

Appendix J

Utility Infrastructure Technical Report



WATER, SEWER, AND ENERGY
INFRASTRUCTURE ASSESSMENT REPORT

Senior Residential Community at the Bellwood

10324-10384, 10341-10381 Bellwood Avenue
Los Angeles, California 90064

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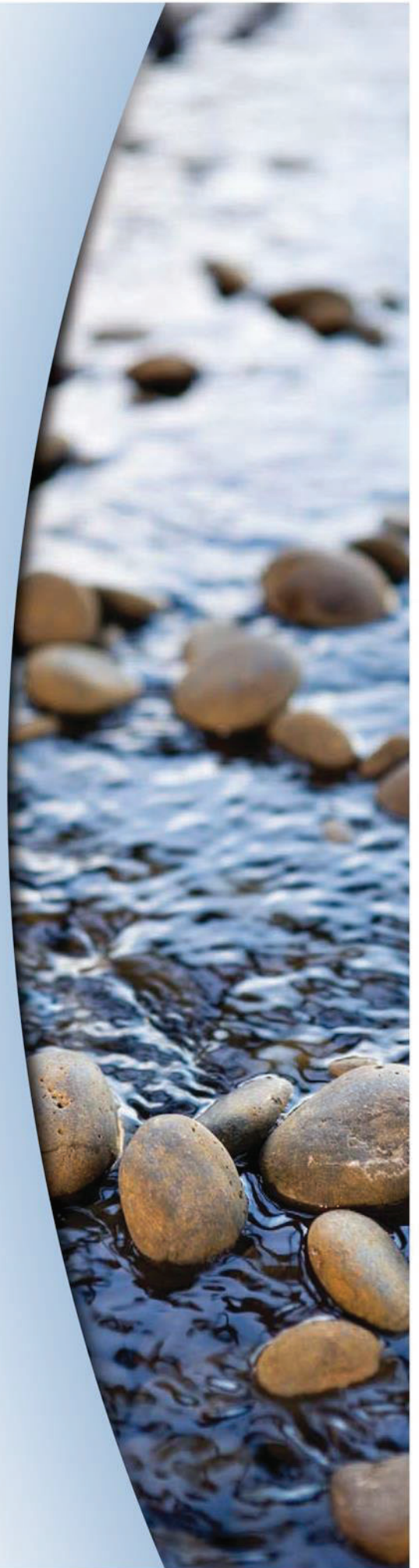


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1. INTRODUCTION

1.1 PROJECT DESCRIPTION

SBLP Century City, LLC (Applicant) is proposing to develop a new eldercare facility for persons 62 years of age and older (Project) on an approximately 2.22-acre site at 10328-10384 and 10341-10381 Bellwood Avenue (Project Site) in the City of Los Angeles (City). The Project Site includes the portion of Bellwood Avenue that bifurcates the Project Site and is proposed to be realigned through the Project Site. The Project Site is bounded by commercial uses adjacent to Olympic Boulevard to the north and northwest and residential uses to the west, south and east.

The existing site consists of three multi-family residential developments with a total of 43,939 sf, including 112 residential units, that would be removed to accommodate the Project. The existing development includes thirteen buildings south of Bellwood Avenue and two buildings north of Bellwood Avenue as well as associated parking areas.

The Project includes the development of a 3- to 6-story eldercare facility building over two (2) levels of substructure parking. The building would have 71 independent living dwelling units, 75 assisted living guest rooms, and 46 memory care guest rooms, totaling to 192 residential units. The residential units include 46 studios, 94 one-bedrooms and 52 two-bedrooms. The Project would comprise 241,754 sf of floor area. The Project would include approximately 50,463 sf of indoor common areas, including space for supporting services, common dining areas, a gym, indoor pool and spa, wellness center, activity rooms, family/living rooms, and building lobby and reception area, and 14,630 sf of outdoor common areas, including several courtyards and terraces that would be distributed throughout the Project Site. The Project also proposes the vacation and realignment of the portion of Bellwood Avenue that bifurcates the Project Site which would affect existing water and sewer infrastructure. The proposed Project land uses would potentially change the demands on water, sewer flows and energy systems that currently serve the Project Site.

1.2 SCOPE OF WORK

As part of the environmental impact report (EIR) for the Project, the purpose of this report is to analyze the potential impacts of the Project upon the existing water, wastewater and energy infrastructure systems. The current location of existing water, wastewater and energy infrastructure, analysis of potential Project impacts related to this infrastructure, and any applicable mitigation measures are discussed in this technical report.

2. REGULATORY FRAMEWORK

2.1 WATER

The Project Site receives water supply from the Los Angeles Department of Water and Power (LADWP), the primary water purveyor for the City. As the primary supplier of water to the City, LADWP must comply with all applicable regulations at the State and Federal level.

Applicable regulations affecting LADWP as a supplier of water include efficiency requirements, such as California Code of Regulations (CCR) Title 20, Chapter 4, Article 4, Section 1605, which requires all new plumbing fixtures to adhere to efficiency requirements, and CCR Title 24, Part 11, which requires a water use reduction of 20% above baseline for all homes, commercial, and state buildings.

The regulations also include reporting requirements, such as the California Urban Water Management Planning Act (1984) and Senate Bill (SB) 610. The California Urban Water Management Planning Act requires that municipalities and other water suppliers must create an updated Urban Water Management Plan (UWMP) every five years, outlining anticipated trends in supply and demand for the planning period. LADWP's most recent UWMP update was in 2015 and identified adequate supplies to match modeled demands through 2040. SB 610 requires water suppliers to submit a Water Supply Assessment (WSA) for all projects that propose over 500 residential dwelling units, 500,000 square feet of commercial floor space, or employ over 1,000 individuals or the equivalent water usage. A WSA will not be required for the Project as it proposes under 500 dwelling units.

2.2 WASTEWATER

The Project site is located in the City of Los Angeles, and therefore falls under the jurisdiction of the Bureau of Sanitation (BOS) of the City of Los Angeles Department of Public Works. The BOS serves over four million customers, and its sewer system is split into three subsystems – the Hyperion Sanitary Sewer System, the Terminal Island Water Reclamation Plant Sanitary Sewer System, and Regional Sanitary Sewer System. The Project Site lies within the Hyperion Sanitary Sewer System service area (“Hyperion”).

Projects that discharge into the Hyperion system must follow the regulations under Ordinance No. 166,060 adopted by the City in 1990. This Ordinance established an additional annual allotment of 5 million gallons per day (MGD), of which it allocates 1.7 MGD for priority projects, 0.4 MGD for public benefit projects, and 2.9 MGD for non-priority projects.

Under the City of Los Angeles Municipal Code (“Municipal Code”), all new projects connecting to the sewer collection system or proposing additional discharge must have a Sewer Capacity Availability Request (SCAR) performed by the City (Section 64.15, Municipal Code). The SCAR analyzes existing sewer system to determine whether or not the proposed increases in wastewater flows will generate any capacity issues. New connections to the sewer system must also pay associated fees (Sewerage Facilities Charge) based upon proposed flow strength and volume (Section 64.11.2, Municipal Code). Pursuant to the City's design criteria, any new sewer laterals less than 18” must be designed for a 100-year planning period, and depth of peak dry weather flows shall not exceed one half the diameter of the pipe ($d/D = 0.5$).

2.3 ENERGY

2.3.1 ELECTRICITY

The Project also receives its electricity from LADWP. LADWP conducts its long-term planning through its Integrated Resources Plan document, which analyzes demand trends and potential supply sources across a 20-year period. The 2017 Integrated Resource Plan (Energy IRP) identified trends in power generation, supply, and GHG reductions across the planning period. Among the changes in supply and demand structure noted was a goal to achieve a 65 percent Renewable Portfolio Standard (RPS) by 2036.

The 2017 Energy IRP notes that LADWP will respond to increases in demand by utilizing an improved portfolio of renewable and traditional energy sources. No potential deficiencies in supply are noted across the planning period.

2.3.2 NATURAL GAS

Southern California Gas Company (SoCalGas), the Project Site's natural gas supplier, prepares an annual California Gas Report (CA Gas Report) that identifies demand forecasts as well as potential changes in supply as part of State reporting requirements (California Public Utilities Commission Decision D.95-01-039). The CA Gas Report covers an 18-year demand and forecast period through 2035. The report noted potential declines in demand across the reporting period as statewide greenhouse gas emission reduction programs and public pressure to switch to emissions-free energy sources become more prevalent. It also identified adequate supply sources to cover the projected demand scenarios through the planning period.

3. ENVIRONMENTAL SETTING

3.1 WATER

3.1.1 REGIONAL

LADWP maintains water infrastructure serving the Project area and provides domestic water service to the Project Site. LADWP receives water primarily from the Los Angeles Aqueduct (LAA), local groundwater supply, the State Water Project (SWP) and the Colorado River Aqueduct (CRA); the latter two supplied by the Metropolitan Water District of Southern California (MWD). Over the past 20 years, water supplies from the LAA have decreased due to environmental concerns resulting in more dependency on other sources of water. Approximately 57% of LADWP water supplies have come from imported SWP and CRA supplies from MWD. Approximately 12% of LADWP water supplies come from local groundwater.¹

3.1.2 LOCAL

Available record drawings provided by the City show that currently there is a 4-inch water line splits the northerly and southerly portions of the Project Site in the existing Bellwood Avenue alignment, connecting to a 6-inch main line on Olympic Boulevard. Another existing 12-inch main line runs along the southbound side of Olympic Boulevard.

¹ Los Angeles Department of Water and Power. 2015 Urban Water Management Plan

3.1.3 ON-SITE

As described above, the Project Site is currently occupied by 112 existing residential apartment units and surface parking. Table 1 shows the estimated existing water demand for the Project Site, prepared based on 100 percent of the City of Los Angeles Bureau of Sanitation (BOS) wastewater generation factors for residential categories.

Table 1 – Existing Water Demand

| Land Use | Units | Average Consumption Rate (gpd/unit) ¹ | Total Average Daily Consumption (gpd) |
|---|-----------|--|---------------------------------------|
| Residential Building: Apartments | 112 Units | 150/Unit | 16,800 |
| Total Existing Water Demand | | | 16,800 |
| Notes | | | |
| ¹ The average daily flow based on 100% of BOS wastewater generation factors. | | | |

The Project Site is currently served by two (2) existing fire hydrants located within 300 feet of the Project Site boundary, along the north side of Olympic Boulevard fronting the neighboring properties. The hydrants are served by the 6-inch main line in Olympic Boulevard.

3.2 WASTEWATER

3.2.1 REGIONAL

The BOS's most current Integrated Resources Plan (BOS IRP) notes that 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), and that the existing average daily flow for the system as of 2017 is approximately 300 mgd.

3.2.2 LOCAL

The BOS provides sanitary sewer service to the Project Site through a sewer system in the surrounding streets. There is an existing 8-inch sewer main along Bellwood Avenue, which the northerly and southerly portions of the Project Site tie into. This line flows northwesterly to a 10-inch main on Olympic Boulevard and then the flow continues southwesterly along Olympic Boulevard. There is also an 8-inch sewer line south of the Project Site, which the neighboring properties to the south tie into. This 8-inch line flows southwesterly, tying into an 8-inch line in Kerwood Avenue, and then ties into the 10-inch main on Olympic Boulevard. Each of these sewer mains that are adjacent to the Project Site connect to a network of sewer lines that ultimately convey wastewater to the City's Hyperion Treatment Plant. Wastewater from the Project Site ultimately flows to the Hyperion Treatment Plant (HTP) system.

3.2.3 ON-SITE

Based on available record data from the City, there are currently ten existing sewer laterals connecting from the City’s public sewer system to the Project Site. Two of these laterals serve the northerly portions of the Project Site, and the other eight serve the southerly portions of the Project Site. They all connect to the 8-inch line in Bellwood Avenue.

Table 2 shows the estimated existing wastewater generation for the Project Site, based on BOS wastewater generation factors.

Table 2 – Estimated Existing Wastewater Generation

| Land Use | Units | Average Generation Factor (gpd/unit) ¹ | Total Average Daily Demand (gpd) |
|---|-----------|---|----------------------------------|
| Residential Building: Apartments | 112 Units | 150/Unit | 16,800 |
| Total Existing Sewer Demand | | | 16,800 |
| Notes | | | |
| ¹ Based on 100% of the BOS wastewater generation factors | | | |

3.3 ENERGY

3.3.1 ELECTRICITY

3.3.1.1 REGIONAL

The LADWP is the supplier of electricity to the Project Site. LADWP’s service area extends across the City of Los Angeles, serving over 1.4 million customers and 26 million megawatt-hours (MWh) of power per year. Sources of power for LADWP include hydro, coal, natural gas, and a suite of renewable energy sources.

LADWP’s infrastructure includes over 10,000 miles of overhead and underground distribution lines and cable across its service area.

3.3.1.2 LOCAL

Based on substructure records there is an existing underground electrical line near the Project Site, running along Olympic Boulevard, which provides connections to the Project Site, adjacent properties and service.

3.3.1.3 ON-SITE

Existing electricity demands have been prepared based on the existing building program and are summarized in Table 3 below.

Table 3 – Estimated Existing Electricity Demands

| Land Use | Units | Total Average Daily Demand (kWh/year) ^{1,2} |
|---|-----------|--|
| Residential Building: Apartments | 112 Units | 683,895 |
| Total Existing Electricity Demand | | 683,895 |
| Notes | | |
| ¹ CalEEMod was used to calculate the electricity demand based on land use. | | |
| ² Kilowatt hours (kWh) | | |
| Source: Eyestone Environmental, 2020. See Energy Appendix in the Project Draft EIR. | | |

3.3.2 NATURAL GAS

3.3.2.1 REGIONAL

Natural gas service to the Project Site is provided by SoCalGas. SoCalGas is the primary distributor of natural gas in Southern California, providing service to a 20,000 square-mile area. Its distribution system is the nation’s largest natural gas distribution utility, and SoCalGas serves over 21.6 million customers.

3.3.2.2 LOCAL

Substructure records indicate that Southern California Gas Company operates a 3-inch gas line, fronting 16-feet west of the centerline of Bellwood Avenue, and it appears that natural gas service is provided to the Project Site via this line.

3.3.2.3 ON-SITE

Existing natural gas demand estimates have been prepared based on the existing building program and are summarized in Table 4 below.

Table 4 – Estimated Existing Natural Gas Demand

| Land Use | Units | Total Average Demand (cf/year) ^{1,2} |
|---|-----------|---|
| Residential Building: Apartments | 112 Units | 1,947,257 |
| Total Existing Natural Gas Demand | | 1,947,257 |
| Notes | | |
| ¹ CalEEMod was used to calculate the natural gas demand based on land use. | | |
| ² Cubic feet (cf) | | |
| Source: Eyestone Environmental, 2020. See Energy Appendix in the Project Draft EIR. | | |

4. SIGNIFICANCE THRESHOLDS

4.1 WATER

Appendix G of the CEQA Guidelines provides a set of sample questions that address impacts with regard to water infrastructure. These questions are as follows:

Would the project:

- Require or result in the relocation or construction of new or expanded water, or wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities or expansion of existing 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 these questions from the CEQA Guidelines, the City of Los Angeles CEQA Thresholds Guide determines the significance of a project 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, taking into account 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

4.2 WASTEWATER

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

Would the project:

- Require or result in the relocation or construction of new or expanded water, or wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities or expansion of existing 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 these questions from the CEQA Guidelines, the City of Los Angeles CEQA Thresholds Guide states that a project would normally have a significant wastewater impact if:

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

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

4.3 ENERGY

Appendix G of the CEQA Guidelines includes a question that addresses impacts with regard to energy infrastructure. This question is:

Would the project:

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

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 factor:

- The extent to which the project would require new (off-site) energy supply facilities and distribution infrastructure; or capacity enhancing alterations to existing facilities;

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 City of Los Angeles 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 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/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.

Based on available site and occupancy information, the BOS sewer generation factors were employed to estimate the existing water consumption. 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 (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. See Attachment A for LADWP's Water Pressure – Flow Report (SAR) for the Project as well as the Information on Fire Flow Availability Report (IFFAR).

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 City of Los Angeles 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

- Location of the Project and appropriate points of connection to the wastewater collection system on the pertinent Sewer Wye Map;
- Description of the existing wastewater system which would serve the Project, including its capacity and current flows.

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 demand with the calculated available capacity of the existing facilities.

The 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. The WWSI prepared for the Project, which contains the results of the BOS preliminary analysis is included in Attachment D. Additional permitting (e.g. SCAR submittals) may be required by BOS.

5.3 ENERGY

The methodology for determining the significance of a project as it relates to a project's impact on energy infrastructure is based on the City of Los Angeles 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 existing facilities.
- 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 impact of the Project on existing energy infrastructure by examining existing and buildout conditions for energy usage. A will-serve letter from LADWP shows availability of sufficient energy resources to supply the Project's demand. Additional analysis of the SoCalGas natural gas projections for future capacity was also performed to ensure adequate capacity to provide natural gas to the Project and other projects within the SoCalGas service area.

6. PROJECT IMPACTS

6.1 CONSTRUCTION

6.1.1 WATER

During construction, water will be required intermittently for dust control, equipment cleaning, soil grading and preparation during the early phases of the Project. The latter phases of construction normally require less water usage. Construction water demands are typically less than the long term operational water demand of a project and are temporary. For purposes of analysis, peak water demand during Project construction is estimated to be approximately 1,000 gpd, based on the site disturbance area and Project scale. It is anticipated that existing water infrastructure would be sufficient to meet the limited, temporary water demand associated with construction of the Project. Therefore, impacts to water infrastructure due to construction activity are considered less than significant.

The Project will require relocation of the existing water lines that serve the Project Site, and construction of new on-site water distribution lines to serve the new building (see Attachment B and Section 6.2.1.2). This is due to the proposed realignment of Bellwood Avenue which currently bifurcates the north and south portions of the Project Site. The drive aisle for the portion of Bellwood Avenue in the Project Site is proposed to be realigned further north of its existing location and the existing 4-inch line would be decommissioned, removed and replaced with two new distinct water main extensions including approximately 250 feet of new 8-inch line to be installed in the easterly drive aisle of Bellwood Avenue and approximately 213 feet of new 8-inch line to be installed in the westerly drive aisle of Bellwood Avenue. These two new 8-inch main lines would tie into the existing 12-inch main in Olympic Boulevard. Prior to buildout of the water system, with approval from LADWP and the City, temporary water supply needs during construction may be obtained from existing metered water connections or fire hydrants. Construction impacts associated with the installation of water distribution lines would primarily involve trenching to place the lines below surface. Installation of new water infrastructure will be limited to on-site water distribution and off-site work associated with installation of the new 8-inch water lines and connections to the public main in Olympic Boulevard. Prior to ground disturbance, Project contractors would coordinate with LADWP to identify the locations and depths of all lines. Further, LADWP would be notified in advance of proposed ground disturbance activities to avoid existing water lines and disruption of water service. Finally, a Construction Management Plan, which would ensure safe pedestrian access as well as emergency vehicle access and safe vehicle travel in general, will be implemented to reduce any temporary pedestrian and traffic impacts occurring as a result of construction activities. Therefore, Project impacts on water infrastructure associated with construction activities would be less than significant.

6.1.2 WASTEWATER

Construction activities for the Project could result in temporary wastewater generation on-site. However, such use would be temporary and nominal when compared with the wastewater generated by the Project. In addition, construction workers would typically utilize portable restrooms and hand wash areas, which would not contribute to direct wastewater flows to the City's wastewater system. Thus, wastewater generation from Project construction activities is not

anticipated to cause any measurable increase in wastewater flows. Therefore, the Project's construction impacts to the wastewater system would be less than significant.

The Project will require the abandonment and removal of the existing 325 feet of the 8-inch sewer line in Bellwood Avenue on the Project Site and adjacent on-site lateral lines; and construction of on-site wastewater infrastructure to serve the new building, and potential limited extension/upgrade and/or relocation of existing adjacent public wastewater 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 on-site wastewater distribution and minor off-site work associated with connections to the public main. No upgrades to the public main are anticipated. Any work that may affect services to the existing sewer lines will be coordinated with the City of Los Angeles. Furthermore, a Construction Management Plan, which would ensure safe pedestrian access as well as emergency vehicle access and safe vehicle travel in general, will be implemented to reduce any temporary pedestrian and traffic impacts occurring as a result of construction activities. Moreover, when considering impacts resulting from the installation of any required wastewater infrastructure, all impacts are of a relatively 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

Electricity provided by LADWP will be utilized during the construction process for various purposes. Demands will include indoor and outdoor lighting and machinery and equipment charging and operation. All demands will be supplied by existing electrical infrastructure and will not have any adverse impact on electrical supply for the area.

Natural gas will not be utilized during construction.

All improvements to energy infrastructure will comply with applicable local, regional, and state requirements and regulations, including City of Los Angeles, LADWP, and SoCalGas. Adherence to these requirements will ensure that any potential impacts are mitigated or reduced. Therefore, construction will not have an adverse impact on either electricity or natural gas infrastructure.

6.2 OPERATION

6.2.1 WATER

6.2.1.1 WATER CONSUMPTION

Based on the Project's proposed land uses, the Project's estimated water consumption is approximately 42,741 gallons per day (gpd), resulting in a net increased water demand of approximately 25,941 gpd. These demand numbers were calculated using 100 percent of the BOS corresponding wastewater generation factors.

Table 5 – Estimated Proposed Water Demand

| Land Use | Units | Avg. Generation Factor (gpd/unit) ¹ | Total Water Demand (gpd) |
|--|-----------|--|--------------------------|
| Senior Independent Units | 71 units | 110 gpd/unit | 7,810 |
| Assisted Living Guest Rooms | 75 units | 110 gpd/unit | 8,250 |
| Memory Care Guest Rooms | 46 units | 110 gpd/unit | 5,060 |
| Indoor Common Areas | 50,463 SF | 50 gpd/1,000 SF | 2,523 |
| Outdoor Common Areas | 14,630 SF | 50 gpd/1,000 SF | 732 |
| Indoor Swimming Pool | 1 unit | 16,458 gpd/unit | 16,458 |
| Indoor Spa | 1 unit | 1,908 gpd/unit | 1,908 |
| Total Proposed Water Demand | | | 42,741 |
| Total Existing Water Demand | | | 16,800 |
| Project Net Water Demand (Proposed – Existing) | | | +25,941 |
| Notes | | | |
| ¹ Based on 100% of the BOS sewer generation factors and correspondence from BOS to Department of City Planning regarding the projected wastewater discharges for the proposed Project dated July 11, 2019 (see Attachment D). | | | |

6.2.1.2 WATER INFRASTRUCTURE ASSESSMENT

The current 4-inch water main needs to be upgraded in order to serve the proposed development with adequate water supply as noted in the SAR (see Attachment A). Therefore, the Project will require removal and upsizing of the existing water lines that serve the Project Site, and construction of new on-site water distribution lines to serve the new building. This is due to both the proposed realignment of Bellwood Avenue which currently bifurcates the north and south portions of the Project Site and the insufficient capacity within the existing 4-inch water main to convey the proposed increased water demand.

To ensure adequate water conveyance capacity is provided for the Project, the current 4-inch water line would be upgraded. As referenced in the Information on Fire Flow Availability Report (IFFAR) in Attachment A, the existing 4-inch line would be abandoned and replaced with approximately 250 feet of new 8-inch line to be installed in the easterly drive aisle of Bellwood Avenue and approximately 213 feet of new 8-inch main extensions to be installed in the westerly drive aisle of Bellwood Avenue. These two new 8-inch lines would tie into the existing 12-inch

main in Olympic Boulevard. Please see Attachment B for an exhibit showing these improvements. These upgrades were identified by LADWP as part of the SAR and IFFAR process (Attachment A) in order to serve the proposed domestic water demand and to meet fire flow requirements as discussed below.

A Will Serve Letter and Service Map was received from LADWP on 02.13.2019, which confirmed the availability of water service for the project (see Attachment C).

6.2.1.3 FIRE FLOW REQUIREMENTS

Per Los Angeles Fire Department requirements, and as indicated by the Los Angeles Fire Department, the Project would be considered to be within the commercial category for fire flow purposes and therefore would require 6,000 gpm to 9,000 gpm from four to six adjacent fire hydrants flowing simultaneously (per Chapter V Article 7 of the City of Los Angeles Municipal Code)². An IFFAR was received for the two (2) existing fire hydrants currently serving the Project Site, as well as two additional proposed private hydrants (see Attachment A). One proposed private hydrant would be located within the private drive aisle fronting the building, and the second would be placed behind the building.

As shown in the IFFAR, the two existing hydrants currently provide 1,500 gpm each and the proposed private hydrants would also provide a minimum of 1,500 gpm each. Therefore, the four (4) hydrants surrounding the site would meet the minimum fire flow requirement of 6,000 gpm. The taps into the new 8-inch water lines discussed above that would be installed as part of the Project would be 6 inches for the proposed hydrants. The minimum requirement of 6,000 gpm for the hydrants was used to determine the upsizing of the existing 4-inch line, discussed above. The upgraded water system surrounding the Project Site would be capable of providing 8,000 gpm of flow. An analysis was run by LADWP at the end of each of the new proposed 8-inch lines for the installation of 8-inch fire service meters, and the proposed upgrades were deemed adequate to provide the necessary fire service to the site.

6.2.2 WASTEWATER

6.2.2.1 SEWER GENERATION

In accordance with the LA CEQA Thresholds Guide, the Project's estimated sewer flows were based on the BOS's sewage generation factors for residential categories as well the WWSI, which is included in Attachment D. Based on the proposed uses and generation factors, the Project's projected wastewater generation is approximately 42,741 gpd, representing a net increase in wastewater generation at the Project Site of approximately 25,941 gpd. A breakdown of these wastewater generation calculations is provided in Table 6.

² Counter meeting with Fire Inspector II, Robert Duff, on January 22, 2019.

Table 6 – Estimated Proposed Wastewater Generation

| Land Use | Units | Avg. Generation Factor (gpd/unit) ¹ | Total Wastewater Generation (gpd) |
|--|-----------|--|-----------------------------------|
| Senior Independent Units | 71 units | 110 gpd/unit | 7,810 |
| Assisted Living Guest Rooms | 75 units | 110 gpd/unit | 8,250 |
| Memory Care Guest Rooms | 46 units | 110 gpd/unit | 5,060 |
| Indoor Common Areas | 50,463 SF | 50 gpd/1,000 SF | 2,523 |
| Outdoor Common Areas | 14,630 SF | 50 GPD/1,000 SF | 732 |
| Indoor Swimming Pool | 1 unit | 16,458 gpd/unit | 16,458 |
| Indoor Spa | 1 unit | 1,908 gpd/unit | 1,908 |
| Total Proposed Wastewater Flow | | | 42,741 |
| Total Existing Wastewater Flow | | | 16,800 |
| Project Net Wastewater Flow (Proposed – Existing) | | | +25,941 |
| Notes | | | |
| ¹ Based on 100% of the BOS sewer generation factors and correspondence from BOS to Department of City Planning regarding the projected wastewater discharges for the proposed Project dated July 11, 2019 (see Attachment D). | | | |

As mentioned, the WWSI estimates wastewater generation to be approximately 42,741 gpd which is summarized in Table 6. This represents an increase in flows from existing conditions by approximately 25,941 gpd. As noted in the WWSI, it is anticipated that adequate capacity exists in the sewer infrastructure surrounding the project. Further detailed gauging and evaluation, as required by Municipal Code Section 64.14, would be conducted to obtain final approval of sewer capacity and connection permit for the Project during the Project’s permitting process.

6.2.2.2 INFRASTRUCTURE CAPACITY

The sewer main in Bellwood Avenue or Kerwood Avenue will serve the Project, and sewage from the Project Site is conveyed to the City’s Hyperion Treatment Plant. The BOS’s most current IRP notes that 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), and that the existing average daily flow for the system as of 2017 is approximately 300 mgd.

The Project’s estimated wastewater generation increase of 25,941 gpd or 0.03 mgd comprises less than 0.01 percent of the available capacity in the system and is within the system’s capacity of 250 mgd and is therefore within the remaining capacity. Therefore, based on the WWSI prepared for the Project and the available wastewater treatment capacity, impacts on wastewater infrastructure would be less than significant.

6.2.3 ENERGY

6.2.3.1 ELECTRICITY

The Project Site would continue to be served by the existing electrical line that runs along Olympic Boulevard. Operation of the Project under proposed buildout conditions is anticipated to increase electricity demands by approximately 884,887 kWh per year.

The estimated proposed electricity demand under buildout conditions for the Project is summarized in Table 7 below.

Table 7 – Estimated Proposed Electricity Demand

| Land Use | Units | Total Avg. (kWh/year) ^{1,2} |
|---|-----------|--------------------------------------|
| Eldercare Facility | 192 units | 1,568,782 |
| Total Proposed Electricity Demand | | 1,568,782 |
| Total Existing Electricity Demand | | 683,895 |
| Project Net Electricity Demand (Proposed – Existing) | | 884,887 |
| Notes | | |
| ¹ CalEEMod was used to calculate the electricity demand based on land use. | | |
| ² Kilowatt hours (kWh) | | |
| Source: Eystone Environmental, 2020. See Energy Appendix in the Project Draft EIR. | | |

A Will Serve Letter was received from LADWP on 10.18.2018, which confirmed the availability of electric service for the project. (See Attachment E). The letter noted that the estimated increase in power requirement under buildout conditions was part of the total load growth forecast for the City and was taken into account with the planned growth of the power system. Based on the letter received by LADWP, impacts to electricity associated with operations of the proposed Project would be less than significant.

6.2.3.2 NATURAL GAS

The Project Site would continue to be served by the existing 3-inch gas line on Bellwood Avenue. Natural gas usage is projected to increase by 462,208 cf per year under proposed buildout conditions.

The estimated proposed natural gas demand under buildout conditions for the Project is provided in Table 8 below.

Table 8 – Estimated Proposed Natural Gas Demand

| Land Use | Units | Total Average Demand (cf/year) ^{1,2} |
|---|-----------|---|
| Eldercare Facility | 192 units | 2,409,465 |
| Total Proposed Natural Gas Demand | | 2,409,465 |
| Total Existing Natural Gas Demand | | 1,947,257 |
| Project Net Natural Gas Demand (Proposed – Existing) | | 462,208 |
| Notes | | |
| ¹ CalEEmod was used to calculate the natural gas demand based on land use. | | |
| ² Cubic feet (cf) | | |
| Source: Eyestone Environmental, 2020. See Energy Appendix in the Project Draft EIR. | | |

A Will Serve Letter was received from Southern California Gas Company on 02.01.2019 confirming the availability of natural gas service for the Project. (See Attachment F).

7. CUMULATIVE IMPACTS

7.1 WATER

As mentioned above, the Project will include the upsizing of the 4-inch water line that serves the Project Site to provide adequate conveyance of water supply for domestic use and fire flows. In addition, the Project will include the appropriate amount of new fire hydrants to meet the requirements of the Municipal Code to provide 6,000 gpm to 9,000 gpm from four to six adjacent fire hydrants flowing simultaneously. Therefore, sufficient water infrastructure and fire protection will be provided for the Project and no significant impacts are anticipated.

With regard to potential cumulative impacts on water supply within the LADWP service area that serves the Project, LADWP, as a public water service provider, is required to prepare and periodically update an Urban Water Management Plan (UWMP) 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. Average demands from 2011-2014 in the LADWP service area are approximately 566,990 acre-feet per year (AFY). Demands within the LADWP service area are anticipated to increase to 675,700 AFY to 709,500 AFY in 2040 depending on climate scenarios (i.e. average years versus drought years). This yields an anticipated increase in demands of 108,710 AFY to 142,510 AFY. The increase in water demands of 25,941 gpd or 29.0 AFY from the proposed Project is well within the planned increases in water demands within the LADWP service area. Based on the above, it is anticipated that LADWP would be able to supply the demands of the Project and future growth. Therefore, cumulative impacts on water supply would be less than significant.

7.2 WASTEWATER

The Project will result in the additional generation of sewer flow. However, as discussed above, the BOS has conducted quantified Project wastewater flows and anticipates 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 BOS as part of the related project's development review. 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 BOS to construct the necessary improvements. Impact determination will be provided following the completion of the SCAR analysis.

Wastewater generated by the 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 BOS, 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 300 mgd. The Project's total estimated wastewater generation increase of 25,941 gpd summarized in Table 6 comprises less than 0.01 percent of the available capacity in the system (250 mgd) and approximately 0.5 percent of the 5 mgd annual allotment of wastewater flow increase for the Hyperion Treatment Plant per Ordinance No. 166060. It is expected that 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 by the Hyperion Service Area. In addition, the BOS'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. Related projects must go through the same analysis to determine if any facilities will need to be upgraded to accommodate for the increase in capacity. Therefore, cumulative impacts would be less than significant.

7.3 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 SoCalGas' service area.

The Project will result in additional electricity demand. As noted above, LADWP has indicated through a will-serve letter dated 10.18.2018 (see Attachment E) that the increase in electrical demands created by the Project are within its planning thresholds and that they will not create an adverse impact on its infrastructure serving the Project Site. Electricity will be delivered through the same infrastructure under buildout conditions as existing conditions.

Natural gas demand is also anticipated to increase as a result of implementation of the proposed Project. The Project will utilize the same 3-inch line on Bellwood Ave that is used under existing conditions. Buildout of the Project is expected to increase natural gas consumption during operation and cumulatively increase the need for natural gas supplies and infrastructure capacity. As stated above, the Project's estimated net increase in demand for natural gas is 462,208 cf per year, or approximately 1,266 cf per day. Based on the 2018 California Gas Report, the California Energy and Electric Utilities estimates natural gas

consumption within SoCalGas' planning area will be approximately 2.49 billion cf/day in 2023 (the Project's buildout year).³ The Project would account for approximately 0.00005 percent of the 2023 forecasted consumption in SoCalGas' planning area.. Therefore, cumulative impacts regarding natural gas capacity would be less than significant.

8. LEVEL OF SIGNIFICANCE

Based on the analysis provided in this report, Project impacts related to water, wastewater, electricity and natural gas would be less than significant.

³ California Gas and Electric Utilities, 2018 California Gas Report, p. 100.

ATTACHMENT A

ATTACHMENT A – CITY OF LOS ANGELES, LADWP, WATER PRESSURE – FLOW REPORT (SAR) AND INFORMATION ON FIRE FLOW AVAILABILITY (IFFAR)



City of Los Angeles

Los Angeles Department of Water and Power - Water System



SAR NUMBER 73170

Fire Service Pressure Flow ReportSERVICE NUMBER **629665**For: 10330 BELLWOOD AVE Approved Date: **12-14-2018**Proposed Service 6 INCH off of the4 inch main in BELLWOOD AV on the EAST side approximately200 feet SOUTH of SOUTH of OLYMPIC BL The System maximum pressure is89 psi based on street curb elevation of 222 feet above sea level at this location.The distance from the DWP street main to the property line is 17 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 | 78 | 590 | 60 | 855 | 42 |
| 125 | 77 | 605 | 59 | 870 | 41 |
| 180 | 76 | 625 | 58 | 880 | 40 |
| 225 | 75 | 640 | 57 | 895 | 39 |
| 260 | 74 | 655 | 56 | 905 | 38 |
| 295 | 73 | 670 | 55 | 920 | 37 |
| 325 | 72 | 690 | 54 | 930 | 36 |
| 355 | 71 | 705 | 53 | 940 | 35 |
| 380 | 70 | 720 | 52 | 955 | 34 |
| 405 | 69 | 735 | 51 | 965 | 33 |
| 430 | 68 | 745 | 50 | 975 | 32 |
| 450 | 67 | 760 | 49 | 990 | 31 |
| 475 | 66 | 775 | 48 | 1000 | 30 |
| 495 | 65 | 790 | 47 | | |
| 515 | 64 | 805 | 46 | | |
| 535 | 63 | 815 | 45 | | |
| 555 | 62 | 830 | 44 | | |
| 570 | 61 | 845 | 43 | | |

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: The maximum available flow is 1000 gpm. Existing 4" main line needs to be upgraded in order to provide requested flow rate.**This information will be sent to the Department of Building and Safety for plan checking.**

This SAR is valid for one year from 12-14-18. Once the SAR expires, the applicant needs to re-apply and pay applicable processing fee.

For additional information contact the Water Distribution Services Section **WESTERN (213) 367-1225**

ELIA SUN
Prepared by

ELIA SUN
Approved by

130-159
Water Service Map



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
 Water Service Map No.: 130-159
 LAFD Signature: R. Duff
 Date Signed: 1-22-19
 Applicant: MARTIN MONASTERIO
 Company Name: FUSCO ENGINEERING
 Address: 600 WILSHIRE BLVD SUITE 1470, LOS ANGELES, CA 90017
 Telephone: (213) 988-8802
 Email Address: MMONASTERIO@FUSCOE.COM

10330 BELLWOOD AVENUE
LOS ANGELES, CA

| | F- 31208 ^{MP} | F- 43262 ^{MP} | F- |
|---|---------------------------------------|---------------------------------------|----|
| Location: | SW BELLWOOD AVE (WEST) & OLYMPIC BLVD | SW OLYMPIC BLVD & BELLWOOD AVE (EAST) | |
| Distance from Nearest Pipe Location (feet): | 17' | 19' | |
| Hydrant Size: | 2 1/2" x 4" | 4" D | |
| Water Main Size (in): | (PROPOSED) 8" D.I. | (EXISTING) 6" C.I. | |
| Static Pressure (psi): | 91 max | 89 max | |
| Residual Pressure (psi): | 79 | 78 | |
| Flow at 20 psi (gpm): | 1500 | 1500 | |

NOTE: Data obtained from hydraulic analysis using peak hour.

Remarks: * COMBINED FLOW FROM (F-43262 & F-31208 & 8" FS. 630048 & 8" FS. 630047)
 ECMR No. W20190129028

PLEASE INCLUDE ALL WATER MAIN UP SIZING REQUIRED
2 PUBLIC HYDRANTS (F-43262 AND F-31208)
2 PRIVATE HYDRANTS FROM (2) 8" FS (S#630048 & S#630047)

* REQUIRES 213'-8" D.I. INS. BELLWOOD AVE (WEST) & 250'-8" D.I. INS. BELLWOOD (EAST) TO GET COMBINED FLOW

Water Purveyor: Los Angeles Department of Water & Power
 Date: 2/1/2019
 Signature: Mark Katterson
 Title: CIVIL ENGINEERING ASSOCIATE

Requests must be made by submitting this completed application, along with a \$230.00 check payable to: "Los Angeles Department of Water and Power", and mailed to:

CYNTHIA TAYLOR
 JAN 29 2019

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
 JAN 29 2019

* 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



SAR NUMBER 74207

Fire Service Pressure Flow ReportSERVICE NUMBER **630047**

For: 10330 BELLWOOD AVE Approved Date: **2-1-2019**

Proposed Service 8 INCH off of the

8 inch main in BELLWOOD AV on the EAST side approximately

150 feet SOUTH of SOUTH of OLYMPIC BL The System maximum pressure is

91 psi based on street curb elevation of 216 feet above sea level at this location.

The distance from the DWP street main to the property line is 17 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 | 79 | 1470 | 61 | 2140 | 43 |
| 310 | 78 | 1515 | 60 | 2170 | 42 |
| 450 | 77 | 1560 | 59 | 2205 | 41 |
| 560 | 76 | 1600 | 58 | 2235 | 40 |
| 655 | 75 | 1640 | 57 | 2265 | 39 |
| 735 | 74 | 1680 | 56 | 2295 | 38 |
| 815 | 73 | 1720 | 55 | 2325 | 37 |
| 885 | 72 | 1760 | 54 | 2355 | 36 |
| 950 | 71 | 1795 | 53 | 2385 | 35 |
| 1010 | 70 | 1830 | 52 | 2415 | 34 |
| 1070 | 69 | 1870 | 51 | 2445 | 33 |
| 1130 | 68 | 1905 | 50 | 2470 | 32 |
| 1185 | 67 | 1940 | 49 | 2500 | 31 |
| 1235 | 66 | 1975 | 48 | | |
| 1285 | 65 | 2010 | 47 | | |
| 1335 | 64 | 2040 | 46 | | |
| 1380 | 63 | 2075 | 45 | | |
| 1425 | 62 | 2110 | 44 | | |

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: Fire Service Only. Simultaneous flow with 1500 gpm from F-31208, 1500 gpm from F-43262 & 2500 gpm from 8"FS 630048. Requires 463' - 8" DI water main upsizing.

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

This SAR is valid for one year from 02-01-19. Once the SAR expires, the applicant needs to re-apply and pay applicable processing fee.

For additional information contact the Water Distribution Services Section **WESTERN (213) 367-1225**

MARK PATTERSON
Prepared by

MARK PATTERSON
Approved by

130-159
Water Service Map



City of Los Angeles

Los Angeles Department of Water and Power - Water System



SAR NUMBER 74208

Fire Service Pressure Flow ReportSERVICE NUMBER **630048**

For: 10330 BELLWOOD AVE Approved Date: **2-1-2019**

Proposed Service 8 INCH off of the

4 inch main in BELLWOOD AV on the WEST side approximately

150 feet SOUTH of SOUTH of OLYMPIC BL The System maximum pressure is

88 psi based on street curb elevation of 224 feet above sea level at this location.

The distance from the DWP street main to the property line is 17 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 | 76 | 1605 | 58 | 2330 | 40 |
| 335 | 75 | 1650 | 57 | 2365 | 39 |
| 490 | 74 | 1695 | 56 | 2400 | 38 |
| 610 | 73 | 1740 | 55 | 2435 | 37 |
| 710 | 72 | 1785 | 54 | 2465 | 36 |
| 805 | 71 | 1830 | 53 | 2500 | 35 |
| 885 | 70 | 1870 | 52 | | |
| 960 | 69 | 1915 | 51 | | |
| 1035 | 68 | 1955 | 50 | | |
| 1100 | 67 | 1995 | 49 | | |
| 1165 | 66 | 2035 | 48 | | |
| 1230 | 65 | 2075 | 47 | | |
| 1290 | 64 | 2110 | 46 | | |
| 1345 | 63 | 2150 | 45 | | |
| 1400 | 62 | 2185 | 44 | | |
| 1455 | 61 | 2225 | 43 | | |
| 1505 | 60 | 2260 | 42 | | |
| 1555 | 59 | 2295 | 41 | | |

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: Fire Service Only. Simultaneous flow with 1500 gpm from F-31208, 1500 gpm from F-43262 & 2500 gpm from 8"FS 630047. Requires 463' - 8" DI water main upsizing.

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

This SAR is valid for one year from 02-01-19. Once the SAR expires, the applicant needs to re-apply and pay applicable processing fee.

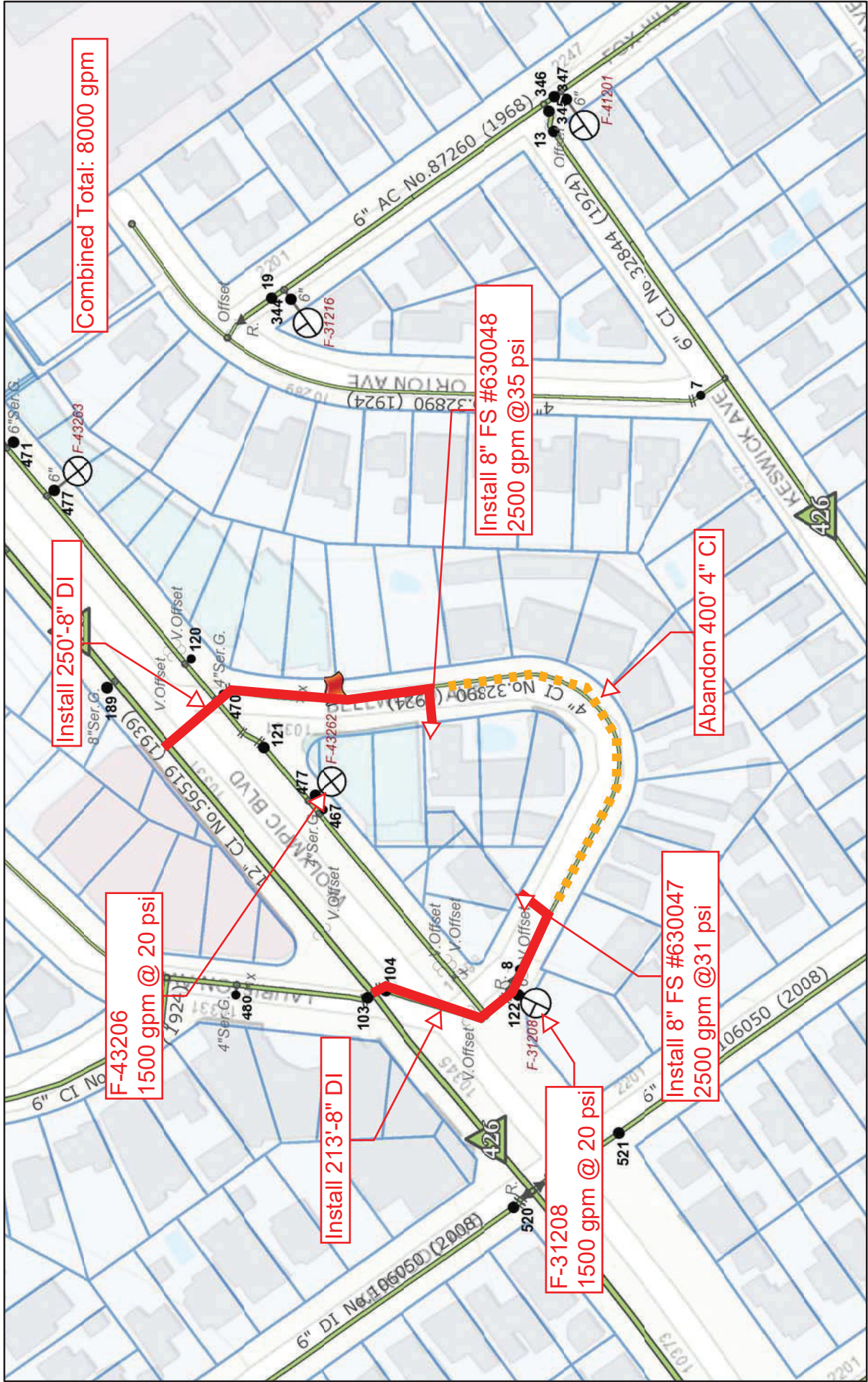
For additional information contact the Water Distribution Services Sector **WESTERN (213) 367-1225**

MARK PATTERSON
Prepared by

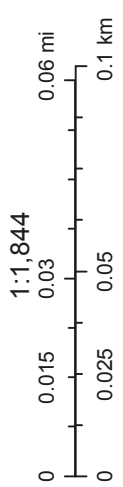
MARK PATTERSON
Approved by

130-159
Water Service Map

10330 Bellwood Ave NavLADWP



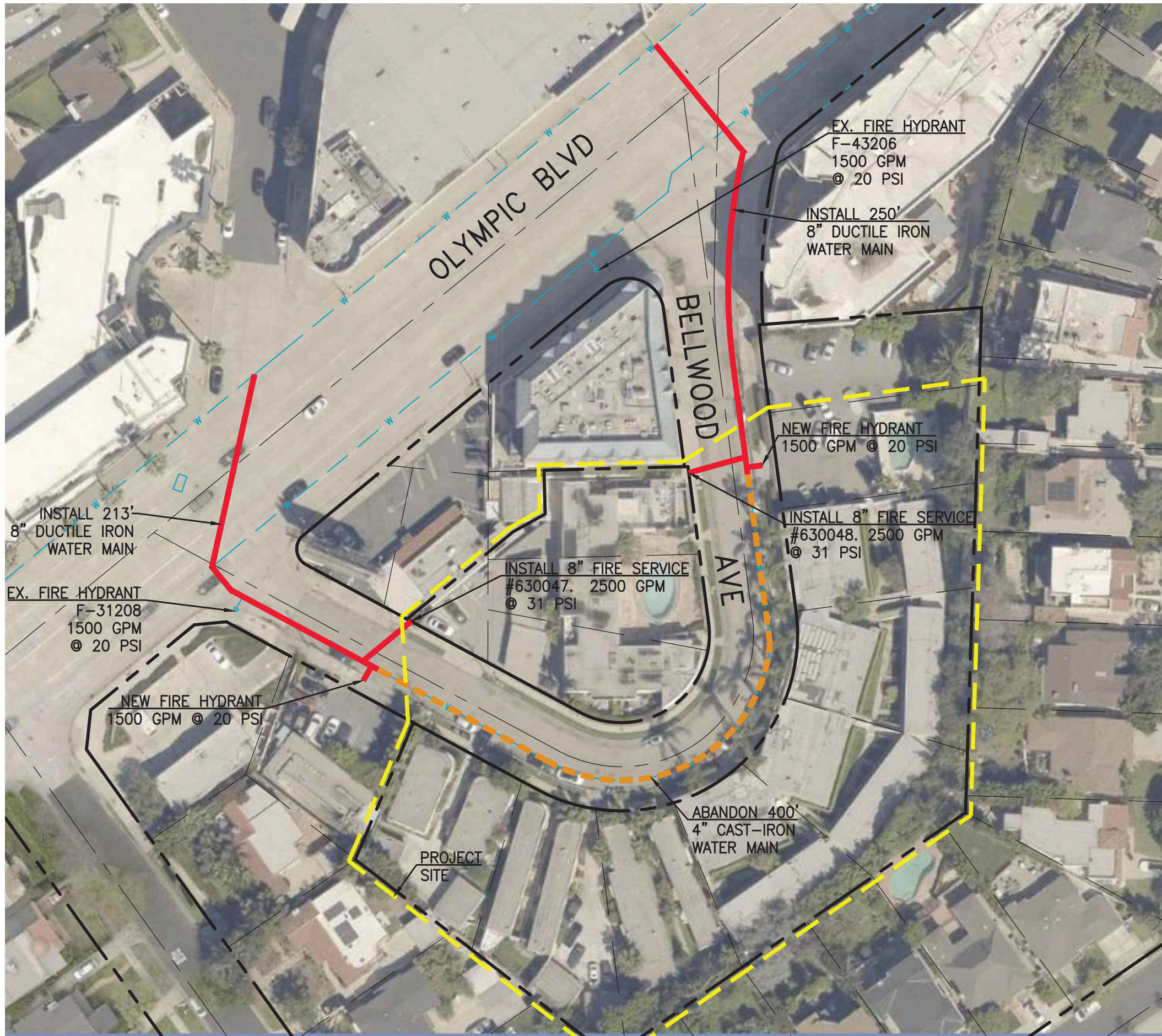
February 1, 2019



Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, Geobase, IGN, Kadaster NL, Ordnance Survey, Esri

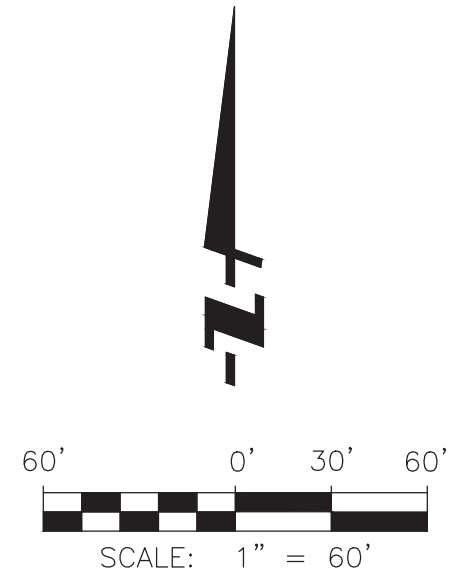
ATTACHMENT B

WATER LINE IMPROVEMENTS EXHIBIT



ATTACHMENT B - BELLWOOD - WATER INFRASTRUCTURE IMPROVEMENTS

10328-10384 AND 10341-10381 BELLWOOD AVENUE
LOS ANGELES, CALIFORNIA
12-23-2019



F:\PROJECTS\1755\001\EXHIBITS\XH1755-001 - BELLWOOD WATER INFRASTRUCTURE.DWG (12-23-19 12:43:41PM) Plotted by: Robert Spagnuolo

ATTACHMENT C

LADWP WATER WILL SERVE LETTER



CUSTOMERS FIRST

Eric Garcetti, Mayor

Board of Commissioners

Mel Levine, President

Cynthia McClain-Hill, Vice President

Jill Banks Barad

Christina E. Noonan

Aura Vasquez

Barbara E. Moschos, Secretary

David H. Wright, General Manager

February 13, 2019

Map No. 130-159

Mr. Martin Monasterio
Fusco Engineering, Inc.
600 Wilshire Boulevard, Suite 1740
Los Angeles, California 90017

Dear Mr. Monasterio:

Subject: Water Availability – Will Serve
10328-10384, 10341 Bellwood Avenue
APN: 4315-018-029, TR 7260, Block 13, Lot 29
APN: 4315-018-034, TR 7260, Block 13, Lot 37
APN: 4315-018-048, TR 7260, Block 14, Lot 10

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

Should you require additional information, please contact Amy Kurakusu at (213) 367-4908. Correspondence may be addressed to:

LADWP – Water Business Arrangements
Attention: Amy Kurakusu
P.O. Box 51111, Room 1425
Los Angeles, California 90051-5700

Sincerely,



Liz Gonzalez
Manager – Business Arrangements
Water Distribution Engineering

AK:rp
c: Amy Kurakusu

130-156

130-162



N.1.840.241



E.6.432.723

128-159

The Los Angeles Department of Water and Power (LADWP) assumes no responsibility for the accuracy of the substructure information herein provided. The user assumes responsibility for verifying substructure locations before excavation and assumes all liabilities for damage to LADWP facilities as a result of such excavation. Call Underground Service alert on 1-800-227-2600 two (2) days before excavating.

| LEGEND MAP SCALE 1" = 150' | SYMBOLS AND NOTATIONS | SCALE 1" = 100' | PLOTTED DATE | CHK'D DATE | FIRE HYDRANTS | REFERENCES |
|-------------------------------|---|---------------------------|----------------------------------|--------------------------|--|---|
| AS SHOWN | OS MAP IN SERVICE CONVERTED MANS CONVERTED SERVICES MISC | NAME A.GARCIA J.LIU | DATE 04-07-2003 03-06-2006 | NAME C.V.BEAS NAME | DATE 06-09-2005 06-09-2005 | MAPS REPLACED 811 NS, 810 NS 812 NS, 813 NS |
| | | | | | 2 1/2" SINGLE 2 1/2" S. BUILT UP 2 1/2" DOUBLE 4" SINGLE 4" S. BUILT UP 4" DOUBLE 2 1/2" x 4" DOUBLE | GATE B/C 133-157, 133-162 |
| | | | | | | LARA AERIAL LANDBASE: 1206157, 1206161 |
| | | | | | | DATUM NAD 1983, ZONE V LEVEL: U.S.G.S |
| | | | | | | APPROVED |

WATER GEOGRAPHIC INFORMATION SYSTEMS & GRAPHICS GROUP
DEPARTMENT OF WATER AND POWER
CITY OF LOS ANGELES

WATER SERVICE MAP

SERVICE ZONE ELEVATION: 130-159 WESTERN

130-159

ATTACHMENT D

REQUEST FOR WASTEWATER SERVICE INFORMATION (WWSI)

CITY OF LOS ANGELES
INTER-DEPARTMENTAL CORRESPONDENCE

DATE: July 11, 2019

TO: Vincent P. Bertoni, Director of Planning
Department of City Planning

Attn: Adam Villani, City Planner
Department of City Planning

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



SUBJECT: SENIOR RESIDENTIAL COMMUNITY AT THE BELLWOOD - NOTICE OF PREPARATION OF ENVIRONMENTAL IMPACT REPORT AND PUBLIC SCOPING MEETING

This is in response to your June 12, 2019 letter requesting a review of the proposed eldercare facility located at 10328-10384 and 10341-10381 Bellwood Ave, Los Angeles, CA 90064. The project will consist of senior independent units, assisted living and memory care guest rooms, indoor common and outdoor common 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) |
|-----------------------------|--|-----------------------|--------------------------|
| <i>Proposed</i> | | | |
| Senior Independent Units | 110 GPD/ DU | 71 DU | 7,810 |
| Assisted Living Guest Rooms | 110 GPD/ DU | 75 DU | 8,250 |
| Memory Care Guest Rooms | 110 GPD/ DU | 46 DU | 5,060 |
| Indoor Common Area | 50 GPD/1000 SQ.FT | 50,463 SQ.FT | 2,523 |
| Outdoor Common Area | 50 GPD/1000 SQ.FT | 14,630 SQ.FT | 732 |
| Indoor Swimming Pool | 16,458 GAL/UNIT | 1 UNIT | 16,458 |
| Indoor Spa | 1,908 GAL/UNIT | 1 UNIT | 1,908 |
| Total | | | 42,741 GPD |

SEWER AVAILABILITY

The sewer infrastructure in the vicinity of the proposed project includes an existing 8-inch line on Bellwood Ave. The sewage from the existing 8-inch line feeds into a 12-inch line on Olympic Blvd. The sewage from the existing 12-inch line feeds into an 18-inch line on Tennessee Ave. The sewage from the existing 18-inch line feeds into a 27-inch line on Tennessee Ave before discharging into a 42-inch sewer line on Manning Ave. Figure 1 shows the details of the sewer system within the vicinity of the project. The current flow levels (d/D) in the 8-inch line, 12-inch line, and 18-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 | Bellwood Ave | * | 475,534 GPD |
| 12 | Olympic Blvd | * | 1.07 MGD |
| 18 | Tennessee Ave | * | 1.89 MGD |
| 27 | Tennessee Ave | 30 | 7.20 MGD |
| 42 | Manning Ave | 27 | 20.25 MGD |

* No gauging available

Based on the 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 has insufficient capacity, then the developer will be required to build sewer lines to a point in the sewer system with sufficient capacity. Any sewer ejector shall be reviewed by LASAN staff prior to City of Los Angeles Department of Building and Safety (LADBS) approval. A final approval for sewer capacity and connection permit will be made at that time. Ultimately, this sewage flow will be conveyed to the Hyperion Water Reclamation Plant, which has sufficient capacity for the project.

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

STORMWATER REQUIREMENTS

LA Sanitation, Watershed Protection Program (WPP) 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 (LID Ordinance) and as it may be subsequently amended or modified. Prior to issuance of grading or building permits, the Applicant shall submit a LID Plan to the City of Los Angeles, Bureau of Sanitation, Watershed Protection Division (WPD), for review and approval. The LID Plan shall be prepared consistent with the requirements of the Development Best Management Practices Handbook.

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 early phases of the project from WPD's plan-checking staff.

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. Additionally, 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, 3rd Fl, Station 18.

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 the 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.

AP/CD: ra

Attachment: Figure 1 - Sewer Map

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



Wastewater Engineering Services Division
Bureau of Sanitation
City of Los Angeles

Figure 1
SENIOR RESIDENTIAL COMMUNITY AT THE BELLWOOD
Sewer Map



Thomas Brother Data reproduced with permission granted by THOMAS BROS MAP



ATTACHMENT E

CITY OF LOS ANGELES, LADWP, POWER WILL SERVE



POWER SYSTEM
ENGINEERING
DIVISION

METROPOLITAN SERVICE PLANNING

NEW BUSINESS & CUSTOMER
SUPPORT SUBSECTION

2633 Artesian Street, Suite 250, Los Angeles CA 90031 (213) 367-6000 FAX: (213) 367-6089

Antoine S. Raad
District Engineer

October 18, 2018

Mr. Martin Monasterio
Fusco Engineering, Inc.
600 Wilshire Bl, Suite 1470
Los Angeles, CA 90017

Dear Mr. Monasterio:

10330-10380, 10341 Bellwood Av

WR# 1862308

This is in response to your letter dated October 17, 2018 regarding electric service for the proposed project at the above address.

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

If you have any questions regarding this matter, please call Mr. Joseph Heitkemper at (213) 367-6230.

Sincerely,

ANTOINE S. RAAD
District Engineer
Metro West Service Planning

Cc: File
Engr - JJH

ATTACHMENT F

SOUTHERN CALIFORNIA GAS COMPANY, SOCALGAS, GAS WILL
SERVE



February 1, 2019

Attn: Evan Cochran, EIT
Fusco Engineering, Inc.
600 Wilshire Blvd.
Los Angeles, CA. 90017

RE: Will Serve Letter Request for – Job ID# 43-2014-09-00074: 10380 Bellwood Ave. Los Angeles, CA. 90064

Dear Sir/Madam:

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,

William Perez
Pipeline Planning Associate
Compton Headquarters