



**1200 CAHUENGA
UTILITY INFRASTRUCTURE TECHNICAL REPORT: WATER
NOVEMBER 2022**

PREPARED BY:

KPFF Consulting Engineers

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1. INTRODUCTION

1.1. PROJECT DESCRIPTION

The 1200 N. Cahuenga Boulevard Project (the “Project”) is located at 1200 – 1210 N. Cahuenga Boulevard, 6337 – 6357 W. Lexington Avenue, and 6332 – 6356 W. La Mirada Avenue (the “Project Site”) in the City of Los Angeles. The Project proposes to replace an existing, vacant private school campus, the Stratford School, at the Project Site with an approximately 75,262 square-foot creative office campus with ground-floor retail uses. The Project would be comprised of three buildings, Buildings A, B, and C, with an outdoor courtyard located between the buildings. The Project would demolish the school’s subterranean parking lot and access ramp, topped with a recreational field and basketball court, and two playgrounds. The Project would also demolish 8,941 square feet of the existing approximately 28,389 square-foot private school building, but would otherwise preserve and upgrade with a few exterior modifications the remaining approximately 19,448 square feet of the building and its subterranean parking garage to be a creative office building (Building B). Building A would be new, located along the northern border of the Project Site, would contain 35,000 square feet, and would be four stories and a maximum of 57’ 1” in height. Building C would be new, occupy the southwest corner of the Project Site, would contain approximately 20,814 square feet, and would be four stories and a maximum of 60’ 11” in height. Building B would consist of 19,448 square feet of the existing two-story, 42’ 6” tall school building; Building B’s unusually tall first story would place its second story approximately in line with the third stories on Buildings A and C. All three buildings would provide decks and balconies adjacent to the creative offices. The buildings would surround an outdoor courtyard for the use of the buildings’ tenants. The Project would provide 156 vehicular parking spaces and 22 bicycle spaces within the Project’s one-level subterranean parking garage, which would extend under both Buildings A and B, and two at-grade parking areas on the first floors of Buildings A and C. The subterranean garage under Building A would contain automated parking stackers. The Project would be built on the 53,557 square-foot Project Site, resulting in a site-wide Floor Area Ratio (FAR) of approximately 1.41 to 1 and a total floor area of 75,262 square feet. The anticipated outbound haul route from the Project Site would be from Vine Street to Santa Monica Boulevard to the 101 freeway. Approximately 12,678 cubic yards of dirt is expected to be excavated and exported from the Project Site during construction.

1.2. SCOPE OF WORK

As a part of the Mitigated Negative Declaration for the Project, the purpose of this report is to analyze the potential impact of the Project to the existing water infrastructure systems.

2. REGULATORY FRAMEWORK

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 pertinent State and Regional water supply regulations:

- California Code of Regulations (CCR), 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 (CALGreen), 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).
- Metropolitan Water District (MWD) official reports and policies as outlined in its Regional UWMP, Water Surplus and Drought Management Plan, Water Supply Allocation Plan, and Integrated Resources Plan.
- LADWP's 2020 UWMP outlines the City's long-term water resources management strategy. The 2020 UWMP 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.

This Project does not trigger one of the above thresholds, therefore a WSA was not performed by the Los Angeles Department of Water and Power.

3. EXISTING CONDITION

The Project Site is located within the East Hollywood Neighborhood Subarea in the Hollywood Community Plan. The Project Site is approximately 53,557 sq. ft. (1.23 acres) and is currently occupied by the now-vacant Stratford School. The Project fronts Lexington Avenue, N. Cahuenga Boulevard, and La Mirada Boulevard. LADWP owns and maintains the water infrastructure to the Project Site.

3.1. DOMESTIC INFRASTRUCTURE

Based on a water service map provided by the city (Exhibit 3), there is a 36-inch water main and a 12-inch water main in N. Cahuenga Boulevard, an 8-inch water main and an abandoned 4-inch water main on Lexington Avenue, and a 12-inch water main in La Mirada Avenue.

Water consumption estimates have been prepared based on 100 percent of the City of Los Angeles Bureau of Sanitation (BOS) sewerage generation factors and are summarized in Table 1 below.

Table 1 – Estimated Existing Water Consumption			
Land Use	Units	Consumption Rate (gpd/unit) ⁽¹⁾	Total Water Consumption (gpd)
Existing			
School	200 Students ⁽²⁾	9 GPD/Student	1,800
Subtotal Existing			1,800
⁽¹⁾ Consumption rates per Bureau of Sanitation – Sewer Generation Factors for Residential and Commercial Categories https://engpermitmanual.lacity.org/sites/default/files/documents/Sewage%20Generation%20Factors%20Chart.pdf			
⁽²⁾ The total number of students was approximated based on the area footprint of the existing school.			

3.2. FIRE INFRASTRUCTURE

Based on a water service map provided by the city (Exhibit 3), there is a 36-inch water main and a 12-inch water main in N. Cahuenga Boulevard, an 8-inch water main and an abandoned 4-inch water main on Lexington Avenue, and a 12-inch water main in La Mirada Avenue. Exhibit 3 shows the location of four (4) hydrants within the vicinity of the Project. See Exhibit 1 for the IFFAR Results.

4. SIGNIFICANCE THRESHOLDS

In accordance with Appendix G of the State CEQA Guidelines, a Project would have a significant impact related to water infrastructure capacity if it would:

- Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunication facilities, the construction or relocation of which could cause significant environmental effects; or
- Not have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years.

In assessing impacts related to water infrastructure capacity in this section, the City will use Appendix G as the thresholds of significance. The analysis utilizes factors and considerations identified in the City’s 2006 L.A. CEQA Thresholds Guide, as appropriate, to assist in answering the Appendix G Threshold questions. The L.A. CEQA Thresholds Guide identifies the following factors to evaluate water capacity infrastructure:

- 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.
- This guidance is applicable to the Project and as such are used to determine if the Project would have significant water impacts.

Based on these factors, the Project would have a significant impact if the City's water infrastructure would not adequately serve the Project or water distribution capacity would be inadequate to serve the proposed use after appropriate infrastructure improvements have been installed.

5. METHODOLOGY

The methodology for determining the significance of a project as it relates to a project's impact on water infrastructure capacity 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 significance 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 demands are based upon available site and Project information and utilize 100 percent of the BOS sewerage generation factors.

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 submitted 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's needs based on existing infrastructure. See Exhibit 2 for the results of the Service Advisory Requests (SARs).

6. PROJECT IMPACTS

6.1. CONSTRUCTION

Water for construction of the Project would be required for dust control, cleaning of equipment, excavation/export, removal, and re-compaction, etc. Based on 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). The estimated construction-period demand is significantly less than the Project's estimated operational demand, which as described below, can be accommodated by the existing infrastructure. It is therefore anticipated that the existing water infrastructure would similarly 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.

The Project will require construction of new, on-site water distribution lines to serve the new buildings. Construction impacts associated with the installation of water distribution lines would primarily involve trenching 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. LADWP would be notified in advance of proposed ground disturbance activities to avoid water lines and disruption of water service. Further, construction associated with new water distribution lines would occur as part of Project construction generally, which, as concluded in the MND, would result in less than significant impacts.

6.2. OPERATION

6.2.1. 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, a conservative analysis for both fire suppression and domestic water flows has been completed by LADWP for the Project. See Exhibit 2 for the results of the SAR, which demonstrates that adequate water infrastructure capacity exists. See Exhibit 1 for the submitted Information of Fire Flow Availability Request (IFFAR).

6.2.2. FIRE WATER DEMAND

Article 7 of the Fire Protection and Prevention, Section 57.507 of the LAMC sets the fire flow requirements for the Project. These guidelines, in addition to the requirements set by the City Fire Chief, will prescribe the fire flow requirements and hydrant spacing requirements for the Project. Per Section 57.513, the Fire Chief also determines the supplemental fire protection systems that will be required for the Project. Supplemental fire protection systems consist of the following:

- Fire protection signaling systems
- Fire hydrants
- Automatic fire extinguishing systems
- Smoke removal systems
- Standpipe systems

Based on fire flow standards set forth in Section 57.507.3 of the LAMC, the Project Site falls within high density residential neighborhood commercial, which requires 4,000 gallons per minute (gpm) from 4 adjacent hydrants flowing simultaneously. This translates to 1,000 gpm flowing from each hydrant and a minimum residual pressure of 20 pounds per square inch (psi). See Exhibit 1 for the submitted IFFAR.

The Project will incorporate a fire sprinkler suppression system to reduce or eliminate the demands on public hydrants, 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 and IFFAR were submitted to LADWP, to determine if the existing public water infrastructure could meet the demands of the Project. The SAR results show that 2,500 gpm can be delivered to the Project with a

minimum residual pressure of 88 psi. See Exhibit 1 & 2 for the results of the IFFAR and SAR respectively. As shown by the SAR, fire flow impacts to LADWP’s water infrastructure capacity would be less than significant.

6.2.3. DOMESTIC WATER DEMAND

Water consumption estimates have been prepared based on 100 percent of the City of LA Bureau of Sanitation sewerage generation factors for commercial categories and are summarized in Table 2 below. The Project proposes to make one 3-inch connection for domestic water and one 8-inch connection for fire water to the existing 12-inch main in North Cahuenga Boulevard. There are two types of connections that can be made to the City main. One type of connection is a combo service, which has one connection to the main and splits to serve both fire and domestic. The second type of connection is to have independent connections for fire and domestic. Lastly, the services will include backflow preventers and will be metered separately per City requirements. Therefore, the Project’s impacts on water infrastructure capacity would be less than significant.

Table 2 – Estimated Proposed Water Consumption			
Land Use	Units	Consumption Rate (gpd/unit) ⁽¹⁾	Total Water Consumption (gpd)
Existing			
School	200 Students ⁽²⁾	9 GPD/Student	1,800
Subtotal Existing			1,800
Proposed			
Retail Area (less than 100,00 SF)	592 SF	25 KGsf	15
Office Building	71,035 SF	120 KGsf	8,524
Gross Water Consumption			8,539
Subtotal Existing			1,800
Net Increase			6,739
⁽¹⁾ Consumption rates per Bureau of Sanitation – Sewer Generation Factors for Residential and Commercial Categories https://engpermitmanual.lacity.org/sites/default/files/documents/Sewage%20Generation%20Factors%20Chart.pdf			
⁽²⁾ The total number of students was conservatively approximated based on the area footprint of the existing school.			

6.3. CUMULATIVE IMPACTS

The geographic context for the cumulative impact analysis on water infrastructure is the LADWP service area, which includes the entirety of the City. LADWP, as a public water service provider, is required to prepare and periodically update a UWMP to plan and provide for water infrastructure to serve existing and projected demands. The 2020 UWMP prepared by LADWP accounts for existing development within the City, as well as projected growth through the year 2045.⁵

There are 22 related projects, which consist of, but are not limited to, residential, restaurants, office, pharmacy, and retail. The total increase in water demand for the related projects is approximately 0.943 million gallons per day (MGD). Combined with the Project, the increase in water demand is approximately 1.09 MGD. Refer to Exhibit 4 for a breakdown of the related projects and associated water consumption. The 2020 UWMP has estimated a water demand of 475 mgd by the year 2025, which means the Project combined with the related projects would account for approximately 0.23 percent of the total daily demand.

Based on the above, it is anticipated that LADWP would have adequate infrastructure to accommodate the Project as well as related Projects. Therefore, impacts on water infrastructure capacity would be less than significant.

7. LEVEL OF SIGNIFICANCE

Based on the analysis contained in this report, no significant impacts have been identified to water infrastructure for this Project.

⁵ <https://www.ladwp.com/cs/groups/ladwp/documents/pdf/mdaw/nzyy/~edisp/opladwpccb762836.pdf>

EXHIBIT 1



INFORMATION OF FIRE FLOW AVAILABILITY

4,000 GPM FROM
 4 ADJACENT FIRE HYDRANTS
 LAFD Fire Flow Requirement: FLOWING SIMUTANEOUSLY

Water Service Map No.: 146-186, 189 Western
 LAFD Signature: _____
 Date Signed: _____

Applicant: Matthew Gooden
 Company Name: KPFF CONSULTING ENGINEERS
 Address: 700 SOUTH FLOWER SUITE 2100
 Telephone: 213-266-5206
 Email Address: matthew.gooden@kpff.com

KATHERINE CRUZ
 SEP 21 2022

	F- 35764	F- 35747	F- 35741
Location:	Lexington Ave	Lexington Ave	Cahuenga Blvd
Distance from Nearest Pipe Location (feet):	22'	12'	17'
Hydrant Size:	4D	2 1/2 x 4D	4D
Water Main Size (in):	6	6	6
Static Pressure (psi):	120 max	121 max	151
Residual Pressure (psi):	92 psi	93 psi	92 psi
Flow at 20 psi (gpm):	1500 gpm	1500 gpm	1500 gpm

NOTE: Data obtained from hydraulic analysis using peak hour.

Remarks: _____ **ECMR No. W20220926023**
F-35764, F-35747, F-35741, F-35742 simultaneous for 6000 gpm combined.

Water Purveyor: Los Angeles Department of Water & Power Date: 10/27/2022

Signature: Title: Civil Engineering Associate

Requests must be made by submitting this completed application, along with a \$271.00 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

* If you have any questions, please contact us at (213) 367-2130 or visit our web site at <http://www.ladwp.com>.
 Project Site Address: 1200 Cahuenga Blvd, Los Angeles, CA 90038
 Please run all 4 hydrants simultaneously. See application #2 for additional hydrant numbers.



INFORMATION OF FIRE FLOW AVAILABILITY

4,000 GPM FROM
 4 ADJACENT FIRE HYDRANTS
 LAFD Fire Flow Requirement: FLOWING SIMUTANEOUSLY

Water Service Map No.: 146-186 Western
 LAFD Signature: _____
 Date Signed: _____

Applicant: Matthew Gooden
 Company Name: KPFF CONSULTING ENGINEERS
 Address: 700 SOUTH FLOWER SUITE 2100
 Telephone: 213-266-5206
 Email Address: matthew.gooden@kpff.com

	<u>F- 35742</u>	<u>F- _____</u>	<u>F- _____</u>
Location:	Cahuenga Blvd		
Distance from Nearest Pipe Location (feet):	<u>17'</u>		
Hydrant Size:	4D		
Water Main Size (in):	6		
Static Pressure (psi):	<u>115 max</u>		
Residual Pressure (psi):	<u>90 psi</u>		
Flow at 20 psi (gpm):	<u>1500 gpm</u>		

KATHRINE CRUZ
 SEP 21 2022

NOTE: Data obtained from hydraulic analysis using peak hour.

Remarks: _____ ECMR No. W20220926024
F-35764, F-35747, F-35741, F-35742 simultaneous for 6000 gpm combined.

Water Purveyor: Los Angeles Department of Water & Power Date: 10/27/2022

Signature: Title: Civil Engineering Associate

Requests must be made by submitting this completed application, along with a \$271.00 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

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

Project Site Address: 1200 Cahuenga Blvd, Los Angeles, CA 90038
 Please run all 4 hydrants simultaneously. See application #2 for additional hydrant numbers.

EXHIBIT 2



City of Los Angeles

Los Angeles Department of Water and Power - Water System



SAR NUMBER 97153

Fire Service Pressure Flow Report

SERVICE NUMBER 638917

For: 1200 S CAHUENGA BLVD Approved Date: **4-4-2022**

Proposed Service 8 INCH off of the

12 inch main in CAHUENGA BLVD on the EAST side approximately

112 feet NORTH of NORTH of LEXINGTON AVE The System maximum pressure is

120 psi based on street curb elevation of 313 feet above sea level at this location.

The distance from the DWP street main to the property line is **66** 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	91				
1380	90				
2010	89				
2500	88				

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: With 220 gpm simultaneous flow from 3" EQ domestic service

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

This SAR is valid for one year from 04-04-22. 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**

ELIA SUN
 Prepared by

ELIA SUN
 Approved by

146-186
 Water Service Map

EXHIBIT 3



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.



E. 6.459.776

LEGEND MAP SCALE 1" = 1500'	SYMBOLS AND NOTATIONS AS SHOWN	SCALE 1" = 100'	PLOTTED DATE	CHKD. DATE	FIRE HYDRANTS	REFERENCES
	CONVERTED MAINS	MAP NAME	05-01-2003	05-01-2003	2 1/2" SINGLE	146 NS, 147 NS
	CONVERTED SERVICES	F.CHANDED			2 1/2" S. BUILT UP	148 NS, 149 NS
					2 1/2" DOUBLE	
					4" SINGLE	
					4" S. BUILT UP	
					4" DOUBLE	
					2 1/2" x 4" DOUBLE	
		APPROVED				

DATE	REVISIONS	BY	FOR
05-01-2003	CONVERTED MAINS		
05-01-2003	CONVERTED SERVICES		

GATE NO.	DATE
149-186C	

REFERENCES	
LANDBASE	147A186, 147A187, 147A189
	147B186, 147B189
DATUM	N.A. 1983 ZONE 8 LEVEL: U.S.G.S.

WATER GEOGRAPHIC INFORMATION SYSTEMS & GRAPHICS GROUP DEPARTMENT OF WATER AND POWER CITY OF LOS ANGELES	
WATER SERVICE MAP	
SERVICE ZONE ELEVATION	DISTRICT: WESTERN
146-186	

EXHIBIT 4

Related Projects - Estimated Water Consumption Table			
Land Use	Units	Consumption Rate ⁽²⁾ (gpd/unit)	Total Consumption (gpd)
Hotel	1,293	120/RM	155,160
Restaurant	102,908	300/1000 SF	30,872
Retail	75,779	50/1000 SF	3,789
Office	1,770,764	120/1000 SF	212,492
Apartment	3,608	150/DU ⁽¹⁾	541,200
TOTAL			943,513
SF= SQUARE FEET, GPD = GALLONS PER DAY, DU= DWELLING UNIT, RM=ROOM ¹ For calculation purposes all units assumed as 2-Bedroom ² Consumption rates based on 100% of Bureau of Sanitation Sewer Generation Factors for Residential and Commercial Categories. https://engpermitmanual.lacity.org/sewer-s-permits/technical-procedures/sewage-generation-factors-chart			