IV. Environmental Impact Analysis

L.2 Utilities and Service Systems—Wastewater

1. Introduction

This section analyzes the proposed project's potential impacts on the existing 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 is or will be available to meet the project's estimated wastewater generation. The proposed project's consistency with relevant adopted goals and ordinances is also discussed. The following analysis is based on the *Sanitary Sewer Capacity Study for Mixed Use Project at Boyle Heights* ("Sewer Capacity Study"), June 8, 2011, prepared by Stantec Consulting Inc., contained in Appendix M.3 of this Draft EIR as well as data from the City of Los Angeles Department of Public Works (LADPW), Bureaus of Sanitation and Engineering.

2. Environmental Setting

a. Existing Conditions

(1) Wastewater Infrastructure

The City of Los Angeles operates and maintains the largest wastewater collection system in the United States. The existing wastewater collection system includes more than 6,500 miles of public sewers and 48 pumping stations, serves a population of more than four million, and conveys approximately 400 million gallons of wastewater per day to the City's four wastewater treatment and water reclamation plants.[37] The project site is served by the Hyperion Sanitary Sewer System (described further below), operated by LADPW.

---

[37] *City of Los Angeles, Department of Public Works, City Sewers, www.lasewers.org/sewers/about/index.htm, accessed September 3, 2010.*

Locally, the project site and surrounding area are served by a wastewater collection system that flows from north to south and drains an approximately 900-acre area generally located north of the Golden State/Santa Ana Freeway (I-5). This system was originally constructed in the 1910s, with major additions in the 1940s and 1960s. As part of this system, a sewer lift station referred to as Sewer Pump Plant No. 606 is located at Dacotah and Eighth Streets and discharges to a 21-inch diameter concrete force main in Eighth Street. Sewer Pump Plant No. 606, which serves the off-site residential area located north of Eighth Street and the eastern portion of the project site, connects to the East Central Interceptor Sewer (ECIS), which in turn conveys wastewater to Hyperion Treatment Plant (HTP).

Two trunk sewers traverse the project site, carrying wastewater generated upstream and intercepting flows from a portion of the site. These lines include the Glenn Avenue trunk sewer, a 16- to 21-inch diameter clay pipe sewer in Glenn Avenue; and the Camulos trunk sewer, a 15- to 18-inch diameter clay pipe sewer that follows the vacated Camulos Street alignment (which is now a natural open space/drainage channel running from east to west through the project site, known as "The Mall").[38] These lines join on-site in Glenn Avenue at Camulos Street and continue as a single 30-inch diameter clay pipe in Camulos Street, exiting the project at Olympic Boulevard and eventually connecting to the ECIS.

Existing development within the project site is served by local collection sewer lines generally consisting of 8-inch clay pipes and located within the public streets. Of the 1,187 dwelling units currently located on-site, 934 units (and other ancillary uses) are located within the central and western areas of the site drain to the Glenn Avenue and Camulos trunk sewers, while 253 units within the eastern portion of the site (east of Rosalind Place) are served by a line in Eighth Street that drains to Sewer Pump Plant No. 606.

Per the City of Los Angeles Bureau of Sanitation, a sewer's capacity is considered constrained if the depth of flow is equal to or greater than 50 percent of the sewer's diameter. The 30-inch Camulos trunk sewer has a total capacity of 4.92 million gallons per day (mgd) when flowing at its maximum allowable depth of 15 inches. Gauging information indicates that this sewer currently flows at an average depth of 12.6 inches; however, the Bureau of Sanitation has indicated that downstream constraints prohibit any increase in flows to this line beyond what is currently emitted. Sewer Pump Plant No. 606 has a capacity of 5,000 gallons per minute (gpm), or 7.2 mgd. The plant's average dry weather

---

[38] *These trunk sewers follow the alignment of some of the original streets that were vacated to construct the existing apartments on-site in the 1930s.*

discharge is 1.8 mgd, thus typically operating at 25 percent of capacity; the historic wet weather peak is 2.9 mgd, leaving an available capacity of 4.3 mgd under peak conditions.

(2) Wastewater Treatment

The City's Bureau of Sanitation operates four treatment and water reclamation plants: Hyperion Treatment Plant in Playa del Rey, Donald Tillman Water Reclamation Plant (TWRP) in Van Nuys, Los Angeles–Glendale Water Reclamation Plant (LAGWRP) in Los Angeles, and Terminal Island Treatment Plant (TTP) in San Pedro. The main purpose of these treatment facilities is to remove pollutants from sewage in order to protect river and marine environments and public health. The City's wastewater treatment system is divided into two major service areas: the Hyperion Service Area (HSA) and the Terminal Island Service Area (TISA). The HSA is served by the HTP, TWRP, and LAGWRP, while the TISA is served by the TTP. The project site is located within the service area of the HSA.

The HSA system includes treatment plants, outfalls, and numerous sewer connections and major interceptors. The current design capacity of the entire HSA is approximately 550 mgd, consisting of 450 mgd at HTP, 80 mgd at TWRP, and 20 mgd at LAGWRP.[39,40] As discussed below, improvements have been identified in the Bureau of Sanitation's Integrated Resources Plan (IRP) to upgrade and expand the capacities of the treatment plants, including expansion of the TWRP by 20 mgd. The HSA has a current average dry water flow (ADWF) of approximately 410 mgd (consisting of 360 mgd at HTP, 38 mgd at TWRP, and 12 mgd at LAGWRP), leaving approximately 140 mgd of available treatment capacity within the system.[41]

---

[39] *City of Los Angeles Department of Public Works Bureau of Sanitation, City of Los Angeles Integrated Resources Plan, December 2006, www.lacity.org/san/irp, accessed September 3, 2010.*

[40] *Design capacity does not take into account the limitations of secondary clarifiers and tertiary filters, which downgrade the capacities of the TWRP and the LAGRWP. Specifically, while the TWRP has a design capacity of 80 mgd, the Integrated Resources Plan (IRP) estimates an effective capacity of 64 mgd. Similarly, the LAGWRP has a design capacity of 20 mgd but an effective capacity of 15 mgd. Thus, as of 2006, the total effective capacity of the HSA was approximately 529 mgd (consisting of 450 mgd at HTP, 64 mgd at TWRP, and 15 mgd at LAGWRP).*

[41] *The approximate ADWF of 360 mgd for HTP was provided via telecommunication with Patricia Cruz, Environmental Engineer with the Bureau of Sanitation, October 25, 2007.*

California Regional Water Quality Control Board, Los Angeles Region, "Fact Sheet: Waste Discharge Requirements and National Pollutant Discharge Elimination System Permit for the City of Los Angeles (Donald C. Tillman Water Reclamation Plant)," September 27, 2006, revised November 30, 2006.

California Regional Water Quality Control Board, Los Angeles Region, "Fact Sheet: Waste Discharge Requirements and National Pollutant Discharge Elimination System Permit for the City of Los Angeles (Los Angeles Glendale Water Reclamation Plant)," September 28, 2006, revised November 27, 2006.

The HTP serves more than two-thirds of the City and provides preliminary, primary, and secondary treatment, as well as solids handling. The HTP also treats excess flows and processes solids from the TWRP and LAGWRP. The HTP has been in operation since 1894 and is the City's oldest and largest wastewater treatment facility. As discussed above, HTP has a dry weather capacity of 450 mgd for full secondary treatment, with an available capacity of approximately 90 mgd, and a total wet weather capacity of 850 mgd.

Following the secondary treatment of wastewater, the majority of effluent from HTP is discharged into the Santa Monica Bay, while approximately 50 mgd of secondary effluent are recycled on-site or conveyed to the West Basin Municipal Water District Water Reclamation Plant for tertiary treatment and reuse as reclaimed water by local industries.[42] The HTP has two outfalls that presently discharge into the Santa Monica Bay: a 1-mile outfall pipeline and a 5-mile outfall pipeline, both of which are 12 feet in diameter. The 1-mile outfall pipeline is 50 feet deep and only used on an emergency basis. The 5-mile outfall pipeline is 187 feet deep and is used to discharge secondary treated effluent on a daily basis. The discharge of effluent from the HTP 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 the Regional Water Quality Control Board's (RWQCB) requirements for a recreational beneficial use. Accordingly, HTP effluent to Santa Monica Bay is continually monitored to ensure that it meets or exceeds prescribed standards. The Los Angeles County Department of Health Services also monitors flows into Santa Monica Bay.[43]

(3) Wastewater Generation

The project site is currently developed with 1,187 dwelling units and nearly 10,000 square feet of ancillary uses that include a leasing office, laundry buildings, a recreation room, security dispatch office, maintenance storage room, and two maintenance workshops, along with approximately 575,000 square feet of parking garages, 9.0 acres of open space, and 28.53 acres of additional yard space. Based on LADPW Bureau of Engineering wastewater generation factors, these uses are estimated to generate an average of approximately 218,250 gpd of wastewater, with a peak flow of 638,936 gpd, as

---

[42] *City of Los Angeles Department of Public Works, Bureau of Sanitation, "About the Los Angeles Sewage System," www.lastormwater.com/Siteorg/general/lasewers.htm, accessed April 7, 2010.*

[43] *City of Los Angeles Department of Public Works, Bureau of Sanitation, Environmental Monitoring Division. "Santa Monica Bay Biennial Assessment Report: 2003–2004."*

shown in Table IV.L-9 on page IV.L-64.[44] Based on these estimates, the existing residential units generate a combined average of approximately 182 gpd/unit.

An alternative method of calculating wastewater generation involves estimation based on a percentage of the total consumption of potable water. The Los Angeles Department of Water and Power (LADWP) assumes that typically 90 percent of potable water consumed ultimately enters the sewer system as wastewater. Based on LADWP billing records for the site from 2006 through 2008, existing uses at the project site consumed an average of 393,945 gpd. Using this data, existing uses are estimated to generate approximately 354,550 gpd of wastewater. This higher wastewater generation estimate may be attributed to factors such as a higher percentage of irrigated surfaces, inefficient irrigation techniques, leakage of the aging water pipes, antiquated toilets and faucets which use more water, and higher than average unit occupancy rates as evidenced by the census data for the site. For the purposes of this analysis, however, the lower wastewater generation estimate based on LADPW Bureau of Engineering generation factors is utilized since it would result in a higher net generation increase attributable to the project, thus yielding a more conservative analysis of project impacts.[45]

Based on the calculated average wastewater flows generated on-site, an estimated 172,189 gpd drain to the 30-inch Camulos trunk sewer, while 46,061 gpd drain to Sewer Pump Plant No. 606. As previously discussed, the Bureau of Engineering has indicated that increases to the Camulos line from the project site beyond what is currently emitted from the project site are prohibited due to downstream constraints.[46]

---

[44] *Average daily generation is the average dry weather flow (ADWF), which represents the total wastewater flow over a typical 24-hour period. The peak dry weather flow (PDWF) represents the instantaneous highest expected flow, which is used to determine pipe sizes.*

[45] *Further comparison of the water consumption by existing uses as calculated using standard LADWP demand rates versus using data from actual water billing records also reveals that actual usage may be higher than typical, as discussed in Section IV.L.1, Water, of this EIR. However, use of the wastewater generation estimate based on LADPW Bureau of Engineering generation factors would still yield a more conservative analysis of the project and is thus used herein.*

[46] *While evaluation of the higher existing wastewater generation estimate based on actual water billing records would imply higher flows to the Camulos trunk sewer, use herein of the lower estimate based on Bureau of Engineering factors yields a lower maximum flow level to which the project would be limited.*

Table IV.L-9
Estimated Wastewater Generation by Existing Uses

Land Use[a]	Amount of Development	Average Dry Weather Flow Wastewater Generation Factor (gpd/du or gpd/ksf)[b]	Average Dry Weather Flow Wastewater Generation (gpd)
Residential—Studio	22 du	100	2,200
Residential—1 Bedroom	455 du	150	68,250
Residential—2 Bedroom	634 du	200	126,800
Residential—3 Bedroom	76 du	250	19,000
Subtotal Residential	*1,187 du*	*182*	*216,250*
Leasing Office/Ancillary Uses	10,000 sf	200	2,000
Total			**218,250**
Peak Flow			**638,936**[c]

[a] *Water usage associated with existing outdoor uses, including parking, park/open space, and yards, drains to the surface water drainage system, not the wastewater system; therefore, such uses are not included herein.*

[b] *Based on City of Los Angeles Department of Public Works, Bureau of Engineering Sewer Design Manual, Section F200.*

[c] *Calculated as 2.64 X $ADWF^{0.905}$ per Section F 235 of the Bureau of Engineering Design Manual—Part F.*

Source: Stantec Consulting Inc., 2011.

b. Regulatory Framework

(1) City of Los Angeles General Plan Framework

The City of Los Angeles General Plan Framework guides the update of the General Plan Elements and Community Plans, thereby providing a Citywide strategy for long-term growth. It also 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, including wastewater collection and treatment. Goal 9A is to provide adequate wastewater collection and treatment capacity for the City and in basins tributary to City-owned wastewater treatment facilities.

(2) City of Los Angeles Integrated Resources Plan

The City of Los Angeles Integrated Resources Plan was created through a contemporary approach that emphasized stakeholder involvement, public input, and interdepartmental collaboration.[47] Multiple departments worked together to develop a single, integrated plan to address the facility needs of the City's wastewater program, recycled water, and urban runoff/stormwater management through the year 2020.

The IRP preparation process began in 1999 and continued through 2006 in two phases. Phase I of the IRP 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, which took place from 1999 to 2001, 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 different 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 to 2020 and beyond. An Environmental Impact Report (EIR) was prepared during Phase II to evaluate the environmental effects of each of these alternatives. The Los Angeles City Council certified the Final EIR on November 14, 2006 and adopted a final alternative, the Approved Alternative (Alternative 4), from the four Preliminary Alternatives. The Approved Alternative would provide for:

- Expansion of the TWRP to 100 mgd and addition of advance treatment. *[Go-if-Triggered Project]*
- Construction of 60 million gallons (MG) of wet weather wastewater storage at the TWRP. *[Go-Project]*
- Potential addition of advanced treatment upgrades at the LAGWR. *[Go-if-Triggered Project]*
- Construction of wastewater and recycled water storage at LAGWR (5 MG each). *[Go-Project]*
- Construction of solids handling/truck loading facility at the HTP. *[Go-Project]*
- Construction of process upgrades at the HTP (i.e., new digesters, new secondary clarifiers). *[Go-if-Triggered Project]*
- Construction of the Northeast Interceptor Sewer Phase II (NEIS II) West Alignment. *[Go-Project]*

---

[47] *The Integrated Resources Plan replaced the City's 1991 Wastewater Facilities Plan.*

- Construction of the Glendale Burbank Interceptor Sewer (GBIS) Alignment. *[Go-Project]*
- Construction of the Valley Spring Lane Interceptor Sewer (VSLIS). *[Go-if-Triggered Project]*

Some of these IRP projects started immediately, with others targeted for a later time when changes take place or additional information is available. Implementation is dependent on monitored triggers, including population growth, recycled water regulations, wastewater discharge regulations, Total Maximum Daily Load (TMDL) requirements, available funding, etc. As indicated in italicized brackets above, the IRP projects are classified either as a “Go-Project” or “Go-If Triggered Project.” “Go-Projects” are so called because design and construction are intended to begin right away as a measure to protect public health and the environment, as associated triggers have been met. “Go-If-Triggered Projects” will be implemented if or when additional information or circumstances, such as regulatory determinations, population growth, or changes in demand for sewage capacity, trigger the need to begin design and construction.

In addition to the IRP projects identified above, the Approved Alternative sets forth the following programmatic elements which are to be implemented through specific “Go Policy Directions”:

- Implementation of increased recycled water use (non-potable and/or potential groundwater replenishment). Groundwater replenishment is contingent upon a future specific City decision to pursue groundwater replenishment and further environmental documentation.
- Implementation of dry weather runoff management through low-flow diversions, smart irrigation, urban runoff plants, and treatment wetlands.
- Implementation of wet weather runoff management though capture and percolation, capture and reuse, urban runoff plants, and groundwater replenishment with non-urban runoff.

During Phase II of the IRP, a Financial Plan, a Public Outreach Program, and a five-volume Facilities Plan were also developed. The Facilities Plan contains alternative development options and a Capital Improvement Program (CIP), as well as wastewater, water, and runoff management strategies. The CIP provides anticipated capital, operation, maintenance, project timing, and implementation strategies for tracking and monitoring triggers.

As of 2009, many of the IRP "Go-Projects" were in the pre-design phase, including the construction of wastewater storage facilities at TWRP, construction of the Northeast Interceptor Sewer Phase II (NEIS II) West Alignment, and construction of the Glendale Burbank Interceptor Sewer (GBIS) Alignment.

As previously indicated, the existing design capacity of the HSA is approximately 550 mgd (consisting of 450 mgd at HTP, 80 mgd at TWRP, and 20 mgd at LAGWRP).[48] With the improvements identified in the IRP, the total design capacity of the HSA in 2020 would be approximately 570 mgd (consisting of 450 mgd at HTP, 100 mgd at TWRP, and 20 mgd at LAGWRP).[49] With full implementation of the IRP, the LADPW and Bureau of Sanitation expect to provide ample wastewater treatment services to the City and contracting cities through the year 2020.

(3) Sewer System Management Plan

On May 2, 2006, the State Water Resources Control Board (SWRCB) adopted the Statewide General Waste Discharge Requirements (WDRs) 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 WDRs, the owners of such systems must comply with the following requirements: (1) Acquire an online account from the SWRCB and report all sanitary sewer overflows (SSO) online; and (2) Develop and implement a written plan referred to as a Sewer System Management Plan (SSMP) to control and mitigate SSOs and make it available to any member of the public upon request in writing.

In accordance with the WDRs, the City acquired online accounts from the SWRCB and began reporting SSOs by the due date of January 2, 2007. An SSMP was prepared for each of the City's sanitary sewer systems and approved by the City's Board of Public Works on February 18, 2009. The goal of the SSMP for the Hyperion Sanitary Sewer System is to provide a plan and schedule to properly manage, operate, and maintain all parts of the sanitary sewer system. In addition, the SSMP will help to reduce and prevent sanitary sewer overflows as well as mitigate any sanitary sewer overflows that do occur.

---

[48] *City of Los Angeles Integrated Resources Plan, December 2006, confirmed via personal communication with Bureau of Sanitation, February 23, 2010.*

[49] *Integrated Resources Plan, City of Los Angeles Department of Public Works Bureau of Sanitation and Department of Water and Power, July 2004.*

(4) City of Los Angeles Municipal Code

Los Angeles Municipal Code (LAMC) Section 64.12 requires approval of a sewer permit (S-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 guidelines for the average wastewater concentrations of two parameters: biological oxygen demand and suspended solids for each type of land use. Fees paid for 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.

Section 64.15 of the LAMC requires that the City perform a Sewer Capacity Availability Review (SCAR) when any person seeks a sewer permit to connect a property to the City's sewer collection system, proposes additional discharge through their existing public sewer connection, or proposes a future sewer connection or future development that is anticipated to generate 10,000 gallons or more of wastewater per day. A SCAR is an analysis of the existing sewer collection system to determine if there is adequate capacity existing in the sewer collection system to safely convey the newly generated wastewater to the appropriate sewage treatment plant. If there is allotted sewer capacity available for the project, then the City's Department of Building and Safety will accept the plans and specifications for plan check upon the payment of plan check fees. If a project is eligible to receive an allocation as a non-priority project, and the monthly allotment has been used, then the project is placed on a waiting list for the next month's allotment. At the request of a project applicant, the Department of Building and Safety will accept the project's plans and specifications as acceptable for plan check even if the project has been placed on the waiting list and a sewer permit has not yet been obtained from LADPW, with the understanding that the project will not be able to connect to the City's wastewater system until capacity is available and a sewer permit issued.

In addition, the Bureau of Engineering's Special Order No. 006-0691 sets forth design criteria for sewer systems. Specifically, the order states that trunk, interceptor, outfall, and relief sewers (i.e., sewers that are 18 inches or greater in diameter) be designed for a planning period of 60 to 100 years and lateral sewers (i.e., sewers less than 18 inches in diameter) be designed for a planning period of 100 years. The order also requires that sewers be designed for their planning period such that the peak dry weather flow (PDWF) depth shall not exceed 50 percent of the pipe diameter.

3. Project Impacts

a. Methodology

The analysis of project impacts on wastewater conveyance and treatment capacity is based on the Sewer Capacity Study prepared by Stantec Consulting Inc. (see Appendix M.3 of this Draft EIR). The study analyzes the existing sewer conveyance system in the project area and calculates the anticipated wastewater flows to be generated by the project using LADPW wastewater generation factors.[50] Such rates were selected in order to provide a conservative analysis, consistent with the Bureau of Engineering Sewer Design Manual, Section F200, as these rates result in a lower baseline wastewater generation and a higher project wastewater demand when compared to wastewater generation rates derived from standard LADWP water demand rates (i.e., 90 percent of standard water consumption rates). Additionally, the project's wastewater estimates are based on the maximum office development scenario, which is anticipated to generate more wastewater than the maximum retail scenario. The adequacy of the existing sewer system to accommodate the project's additional flows was then evaluated, with consideration of any improvements that are included as part of the project. The analysis also evaluates whether adequate treatment capacity within the HSA would be available to accommodate wastewater flows associated with the proposed project based on data from the City of Los Angeles Bureau of Sanitation.

b. Significance Thresholds

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

Would the project:

- Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?

[50] *All calculated flows represent ADWF unless otherwise indicated. Pursuant to the Bureau of Engineering Sewer Design Manual, the ADWF represents the total wastewater flow over a typical 24-hour period. The ADWF is also the basis of the PDWF. The PDWF represents the instantaneous highest flow and is used for determining pipe size. The ADWF is measured in gpd and the PDWF is measured in gpm or cubic feet per second (cfs).*

- 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?

- Result in a determination by the wastewater treatment provider, which serves or may serve the project, that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

In the context of these questions from the CEQA Guidelines, the *City of Los Angeles CEQA Thresholds Guide (2006)* states the impacts on wastewater shall be made on a case-by-case basis based on the following factors:

- The project would cause a measurable increase in wastewater flows at a point where, and a time when, a sewer's capacity is already constrained or that would cause a sewer's capacity to become constrained; or

- The project's additional wastewater flows would substantially or incrementally exceed the future scheduled capacity of any one treatment plant by generating flows greater than those anticipated in the Wastewater Facilities Plan or General Plan and its elements.

c. Project Design Features

The proposed project involves the development of up to 4,400 residential units and 325,000 square feet of neighborhood-serving retail, office, and civic uses, along with a variety of park/open space and recreational uses. The project would include a number of sewer system improvements to serve the new uses and connect proposed development to the local sanitary sewer system. The following improvements would be constructed or implemented as part of the project:

- The existing Glenn Avenue and Camulos trunk sewers would be relocated and replaced within the new street rights-of-way (refer to Section II, Project Description, of this EIR and Figure II-14 therein for a brief discussion and illustration of the proposed street grid). The replacement sewers would be the same diameter as the existing sewers. Improvements would be constructed in a manner such that the existing sewers would remain in operation during all phases of project development in order to serve the off-site areas located north of the project site, until transition to the new lines occurs.

- A new 27-inch trunk sewer would be constructed through the site to connect to Sewer Pump Plant No. 606.

- All proposed on-site sewer mainlines would be publicly owned and located either in the public street rights-of-way or easements. The diameter of the new mainline sewers would vary from 12 to 27 inches.

- As project construction and associated replacement of the existing residential units would be phased, during each phase of development, all remaining existing units would continue to be connected to the existing on-site public sewers and trunk sewers. Refer to the discussion below for further description of the phasing of the proposed sewer infrastructure.

- Discharge to the 30-inch diameter Camulos trunk sewer would be limited to a maximum of 172,189 gpd (i.e., the current flow to this line from the project site) by reducing the number of new residences connected to the Camulos sewer to 910 units, with a combined average estimated wastewater generation of approximately 189.1 gpd/unit. Thus, approximately 21 percent of the proposed residential units would be connected to the 30-inch Camulos trunk sewer, as opposed to 80 percent of existing units under current conditions.

- The project flows generated by the remaining 3,490 residential units and the non-residential development would be discharged to Sewer Pump Plant No. 606, for an estimated total of 720,811 gpd (see project wastewater calculations below in the impact analysis).

As described more fully in Section II, Project Description, of this Draft EIR, project construction is expected to occur in five phases commencing in 2015 and ending by 2030. In order to maintain sewer service to the nearby off-site uses as well as the existing on-site units that would remain during all but the last phase of development, the project's sewer improvements would be phased as follows:

- New development associated with Phases 1, 2, and 3 and a portion of Phase 4 (which would include all proposed non-residential uses) would be served by the proposed 27-inch trunk sewer that would connect to Sewer Pump Plant No. 606. As existing units are removed with each subsequent phase, wastewater discharge to the Camulos trunk sewer would be reduced. As phases are constructed, flow to the new 27-inch trunk sewer and Pumping Plant No. 606 would increase.

- The remaining portion of Phase 4 and all of Phase 5 would connect to the existing 30-inch Camulos trunk sewer. At no time would the proposed project increase wastewater discharge to the Camulos trunk sewer above the current site discharge of 172,189 gpd. It is anticipated that upon project completion, wastewater flow from the site to the Camulos trunk sewer would be less than the current flow from the site to this line.

In addition, the project would be designed to meet the requirements for certification at the Silver level under the Leadership in Energy and Environmental Design (LEED®) Neighborhood Development (LEED-ND®) Rating System. As part of these efforts and as discussed in Section IV.L.1, Water Supply, of this Draft EIR, the project would implement a variety of water conservation features including, but not limited to, the use of: water efficient fixtures, high-efficiency clothes washers and dish washers, a demand (tankless or instantaneous) water heater system, weather-based irrigation controllers, urban bioswales, and native/drought-tolerant plantings. The project would also implement specific actions to support the use of recycled water at the project site pursuant to Project Design Feature L.1-5 in Section IV.L.1, Water Supply, of this Draft EIR. By reducing the amount of water consumed, these conservation measures would also serve to reduce the amount of wastewater generated by the proposed project. The sustainability project features would be implemented by incorporation of the features into the conditions of approval for the project, mitigation measures, or pursuant to the regulations or design criteria required by the Specific Plan. Some of the key sustainability project features are highlighted above. Additionally, a comprehensive matrix summarizing these and numerous other sustainable design features that would be implemented by the project is contained in Table II-3 in Section II, Project Description, of this Draft EIR.

d. Analysis of Project Impacts

(1) Construction

Project construction activities would result in a temporary increase in wastewater generation as a result of construction workers being present on-site. Wastewater generation would occur incrementally during the five construction phases, with 1- to 2-year breaks during periods of no construction between most phases. Such wastewater flows would be temporary and nominal when compared with the wastewater generated by a permanent occupied building. Thus, wastewater generation from construction activities is not anticipated to cause a measurable increase in wastewater flows at a point where, and at a time when, a sewer’s capacity is already constrained or that would cause a sewer’s capacity to become constrained. Similarly, construction is not anticipated to generate wastewater flows that would substantially or incrementally exceed the future scheduled capacity of any one treatment plant by generating flows greater than those anticipated in the IRP. Therefore, construction impacts to the local wastewater conveyance and treatment system would be less than significant.

(2) Operation

(a) Wastewater Generation and Infrastructure

Development of the proposed project would result in an increase in wastewater flows during operation. Consistent with the LADPW Bureau of Engineering Sewer Design Manual, wastewater to be generated by the project was calculated by applying the LADPW wastewater generation factors to the proposed floor areas for each of the various land uses. These rates result in a lower baseline wastewater generation and a higher project wastewater demand when compared to the wastewater generation rates derived from standard LADWP water demand rates, and thus yield a more conservative analysis.

As shown in Table IV.L-10 on page IV.L-74, the proposed project is estimated to generate approximately 893,000 gpd of wastewater on an average dry weather day under the maximum office development scenario, with a peak flow of 2,277,607 gpd. As discussed previously, the existing uses on-site generate an estimated 218,250 gpd of wastewater with a peak flow of 638,936 gpd. Therefore, the proposed project would result in a net increase of approximately 674,750 gpd of wastewater under the maximum office development scenario, with a net peak flow of 1,638,671 gpd.

According to the Bureau of Sanitation, due to downstream constraints, discharge from the project site to the 30-inch diameter Camulos trunk sewer is not permitted to exceed the current flow from the project site to this pipe, which is 172,189 gpd (0.17 mgd). The Bureau of Sanitation has also indicated that Sewer Pump Plant No. 606 has capacity to accept an additional flow of 4.3 mgd. Therefore, the total wastewater capacity available to the project site, including the allowed flow to the Camulos trunk sewer (0.17 mgd), the existing flow to the Pump Plant No. 606 (0.05 mgd), and the additional capacity of Pump Plant No. 606 (4.3 mgd) is 4.52 mgd.

As previously indicated, the project's sewer system would be designed such that 910 new units averaging 189.1 gpd/unit would connect to the 30-inch diameter Camulos trunk sewer, so as not to exceed the current flow from the site of 172,189 gpd. It is anticipated that upon project build-out, the flow to the Camulos trunk sewer would be less than the existing flow from the site. The remainder of new residential development and all of the non-residential uses would discharge to Sewer Pump Plant No. 606. This plant was designed to accommodate full buildout of the project site and other tributary properties based on the maximum amount of development allowed under the site's current RD 1.5 zoning. The project would discharge approximately 720,811 gpd to the pump plant for a net increase of approximately 674,750 gpd. Following project development, the project site's total peak discharge would be 2.28 mgd; even if the entire peak discharge were to flow to the Sewer Pump Plant No. 606, it would comprise 53 percent of the plant's available

Table IV.L-10
Estimated Wastewater Flows—Maximum Office Development Scenario

Land Usea	Amount of Development	Average Dry Weather Flow Wastewater Generation Factor (gpd/du or gpd/ksf)[b]	Average Dry Weather Flow Wastewater Generation (gpd)
Studio/Single	72 du	100	7,200
Residential—1-br apt	432 du	150	64,800
Residential—2-br apt	600 du	200	120,000
Residential—3-br apt	96 du	250	24,000
Residential—1-br condo	1,280 du	150	192,000
Residential—2-br condo	1,120 du	200	224,000
Residential—3-br condo	800 du	250	200,000
Subtotal Residential	*4,400 du*	—	*832,000*
Office	125,000 sf	200	25,000
Medical Office	25,000 sf	300	7,500
Neighborhood Retail	60,000 sf	100	6,000
Pharmacy/Grocery	25,000 sf	100	2,500
Restaurant	25,000 sf	300	7,500
Health Club/Fitness/Gym	25,000 sf	300	7,500
Civic Uses	25,000 sf	200	5,000
Subtotal Commercial/Civic	*310,000 sf*	—	*61,000*
Project Total			**893,000**
Project Peak Flow			**2,277,607**[c]
Less Existing Generation			*218,250*
Less Existing Peak Flow			*638,936*
Project Net Increase			**674,750**
Project Net Peak Flow			**1,638,671**[c]

[a] *Water usage associated with outdoor uses such as park/open space would drain to the surface water drainage system, not the wastewater system; therefore, such uses are not included herein. The proposed parking structures would be outfitted with roof drains that discharge to the storm drain system; only minor rainfall that may get blown into the open sides of a parking structure and limited water usage would drain to a sump inlet with an oil separator or clarifier for eventual discharge via pump to the sanitary sewer system. Such volumes are anticipated to be negligible.*

[b] *Based on City of Los Angeles Department of Public Works, Bureau of Engineering Sewer Design Manual, Section F200, except as otherwise noted. These rates are generally higher than the standard LADWP water demand rates and are used herein to provide a conservative analysis. Further, the Bureau of Engineering uses such rates to determine sewer line pipe sizes.*

[c] *Calculated as 2.64 X $ADWF^{0.905}$ per Section F 235 of the Bureau of Engineering Design Manual—Part F.*

Source: Stantec Consulting Inc., 2011.

4.3 mgd capacity. Thus, based on the project design to limit flows to the 30-inch Camulos trunk sewer in accordance with LADPW requirements and the available capacity at Sewer Pump Plant No. 606, the existing facilities are sufficient to accommodate the wastewater demands of the proposed project. It is further noted that the project estimates do not account for reductions in wastewater that would occur with implementation of the water conservation measures mentioned above and described more fully in Section IV.L.1, Water Supply, of this Draft EIR. Therefore, the project would not cause a measurable increase in wastewater flows at a point where, and a time when, a sewer's capacity is already constrained or that would cause a sewer's capacity to become constrained. Impacts with respect to wastewater conveyance capacity would be less than significant.

(b) Wastewater Treatment

Wastewater generated by the proposed project would ultimately be conveyed to HTP via the Hyperion Sanitary Sewer System. As mentioned above, based on the IRP, the existing effective capacity of the entire HSA is approximately 529 mgd (consisting of 450 mgd at HTP, 64 mgd at TWRP, and 15 mgd at LAGWRP), with current flows of approximately 410 mgd (consisting of 360 mgd at HTP, 38 mgd at TWRP, and 12 mgd at LAGWRP).[51,52] With the future improvements identified in the IRP, the total design capacity of the HSA in 2020 would be approximately 570 mgd. Various factors, including future County development of new treatment plants, upgrades/improvements to existing treatment capacity, development of new technologies, etc, will ultimately determine the available capacity of the HSA in 2030 (i.e., the project buildout year). While it is anticipated that future iterations of the IRP would provide for improvements beyond 2020 to increase the treatment capacity of the HSA to serve future population needs, it is conservatively assumed herein that no new improvements to the wastewater treatment plants would occur between 2020 and 2030. Thus, the 2030 design capacity of the HSA is assumed to be approximately 570 mgd. Even with this conservative assumption, the project's net increase in wastewater generation of 674,750 gpd in average daily flows (1,638,671 gpd in peak daily flow) would be adequately accommodated by the HSA. Thus, the project's additional

---

[51] *City of Los Angeles, Integrated Resources Plan, December 2006.*

[52] *The approximate ADWF of 360 mgd for HTP was provided via telecommunication with Patricia Cruz, Environmental Engineer with the Bureau of Sanitation, October 25, 2007.*

California Regional Water Quality Control Board, Los Angeles Region, "Fact Sheet: Waste Discharge Requirements and National Pollutant Discharge Elimination System Permit for the City of Los Angeles (Donald C. Tillman Water Reclamation Plant)," September 27, 2006, revised November 30, 2006.

California Regional Water Quality Control Board, Los Angeles Region, "Fact Sheet: Waste Discharge Requirements and National Pollutant Discharge Elimination System Permit for the City of Los Angeles (Los Angeles Glendale Water Reclamation Plant)," September 28, 2006, revised November 27, 2006.

wastewater flows would not substantially or incrementally exceed the future scheduled capacity of any treatment plant by generating flows greater than those anticipated in the IRP. As such, the wastewater flows generated by the proposed project would have a less than significant impact on wastewater treatment facilities.

In addition, effluent conveyed to HTP would not have a significant effect on the Santa Monica Bay, as HTP currently meets applicable water quality standards and is required to comply with water quality standards established for beneficial uses. Further, both LADPW as well as the County Department of Health Services continually monitor all effluent.

(3) Consistency with Regulatory Framework

(a) City of Los Angeles General Plan Framework

As previously discussed, Chapter 9, Infrastructure and Public Services, of the City's General Plan Framework identifies goals, objectives, and policies for utilities in the City, including wastewater collection and treatment. In accordance with Goal 9A, the proposed project would connect to the existing sewer system, which has been shown to have adequate capacity to meet the demands of the proposed project. Therefore, the proposed project would be consistent with the goals of the General Plan Framework.

(b) City of Los Angeles Municipal Code

Pursuant to the LAMC Section 64.12, the project Applicant would be required to obtain an S-permit and pay a Sewerage Facilities Charge in order to connect to the existing sewer system. Payment of the fees would ensure that the project would pay its fair share for necessary expansions of the sewer system, including improvements to conveyance, treatment, and disposal facilities. Therefore, the proposed project would be consistent with LAMC Section 64.12.

In accordance with LAMC Section 64.15, the City would be required to perform a SCAR analysis to confirm that there is adequate capacity in the sewer collection system to safely convey project-generated wastewater to HTP. This determination would be indicated by acceptance of plans and specifications for plan check and issuance of the project's S-permit. Additionally, all project-related wastewater infrastructure improvements, including those described above and individual building connections, would be designed to meet applicable requirements, including those set forth in the Bureau of Engineering's Special Order No. SO06-0691. As such, project impacts relative to consistency with LAMC regulations would be less than significant.

4. Cumulative Impacts

Cumulative growth in the greater project area through 2030 includes specific known development projects as well as general ambient growth projected to occur, as described in Section III, Environmental Setting, of this EIR. A number of the identified related projects and ambient growth projections fall within the service areas of the Hyperion Sanitary Sewer System and HTP. Such growth and development would cumulatively contribute, in conjunction with the proposed project, to wastewater generation and conveyance and treatment needs in the area.

Public agencies within the City typically use official growth projections established by SCAG in its 2008 Regional Transportation Plan for systems planning. Specifically, the Bureau of Sanitation based its IRP on SCAG's population projections in order to plan for future system growth. As indicated in Section III, Environmental Setting, of this Draft EIR, the growth associated with 11 of the 37 identified related projects are within SCAG's 2030 growth forecasts. However, growth associated with 26 of the related projects was not within the SCAG forecasts, and therefore, has been added to the forecasts for this cumulative analysis.

As shown in Table IV.L-11 on page IV.L-78, the estimated wastewater generation associated with the 26 related projects would be approximately 957,667 gpd. Based on the maximum office development scenario, the proposed project would contribute an additional 674,750 gpd of wastewater for a cumulative total average daily flow of 1,632,417 gpd.[53] The related projects' wastewater generation estimates are considered conservative in that they do not account for existing uses to be removed, nor water conservation measures that would likely be implemented.

a. Wastewater Conveyance

New development projects occurring in the project vicinity would be subject to LAMC Section 64.12, which requires approval of an S-Permit prior to connection to the public sewer system. Additionally, in order to connect to the sewer system, all new development in the City including the related projects would be subject to payment of the City's Sewerage Facilities Charge. Payment of such fees would help to offset the costs

[53] *All calculated flows represent ADWF unless otherwise indicated. Pursuant to the Bureau of Engineering Sewer Design Manual, the ADWF represents the total wastewater flow over a typical 24-hour period. The ADWF is also the basis of the PDWF. The PDWF represents the instantaneous highest flow and is used for determining pipe size. The ADWF is measured in gpd and the PDWF is measured in gpm or cfs.*

Table IV.L-11
Cumulative Wastewater Generation for Related Projects Not Within SCAG Growth Forecasts for 2030[a]

ID	Related Project	SF Units	MF Units	Total Res Units	Total Res Generation[a,b] (gpd)	Rest SF	Total Rest Generation[a] (gpd)	Retail and Services SF	Total Retail Generation[a] (gpd)	Office SF	Total Office Generation[a] (gpd)	Indust/ Manuf/ Warehs SF	Total Industrial Generation[c] (gpd)	School Students	Total School Generation[d] (gpd)	Combined Total Generation (gpd)
2	LAUSD ELA High School #1	0	0	0	0	0	0	0	0	0	0	0	0	1,026	8,208	**8,208**
3	Fast food restaurant with drive thru	0	0	0	0	2,510	753	0	0	0	0	0	0	0	0	**753**
4	Oscar de La Hoya Charter School	0	0	0	0	0	0	0	0	0	0	0	0	120	960	**960**
5	Prop Q & F Public Safety Civic Center Facility Plan (EOC)[e]	0	0	0	0	0	0	0	0	112,000	22,400	0	0	0	0	**22,400**
6	Bar/Lounge	0	0	0	0	8,770	2,631	0	0	0	0	0	0	0	0	**2,631**
8	LAUSD—Central Reg Middle School #7	0	0	0	0	0	0	0	0	0	0	0	0	1,350	10,800	**10,800**
9	Police HQ Facility Plan (Aiso Street Parking Facility)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
10	Sears Project (Mixed-Use)	0	764	764	152,800	0	0	572,620	57,262	165,300	33,060	0	0	0	0	**243,122**
11	Mixed-Use Project	0	182	182	36,400	0	0	3,000	300	0	0	0	0	0	0	**36,700**
12	Bus Maintenance & Inspection Facility[f]	0	0	0	0	0	0	0	0	0	0	87,120	6,970	0	0	**6,970**
13	WHOLESALE MART	0	0	0	0	0	0	78,970	7,897	0	0	0	0	0	0	**7,897**
14	One Santa Fe Project (Mixed-Use)	0	459	459	91,800	0	0	25,000	2,500	0	0	0	0	0	0	**94,300**
15	Mixed-Use Project	0	320	320	64,000	0	0	18,720	1,872	0	0	0	0	0	0	**65,872**
17	Industrial Park	0	0	0	0	0	0	0	0	0	0	94,850	7,588	0	0	**7,588**
18	Warehouse/Office/Manufacturing	0	0	0	0	0	0	0	0	77,000	15,400	361,000	28,880	0	0	**44,280**
19	East 27th Street Charter School	0	0	0	0	0	0	0	0	0	0	0	0	1,120	8,960	**8,960**
20	Industrial Park Tract Map	0	0	0	0	0	0	0	0	0	0	643,000	51,440	0	0	**51,440**
21	Lorena Apartments	0	112	112	22,400	0	0	0	0	0	0	0	0	0	0	**22,400**
22	Commercial (Light Manufacturing) Condos	0	0	0	0	0	0	0	0	0	0	320,500	25,640	0	0	**25,640**
23	Little Tokyo Block 8 Mixed Use	0	750	750	150,000	0	0	50,000	5,000	0	0	0	0	0	0	**155,000**
24	Affordable Housing	0	115	115	23,000	0	0	0	0	0	0	0	0	0	0	**23,000**
27	Middle School	0	0	0	0	0	0	0	0	0	0	0	0	360	2,880	**2,880**

Table IV.L-11 (Continued)
Cumulative Wastewater Generation for Related Projects Not Within SCAG Growth Forecasts for 2030[a]

ID	Related Project	SF Units	MF Units	Total Res Units	Total Res Generation[a,b] (gpd)	Rest SF	Total Rest Generation[a] (gpd)	Retail and Services SF	Total Retail Generation[a] (gpd)	Office SF	Total Office Generation[a] (gpd)	Indust/ Manuf/ Warehs SF	Total Industrial Generation[c] (gpd)	School Students	Total School Generation[d] (gpd)	Combined Total Generation (gpd)
28	Live/Work Lofts	0	18	18	3,600	0	0	0	0	0	0	0	0	0	0	**3,600**
29	Mixed-Use Project	0	78	78	15,600	0	0	0	0	0	0	0	0	0	0	**15,600**
30	Mixed Use/Senior Housing	0	125	125	25,000	0	0	19,700	1,970	0	0	0	0	0	0	**26,970**
34	Pechiney Site (Power Plant)[f]	0	0	0	0	0	0	0	0	0	0	871,200	69,696	0	0	**69,696**
	Related Projects Total				**584,600**		**3,384**		**76,801**		**70,860**		**190,214**		**31,808**	**957,667**

Res = Residential
SF = Square Feet
Rest = Restaurant
Indust/Manuf/Warehs = Industrial/Manufacturing/Warehouse
[a] Generation factor source: City of Los Angeles Department of Public Works, Bureau of Engineering Sewer Design Manual, Section F200.
[b] Assumes average size of two bedrooms per unit for multifamily units
[c] Generation factor source: Los Angeles CEQA Thresholds Guide, 2006.
[d] Generation factor source: Assumes LADWP water demand rate of 8 gpd/student.
[e] Assumes office generation rate for public facility uses.
[f] Assumes a floor area based on the total site acreage.

Source: Matrix Environmental, 2011.

associated with infrastructure improvements that may be needed to accommodate wastewater generated by future growth. Therefore, cumulative impacts on wastewater conveyance systems would be less than significant.

b. Wastewater Treatment

The Bureau of Sanitation's IRP projects wastewater flows and wastewater treatment capacity through 2020. Specifically, the IRP projects ADWF for the HSA in 2020 to be approximately 511.5 mgd. However, based on a more recent analysis by the Bureau of Sanitation, the ADWF for the HSA in 2030 is expected to decrease to approximately 381 mgd; the projected decrease in wastewater flows is due to anticipated decreases in the City's water usage as a result of increased water conservation measures and higher water billing rates.[55] Therefore, based on the HSA's projected design capacity of 570 mgd in 2020 and its projected ADWF of 381 mgd in 2030, and conservatively assuming that no treatment capacity expansion would occur between 2020 and 2030, the HSA would have an available capacity of 189 mgd in 2030. As discussed above, without accounting for the proposed project's water conservation features, the project would generate a net increase of 674,750 gpd in average daily flows. The project combined with the 26 related projects that were not accounted for in SCAG's growth projections plus the forecasted 2030 ADWF for the HSA would result in a total cumulative wastewater flow of approximately 1.6 mgd, well within the HSA's 2020 design capacity.

As previously discussed, the IRP identifies adequate treatment capacity within the City through 2020, and based on the Bureau of Sanitation's more recent wastewater generation projections, adequate capacity will likely be available through 2030. Various factors, including future County development of new treatment plants, upgrades/ improvements to existing treatment capacity, development of new technologies, etc, will ultimately determine the available capacity of the HSA in 2030. It is anticipated that future iterations of the IRP will provide for improvements beyond 2020 to increase the treatment capacity of the HSA if needed to serve future population needs. Therefore, cumulative wastewater flows would not substantially or incrementally exceed the future scheduled capacity of any treatment plant by generating flows greater than those anticipated in the IRP. As such, cumulative impacts on wastewater treatment systems would be less than significant.

---

[55] *City of Los Angeles Department of Public Works, Bureau of Sanitation, Draft Projected Hyperion Service Area Flow, Recycled Water Master Plan, September 30, 2009.*

5. Project Design Features and Mitigation Measures

a. Project Design Features

Project Design Feature L.2-1: The existing Glenn Avenue and Camulos trunk sewers shall be relocated and replaced within the new street rights-of-way (refer to Section II, Project Description, of the Draft EIR and Figure II-14 therein for a brief discussion and illustration of the proposed street grid). The replacement sewers shall be the same diameter as the existing sewers. Improvements shall be constructed in a manner such that the existing sewers shall remain in operation during all phases of project development in order to serve the off-site areas located north of the project site, until transition to the new lines occurs.

Project Design Feature L.2-2: A new 27-inch trunk sewer shall be constructed through the site to connect to Sewer Pump Plant No. 606. Preliminary measurements indicate a 27-inch line will be needed.

Project Design Feature L.2-3: All proposed on-site sewer mainlines shall be publicly owned and located either in the public street rights-of-way or easements. The diameter of the new mainline sewers shall vary from 12 to 27 inches.

Project Design Feature L.2-4: The project construction is expected to occur in five phases commencing in 2015 and ending by 2030. As project construction and associated replacement of the existing residential units shall be phased, during each phase of development, all remaining existing units shall continue to be connected to the existing on-site public sewers and trunk sewers. In order to maintain sewer service to the nearby off-site uses as well as the existing on-site units that would remain during all but the last phase of development, the project's sewer improvements shall be phased as follows:

New development associated with Phases 1, 2, and 3 and a portion of Phase 4 (which would include all proposed non-residential uses) shall be served by the proposed 27-inch trunk sewer that would connect to Sewer Pump Plant No. 606. As existing units are removed with each subsequent phase, wastewater discharge to the Camulos trunk sewer shall be reduced. As phases are constructed, flow to the new 27-inch trunk sewer and Pumping Plant No. 606 would increase.

The remaining portion of Phase 4 and all of Phase 5 shall connect to the existing 30-inch Camulos trunk sewer. At no time shall the proposed project increase wastewater discharge to the Camulos trunk sewer above the current site discharge of 172,189 gpd. It is anticipated that upon project completion, wastewater flow from the site to the Camulos trunk sewer would be less than the current flow from the site to this line.

Project Design Feature L.2-5: Discharge to the 30-inch diameter Camulos trunk sewer shall be limited to a maximum of 172,189 gpd (i.e., the current flow to this line from the project site) by limiting the number of new residences connected to the Camulos sewer to 910 units, with a combined average estimated wastewater generation of approximately 189.1 gpd/unit.

Project Design Feature L.2-6: The project flows generated by the remaining residential units not connected to the Camulos sewer (see Project Design Feature L.2-5) and the non-residential development shall be discharged to Sewer Pump Plant No. 606, for an estimated total of 720,811 gpd.

In addition to the project design features above, the project design features set forth in Sections II, Project Description, and IV.L.1, Water Supply, of this Draft EIR, which reduce the amount of water consumed, also serve to reduce the amount of wastewater generated by the proposed project.

b. Mitigation Measures

Based on the analysis above and incorporation of the project design features described above and in Section IV.L.1, Water Supply, of this Draft EIR, impacts to the City's wastewater collection and treatment infrastructure would be less than significant. Therefore, no mitigation measures would be required.

6. Level of Significance After Mitigation

As stated above, with implementation of the project design features, impacts to the City's wastewater infrastructure would be less than significant, and no mitigation measures would be required.