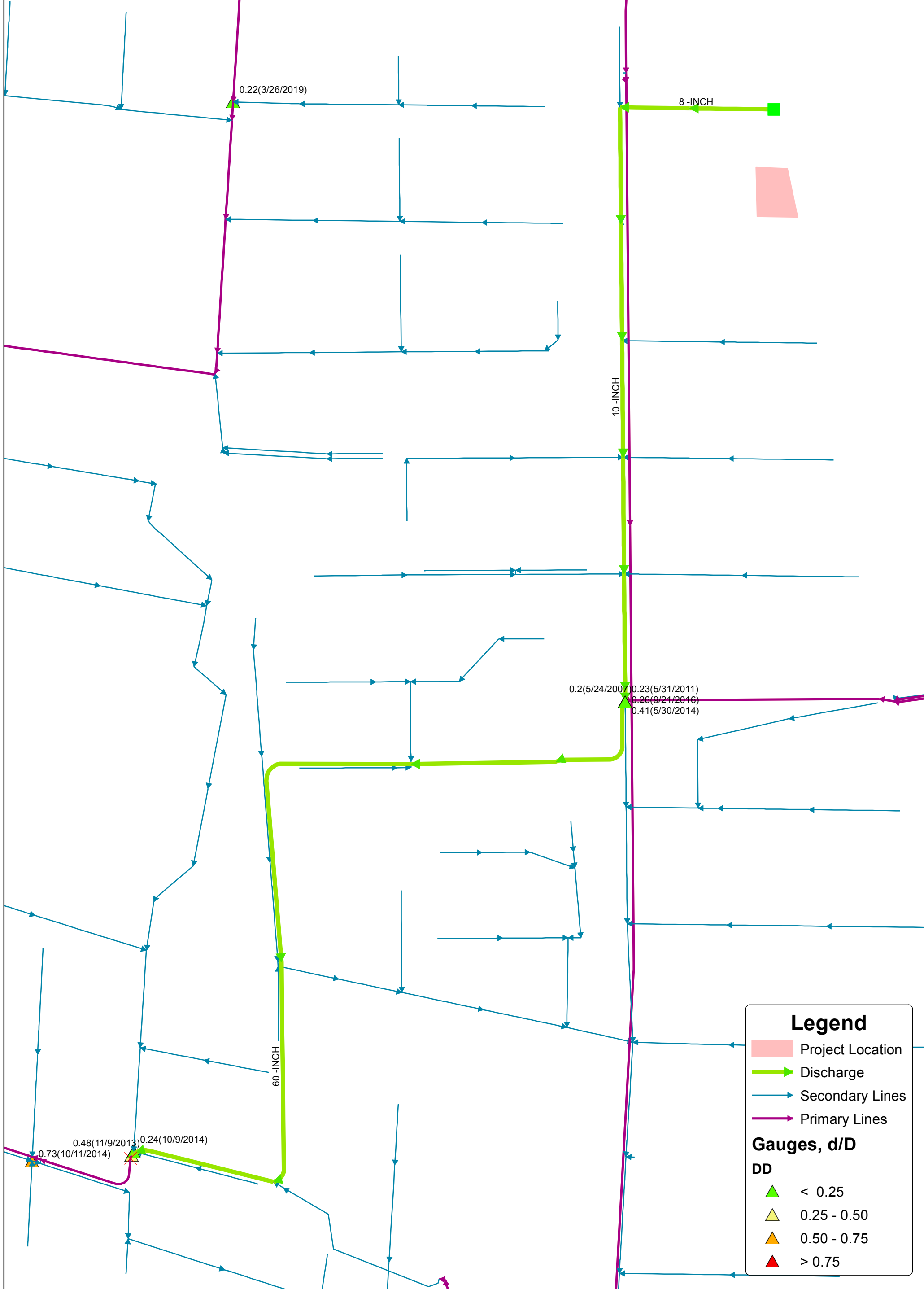


Ali Poosti, Division Manager
Wastewater Engineering Services Division
LA Sanitation and Environment

AP/CD: gc

Attachment: Figure 1 - Sewer Map

c: Kosta Kaporis, LASAN
Cyrous Gilani, LASAN
Christopher DeMonbrun, LASAN



Legend

- Project Location
- Discharge
- Secondary Lines
- Primary Lines

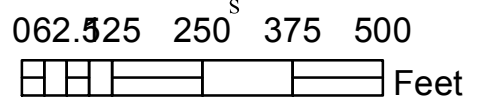
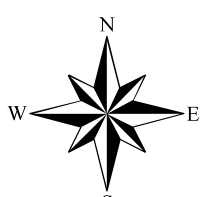
Gauges, d/D

DD

- < 0.25
- 0.25 - 0.50
- 0.50 - 0.75
- > 0.75

Wastewater Engineering Services Division
Bureau of Sanitation
City of Los Angeles

Figure 1
2143 Violet Street
Sewer Map



Thomas Brother Data reproduced with permission granted by THOMAS BROS MAP