IV. Environmental Impact Analysis

L.2 Utilities and Service Systems—Wastewater

1. Introduction

This section of the Draft EIR analyzes the potential impacts of the Project with regard to the wastewater infrastructure and treatment facilities that serve the Project Site. The analysis describes the existing wastewater system (including local and regional conveyance and treatment facilities), calculates the wastewater to be generated by the Project, and evaluates whether sufficient capacity would be available to accommodate the Project's estimated wastewater generation. The analysis is based in part on the *222 West 2nd Street Project Utilities Technical Memorandum* (Utilities Report), prepared by Psomas (November 30, 2018), which is included in Appendix N.2 of this Draft EIR, as well as information provided by the City of Los Angeles Bureau of Sanitation (LASAN) in their response to the Request for Wastewater Service Information (WWSI), which is included with the Utilities Report.

2. Environmental Setting

a. Regulatory Framework

(1) State

(a) California Green Building Standards Code

The California Green Building Standards Code, commonly referred to as the CALGreen Code, is set forth in California Code of Regulations Title 24, Part 11 and establishes voluntary and mandatory standards pertaining to the planning and design of sustainable site development and water conservation, among other issues. Under the CALGreen Code, all water closets (i.e., flush toilets) are limited to 1.28 gallons per flush, and urinals are limited to 0.5 gallon per flush. In addition, maximum flow rates for faucets are established as follows: 2.0 gallons per minute (gpm) at 80 pounds per square inch (psi) for showerheads; 1.2 gpm at 60 psi for residential lavatory faucets; and 1.8 gpm at 60 psi for kitchen faucets. Such water usage has a direct relationship to the amount of wastewater to be conveyed and treated.

(2) Local

(a) City of Los Angeles General Plan Framework

The City of Los Angeles's (City) General Plan Framework Element (adopted in August 2001) provides a Citywide strategy for long-term growth and guides the update of the community plan and Citywide elements. As such, it addresses state and federal mandates to plan for the future. Chapter 9, Infrastructure and Public Services, of the General Plan Framework identifies goals, objectives, and policies for utilities in the City.[1] Goal 9A is to provide for adequate wastewater collection and treatment capacity for the City and in basins tributary to City-owned wastewater treatment facilities.

(b) City of Los Angeles Integrated Resources Plan

The City of Los Angeles Integrated Resources Plan (IRP) addresses the facility needs of the City's wastewater program, recycled water, and urban runoff/stormwater management through the year 2020.[2] The IRP preparation process began in 1999 in two phases. Phase I of the IRP, which took place from 1999 to 2001, addressed the anticipated water, wastewater, and stormwater needs of the City through the year 2020 using comprehensive, basin-wide water resources planning. During this initial phase, gaps in the existing water system's capability to serve future populations, as projected by the Southern California Association of Governments (SCAG), were examined and "Preliminary Alternatives" to address these gaps were created. Phase II of the IRP, which took place from 2002 to 2006, involved the selection and comparison of four Preliminary Alternatives all aimed at ensuring implementation of the appropriate infrastructure, policies, and programs to reliably serve Los Angeles through 2020 and beyond. Within IRP Phase II, a Financial Plan, Public Outreach Program, and five-volume Facilities Plan also were developed. The Facilities Plan contains alternative development options and a Capital Improvement Program, as well as wastewater, water, and runoff management strategies. The Capital Improvement Program provides anticipated capital, operation, maintenance, project timing, and implementation strategies for tracking and monitoring triggers.[3]

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[1] *City of Los Angeles, Framework Element of the Los Angeles General Plan, Chapter 9: Infrastructure and Public Services, originally adopted by City Council on December 11, 1996, and re-adopted on August 8, 2001.*

[2] *The IRP replaced the City's 1991 Wastewater Facilities Plan.*

[3] *City of Los Angeles, Department of Public Works Bureau of Sanitation and Department of Water and Power, Water Integrated Resources Plan 5-Year Review FINAL Documents, June 2012; City of Los Angeles, Department of Public Works Bureau of Sanitation and Department of Water and Power, City of Los Angeles Integrated Resources Plan Summary Report, December 2006; City of Los Angeles, Department of Public Works Bureau of Sanitation and Department of Water and Power, City of Los Angeles Integrated Resources*

(Footnote continued on next page)

The Los Angeles City Council certified the IRP Final Environmental Impact Report (EIR) on November 14, 2006 and adopted a final alternative, the Approved Alternative (Alternative 4), from the four Preliminary Alternatives. More recently, the Final IRP 5-Year Review was released in June 2012. According to the Final IRP 5-Year Review, Alternative 4 included 12 projects that were separated into two categories: (1) "Go Projects" for immediate implementation; and (2) "Go-If Triggered Projects" for implementation in the future once a trigger is reached.[4] Triggers for these projects include wastewater flow, population, regulations, and operational efficiency. Based on the Final IRP 5-Year Review, the Go Projects consisted of six capital improvement projects for which triggers were considered to have been met at the time the IRP EIR was certified. The Go-If Triggered Projects consisted of six capital improvement projects for which triggers were not considered to have been met at the time the IRP EIR was certified.

The following summarizes the six Go Projects:

1. Construct wastewater storage facilities at Donald C. Tillman Water Reclamation Plant to provide the needed wet weather wastewater storage and operational storage.

2. Construct wastewater storage at the Los Angeles Glendale Water Reclamation Plant to allow operations to be more efficient while increasing its ability to provide consistent recycled water flows to customers.

3. Construct recycled water storage at Los Angeles Glendale Water Reclamation Plant to allow the Los Angeles Glendale Water Reclamation Plant to deliver recycled water to customers at times when wastewater flows are low (i.e., during the night.)

4. Construct a solids handling and truck loading facility at the Hyperion Treatment Plant to provide more efficient operations and meet future solids handling production.

5. Construct a Glendale–Burbank Interceptor Sewer to provide relief and additional capacity in the near future to prevent overflows and spills.

6. Construct the North East Interceptor Sewer Phase II to relieve the section of the North Outfall Sewer south of the Los Angeles Glendale Water Reclamation Plant

Plan: Planning for Wastewater, Recycled Water and Storm Water Management: A Visionary Strategy for the Right Facilities, in the Right Place, at the Right Time, Executive Summary, December 2006.

[4] *City of Los Angeles, Department of Public Works Bureau of Sanitation and Department of Water and Power, Water Integrated Resources Plan 5-Year Review FINAL Documents, June 2012.*

and convey additional wastewater from the Glendale–Burbank Interceptor Sewer to provide additional capacity in the near future to prevent overflows and spills.

The following summarizes the six Go-If Triggered Projects:

1. Upgrades at the Donald C. Tillman Water Reclamation Plant to advanced treatment (current capacity) may be triggered by regulations and/or a decision to reuse recycled water for groundwater replenishment (advanced treatment may be necessary in order to meet all applicable requirements).

2. Expansion of the Donald C. Tillman Water Reclamation Plant to 100 million gallons per day (mgd) with advanced treatment may be triggered if an increase in population, regulations, and/or a decision to replenish groundwater basins takes place. At that time, the Donald C. Tillman Water Reclamation Plant could be expanded to 100 mgd with advanced treatment.

3. Upgrades of the Los Angeles Glendale Water Reclamation Plant to advanced treatment (current capacity) may be triggered by regulations, downstream sewer capacity, and/or management's decision to reuse. At that time, advanced treatment at current capacity could be required.

4. Design/construction of secondary clarifiers at the Hyperion Treatment Plant to provide operational performance at 450 mgd may be triggered if the optimization of existing secondary clarifiers is unsuccessful.

5. Design/construction of up to 12 digesters at Hyperion Treatment Plant may be triggered if an increased biosolids production in the service area takes place. At that time, additional digesters will be required at Hyperion.

6. Design/construction of Valley Spring Lane Interceptor Sewer may be required to provide additional sewer conveyance capacity between the Donald C. Tillman Water Reclamation Plant and the Valley Spring Lane/Forman Avenue Diversion structure if flow triggers are met.

Since the implementation of the IRP, new programs and projects that have resulted in a substantial decrease in wastewater flows have affected the Go Projects and Go-If Triggered Projects. Based on the Final IRP 5-Year Review, two of the Go Projects have been moved to the Go-If Triggered category (Go Project 2 and Go Project 3), and two have been deferred beyond the 2020 planning window of the IRP (Go Project 4 and Go Project 5). Construction of wastewater storage facilities at the Donald C. Tillman Water Reclamation Plant (Go Project 1) has been completed. In addition, Go Project 6, involving the design of the North East Interceptor Sewer Phase II, is no longer being pursued.

As discussed above, the IRP addressed the anticipated water, wastewater, and stormwater needs of the City through the year 2020. As 2020 approaches, the City is now developing the One Water LA 2040 Plan, which builds on the premise of the IRP to maximize water resources by creating programs and projects that provide multi-beneficial functions.[5] As with the IRP, such efforts will be organized in phases. Phase I of the One Water Los Angeles 2040 Plan includes developing initial planning baselines and guiding principles for water management and Citywide facilities planning in coordination with City departments, other agencies, and stakeholders.[6] Phase II includes development of technical studies and an updated facilities plan for stormwater and wastewater and is anticipated to be complete in 2017.

(c) City Infrastructure 2010–2011 Report Card

The City Infrastructure 2010–2011 Report Card was developed to analyze the current conditions of key infrastructure and provide recommendations on how to maintain and strengthen the infrastructure. Seven key components of each infrastructure system were considered, including capacity, condition, funding, future need, operation and maintenance, public safety, and resilience. With regards to wastewater infrastructure, the report graded the wastewater collection infrastructure and wastewater treatment plants with a Grade B-, in which "minor changes required in one or more of the above areas to enable the infrastructure system to be fit for its current and anticipated future purposes." The recommended grade is B+ for wastewater collection infrastructure and B for wastewater treatment plants.

Based on the City Infrastructure 2010–2011 Report Card, to obtain a B grade it is recommended the City improve its wastewater treatment and reclamation facilities where opportunities exist in order to meet projected increase in flows, enhance efficiencies, and continue to protect the public and the environment. As indicated in the City Infrastructure 2010–2011 Report Card, based on the Wastewater Capital Improvement Program, 468 miles of sewers are listed to be rehabilitated, and approximately 207 miles have been completed since the publishing of the City Infrastructure 2010–2011 Report Card. The remaining 262 miles of sewers listed in the Wastewater Capital Improvement Program are planned to be completed by 2018.[7]

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[5] *City of Los Angeles, One Water LA Plan, www.lacitysan.org/san/faces/wcnav_externalId/s-lsh-es-owla-au?_adf.ctrl-state=3s41u47kd_4&_afrLoop=1919284688885768#!, accessed August 3, 2018.*

[6] *City of Los Angeles, One Water LA, Plan Development, www.lacitysan.org/san/faces/home/portal/s-lsh-es/s-lsh-es-owla/s-lsh-es-owla-au/s-lsh-es-owla-au-aowla-pd?_adf.ctrl-state=f0cxqccpz_68&_afrLoop=2896354179393940 4#!, accessed August 3, 2018.*

[7] *City of Los Angeles, Department of Public Works, Infrastructure 2010–2011 Report Card.*

(d) Sewer System Management Plan

On May 2, 2006, the State Water Resources Control Board adopted the Statewide General Waste Discharge Requirements for publicly owned sanitary sewer systems with greater than one mile in length that collect and/or convey untreated or partially treated wastewater to a publicly owned treatment facility in California. Under the Statewide General Waste Discharge Requirements, the owners of such systems must comply with the following requirements: (1) acquire an online account from the State Water Board and report all sanitary sewer overflows online; and (2) develop and implement a written plan referred to as a Sewer System Management Plan to control and mitigate sanitary sewer overflows and make it available to any member of the public upon request in writing.

In accordance with the Statewide General Waste Discharge Requirements, the City of Los Angeles acquired online accounts from the State Water Board and began reporting sanitary sewer overflows by the due date of January 2, 2007. The City's original Sewer System Management Plan was adopted by the City's Board of Public Works and certified with the State Water Resources Control Board on February 18, 2009.[8] The City's Sewer System Management Plans were last updated in February 2017, which confirmed the City's Sewer System Management Plans are in full compliance with the Statewide General Waste Discharge Requirements and are effective.[9]

The goal of the Sewer System Management Plan for the Hyperion Sanitary Sewer System, in which the Project Site is located (as discussed below), is to provide a plan and schedule to properly manage, operate, and maintain all parts of the sanitary sewer system.[10] In addition, the Sewer System Management Plan will help to reduce and prevent sanitary sewer overflows as well as mitigate any sanitary sewer overflows that do occur.

(e) City of Los Angeles Municipal Code

Los Angeles Municipal Code (LAMC) Sections 64.11 and 64.12 require approval of a sewer permit prior to connection to the sewer system. New connections to the sewer system are assessed a Sewerage Facilities Charge. The rate structure for the Sewerage Facilities Charge is based upon wastewater flow strength as well as volume. The determination of wastewater strength for each applicable project is based on City

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[8] *City of Los Angeles, Sewer System Management Plan: Hyperion Sanitary Sewer System, February 2017.*

[9] *City of Los Angeles, Department of Public Works, Sewers, Sewer System Management Plan, www.lacitysan.org/san/faces/home/portal/s-lsh-wwd/s-lsh-wwd-cw/s-lsh-wwd-cw-s/s-lsh-wwd-cw-s-ssmp?_adf.ctrl-state=3s41u47kd_504&_afrLoop=1919486607097564#!, accessed August 3, 2018.*

[10] *City of Los Angeles, Sewer System Management Plan: Hyperion Sanitary Sewer System, February 2017.*

guidelines for the average wastewater concentrations of two parameters, biological oxygen demand and suspended solids, for each type of land use. Fees paid to the Sewerage Facilities Charge are deposited in the City's Sewer Construction and Maintenance Fund for sewer and sewage-related purposes, including, but not limited to, industrial waste control and water reclamation purposes.

LAMC Section 64.15 requires the City to perform a Sewer Capacity Availability Review when: (1) a sewer permit is required to connect to the City's sewer collection system; (2) proposes additional discharge into an existing public sewer connection; or (3) a future sewer connection or future development that would generate 10,000 gallons or more of sewage per day. A Sewer Capacity Availability Review determines if there is adequate capacity existing in the sewer collection system to safely convey the newly generated sewage to the appropriate sewage treatment plant.

In addition, the City of Los Angeles Bureau of Engineering Special Order No. SO06-0691 sets forth design criteria for sewer systems requiring trunk, interceptor, outfall, and relief sewers (i.e., sewers 18 inches or greater in diameter) to be designed for a planning period of 60 to 100 years, and lateral sewers (i.e., sewers less than 18 inches in diameter) to be designed for a planning period of 100 years. The order also requires sewers to be designed such that the peak dry weather flow depth, during the respective planning period, shall not exceed 50 percent of the pipe diameter.

b. Existing Conditions

(1) Wastewater Generation

As discussed in Section II, Project Description, of this Draft EIR, existing uses at the Project Site consist of a former surface parking lot (which is currently in use as a staging and excavation area for construction of the Los Angeles County Metropolitan Transportation Authority (Metro) Regional Connector 2nd Street/Broadway rail station and portal) and a five-level parking structure that includes rooftop parking and two subterranean levels. The former surface parking lot does not generate wastewater. The existing parking structure, which includes a sump pump, would remain under the Project. The subterranean levels of the parking structure include a sump pump that discharges perched groundwater, as needed, to the local sanitary sewer system in accordance with Industrial Waste Permit No. W-553516. A totalizer was installed in August 2017 and allows LASAN's Industrial Waste Management Division to monitor the discharge volume on a biannual basis. To date, the discharge volume to the sanitary sewer system has been less than 5 gallons per month, which is considered *de minimus*.[11]

[11] *Electronic communication, Juan Espana, Location Manager, Parking Concepts Inc., November 27, 2017.*

(2) Wastewater Infrastructure

Sanitary sewer service to and from the Project area is provided by the City of Los Angeles. The existing wastewater collection system includes more than 6,700 miles of public sewers, which serves a population of more than 4 million people and conveys approximately 400 mgd to the City's four wastewater treatment and water reclamation plants.[12]

As described in the Utilities Report, there are four existing sanitary sewer connections to the Project Site from 2nd Street, Spring Street, and Broadway: an 8-inch public main line in 2nd Street, an 18-inch main line in Spring Street, and two 12-inch main lines in Broadway. Sewer flows originating from the Project Site are collected and conveyed through a network of sewer lines for treatment at the Hyperion Water Reclamation Plant, which is also referred to as the Hyperion Treatment Plant.

According to LASAN, the two primary discharge routes from the Project Site consist of: (1) the 8-inch line in 2nd Street which connects to the Spring Street line, which in turn increases to 21 inches in diameter and then eventually to 36 inches as it flows south; and (2) one of the 12-inch lines in Broadway, which connects to a 24-inch line in Hill Street that increases to 27 inches in diameter as it flows south. The current flow levels (measured as depth to diameter or d/D) and design capacities of these lines are summarized in Table IV.L.2-1 on page IV.L.2-9. As shown, while current flow level data is not available for the smaller lines, the 36-inch Spring Street line is reported to have an existing flow level of 7 percent, and the 24- and 27-inch Hill Street lines are reported to have flow levels of 14 percent and 33 percent, respectively.[13]

(3) Wastewater Treatment

LASAN is responsible for the operation of wastewater treatment facilities in the City. The main purpose of these treatment facilities is to remove potential pollutants from sewage in order to protect river and marine environments and public health. Daily monitoring of treatment plant processes is provided at each treatment facility to ensure compliance with waste discharge and water recycling permits. Laboratory services provided include, but are not limited to, testing biological oxygen demand, fecal indicator bacteria, solids, oil and grease, heavy metals, organic priority pollutants, and toxicity

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[12] *LASAN, Sewers, www.lacitysan.org/san/faces/home/portal/s-lsh-wwd/s-lsh-wwd-cw/s-lsh-wwd-cw-s?_adf.ctrl-state=w3f8ikamv_4&_afrLoop=18666739916391336#!, accessed August 3, 2018.*

[13] *LASAN, 232 West 2nd Street—Request for Wastewater Service Information, November 15, 2018; refer to the Utilities Report appendices.*

Table IV.L.2-1
Existing Flow Levels and Design Capacities of Wastewater Lines Serving the Project Site

Discharge Route	Pipe Diameter (in)	Pipe Location	Current Flow d/D (%)	50% Design Capacity[a]
First Discharge Route: 2nd Street to Spring Street	8	2nd Street	*	177,633 gpd
	21	Spring Street	*	4.23 mgd
	36	Spring Street	7	33.73 mgd
Second Discharge Route: Broadway to Hill Street	12	Broadway	*	938,078 gpd
	24	Hill Street	14	5.21 mgd
	27	Hill Street	33	6.50 mgd

in = inches
d/D = depth to diameter
gpd = gallons per day
mgd = million gallons per day
* *Data not available.*
[a] *Wastewater line design capacities are based on 50 percent d/D.*
Source: LASAN, 232 West 2nd Street—Request for Wastewater Service Information, November 15, 2018; refer to the Utilities Report appendices.

testing. The U.S. Environmental Protection Agency (USEPA) and the Los Angeles Regional Water Quality Control Board (LARWQCB) regulate the treatment plants, and LASAN monitors the impacts of treated wastewater on the water quality and general health of Santa Monica Bay, the Los Angeles Harbor, and the Los Angeles River.[14]

LASAN divides the City's wastewater treatment system into two major service areas: the Hyperion Service Area and the Terminal Island Service Area. The Hyperion Service Area is served by the Hyperion Treatment Plant, the Donald C. Tillman Water Reclamation Plant, and the Los Angeles–Glendale Water Reclamation Plant. The Terminal Island Service Area is served by the Terminal Island Treatment Plant. The Project Site is located within the Hyperion Service Area.

(a) Hyperion Service Area

As shown in Table IV.L.2-2 on page IV.L.2-10, the existing design capacity of the Hyperion Service Area is approximately 550 mgd (consisting of 450 mgd at the Hyperion

[14] *LASAN, Water Reclamation Plants, Environmental Monitoring, www.lacitysan.org/san/faces/home/portal/s-lsh-wwd/s-lsh-wwd-cw/s-lsh-wwd-cw-p/s-lsh-wwd-cw-p-em?_adf.ctrl-state=jq960nibn_4&_afrLoop=4150107670533816#!, accessed August 3, 2018.*

Table IV.L.2-2
Existing Capacity of Hyperion Service Area

	Design Capacity (mgd)
Hyperion Treatment Plant	450
Donald C. Tillman Water Reclamation Plant	80
Los Angeles–Glendale Water Reclamation Plant	20
Total	**550**

mgd = million gallons per day

Source: LASAN, Water Reclamation Plants, www.lacitysan.org/san/faces/home/portal/s-lsh-wwd/s-lsh-wwd-cw/s-lsh-wwd-cw-p?_adf.ctrl-state=tyx20hvz7_1210&_afrLoop=1860410461394138O#!, accessed August 3, 2018.

Treatment Plant, 80 mgd at the Donald C. Tillman Water Reclamation Plant, and 20 mgd at the Los Angeles–Glendale Water Reclamation Plant).[15] Current flows to the treatment plants that comprise the Hyperion Service Area total approximately 338.2 mgd (consisting of 275 mgd to the Hyperion Treatment Plant, 46 mgd to the Donald C. Tillman Water Reclamation Plant, and 17.2 mgd to the Los Angeles–Glendale Water Reclamation Plant).[16,17] Current flows are below the design capacity of approximately 550 mgd for the Hyperion Service Area.

(b) Hyperion Water Reclamation Plant

As discussed above, wastewater generated from the Project Site is conveyed via the local collector sanitary sewer system directly to the Hyperion Water Reclamation Plant for treatment. The Hyperion Water Reclamation Plant has the capacity to treat approximately 450 mgd of wastewater for full secondary treatment and currently treats approximately 275 mgd.[18] As such, the Hyperion Water Reclamation Plant currently operates at approximately 61 percent of its capacity, with a remaining available capacity of

[15] *LASAN, One Water Los Angeles, CA Wastewater System Fact Sheet, 11/4/2014.*

[16] *LASAN, Hyperion Water Reclamation Plant, www.lacitysan.org/san/faces/wcnav_externalId/s-lsh-wwd-cw-p-hwrp?_adf.ctrl-state=grj40dmqj_1780&_afrLoop=3950078628628745#!, accessed August 3, 2018.*

[17] *Per Phone Communication with Abraham Razon, Environmental Engineer, City of Los Angeles, Bureau of Sanitation, March 21, 2016.*

[18] *City of Los Angeles, Department of Public Works, Bureau of Sanitation, Water Reclamation Plants, Hyperion Water Reclamation Plant, www.lacitysan.org/san/faces/wcnav_externalId/s-lsh-wwd-cw-p-hwrp?_adf.ctrl-state=1brav2vyj0_742&_afrLoop=4195442697726033#!, accessed August 3, 2018.*

approximately 175 mgd. Accordingly, current flows to the Hyperion Water Reclamation Plant are well below its design capacity.

Incoming wastewater to the treatment plant initially passes through screens and basins to remove coarse debris and grit. This is followed by primary treatment, which is a physical separation process where solids are allowed to either settle to the bottom of tanks or float on the surface. These solids, called sludge, are collected, treated, and recycled. The portion of water that remains, called primary effluent, is treated through secondary treatment using a natural, biological approach. Living micro-organisms are added to the primary effluent to consume organic pollutants. These micro-organisms are later harvested and removed as sludge. The treated water from the Hyperion Treatment Plant is discharged through an outfall pipe five miles into Santa Monica Bay and the Pacific Ocean.[19] As this treated effluent enters the ocean environment, it is diluted at a ratio of over 80 parts seawater to one part treated effluent. The discharge of effluent from the Hyperion Treatment Plant into Santa Monica Bay is regulated by permits issued under the Clean Water Act's National Pollution Discharge Elimination System (NPDES) and is required to meet LARWQCB requirements for a recreational beneficial use. Accordingly, the Hyperion Treatment Plant's effluent that is released to Santa Monica Bay is continually monitored to ensure that it meets or exceeds prescribed standards. The Los Angeles County (County) Department of Health Services also monitors flows into Santa Monica Bay.[20,21]

3. Project Impacts

a. Methodology

The analysis of Project impacts on wastewater infrastructure and treatment capacity is based on the Utilities Report included in Appendix N.2 of this Draft EIR. The table on page 8 of the Utilities Report estimates the anticipated wastewater flows to be generated by the Project during operations. The estimated wastewater generation is conservatively assumed to be equal to the Project's calculated domestic water demand (less irrigation water, which would not enter the sanitary sewer system). The assessment of the ability of

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[19] *City of Los Angeles, Department of Public Works, Bureau of Sanitation, Water Reclamation Plants, Hyperion Water Reclamation Plant, www.lacitysan.org/san/faces/wcnav_externalId/s-lsh-wwd-cw-p-hwrp?_adf.ctrl-state=1brav2vyj0_742&_afrLoop=4195442697726033#!, accessed August 3, 2018.*

[20] *City of Los Angeles, Department of Public Works, Bureau of Sanitation, Santa Monica Bay Shoreline Monitoring Municipal Separate Storm Sewer System Report, July 1, 2005–June 30, 2006.*

[21] *City of Los Angeles, Department of Public Works, Bureau of Sanitation, Environmental Monitoring, www.lacitysan.org/san/faces/wcnav_externalId/s-lsh-wwd-wp-ec-em?_adf.ctrl-state=xsmd2kqwx_131&_afrLoop=21105064772207683#!, accessed August 3, 2018.*

the wastewater system to accommodate the Project was made based on existing conditions data and a preliminary analysis provided by LASAN in the WWSI. In addition, a qualitative discussion of construction-related wastewater generation is provided.

To evaluate potential impacts relative to wastewater treatment capacity, this analysis evaluates whether adequate treatment capacity within the Hyperion Service Area would be available to accommodate the Project based on the estimate of the Project's wastewater generation and data from LASAN. For the assessment of cumulative impacts related to wastewater treatment, the projected cumulative wastewater generation is compared to the estimated available capacity of the Hyperion Service Area.

b. Thresholds of Significance

(1) State CEQA Guidelines Appendix G

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

Threshold (a): ***Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board;***

Threshold (b): ***Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which would cause significant environmental effects; or***

Threshold (c): ***[Not] 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.***

(2) 2006 L.A. CEQA Thresholds Guide

The *L.A. CEQA Thresholds Guide* states that the determination of significance shall be made on a case-by-case basis, considering the following criteria to evaluate wastewater:

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

flows greater than those anticipated in the Wastewater Facilities Plan or General Plan and its elements.[22]

In assessing impacts related to wastewater in this section, the City will use Appendix G as the thresholds of significance. The criteria identified above from the *L.A. CEQA Thresholds Guide* will be used where applicable and relevant to assist in analyzing the Appendix G threshold questions.

c. Analysis of Project Impacts

(1) Project Design Features

The Project includes water conservation features, which would serve to reduce wastewater generation. Such water conservation features are set forth in WAT-PDF-1, detailed in Section IV.L.1, Utilities and Service System—Water Supply and Infrastructure, of this Draft EIR.

(2) Relevant Project Characteristics

As described in detail in Section II, Project Description, of this Draft EIR, the Project involves the development of a 30-story mixed-use building consisting of 107 residential units (comprising an estimated 137,347 square feet), plus 7,200 square feet of ground level commercial retail uses, and 534,044 square feet of office uses. The proposed residences would include 12 studios, 42 one-bedroom units, 40 two-bedroom units, and 13 three-bedroom units ranging from approximately 650 square feet to 1,630 square feet in size.

(3) Project Impacts

Threshold (a): Would the Project exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?

(a) Construction

During construction, temporary facilities such as portable toilet and hand wash areas would be provided by the contractor at the Project Site. Wastewater from these facilities would be collected and hauled off-site and would not be discharged into the public sewer system. As such, wastewater generation related to Project construction activities would not cause a measurable increase in wastewater flows. Therefore, Project construction would

[22] *The Wastewater Facilities Plan referenced in the L.A. City CEQA Thresholds Guide has since been superseded by the Integrated Resources Plan.*

not substantially or incrementally exceed the future scheduled capacity of any treatment plant by generating flows greater than those anticipated in the IRP.

With respect to construction dewatering, the Project's excavation activities would reach a maximum depth of 25 feet and are not expected to impact groundwater, as groundwater occurs on-site at a depth of approximately 110 to 140 feet below the ground surface (bgs).[23,24] Although past soil borings conducted on-site observed water seepage at depths ranging between 13.5 and 17 feet bgs, this seepage is assumed to represent a perched condition due to the underlying siltstone bedrock and does not represent the static groundwater table.[25] However, construction of the Project's basement and building footings could have the potential to encounter perched water should it exist within the excavation area. If construction dewatering is required or if groundwater is encountered, it is anticipated to be short-term and limited to shallow/perched groundwater. As discussed further in Section IV.E, Hazards and Hazardous Materials, of this Draft EIR, the discharge of groundwater to the local storm drain system is the preferred option for dewatering operations, but when other disposal methods are determined to be infeasible, construction groundwater may be discharged into the sanitary sewer system through an industrial waste sewer discharge permit obtained from the City Department of Public Works, Bureau of Sanitation, Industrial Waste Management Division under LAMC Section 64.30 (Los Angeles Industrial Waste Control Ordinance). Compliance with an industrial waste sewer discharge permit, if required, would minimize impacts associated with any potential construction dewatering activities.

Thus, wastewater generation associated with Project construction activities would not cause a measurable increase in wastewater flows or exceed wastewater treatment requirements of the LARWQCB. Therefore, impacts to the wastewater system and treatment requirements as a result of Project construction activities would be less than significant.

(b) Operation

Wastewater generated by the Project was estimated using wastewater generation factors provided by LASAN for each of the proposed uses. As shown in Table IV.L.2-3 on page IV.L.2-15, the Project is estimated to generate an average daily wastewater flow of 108,749 gallons per day (gpd).

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[23] *CDM Smith, Hazardous Materials Technical Report, June 2017; refer to Appendix D of this Draft EIR.*

[24] *According to the California Geological Survey, the historic high groundwater level beneath the Project Site is approximately 30 feet below the ground surface.*

[25] *Geotechnologies, Inc., Soils and Geology Report to Support the Environmental Impact Report, August 16, 2016 and revised November 3, 2016; refer to Appendix IS-2 of the Initial Study.*

Table IV.L.2-3
Estimated Project Wastewater Generation

Land Use	Units	Generation Rate[a] (gpd/unit)	Total Wastewater Generation (gpd)
Residential: Studio	12 du	75 gpd/du	900
Residential: One Bedroom	42 du	110 gpd/du	4,620
Residential: Two Bedroom	40 du	150 gpd/du	6,000
Residential: Three Bedroom	13 du	190 gpd/du	2,470
Fitness Center[b]	5,444 sf	650 gpd/1,000 sf	3,539
Common Rooms[c]	1,463 sf	50 gpd/1,000 sf	73
Commercial	7,200 sf	50 gpd/1,000 sf	360
Office Uses[d]	534,044 sf	170 gpd/1,000 sf	90,787
Total Wastewater Generation			***108,749***

gpd = gallons per day
du = dwelling units
sf = square feet

[a] *Based on sewage generation rates provided by LASAN, Sewage Facilities Charge, Sewage Generation Factor for Residential and Commercial Categories, effective April 6, 2012.*

[b] *Based on the Health Club/Spa sewage generation rate, which includes any lobby area, workout floors, aerobic rooms, swimming pools, Jacuzzis, saunas, locker rooms, showers, and restrooms. Relative to the Project, this includes the 2,544-square-foot indoor fitness center and the 2,900-square-foot outdoor pool area. Because swimming pools and Jacuzzis are not typically drained and refilled on a daily basis, the total daily wastewater generation shown here and set forth in the WWSI, which includes the Project's pool and spa uses, is greater than the Project's actual anticipated average daily wastewater discharge. Accordingly, the analysis provided herein is considered conservative.*

[c] *Common rooms are ancillary rooms for tenant use. Wastewater demand is based on the Lounge sewage generation rate.*

[d] *Based on the Office Building with Cooling Tower sewage generation rate.*

Source: Psomas, Utilities Report, November 30, 2018; refer to Appendix N.2 of this Draft EIR.

In accordance with the wastewater reduction requirements for new non-residential and high-rise residential construction set forth in the LAMC (LAMC Chapter IX, Article 9, Section 99.05.303.2), the Project would be required to demonstrate a 20-percent reduction in potable water to comply with the City of Los Angeles Green Building Code. To provide a conservative analysis, the estimate of the Project's wastewater flow does not account for this required reduction. Additionally, as detailed in Table IV.L.2-3, the total daily wastewater generation estimate is greater than the Project's actual anticipated average daily wastewater discharge due to inclusion of the Project's pool and spa uses. Thus, the analysis below likely overstates the Project's potential impacts on wastewater treatment and conveyance facilities.

In addition, as previously discussed, the existing parking structure would remain in operation under the Project, as would its subterranean sump pump. The current discharge volume recorded to date by the LASAN Industrial Waste Management Division has been less than 5 gallons per month, which is considered *de minimus.*[26] Under the Project, the sump pump would continue to operate in accordance with Industrial Waste Permit No. W-553516, and no noticeable change in the discharge volume is anticipated.

As previously discussed, wastewater generated from the Project Site would be conveyed via the local collector sanitary sewer system to the Hyperion Water Reclamation Plant for treatment. The discharge of effluent from the Hyperion Treatment Plant into Santa Monica Bay is regulated by permits issued under the NPDES and is required to meet LARWQCB requirements. As LASAN monitors the treated wastewater, wastewater generated from the Project Site would not exceed wastewater treatment requirements of LARWQCB.

Therefore, operation of the Project would not result in an exceedance of any wastewater treatment requirements of the LARWQCB, and impacts would be less than significant.

Threshold (b): Would the Project require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which would cause significant environmental effects?

(a) Construction

The Project would require construction of new on-site wastewater infrastructure to serve the proposed building and potential upgrade and/or relocation of existing infrastructure. Construction impacts associated with wastewater infrastructure would be confined primarily to trenching for connections to the public sewer system. Although no upgrades to the adjacent public mains are anticipated, installation of wastewater infrastructure would be required on-site, and minor off-site work associated with additional 8-inch sewer lateral connections to the public main line(s) may be required. As set forth in TR-PDF-1 included in Section IV.J, Transportation/Traffic, a Construction Management Plan would be implemented to reduce any temporary pedestrian and traffic impacts. The Construction Management Plan would ensure safe pedestrian access and vehicle travel in general, and emergency vehicle access in particular, throughout the construction period. In

[26] *Electronic communication, Juan Espana, Location Manager, Parking Concepts Inc., November 27, 2017.*

addition, activities related to the installation of any required wastewater infrastructure would be coordinated through LASAN so as not to interrupt existing service to other users.

Based on the above, construction activities would result in a negligible and temporary wastewater generation and are not anticipated to have any adverse impact on wastewater conveyance or treatment infrastructure. In addition, most construction impacts associated with the installation of on-site wastewater facilities and off-site connections are expected to be confined to trenching and would be temporary in nature.

As such, Project construction would not require or result in the construction of new wastewater treatment facilities or expansion of existing facilities, the construction of which would cause significant environmental effects. Therefore, Project construction impacts to the wastewater conveyance or treatment system would be less than significant.

(b) Operation

Wastewater generated by the Project would be conveyed via the existing local wastewater conveyance systems for treatment at the Hyperion Treatment Plant. As described above, the Hyperion Treatment Plant has a capacity of 450 mgd, and current wastewater flow levels are 275 mgd. Accordingly, the remaining available capacity at the Hyperion Treatment Plant is 175 mgd. As discussed above and shown in Table IV.L.2-3 on page IV.L.2-15, the Project would generate an estimated wastewater flow of 108,749 gpd or approximately 0.11 mgd. The Project's average daily wastewater flow of 0.11 mgd would represent approximately 0.06 percent of the current 175 mgd remaining available capacity of the Hyperion Treatment Plant. Therefore, as confirmed by LASAN in the WWSI, Project-generated wastewater would be accommodated by the existing capacity of the Hyperion Treatment Plant.

Various factors, including future development of new treatment plants, upgrades and improvements to existing treatment capacity, development of new technologies, etc., will ultimately determine the available capacity of the Hyperion Service Area in 2025, the year in which Project occupancy is expected to occur. While it is anticipated that future iterations of the Integrated Resources Plan would provide for improvements beyond 2025 to serve future population needs, it is conservatively assumed that no new improvements to the wastewater treatment plants would occur prior to 2025. Thus, based on this conservative assumption, the 2025 effective capacity of the Hyperion Service Area would continue to be approximately 550 million gallons per day. Similarly, the capacity of the Hyperion Treatment Plant in 2025 will continue to be 450 mgd.

Even with this conservative assumption, the proposed Project's average daily wastewater generation of 0.11 mgd would represent approximately 0.02 percent of the Hyperion Service Area's assumed future capacity of 550 mgd and just over 0.02 percent of the Hyperion Treatment Plant's design capacity of 450 mgd. The Project's average daily wastewater generation plus the current flows of approximately 275 mgd to the Hyperion Treatment Plant would represent approximately 61.1 percent of the Hyperion Treatment Plant's assumed future capacity of 450 mgd. In addition, the proposed Project's average daily wastewater generation plus the current flows of approximately 338.2 mgd to the Hyperion Service Area would represent approximately 61.5 percent of the Hyperion Service Area's assumed future capacity of 550 million gallons per day. Thus, the Project's additional wastewater flows would not substantially or incrementally exceed the future scheduled capacity of any treatment plant.

Furthermore, the Project includes on-site and off-site improvements to the existing sanitary sewer system to serve the Project's need for wastewater conveyance. As described in the Utilities Report, there are four existing sanitary sewer connections to the Project Site from 2nd Street, Spring Street, and Broadway. There is an 8-inch public main line in 2nd Street, an 18-inch main line in Spring Street, and two separate 12-inch main lines in Broadway.

The WWSI, which is included in the Utilities Report appendices, evaluates the capability of the existing wastewater conveyance system to serve the Project's estimated wastewater flow. As previously discussed, the downstream sewer lines in Spring Street and Hill Street have current flow levels ranging from 7 to 33 percent, which indicates sufficient available capacity (based on design capacities of 50 percent d/D). The WWSI indicates the local sewer system may be able to accommodate Project flows pending further detailed gauging and evaluation to determine a specific connection point.[27] However, based on a letter from LASAN accompanying a Sewer Capacity Availability Request (SCAR) prepared in November 2017 (also included in the Utilities Report appendices), the sewer system would be able to handle the increased flow from the Project. Further detailed gauging and evaluation, as required by LAMC Section 64.14, would be conducted to obtain final approval of sewer capacity and a connection permit for the Project during the Project's permitting process. Based on the current approximate flow levels and design capacities in the sewer system and the Project's estimated wastewater flow, the City determined that the Project would require multiple 8-inch sewer laterals to connect to the main lines in the adjacent streets. All Project-related sanitary sewer connections and on-site infrastructure would be designed and constructed in accordance

[27] *As stated in the WWSI, if the nearest public sewer has insufficient capacity, the Project applicant would be required to construct new line(s) to connect to a point in the sewer system with sufficient capacity.*

with applicable LASAN and California Plumbing Code standards. With the connection of the laterals and approval of a connection permit, the sewer system capacity would be adequate to accommodate the additional wastewater infrastructure demand created by the Project. Thus, the Project would not cause a measurable increase in wastewater flows that would constrain a sewer's capacity.

As such, based on the above, operation of the Project would not require or result in the construction of new wastewater treatment facilities or expansion of existing facilities, the construction of which would cause significant environmental effects. Therefore, operational impacts of the Project with respect to wastewater treatment and infrastructure capacity would be less than significant, and mitigation measures are not required.

Threshold (c): Would the Project 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?

As discussed above, construction and operation of the Project would not exceed wastewater treatment requirements of the LARWQCB. In addition, based on the temporary nature of construction of new on-site infrastructure and minor off-site work associated with connections to the public main line, as well as operational wastewater generation, the Project would not constrain existing and future scheduled wastewater treatment and infrastructure capacity. Furthermore, LASAN has confirmed that the local sewer system would be able to handle the increased flow from the Project, and the Project would comply with relevant design requirements as well as applicable sanitation and plumbing standards.

Therefore, it is expected that Project would result in a determination by LASAN that it has adequate treatment capacity to serve the Project's projected demand in addition to LASAN's existing commitments. Accordingly, impacts relative to this threshold would be less than significant.

4. Cumulative Impacts

The geographic context for the cumulative impact analysis on the wastewater conveyance system is the area that includes the Project Site and those related projects potentially utilizing the same infrastructure as the Project. The geographic context for the cumulative impact analysis on wastewater treatment facilities is the Hyperion Service Area. The Project, in conjunction with growth forecasted in the Hyperion Service Area through 2025 (i.e., the Project buildout year), would generate wastewater, potentially resulting in cumulative impacts on wastewater conveyance and treatment facilities. Cumulative growth

in the greater Project area through 2025 includes specific known development projects, as well as general ambient growth projected to occur.

As identified in Section III, Environmental Setting, of this Draft EIR, 173 related projects in the surrounding area are expected to be constructed and/or operational during the same time period as the Project. Much of this growth is anticipated by the City and will be incorporated into the Central City Community Plan update, known as the DTLA 2040 Plan, which the Department of City Planning is in the process of preparing (refer to Section IV.F, Land Use, of this Draft EIR for further discussion). According to the DTLA 2040 projections, an additional approximately 125,000 people, 70,000 housing units, and 55,000 jobs will be added to the Downtown area by the year 2040.[28]

(a) Wastewater Generation

Development of the Project in conjunction with the related projects would result in an increase in the demand for sanitary sewer service in the Hyperion Service Area. Assuming that each of the 173 related projects would connect to some or all of the City sewers serving the Project Site, forecasted growth from the related projects would generate an average daily wastewater flow of approximately 12,853,544 gpd or approximately 12.85 mgd, as shown in Table IV.L.2-4 on page IV.L.2-21. This cumulative estimated flow is conservative as it does not reflect the removal of existing uses that would occur as part of many of the related projects, as well as wastewater reduction requirements for new non-residential and high-rise residential construction as set forth in the LAMC and City of Los Angeles Green Building Code. Combined with the Project's estimated wastewater generation of 108,749 gpd (0.11 mgd), this equates to a cumulative increase in average daily wastewater flow of approximately 12,962,293 gpd, or 12.96 mgd.

(b) Wastewater Treatment

Based on LASAN's average flow projections for the Hyperion Service Area, it is anticipated that the average flow in 2025 would be approximately 431 mgd.[29] As previously

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[28] *Growth projections current as of December 2018. Source: City of Los Angeles, DTLA 2040, About This Project, www.dtla2040.org/, accessed December 6, 2018.*

[29] *Los Angeles Department of Water and Power, 2015 Urban Water Management Plan, Exhibit 4D, City of Los Angeles Wastewater Treatment Plants Average Dry-Weather Flows, Reuse and Discharge Method. Based on a straight-line interpolation of the projected flows for the Hyperion Service Area (which is comprised of the Hyperion Water Reclamation Plant, the Donald C. Tillman Water Reclamation Plant, and the Los Angeles-Glendale Water Reclamation Plant) for Fiscal Year (FY) 2024/2025 (approximately 427.6 mgd) and FY 2029/2030 (approximately 444.6 mgd). The 2025 extrapolated value is calculated using FY 2024/2025 and FY 2029/2030 projections to find the average increase between years, and then applying that annual increase for FY 2025/2026: [(444.6 mgd – 427.6 mgd) ÷ 5] + 427.6 mgd = 431 mgd.*

Table IV.L.2-4
Cumulative Wastewater Generation

No.[a]	Project Name and Location	Land Use	Size	Generation Factor[b,c]	Total (gpd)
1[a]	Blossom Plaza 900 North Broadway	Condominium	223 du	—	0
		Retail	25,000 glsf	—	0
		Restaurant	15,000 gsf	—	0
2[a]	Ava Little Tokyo 200 South Los Angeles Street	Condominium	570 du	—	0
		Apartment	280 du	—	0
		Retail	50,000 glsf	—	0
3	454 East Commercial Street	Bus Maintenance Facility[d] (2 ac)	43,560 sf	0.050 gpd/sf	2,178
4	Tenten Wilshire Expansion 1027 West Wilshire Boulevard	Condominium	356 du	190 gpd/du	67,640
		Retail	5,000 glsf	0.025 gpd/sf	125
		Office	5,000 gsf	0.12 gpd/sf	600
5[a]	Vibiana Lofts 225 South Los Angeles Street	Condominium	300 du	—	0
		Retail	3,400 glsf	—	0
6	215 West 9th Street	Condominium	210 du	190 gpd/du	39,900
		Retail	9,000 glsf	0.025 gpd/sf	225
7	1101 North Main Street	Condominium	318 du	190 gpd/du	60,420
8	Amacon Project 1133 South Hope Street	Apartment	208 du	190 gpd/du	39,520
		Retail	5,069 glsf	0.025 gpd/sf	127
9	Megatoys 905 East 2nd Street	Condominium	320 du	190 gpd/du	60,800
		Retail	18,716 glsf	0.025 gpd/sf	468
10	Park Fifth 427 W. 5th St., 437 S. Hill St.	Condominium	660 du	190 gpd/du	125,400
		Restaurant (13,742 glsf)	458 seats	30 gpd/seat	13,742
11	1115 South Hill Street	Condominium	172 du	190 gpd/du	32,680
		Restaurant (6,850 gsf)	228 seats	30 gpd/seat	6,850
12	1102 West 6th Street	Apartment	649 du	190 gpd/du	123,310
		Retail	39,996 glsf	0.025 gpd/sf	1,000

Table IV.L.2-4 (Continued)
Cumulative Wastewater Generation

No.[a]	Project Name and Location	Land Use	Size	Generation Factor[b,c]	Total (gpd)
13	1130 West Wilshire Boulevard	Office	88,224 gsf	0.12 gpd/sf	10,587
		Day Care	20 stu	9 gpd/child	180
		High-Turnover Restaurant (248 gsf)	8 seats	30 gpd/seat	248
		Quality Restaurant (5,375 gsf)	179 seats	30 gpd/seat	5,375
14[a]	Metro Bus Maintenance & Operations 920 North Vignes Street	Bus Maintenance Facility	N/A	—	0
15	Glass Tower Project 1050 South Grand Avenue	Condominium	151 du	190 gpd/du	28,690
		Retail	3,472 glsf	0.025 gpd/sf	87
		Restaurant (2,200 gsf)	73 seats	30 gpd/seat	2,200
16	Embassy Tower 848 South Grand Avenue	Condominium	420 du	190 gpd/du	79,800
		Retail	38,500 glsf	0.025 gpd/sf	963
17	Beverly + Lucas Project 1430 West Beverly Boulevard	Apartment	243 du	190 gpd/du	46,170
		Retail	3,500 glsf	0.025 gpd/sf	88
18	Wilshire Grand Redevelopment Project 900 West Wilshire Boulevard	Hotel	889 rm	120 gpd/rm	106,680
		General Office	369,300 gsf	0.12 gpd/sf	44,316
		Retail/Restaurant[e] (34,776 gsf)	1,159 seats	30 gpd/seat	34,776
19	Barlow Hospital Replacement & MP 2000 Stadium Way	Condominium	800 du	190 gpd/du	152,000
		Hospital[f]	56 beds	70 gpd/bed	3,920
		Retail	15,000 glsf	0.025 gpd/sf	375
20	1435 West 3rd Street	Apartment	122 du	190 gpd/du	23,180
		Retail	3,500 glsf	0.025 gpd/sf	88
21	Grand Avenue Project 225 South Grand Avenue	Condominium	1,432 du	190 gpd/du	272,080
		Apartment	357 du	190 gpd/du	67,830
		Office	681,000 gsf	0.12 gpd/sf	81,720
		Retail	449,000 glsf	0.050 gpd/sf	22,450

Table IV.L.2-4 (Continued)
Cumulative Wastewater Generation

No.[a]	Project Name and Location	Land Use	Size	Generation Factor[b,c]	Total (gpd)
22	Metropolis Mixed-Use 899 South Francisco Street	Hotel	480 rm	120 gpd/rm	57,600
		Condominium	836 du	190 gpd/du	158,840
		Retail/Restaurant[e] (46,000 gsf)	1,533 seats	30 gpd/seat	46,000
		Office	988,225 gsf	0.12 gpd/sf	118,587
23	LA Civic Center Office 150 North Los Angeles Street	Office	712,500 gsf	0.12 gpd/sf	85,500
		Retail	35,000 glsf	0.025 gpd/sf	875
		Child Care[g] (2,500 gsf)	34 per	9 gpd/child	309
24	1300 South Hope Street	Apartment	419 du	190 gpd/du	79,610
		Retail	42,200 glsf	0.025 gpd/sf	1,055
25	928 South Broadway	Apartment	662 du	190 gpd/du	125,780
		Live/Work	11 du	190 gpd/du	2,090
		Retail	47,000 glsf	0.025 gpd/sf	1,175
		Office	34,824 gsf	0.12 gpd/sf	4,179
26	1200 South Grand Avenue	Apartment	640 du	190 gpd/du	121,600
		Retail	45,000 glsf	0.025 gpd/sf	1,125
27	Valencia Project 1501 West Wilshire Boulevard	Apartment	218 du	190 gpd/du	41,420
		Retail	6,000 glsf	0.025 gpd/sf	150
		Restaurant (1,500 gsf)	50 seats	30 gpd/seat	1,500
28	1329 West 7th Street	Apartment	87 du	190 gpd/du	16,530
29	534–552 South Main Street, 539–547 South Los Angeles Street	Apartment	160 du	190 gpd/du	30,400
		Retail	18,000 glsf	0.025 gpd/sf	450
		Restaurant (3,500 gsf)	117 seats	30 gpd/seat	3,500
		Fast-Food Restaurant (3,500 gsf)	117 seats	30 gpd/seat	3,500
30	840 South Olive Street	Condominium	303 du	190 gpd/du	57,570
		Restaurant (9,680 gsf)	323 seats	30 gpd/seat	9,680
		Retail	1,500 glsf	0.025 gpd/sf	38

Table IV.L.2-4 (Continued)
Cumulative Wastewater Generation

No.[a]	Project Name and Location	Land Use	Size	Generation Factor[b,c]	Total (gpd)
31[a]	770 South Grand Avenue	Apartment	700 du	—	0
		Retail	27,000 glsf	—	0
		Restaurant	5,000 gsf	—	0
32	Santa Fe Freight Yard Redevelopment 950 East 3rd Street	Apartment	635 du	190 gpd/du	120,650
		Retail/Restaurant[e] (30,062 glsf)	1,002 seats	30 gpd/seat	30,062
		School	532 stu	11 gpd/du	5,852
33	201 South Broadway	Mixed Office/Retail/Restaurant[e] (27,675 gsf)	923 seats	30 gpd/seat	27,675
34	The City Market 1057 South San Pedro Street	Office	549,141 gsf	0.12 gpd/sf	65,897
		Retail	224,862 glsf	0.050 gpd/sf	11,244
		Cinema	744 seats	3 gpd/seat	2,232
		Apartment	877 du	190 gpd/du	166,630
		Hotel	210 rm	120 gpd/rm	25,200
		Condominium	68 du	190 gpd/du	12,920
35	400 South Broadway	Apartment	450 du	190 gpd/du	85,500
		Retail	6,904 glsf	0.025 gpd/sf	173
		Bar	5,000 gsf	0.720 gpd/sf	3,600
36	1001 South Olive Street	Apartment	225 du	190 gpd/du	42,750
		Restaurant (5,000 gsf)	167 seats	30 gpd/seat	5,000
37	Camden Arts Mixed-Use 1525 East Industrial Street	Apartment	328 du	190 gpd/du	62,320
		Retail	6,400 glsf	0.025 gpd/sf	160
		Restaurant (5,700 gsf)	190 seats	30 gpd/seat	5,700
		Office	27,300 gsf	0.12 gpd/sf	3,276
38	920 South Hill Street	Apartment	239 du	190 gpd/du	45,410
		Retail	5,400 glsf	0.025 gpd/sf	135
39	955 South Broadway	Apartment	163 du	190 gpd/du	30,970
		Retail	6,406 glsf	0.025 gpd/sf	161

Table IV.L.2-4 (Continued)
Cumulative Wastewater Generation

No.[a]	Project Name and Location	Land Use	Size	Generation Factor[b,c]	Total (gpd)
40	801 South Olive Street	Apartment	363 du	190 gpd/du	68,970
		Restaurant (7,500 gsf)	250 seats	30 gpd/seat	7,500
		Retail	2,500 glsf	0.025 gpd/sf	63
41	1212 South Flower Street	Condominium	730 du	190 gpd/du	138,700
		Retail	7,873 glsf	0.025 gpd/sf	197
42	820 South Olive Street; 825 South Hill Street	Apartment	589 du	190 gpd/du	111,910
		Retail	4,500 glsf	0.025 gpd/sf	113
43	Sunset Everett Mixed-Use 1185 West Sunset Boulevard	Apartment	214 du	190 gpd/du	40,660
		Condominium	6 du	190 gpd/du	1,140
		Single-Family Residential	6 du	190 gpd/du	1,140
44	601 South Main Street	Condominium	452 du	190 gpd/du	85,880
		Retail	25,000 glsf	0.025 gpd/sf	625
45	2051 East 7th Street	Apartment	320 du	190 gpd/du	60,800
		Retail	15,000 glsf	0.025 gpd/sf	375
		Restaurant (5,000 gsf)	167 seats	30 gpd/seat	5,000
46	Herald Examiner 1111 South Broadway & 156 West 11th Street & 1201 South Main Street	Apartment	391 du	190 gpd/du	74,290
		Retail	49,000 glsf	0.025 gpd/sf	1,225
		Office	39,725 gsf	0.12 gpd/sf	4,767
47	South Park Site 1 1120 South Grand Avenue	Apartment	666 du	190 gpd/du	126,540
		Retail	20,600 glsf	0.025 gpd/sf	515
48	South Park Site 4 1230 South Olive Street	Apartment	360 du	190 gpd/du	68,400
		Retail	6,400 glsf	0.025 gpd/sf	160
49	1247 South Grand Avenue	Apartment	115 du	190 gpd/du	21,850
		Retail	4,610 glsf	0.025 gpd/sf	116
50	Legal Aid Foundation of Los Angeles 1550 West 8th Street	Office	33,957 gsf	0.12 gpd/sf	4,075

Table IV.L.2-4 (Continued)
Cumulative Wastewater Generation

No.[a]	Project Name and Location	Land Use	Size	Generation Factor[b,c]	Total (gpd)
51	Variety Arts Mixed-Use 940 South Figueroa Street	Theater	1,942 seats	3 gpd/seat	5,826
		Restaurant (10,056 gsf)	335 seats	30 gpd/seat	10,056
		Bar	5,119 gsf	0.720 gpd/sf	3,686
52	La Plaza Cultura Village 527 North Spring Street	Apartment	345 du	190 gpd/du	65,550
		Retail	23,000 glsf	0.025 gpd/sf	575
		Specialty Retail	21,000 glsf	0.025 gpd/sf	525
		Restaurant (11,000 gsf)	367 seats	30 gpd/seat	11,000
53	1036 South Grand Avenue	Restaurant (7,149 gsf)	238 seats	30 gpd/seat	7,149
54	Coca Cola 963 East 4th Street	Office	78,600 gsf	0.12 gpd/sf	9,432
		Retail	25,000 glsf	0.025 gpd/sf	625
		Restaurant (20,000 gsf)	667 seats	30 gpd/seat	20,000
55	1335 West 1st Street	Apartment	102 du	190 gpd/du	19,380
		Retail	3,463 glsf	0.025 gpd/sf	87
56	459 South Hartford Avenue	Apartment	101 du	190 gpd/du	19,190
57	401 North Boylston Street	Apartment	121 du	190 gpd/du	22,990
58	1800 East 7th Street	Apartment	122 du	190 gpd/du	23,180
		Restaurant (4,605 gsf)	154 seats	30 gpd/seat	4,605
		Retail	3,245 glsf	0.025 gpd/sf	82
59	1150 West Wilshire Boulevard	Apartment	80 du	190 gpd/du	15,200
		Restaurant (4,589 gsf)	153 seats	30 gpd/seat	4,589
60	737 South Spring Street	Apartment	320 du	190 gpd/du	60,800
		Pharmacy/Drug Store	25,000 gsf	0.025 gpd/sf	625
61	520 South Mateo Street	Apartment	600 du	190 gpd/du	114,000
		Office	30,000 gsf	0.12 gpd/sf	3,600
		Retail	15,000 glsf	0.025 gpd/sf	375
		Restaurant (15,000 gsf)	500 seats	30 gpd/seat	15,000
62	1218 West Ingraham Street	Apartment	80 du	190 gpd/du	15,200

Table IV.L.2-4 (Continued)
Cumulative Wastewater Generation

No.[a]	Project Name and Location	Land Use	Size	Generation Factor[b,c]	Total (gpd)
63	Palmetto & Mateo 555 South Mateo Street	Retail	153,000 glsf	0.050 gpd/sf	7,650
64	732 South Spring Street	Apartment	400 du	190 gpd/du	76,000
		Pharmacy/Drug Store	15,000 gsf	0.025 gpd/sf	375
65	340 South Hill Street	Apartment	428 du	190 gpd/du	81,320
		Restaurant (2,894 gsf)	96 seats	30 gpd/seat	2,894
66	1145 West 7th Street	Condominium	241 du	190 gpd/du	45,790
		Retail	7,291 glsf	0.025 gpd/sf	183
67	540 South Santa Fe Avenue	Office	89,825 gsf	0.12 gpd/sf	10,779
68	360 South Alameda Street	Apartment	55 du	190 gpd/du	10,450
		Office	6,300 gsf	0.12 gpd/sf	756
		Restaurant (2,500 gsf)	83 seats	30 gpd/seat	2,500
69	118 South Astronaut Ellison S Onizuka Street	Apartment	77 du	190 gpd/du	14,630
70	Kaiser Permanente Los Angeles Medical Center Expansion 765 West College Street	Medical Office	100,000 gsf	0.250 gpd/sf	25,000
		Inpatient Facility[f]	62 beds	70 gpd/bed	4,340
71	Stadium Way & Chavez Ravine Apartments 959 East Stadium Way	Apartment	158 du	190 gpd/du	30,020
72	700 West Cesar Chavez Avenue	Apartment	299 du	190 gpd/du	56,810
		Retail	8,000 glsf	0.025 gpd/sf	200
73	Clinic at 7th & Wall 649 South Wall Street	Medical Office[h] (66 emp)	16,500 sf	0.250 gpd/sf	4,125
		Assisted Living[f]	55 beds	70 gpd/bed	3,850
74	Metro Emergency Security Operations Center 410 North Center Street	Office	110,000 gsf	0.12 gpd/sf	13,200
75	500 South Mateo Street	Restaurant (12,882 gsf)	429 seats	30 gpd/seat	12,882

Table IV.L.2-4 (Continued)
Cumulative Wastewater Generation

No.[a]	Project Name and Location	Land Use	Size	Generation Factor[b,c]	Total (gpd)
76	Medallion Phase 2 300 South Main Street	Apartment	471 du	190 gpd/du	89,490
		Retail	5,190 glsf	0.025 gpd/sf	130
		Restaurant (27,780 gsf)	926 seats	30 gpd/seat	27,780
77	Alexan South Broadway 850 South Hill Street	Apartment	300 du	190 gpd/du	57,000
		Retail	3,500 glsf	0.025 gpd/sf	88
		Restaurant (3,500 gsf)	117 seats	30 gpd/seat	3,500
78	340 North Patton Street	Apartment	44 du	190 gpd/du	8,360
79	Alameda Hotel 400 South Alameda Street	Hotel	66 rm	120 gpd/rm	7,920
		Restaurant (2,130 gsf)	71 seats	30 gpd/seat	2,130
		Retail	840 glsf	0.025 gpd/sf	21
80	Apex II 700 West 9th Street	Apartment	341 du	190 gpd/du	64,790
		Retail	11,687 glsf	0.025 gpd/sf	293
81	649 South Olive Street	Hotel	241 rm	120 gpd/rm	28,920
82	Sapphire Mixed-Use 1111 West 6th Street	Apartment	362 du	190 gpd/du	68,780
		Retail	25,805 glsf	0.025 gpd/sf	646
83	Grand Residences 1233 South Grand Avenue	Condominium	161 du	190 gpd/du	30,590
		Restaurant (3,000 gsf)	100 seats	30 gpd/seat	3,000
84	675 South Bixel Street	Hotel	126 rm	120 gpd/rm	15,120
		Apartment	422 du	190 gpd/du	80,180
		Retail	4,874 glsf	0.025 gpd/sf	122
85	740 South Hartford Avenue	Apartment	80 du	190 gpd/du	15,200
86	Lifan Tower 1235 West 7th Street	Condominium	304 du	190 gpd/du	57,760
		Retail	5,699 glsf	0.025 gpd/sf	143
87	940 South Hill Street	Apartment	232 du	190 gpd/du	44,080
		Restaurant (14,000 glsf)	467 seats	30 gpd/seat	14,000
88	1322 Linwood Avenue	Apartment	84 du	190 gpd/du	15,960

Table IV.L.2-4 (Continued)
Cumulative Wastewater Generation

No.[a]	Project Name and Location	Land Use	Size	Generation Factor[b,c]	Total (gpd)
89	1340 South Olive Street	Apartment	156 du	190 gpd/du	29,640
		Retail	5,000 glsf	0.025 gpd/sf	125
		Restaurant (10,000 gsf)	333 seats	30 gpd/seat	10,000
90	1334 South Flower Street	Apartment	188 du	190 gpd/du	35,720
		Retail/Restaurant[e] (10,096 glsf)	337 seats	30 gpd/seat	10,096
91	929 East 2nd Street	Retail	37,974 glsf	0.025 gpd/sf	950
		Other[i]	71,078 gsf	0.120 gpd/sf	8,530
92	633 South Spring Street	Hotel	176 rm	120 gpd/rm	21,120
		Restaurant (8,430 gsf)	281 seats	30 gpd/seat	8,430
		Bar	5,290 gsf	0.720 gpd/sf	3,809
93	Luxe Hotel 1020 South Figueroa Street	Hotel	300 rm	120 gpd/rm	36,000
		Condominium	435 du	190 gpd/du	82,650
		Retail	58,959 glsf	0.025 gpd/sf	1,474
94	1200 South Figueroa Street	Residential	648 du	190 gpd/du	123,120
		Restaurant (20,000 gsf)	667 seats	30 gpd/seat	20,000
		Retail	28,000 glsf	0.025 gpd/sf	700
95	701 South Hill Street	Apartment	124 du	190 gpd/du	23,560
		Retail	8,500 glsf	0.025 gpd/sf	213
96	525 South Spring Street	Apartment	360 du	190 gpd/du	68,400
		Retail	9,400 glsf	0.025 gpd/sf	235
97	Case Hotel 1106 South Broadway	Hotel	151 rm	120 gpd/rm	18,120
98[a]	425 West 11th Street	Office	500 emp	—	0
99	Freehand Hotel 416 West 8th Street	Hotel	200 rm	120 gpd/rm	24,000

Table IV.L.2-4 (Continued)
Cumulative Wastewater Generation

No.[a]	Project Name and Location	Land Use	Size	Generation Factor[b,c]	Total (gpd)
100	The Bloc 700 South Flower Street	Office	737,710 gsf	0.12 gpd/sf	88,526
		Retail	260,000 glsf	0.050 gpd/sf	13,000
		Restaurant (50,000 gsf)	1,667 seats	30 gpd/seat	50,000
		Theater	800 seats	3 gpd/seat	2,400
101	1728 West 7th Street	Restaurant/Bar[e] (13,100 gsf)	437 seats	30 gpd/seat	13,100
102	Olympic Tower 815 West Olympic Boulevard	Hotel	373 rm	120 gpd/rm	44,760
		Retail	65,074 glsf	0.025 gpd/sf	1,627
		Condominium	374 du	190 gpd/du	71,060
		Office	33,498 gsf	0.12 gpd/sf	4,020
		Conference Center[j]	10,801 gsf	0.350 gpd/sf	3,781
103	LA Gateway Project 1025 West Olympic Boulevard	Apartment	1,367 du	190 gpd/du	259,730
		Restaurant (20,000 gsf)	667 seats	30 gpd/seat	20,000
		Retail	20,000 glsf	0.025 gpd/sf	500
104	Oceanwide Plaza 1101 South Flower Street	Condominium	504 du	190 gpd/du	95,760
		Hotel	183 rm	120 gpd/rm	21,960
		Retail	120,583 glsf	0.050 gpd/sf	6,030
		Restaurant (46,000 gsf)	1,533 seats	30 gpd/seat	46,000
105	Los Angeles Sports and Entertainment District Figueroa Street & 11th Street	Office	601,800 gsf	0.12 gpd/sf	72,216
		Convention Center[j]	250,000 gsf	0.350 gpd/sf	87,500
106[a]	Hall of Justice 211 West Temple Street	Government Building	1,600 emp	—	0
		Parking Structure	1,000 spc	—	0
107[a]	418 South Spring Street	High-Rise Condominium	96 du	—	0
		Hotel	122 rm	—	0
		Retail	10,000 glsf	—	0
		Health Club	2,000 gsf	—	0
		Bar	3,500 gsf	—	0

Table IV.L.2-4 (Continued)
Cumulative Wastewater Generation

No.[a]	Project Name and Location	Land Use	Size	Generation Factor[b,c]	Total (gpd)
108	1013 North Everett Street	Apartment	49 du	190 gpd/du	9,310
109	708 North Hill Street	Apartment	162 du	190 gpd/du	30,780
		Retail	5,000 glsf	0.025 gpd/sf	125
110	211 West Alpine Street	Apartment	122 du	190 gpd/du	23,180
		Retail	7,500 glsf	0.025 gpd/sf	188
111	130 South Beaudry Avenue	Apartment	220 du	190 gpd/du	41,800
112	College Station Mixed-Use 129 W. College Street, 924 N. Spring Street	Condominium	770 du	190 gpd/du	146,300
		Retail	51,592 glsf	0.025 gpd/sf	1,290
113	Urban View Lots 495 South Hartford Avenue	Apartment	218 du	190 gpd/du	41,420
114	1316 West Court Street	Apartment	60 du	190 gpd/du	11,400
115	8th & Figueroa Mixed-Use 744 South Figueroa Street	Apartment	438 du	190 gpd/du	83,220
		Retail	7,500 glsf	0.025 gpd/sf	188
116	1201 North Broadway	Apartment	118 du	190 gpd/du	22,420
		Office	8,800 gsf	0.12 gpd/sf	1,056
117	1346–1354 West Court Street	Apartment	43 du	190 gpd/du	8,170
118	433 South Main Street	Condominium	161 du	190 gpd/du	30,590
		Mixed-Use[i]	6,900 gsf	0.12 gpd/sf	828
119	Downtown LA Hotel 926 West James M. Woods Boulevard	Hotel	247 rm	120 gpd/rm	29,640
120	JMF Tower 333 West 5th Street	Condominium	100 du	190 gpd/du	19,000
		Hotel	200 rm	120 gpd/rm	24,000
		Restaurant (27,500 gsf)	917 seats	30 gpd/seat	27,500

Table IV.L.2-4 (Continued)
Cumulative Wastewater Generation

No.[a]	Project Name and Location	Land Use	Size	Generation Factor[b,c]	Total (gpd)
121	Times Mirror Square 202 West 1st Street	Apartment	1,127 du	190 gpd/du	214,130
		Office	285,088 gsf	0.12 gpd/sf	34,211
		Supermarket	50,000 gsf	0.025 gpd/sf	1,250
		Restaurant (75,589 gsf)	2,520 seats	30 gpd/seat	75,589
122	888 South Hope Street	Apartment	526 du	190 gpd/du	99,940
123	Sofia Los Angeles 1106 West 6th Street	Apartment	606 du	190 gpd/du	115,140
		Retail	25,000 glsf	0.025 gpd/sf	625
124	Ferrante 1000 West Temple Street	Apartment	1,500 du	190 gpd/du	285,000
		Retail	30,000 glsf	0.025 gpd/sf	750
125	640 South Alameda Street, 1206 East 6th Street	Apartment	1,305 du	190 gpd/du	247,950
		Condominium	431 du	190 gpd/du	81,890
		Hotel	412 rm	120 gpd/rm	49,440
		Office	253,514 gsf	0.12 gpd/sf	30,422
		Retail	127,609 glsf	0.050 gpd/sf	6,381
		School[g] (29,316 gsf)	402 stu	11 gpd/stu	4,418
		Art Space[k]	22,429 gsf	0.050 gpd/sf	1,122
126	1300 South Figueroa Street	Hotel	1,024 rm	120 gpd/rm	122,880
127	Budokan of Los Angeles 237–249 South Los Angeles Street	Sports Center[l]	63,000 gsf	0.200 gpd/sf	12,600
128	King's Arch 537 South Broadway	Office	45,000 gsf	0.12 gpd/sf	5,400
129	Title Insurance Building 433 South Spring Street	Office	320,000 gsf	0.12 gpd/sf	38,400
130	Subway Terminal Retail 417 South Hill Street	Retail/Office[m]	130,000 glsf	0.12 gpd/sf	15,600
131	405 South Hewitt Street	Office	255,500 gsf	0.12 gpd/sf	30,660
		Retail	4,970 glsf	0.025 gpd/sf	125
		Restaurant (9,940 gsf)	331 seats	30 gpd/seat	9,940

Table IV.L.2-4 (Continued)
Cumulative Wastewater Generation

No.[a]	Project Name and Location	Land Use	Size	Generation Factor[b,c]	Total (gpd)
132	333 South Alameda Street	Apartment	994 du	190 gpd/du	188,860
		Retail	99,300 glsf	0.025 gpd/sf	2,483
133	The San Pedro Towers 600–628 S. San Pedro St, 611–615 S. Crocker St, 518–522 E. 6th St	Affordable Housing	298 du	190 gpd/du	56,620
		Manager Apartment	5 du	190 gpd/du	950
		Retail	3,136 glsf	0.025 gpd/sf	79
		Office	16,773 gsf	0.12 gpd/sf	2,013
134	1000 South Hill Street	Apartment	498 du	190 gpd/du	94,620
		Retail	8,707 glsf	0.025 gpd/sf	218
135	1011 North Broadway	Hotel	92 rm	120 gpd/rm	11,040
136	1018 West Ingraham Street	Apartment	43 du	190 gpd/du	8,170
		Retail	7,400 glsf	0.025 gpd/sf	185
137	1100 East 5th Street	Apartment	220 du	190 gpd/du	41,800
		Office	20,021 gsf	0.12 gpd/sf	2,403
		Restaurant (19,609 gsf)	654 seats	30 gpd/seat	19,609
		Retail	9,250 glsf	0.025 gpd/sf	232
138	1100 South Main Street	Apartment	379 du	190 gpd/du	72,010
		Retail	25,810 glsf	0.025 gpd/sf	646
139	1625 West Palo Alto Street	Hotel	88 rm	120 gpd/rm	10,560
140	1219 South Hope Street	Hotel	75 rm	120 gpd/rm	9,000
		Restaurant (7,700 gsf)	257 seats	30 gpd/seat	7,700
141	1246 West Court Street	Apartment	54 du	190 gpd/du	10,260
142	1307 West 7th Street	Apartment	76 du	190 gpd/du	14,440
		Retail	6,035 glsf	0.025 gpd/sf	151
143	1322 West Maryland Street	Apartment	47 du	190 gpd/du	8,930
		Retail	760 glsf	0.025 gpd/sf	19
144	1323 South Grand Avenue	Apartment	284 du	190 gpd/du	53,960
		Retail	6,300 glsf	0.025 gpd/sf	158

Table IV.L.2-4 (Continued)
Cumulative Wastewater Generation

No.[a]	Project Name and Location	Land Use	Size	Generation Factor[b,c]	Total (gpd)
145	656 South Stanford Avenue	Apartment	82 du	190 gpd/du	15,580
146	The Weingart Towers 554–562 South San Pedro Street, 555–561 South Crocker Street	Affordable Housing	378 du	190 gpd/du	71,820
		Manager Apartment	4 du	190 gpd/du	760
		Retail	1,758 glsf	0.025 gpd/sf	44
		Office	4,410 gsf	0.12 gpd/sf	530
		Dining Room/Flex Space[e] (5,932 gsf)	198 seats	30 gpd/seat	5,932
147	601 South Central Avenue	Apartment	236 du	190 gpd/du	44,840
		Retail	12,000 glsf	0.025 gpd/sf	300
148	640 South Santa Fe Avenue	Office	107,127 gsf	0.12 gpd/sf	12,856
149	641 South Imperial Street	Apartment	140 du	190 gpd/du	26,600
		Office	14,749 gsf	0.12 gpd/sf	1,770
150	643 North Spring Street	Apartment	203 du	190 gpd/du	38,570
		Retail	21,049 glsf	0.025 gpd/sf	527
151	668 South Alameda Street	Apartment	475 du	190 gpd/du	90,250
		Office	43,000 gsf	0.12 gpd/sf	5,160
		Retail	9,000 glsf	0.025 gpd/sf	225
		Supermarket	15,000 gsf	0.025 gpd/sf	375
		Restaurant (17,000 gsf)	567 seats	30 gpd/seat	17,000
152	676 South Mateo Street	Apartment	172 du	190 gpd/du	32,680
		Retail	23,025 glsf	0.025 gpd/sf	576
153	755 South Los Angeles Street	Office	60,243 gsf	0.12 gpd/sf	7,230
		Retail	16,694 glsf	0.025 gpd/sf	418
		Restaurant (26,959 gsf)	899 seats	30 gpd/seat	26,959
154	940 East 4th Street	Apartment	93 du	190 gpd/du	17,670
		Retail	14,248 glsf	0.025 gpd/sf	357
		Office	6,000 gsf	0.12 gpd/sf	720

Table IV.L.2-4 (Continued)
Cumulative Wastewater Generation

No.[a]	Project Name and Location	Land Use	Size	Generation Factor[b,c]	Total (gpd)
155	1410 South Flower Street	Apartment	152 du	190 gpd/du	28,880
		Retail	1,184 glsf	0.025 gpd/sf	30
156	845 South Olive Street	Apartment	208 du	190 gpd/du	39,520
		Retail	810 glsf	0.025 gpd/sf	21
		Restaurant (1,620 gsf)	54 seats	30 gpd/seat	1,620
157	330 South Alameda Street	Apartment	186 du	190 gpd/du	35,340
		Office	10,415 gsf	0.12 gpd/sf	1,250
		Retail	11,925 glsf	0.025 gpd/sf	299
158	527 South Colyton Street	Condominium	310 du	190 gpd/du	58,900
		Retail	11,375 glsf	0.025 gpd/sf	285
		Art Production Space[k]	11,736 gsf	0.050 gpd/sf	587
159	Fashion District Residences 212–230 East 7th Street, 701–739 South Maple Avenue	Apartment	452 du	190 gpd/du	85,880
		Retail	6,802 glsf	0.025 gpd/sf	171
		Restaurant (6,802 gsf)	227 seats	30 gpd/seat	6,802
160	755 South Wall Street	Apartment	323 du	190 gpd/du	61,370
		Retail	4,400 glsf	0.025 gpd/sf	110
		Event Space[n]	125 per	11 gpd/per	1,375
		Office	53,200 gsf	0.12 gpd/sf	6,384
		Restaurant (4,420 gsf)	147 seats	30 gpd/seat	4,420
161	1101 East 5th Street, 445–457 South Colyton Street	Live/Work	129 du	190 gpd/du	24,510
		Retail	26,979 glsf	0.025 gpd/sf	675
		Restaurant (31,719 gsf)	1,057 seats	30 gpd/seat	31,719
		Hotel	113 rm	120 gpd/rm	13,560
		Art Uses[k]	13,771 gsf	0.050 gpd/sf	689
162	1045 South Olive Street	Apartment	800 du	190 gpd/du	152,000

Table IV.L.2-4 (Continued)
Cumulative Wastewater Generation

No.[a]	Project Name and Location	Land Use	Size	Generation Factor[b,c]	Total (gpd)
163	Figueroa Centre 913 South Figueroa Street	Hotel	220 rm	120 gpd/rm	26,400
		Apartment	200 du	190 gpd/du	38,000
		Retail	94,080 glsf	0.025 gpd/sf	2,352
164	8th, Grand & Hope Tower 754 South Hope Street	Apartment	409 du	190 gpd/du	77,710
		Retail	7,329 sf	0.025 gpd/sf	184
165	1340 South Hill Street	Apartment	233 du	190 gpd/du	44,270
166	670 Mesquit Street	Apartment	308 du	190 gpd/du	58,520
		Hotel	236 rm	120 gpd/rm	28,320
		Office	944,055 gsf	0.12 gpd/sf	113,287
		Retail	79,240 glsf	0.025 gpd/sf	1,981
		Restaurant (89,576 gsf)	2,986 seats	30 gpd/seat	89,576
		Event Space[j]	93,617 gsf	0.350 gpd/sf	32,766
		Gym	62,148 gsf	0.650 gpd/sf	40,397
		Grocery	56,912 gsf	0.025 gpd/sf	1,423
167	1030–1380 N. Broadway, 1251 N. Spring St	Apartment	920 du	190 gpd/du	174,800
		Retail	21,406 glsf	0.025 gpd/sf	536
168	Alameda Square 777 South Alameda Street	Office	1,300,000 gsf	0.12 gpd/sf	156,000
		Retail	250,000 glsf	0.050 gpd/sf	12,500
169	1248 South Figueroa Street	Hotel	1,162 rm	120 gpd/rm	139,440
		Restaurant (13,145 gsf)	438 seats	30 gpd/seat	13,145
170	215 West 14th Street	Apartment	154 du	190 gpd/du	29,260
		Retail	10,700 glsf	0.025 gpd/sf	268
171	1745 East 7th Street	Apartment	57 du	190 gpd/du	10,830
		Retail	6,000 glsf	0.025 gpd/sf	150
172	354 South Spring Street	Apartment	212 du	190 gpd/du	40,280
		Restaurant (15,280 gsf)	509 seats	30 gpd/seat	15,280

Table IV.L.2-4 (Continued)
Cumulative Wastewater Generation

No.[a]	Project Name and Location	Land Use	Size	Generation Factor[b,c]	Total (gpd)
173	Alameda District Plan	Residential	22 du	190 gpd/du	4,180
		Office	7,443,200 gsf	0.12 gpd/sf	893,184
		Retail	645,000 glsf	0.050 gpd/sf	32,250
		Hotel	750 rm	120 gpd/rm	90,000
		Restaurant (20,000 gsf)	667 seats	30 gpd/seat	20,000
		Museum	70,000 gsf	0.12 gpd/sf	8,400
Related Projects Wastewater Generation					**12,853,544**
Project Wastewater Generation					**108,749**
Total Wastewater Generation for Related Projects and Project					**12,962,293**

du = dwelling units
emp = employees
glsf = gross leasable square feet
gpd = gallons per day
gsf = gross square feet
per = persons
rm = rooms
sf = square feet
stu = students
N/A = Information is not available.
— = Information is not applicable.
Totals calculated may not sum due to rounding.

[a] *Related Project Nos. 1, 2, 5, 14, 31, 98, 106, and 107 have been built and are operational. As these related projects have already been accounted for in existing conditions, wastewater generation was not calculated for cumulative impact purposes.*

[b] *This analysis is based on sewage generation rates provided by LASAN, Sewerage Facilities Charge, Sewage Generation Factor for Residential*

Table IV.L.2-4 (Continued)
Cumulative Wastewater Generation

No.[a]	Project Name and Location	Land Use	Size	Generation Factor[b,c]	Total (gpd)

and Commercial Categories, effective April 6, 2012, except as noted below.

[c] *This analysis conservatively assumes all dwelling units are 3-bedroom units. In addition, restaurant wastewater generation is calculated based on the Los Angeles Department of Water and Power standard of 1 seat per 30 square feet.*

[d] *It is conservatively assumed that 50 percent (i.e., 1 acre, or 43,560 square feet) of the bus maintenance facility will generate wastewater. As sewage generation rates provided by LASAN do not include rates for bus maintenance facilities, the highest comparable land use rate of 50 gallons per day per 1,000 square feet for "Machine Shop" has been applied.*

[e] *This related project does not distinguish square footage between these uses. Therefore, to provide a conservative analysis, this related project is assumed to include only restaurant uses.*

[f] *The sewage generation rate reflects LASAN rates for hospitals and convalescent homes.*

[g] *Sewage generation rates provided by LASAN do not include floor area-based rates for child care or school uses. Therefore, a rate of 73 square feet per student or child has been applied to calculate the number of students, as provided by the California Department of Education, Report on Complete Schools, www.cde.ca.gov/ls/fa/sf/completesch.asp, accessed August 3, 2018.*

[h] *Sewage generation rates provided by LASAN do not include employee-based rates. Therefore, a rate of 4 employees per 1,000 square feet of medical office space has been applied to calculate floor area, based on Section IV.N.(1), Water Consumption, of the Draft EIR for Village at Playa Vista Draft EIR, August 2003.*

[i] *This related project does not specify proposed land uses. Therefore, the "Office" rate has been assumed, which is more conservative than other non-residential uses typical of mixed-use projects (e.g., retail uses).*

[j] *Sewage generation rates provided by LASAN do not include rates for conference center, convention center, event space uses. Therefore, the most comparable land use rate of 350 gallons per day per 1,000 square feet for "Banquet Room/Ballroom" has been applied.*

[k] *Sewage generation rates provided by LASAN do not include rates for art and production space uses. Therefore, the most comparable land use rate of 50 gallons per day per 1,000 square feet for "Studio: Film/TV/Recording" has been applied.*

[l] *Sewage generation rates provided by LASAN do not include rates for sports center uses. Therefore, the most comparable land use rate of 200 gallons per day per 1,000 square feet for "Gymnasium" has been applied.*

[m] *This related project does not distinguish square footage between the retail and office uses. Therefore, to provide a conservative analysis, the higher "Office" rate has been applied.*

[n] *Sewage generation rates provided by LASAN do not include rates per person for event center uses. Therefore, the most comparable rate available for non-residential uses per person is applied.*

Source: Eyestone Environmental, 2018.

indicated, the Hyperion Service Area's total treatment capacity is assumed to be approximately 550 mgd in 2025 (i.e., no change to existing capacity).

The Project wastewater flow of approximately 0.11 mgd combined with the related projects flow of approximately 12.85 mgd and the forecasted 2025 wastewater flow of 431 mgd for the Hyperion Service Area would result in a total cumulative wastewater flow of approximately 443.96 mgd. This cumulative total is considered conservative as a certain amount of development reflected in the related projects likely is included in LASAN's growth projections. Based on the Hyperion Service Area's assumed future capacity of approximately 550 mgd, the Hyperion Service Area is expected to have adequate capacity to accommodate the cumulative wastewater flow of approximately 443.96 mgd in 2025.

Therefore, the Project would not combine with related development to exceed wastewater treatment requirements of the LARWQCB or result in the construction of new wastewater treatment facilities or expansion of existing facilities, the construction of which would cause significant environmental effects. Project impacts on the wastewater treatment systems would not be cumulatively considerable, and cumulative impacts would be less than significant.

(c) Wastewater Infrastructure

As with the Project, new development projects occurring in the Project vicinity would be required to coordinate with LASAN via a sewer capacity availability request to determine whether adequate sewer capacity exists. In addition, new development projects would be subject to LAMC Sections 64.11 and 64.12, which require approval of a sewer permit prior to connection to the sewer system. In order to connect to the sewer system, the related projects would be subject to payment of the City's Sewerage Facilities Charge. Payment of such fees would help offset the costs associated with infrastructure improvements that may be needed to accommodate wastewater generated by overall future growth. If system upgrades are required as a result of a given project's additional flow, arrangements would be made between the relevant project applicant and LASAN to construct the necessary improvements. Furthermore, similar to the Project, each related project would be required to comply with applicable water conservation programs, including the City of Los Angeles Green Building Code.

Therefore, the Project would not combine with related development to result in a determination by LASAN that it does not have adequate capacity to serve projected demand. Project impacts on the City's wastewater infrastructure would not be cumulatively considerable, and cumulative impacts would be less than significant.

5. Mitigation Measures

Project-level and cumulative impacts with regard to wastewater would be less than significant. Therefore, no mitigation measures are required.

6. Level of Significance After Mitigation

Project-level and cumulative impacts related to wastewater would be less than significant without mitigation.