IV. Environmental Impact Analysis

M. Utility and Service Systems

1. Water Supply and Infrastructure

1. Introduction

This subsection describes the water supply and infrastructure that currently serve the Project Site and surrounding area, assesses potential impacts associated with the Project on this supply and infrastructure, and identifies the need for improvements in order to serve the Project and related development, if needed. This subsection uses information from the Los Angeles Department of Water and Power's (LADWP) 2015 Urban Water Management Plan. This section incorporates the *676 Mateo Street Mixed-Use Project Utility Infrastructure Technical Report: Water* (Infrastructure Technical Report: Water), prepared by KPFF Consulting Engineers, July 21, 2020. The *Infrastructure Technical Report: Water* is included as **Appendix N.1** of this Draft EIR.

Refer to **Section IV.F, Hydrology and Water Quality**, **threshold (ciii)** of this Draft EIR, for an impact analysis discussion on stormwater drainage facilities. Refer to **Section IV.M.2, Utility and Service Systems – Wastewater, threshold (b)** of this Draft EIR, for an impact analysis discussion on wastewater treatment facilities. Refer to **Section IV.M.4, Utility and Service Systems – Dry Utilities,** of this Draft EIR, for an impact analysis discussion on electric power, natural gas, and telecommunication facilities. As discussed in **Section IV.F, Hydrology and Water Quality, Section IV.M.2, Utility and Service Systems – Wastewater,** and **Section IV.M.4, Utility and Service Systems – Dry Utilities,** the Project would have a less than significant impact on wastewater, stormwater, electric power, natural gas, or telecommunication facilities, and would not require the relocation or construction of wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities. No mitigation measures are needed.

2. Environmental Setting

a) Regulatory Framework

(1) State

(a) Senate Bills 610, 221, and 7

California Senate Bill (SB) 610 and SB 221 became effective January 1, 2002, amending State Water Code Sections 10910-10915, and requiring that counties and cities consider the availability of adequate water supplies for certain new large development projects. These statutes require that cities and counties obtain from the local water supplier written assessment or verification of the sufficiency of water supply to serve proposed large development projects in their jurisdiction through a Water Supply Assessment (WSA). The WSA shall identify existing water supply entitlements, water rights, or water service contracts held by the public water system, and prior years' water deliveries received by the public water system. In addition, it must address water supplies over a 20-year future period and consider average, single-dry, and multiple-dry years. Pursuant to SB 610, projects that are required to obtain a WSA include the following:

- Residential developments of more than 500 dwelling units;
- Shopping center or business establishment of more than 500,000 square feet of floor space or employing more than 1,000 persons;
- Commercial office buildings of more than 250,000 square feet of floor space or employing more than 1,000 persons;
- Hotels or motels, or both, having more than 500 rooms;
- Industrial, manufacturing, or processing plant or industrial park of more than 40 acres of land, more than 650,000 square feet of floor area, or employing more than 1,000 persons;
- Mixed-use projects that falls in one or more of the above-identified categories; or
- A project not falling in one of the above-identified categories but that would demand water equal or greater to a 500 dwelling-unit project.

SB 221 also addresses water supply in the land use planning process for large residential subdivision projects. However, unlike SB 610 WSAs, which are prepared at the beginning of a planning process, the SB 221-required Water Supply Verification (WSV) is prepared at the end of the planning process for such projects. Under SB 221, a water supplier must prepare and adopt a WSV indicating sufficient water supply is available to serve a

proposed subdivision, or the local agency must make a specific finding that sufficient water supplies are or will be available prior to completion of a project, as part of the conditions for the approval of a final subdivision map. SB 221 specifically applies to residential subdivisions of 500 units or more. However, Government Code Section 66473.7(i) exempts "...any residential project proposed for a site that is within an urbanized area and has been previously developed for urban uses; or where the immediate contiguous properties surrounding the residential project site are, or previously have been, developed for urban uses; or housing projects that are exclusively for very low and low-income households."

In addition, under SB 610, a water supplier responsible for the preparation and periodic updating of an UWMP must describe the water supply projects and programs that may be undertaken to meet the total project water use of the service area. If groundwater is identified as a source of water available to the supplier, the following additional information must be included in the UWMP: (1) a groundwater management plan; (2) a description of the groundwater basin(s) to be used and the water use adjudication rights, if any; (3) a description and analysis of groundwater use in the past 5 years; and (4) a discussion of the sufficiency of the groundwater that is projected to be pumped by the supplier.

Furthermore, SB 7, enacted on November 10, 2009, mandates new water conservation goals for UWMPs, requiring Urban Water Suppliers to achieve a 20 percent per capita water consumption reduction by the year 2020 statewide, as described in the "20 x 2020" State Water Conservation Plan.[1] As such, each updated UWMP must now incorporate a description of how each respective urban water supplier will quantitatively implement this water conservation mandate, which requirements in turn must be taken into consideration in preparing and adopting WSAs under SB 610.

(b) Senate Bill X7-7

Senate Bill X7-7, enacted in November 2009, codified in the California Water Code Section 10608, requires all water suppliers to increase water use efficiency by 20 percent by December 31, 2020. The state was required to make incremental progress towards this goal by reducing per capita water use by at least 10 percent on or before December 31, 2015. Furthermore, it was determined in 2016 that urban retailer water suppliers who do not meet the water conversation requirements would not be eligible for state water grants or loans.

[1] *California State Water Resources Control Board, 20 x 2020 Water Conservation Plan, February 2010.*

(c) California Urban Water Management Act

The California Urban Water Management Planning Act[2] of 1984 requires every municipal water supplier who serves more than 3,000 customers or provides more than 3,000 acre-feet per year (acre-feet per year) of water to prepare an Urban Water Management Plan (UWMP) every five years to identify short-term and long-term water resources management measures to meet growing water demands during normal, single-dry, and multiple-dry years. In the UWMP, the water supplier must describe the water supply projects and programs that may be undertaken to meet the total water use of the service area.

(d) Senate Bill 606 and Assembly Bill 1668

In May 2018, Governor Brown signed SB 606 and AB 1668 to better assist California in preparation for droughts and climate change by establishing statewide water efficiency standards. Both bills set goals for water consumption to be met by the year 2022. The two bills establish an indoor, per person water use goal of 55 gallons per day until 2025, 52.5 gallons from 2025 to 2030 and 50 gallons beginning in 2030. The legislation includes incentives for water suppliers to recycle water and requires both urban and agricultural water suppliers to set annual water budgets and prepare for drought.[3]

(e) California Plumbing Code

Title 24 of the California Administrative Code contains the California Building Standards, including the California Plumbing Code (Part 5), which promotes water conservation through efficiency standards (i.e., maximum flow rates) for federally regulated plumbing fittings and fixtures, such as showerheads and faucets. The 2019 California Plumbing Code went into effect on January 1, 2020.

(f) California Water Action Plan

The California Water Action Plan is a roadmap for the state's journey towards sustainable water management. The first California Water Action Plan was released in January 2014 under Governor Jerry Brown's administration.[4] The California Water Action Plan discusses the challenges to water in California: uncertain water supplies, water scarcity/drought, declining groundwater supplies, poor water quality, declining native fish species and loss of wildlife habitat, floods, supply disruptions, and population growth and climate change further increasing the severity of these risks.[5] Ten actions are listed in

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2 *California Water Code, Sections 10610-10656).*
3 *State of California website, Officer of Governor, Edmund G. Brown Jr. "Governor Brown Signs Legislation Establishing Statewide Water Efficiency Goals", May 31, 2018.*
4 *California Natural Resources Agency, California Water Action Plan.*
5 *California Natural Resources Agency, California Water Action Plan 2016 Update, pages 2 – 3.*

the California Water Action Plan to address the pressing water issues that California faces while laying groundwork for a sustainable water future:[6]

1. Make conservation a California way of life;
2. Increase regional self-reliance and integrated water management across all levels of government;
3. Achieve the co-equal goals for the Delta;
4. Protect and restore important ecosystems;
5. Manage and prepare for dry periods;
6. Expand water storage capacity and improve groundwater management;
7. Provide safe water for all communities;
8. Increase flood protection;
9. Increase operational and regulatory efficiency;
10. Identify sustainable and integrated financing opportunities.

(g) Sustainable Groundwater Management Act of 2014

On September 16, 2014, the State of California signed into law the Sustainable Groundwater Management Act (SGMA).[7] Comprised of three bills, AB 1739, SB 1168, and SB 1319, the SGMA provides a framework for long-term sustainable groundwater management across California and requires governments and water agencies of high and medium priority basins to halt overdraft and bring groundwater basins into balanced levels of pumping and recharge. Under the roadmap laid out by the legislation, local and regional authorities in medium and high priority groundwater basins have formed Groundwater Sustainability Agencies (GSAs) that will oversee the preparation and implementation of a local Groundwater Sustainability Plan (GSP). Local stakeholders have until 2022 (in critically overdrafted basins until 2020) to develop, prepare, and begin implementation of Groundwater Sustainability Plans. GSAs will have until 2042 (2040 in critically overdrafted basins) to achieve groundwater sustainability. The Project Site overlies a basin which is not designated as critically overdrafted and as such, no GSA has been formed to develop a local GSP for its management as of yet.

[6] *California Natural Resources Agency, California Water Action Plan 2016 Update, page 5.*

[7] *State of California, the Sustainable Groundwater Management Act of 2014 And Related Statutory Provisions from SB1168 (Pavley), AB1739 (Dickinson), and SB1319 (Pavley) as Chaptered, 2014.*

(h) Article 22.5 Drought Emergency Water Conservation

In January 2014, Governor Brown proclaimed a State of Emergency and directed state officials to take all necessary action to make water available in response to California's drought conditions. Key measures in the proclamation included:

- Asking all Californians to reduce water consumption by 20 percent and referring residents and water agencies to the Save Our Water campaign—www.saveourwater.com—for practical advice on how to do so;
- Directing local water suppliers to immediately implement local water shortage contingency plans;
- Ordering the State Water Resources Control Board (SWRCB) to consider petitions for consolidation of places of use for the State Water Project and Central Valley Project, which could streamline water transfers and exchanges between water users;
- Directing the Department of Water Resources (DWR) and the SWRCB to accelerate funding for projects that could break ground in 2014 and enhance water supplies;
- Ordering the SWRCB to put water rights holders across the state on notice that they may be directed to cease or reduce water diversions based on water shortages;
- Asking the SWRCB to consider modifying requirements for releases of water from reservoirs or diversion limitations so that water may be conserved in reservoirs to protect cold water supplies for salmon, maintain water supplies and improve water quality.

In April 2014, Governor Brown issued an executive order, April 2014 Proclamation, that strengthened the state's ability to manage water and habitat effectively in drought conditions and called on all Californian's to redouble their efforts to conserve water.

In April 2015, Governor Brown issued Executive Order B-29-15 that directed the SWRCB to impose restrictions on urban water suppliers to achieve a statewide 25 percent reduction in potable urban usage through February 2016; require commercial, industrial, and institutional users to implement water efficiency measures; prohibit irrigation with potable water of ornamental turf in public street medians; and prohibit irrigation with potable water outside newly constructed homes and buildings that is not delivered by drip or microspray systems; along with other directives. This executive order also directed the SWRCB to work with cities in implementing water usage reductions measures such as

replacing up to 50 million square feet of lawns with drought-tolerant landscaping, creating temporary statewide consumer rebate programs to replace old appliances, ban watering of ornamental grass on public street medians, and prohibiting new residential developments from irrigating with potable water unless water-efficient drip irrigation systems are used. The goal of the executive order was to reduce urban water usage by 25 percent statewide through February 2016.

In addition, the executive order directed the California Energy Commission (CEC) to implement standards for a statewide time-limited appliance rebate program to provide monetary incentives for the replacement of inefficient household devices.

In November 2015, Governor Brown issued Executive Order B-36-15, which called for an extension of urban water use restrictions until October 31, 2016, should drought conditions persist through January 2016.

In May 2016, Governor Brown issued Executive Order B-37-16, which extends the requirements of Executive Order B-29-15 and further directs the DWR and the SWRCB to develop long term efficiency targets that go beyond the 20 percent reductions mandated by Senate Bill X7-7, discussed further above. The executive order established longer-term water conservation measures that include permanent prohibition of wasteful practices, reduce water supplier leaks and water losses, strengthening urban water shortage contingency plans and improve drought planning for small water suppliers and rural communities.

On February 8, 2017, the SWRCB readopted and extended its drought regulations, continuing the January 2014 drought declaration and Executive Order B-37-16 from May 2016. The agency stated that the reassessment of water supply conditions and the need for continued urban conversation regulations would be subject to precipitation, snowpack levels, and other variables to be measured and determined until at least through the end of spring 2017. The regulatory requirements resulting from these Executive Orders have been codified in Article 22.5 Drought Emergency Water Conservation of the California Code of Regulations.

(i) State Water Code Section 350-354

State Water Code Section 350-354 regulates water distribution during periods of extreme drought, ensuring that when the distributor of a public water supply declares a water shortage emergency within its service area, water will be allocated to meet domestic, sanitation, and fire protection needs.

(j) California Code of Regulations

(i) Title 20

Title 20, Section 1605.3 (h) and 1505(i) of the California Code of Regulations (CCR) establishes applicable state efficiency standards (i.e., maximum flow rates) for plumbing fittings and fixtures, including fixtures such as showerheads, lavatory faucets and water closets (toilets). Among the standards, the maximum flow rate for showerheads manufactured between July 1, 2016 and prior to July 1, 2018 is 2.0 gallons per minute (gpm) at 80 pounds per square inch (psi); manufactured on or after July 1, 2018 is 1.8 gpm at 80 psi; and lavatory faucets manufactured after July 1, 2016 is 1.2 gpm at 60 psi. The standard for toilets sold or offered for sale on or after January 1, 2016 is 1.28 gallons per flush.[8]

(ii) Title 24, Part 11

Part 11 of Title 24, the title that regulates the design and construction of buildings, establishes the California Green Building Standards (CALGreen) Code. The purpose of the CALGreen Code is to improve public health, safety and general welfare by enhancing the design and construction of buildings through the use of building concepts having a reduced negative impact or a positive environmental impact and encouraging sustainable construction practices in the following categories: planning and design, energy efficiency, water efficiency and conservation, material conservation and resource efficiency, and environmental quality. The CALGreen Code includes both mandatory measures as well as voluntary measures. The mandatory measures establish minimum baselines that must be met in order for a building to be approved. The mandatory measures for water conservation provide limits for fixture flow rates, which are the same as those for the Title 20 efficiency standards listed above. The voluntary measures can be adopted by local jurisdictions for greater efficiency.

(iii) Title 24, Part 5

Title 24, Part 5 of the California Code of Regulations, establishes the California Plumbing Code. The California Plumbing Code sets forth efficiency standards (i.e., maximum flow rates) for all new federally-regulated plumbing fittings and fixtures, including showerheads and lavatory faucets. The 2016 California Plumbing Code, which is based on the 2015 Uniform Plumbing Code, has been published by the California Building Standards Commission and went into effect on January 1, 2017.

[8] *California Code of Regulations, Title 20, Section 1605.3(h).*

(2) Regional

(a) Metropolitan Water District's 2015 Water Management Plan

The Metropolitan Water District's (MWD's) *2015 Regional UWMP* (RUWMP) addresses the future of MWD's water supplies and demand through the year 2040.[9] Evaluations are prepared for average year conditions, single dry-year conditions, and multiple dry-year conditions. The analysis for multiple-dry year conditions, i.e. under the most challenging weather conditions such as drought and service interruptions caused by natural disasters, is presented in Table 2-4 of the 2015 RUWMP.[10] The analysis in the 2015 RUWMP concluded that reliable water resources would be available to continuously meet demand through 2040.[11] In the 2015 RUWMP, the projected 2040 demand water is 2,201,000 afy, whereas the expected and projected 2040 supply is 2,941,000 afy based on current programs, and an additional 398,000 afy is expected to become available under programs under development for a potential surplus in 2040 of 1,138,000 afy.[12]

MWD has comprehensive plans for stages of actions it would undertake to address up to a 50-percent reduction in its water supplies and a catastrophic interruption in water supplies through its Water Surplus and Drought Management and Water Supply Allocation Plans. MWD has also developed an Emergency Storage Requirement to mitigate against potential interruption in water supplies resulting from catastrophic occurrences within the Southern California region and is working with the state to implement a comprehensive improvement plan to address catastrophic occurrences that could occur outside of the Southern California region. MWD is also working with the state on the Delta Risk Management Strategy to reduce the impacts of a seismic event in the Delta that would cause levee failure and disruption of State Water Project (SWP) deliveries. In addition, MWD has plans for supply implementation and continued development of a diversified resource mix, including programs in the Colorado River Aqueduct (CRA), SWP, Central Valley transfers, local resource projects, and in-region storage that enables the region to meet its water supply needs. As set forth in their 2015 UWMP, MWD will also continue investments in water use efficiency measures to help the region achieve the 20 percent per person potable water use reduction by 2020.

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9 *Metropolitan Water District of Southern California, 2015 Regional Urban Water Management Plan, June 2016.*

10 *Metropolitan Water District of Southern California, 2015 Regional Urban Water Management Plan, June 2016, page 2-15.*

11 *Metropolitan Water District of Southern California, 2015 Regional Urban Water Management Plan, June 2016, page 2-15.*

12 *Metropolitan Water District of Southern California, 2015 Regional Urban Water Management Plan, June 2016, page 2-15.*

(b) MWD's Water Surplus and Drought Management Plan

In 1999, the Metropolitan Water District of Southern California (MWD) created the *Water Surplus and Drought Management (WSDM) Plan*, which is required as part of an UWMP, to address water shortage. The guiding principal of the *WSDM Plan* is to encourage storage of water during periods of surplus and work to minimize the impacts of water shortages on the region's consumers. Surplus, when supplies are sufficient to allow MWD to meet service demands, make deliveries to all interruptible programs, and deliver water to regional and local facilities for storage, and shortage, when supplies are sufficient to allow MWD to meet demands and make partial or full deliveries to interruptible programs, sometimes using stored water and voluntary water transfers, contingencies are both addressed. Shortages are further divided into the subcategories of severe shortages and extreme shortages with their own associated actions that could be taken as a part of the response to prevailing shortage conditions.[13]

(c) MWD's 2015 Integrated Resources Plan

The MWD prepares an *Integrated Water Resources Plan* (IRP) that provides a water management framework with plans and programs for meeting future water needs. It addresses issues that can affect future water supply such as water quality, climate change, and regulatory and operational changes. The most recent IRP (2015 IRP) was adopted in January 2016.[14] It establishes a water supply reliability mission of providing its service area with an adequate and reliable supply of high-quality water to meet present and future needs in an environmentally and economically responsible way. Among other topics, the 2015 IRP discusses water conservation, local and imported water supplies, storage and transfers, water demand, and adaptation to drought conditions. Specifically, the 2015 IRP includes the following strategies to meet future water demand:[15]

- Stabilizing and maintaining imported supplies;
- Meeting future growth through increase water conservation and the development of new – and protection of existing – local supplies;
- Pursuing a comprehensive transfers and exchanges strategy;
- Building storage in wet and normal years to manage risk and drought; and

[13] *Metropolitan Water District of Southern California, Water Surplus and Drought Management Plan: Report No. 1150, August, 1999.*

[14] *Metropolitan Water District of Southern California, Integrated Water Resources Plan 2015 Update, Report 1518, January 2016.*

[15] *Metropolitan Water District of Southern California, Integrated Water Resources Plan 2015 Update, page 6.5.*

- Preparing for climate change with Future Supply Actions – recycled water, seawater desalination, stormwater capture, and groundwater cleanup.

The 2015 IRP reliability targets identify developments in imported and local water supply, and in water conservation that, if successful, would provide a future without water shortages and mandatory restrictions under planned conditions. For imported supplies, MWD would make investments to maximize CRA deliveries in dry years. MWD would make ecologically-sound infrastructure investments to the SWP so that the water system can capture sufficient supplies to help meet average year demands and to refill the MWD storage network in above-average and wet years.

Planned actions to keep supplies and demands in balance include, among others, lowering regional residential per capita demand by 20 percent by the year 2020 (compared to a baseline established in 2009 state legislation), reducing water use from outdoor landscapes and advancing additional local supplies. IRP Table ES-1, 2015 IRP Update Total Level of Average-Year Supply Targeted (Acre-Feet), of the 2015 IRP, shows the supply reliability and conservation targets. As presented in the IRP, the total supply reliability target for each five-year increase between 2016 and 2040 would exceed the retail demand after conservation. In 2040, retail demand after conservation is estimated to be 4,273,000 acre-feet and the total supply reliability target is approximately 4,539,000 acre-feet, representing an excess of 266,000 acre-feet.[16]

(3) Local

(a) LADWP's Urban Water Management Plan Act

The LADWP 2015 UWMP confirmed that water use in the City has remained relatively constant over the previous five years and about the same as in the 1970s despite the fact that over 1.1 million more people now live in Los Angeles.[17] More recently, water consumption levels have remained relatively steady even as the City's population has been slowly increasing. This stability in water use is largely attributed to the City's public education campaigns and water conservation programs over the past 15 years.

LADWP's 2015 UWMP also defines an evolving water supply portfolio that includes significant increases in both water conservation and local water supplies. It addresses confidence in the water supply by analyzing the uncertainties associated with climate change and integrating this analysis into water supply plans. Finally, it reinforces the need to address the water/energy nexus and continuing efforts to reduce carbon footprint. With its current water supplies, planned future water conservation, and planned future water

[16] *Metropolitan Water District of Southern California, Integrated Water Resources Plan 2015 Update, Report 1518, page VIII.*

[17] *Metropolitan Water District of Southern California, Integrated Water Resources Plan 2015 Update, Report 1518, page ES-12.*

supplies, LADWP has available supplies to meet all demands under all three hydrologic scenarios through the 25-year planning period covered by the LADWP 2015 UWMP.

In addition to conformance with SB 610 and SB 221, the LADWP has implemented its own City-mandated water conservation measures that include:

- "Water Closet, Urinal and Showerhead Regulations" (Los Angeles Municipal Code ["LAMC"] Sections 122.00–122.10): Reduces water consumption by requiring new buildings to include water conservation fixtures (such as ultra-low-flush toilets, urinals, taps, and showerheads) and plumbing fixtures that reduce water loss from leakage in order to obtain City building permits. In addition, there are provisions requiring xeriscaping (i.e., the use of low-maintenance, drought-resistant plants).

- "The Emergency Water Conservation Plan of the City of Los Angeles" (LAMC Sections 121.00-121.13): Provides for the implementation of a citywide phased water conservation program to respond to dry weather periods based on the LADWP's evaluation of the projected supply and demand of City water supplies. The phased conservation program provides for mandatory water conservation measures at the user level and customer use curtailment of normal water use.

(b) Sustainable City pLAn/L.A. Green New Deal

In April 2019, Mayor Eric Garcetti released L.A.'s Green New Deal (Sustainable City pLAn 2019). Rather than an adopted plan, the Green New Deal is a mayoral initiative that consists of a program of actions designed to create sustainability-based performance targets through 2050 that advance economic, environmental, and equity objectives.[18] L.A.'s Green New Deal (Sustainable City pLAn 2019) is the first four-year update to the City's first Sustainable City pLAn that was released in 2015. It augments, expands, and elaborates in even more detail L.A.'s vision for a sustainable future and it addresses climate change with accelerated targets and new aggressive goals.

While not a plan adopted solely to reduce GHG emissions, within L.A.'s Green New Deal (Sustainable City pLAn 2019), climate mitigation is one of eight explicit benefits that help define its strategies and goals. L.A.'s Green New Deal (Sustainable City pLAn 2019) accelerates the following targets:[19]

- Supply 55 percent renewable energy by 2025; 80 percent by 2036; and 100 percent by 2045;

[18] *City of Los Angeles, L.A.'s Green New Deal (Sustainable City pLAn 2019, April 2019.*
[19] *City of Los Angeles, L.A.'s Green New Deal (Sustainable City pLAn 2019, April 2019, page 11.*

- Source 70 percent of our water locally by 2035, and capture 150,000 acre-feet per year (afy) of stormwater by 2035;
- Reduce building energy use per square foot for all types of buildings 22 percent by 2025, 34 percent by 2035; and 44 percent by 2050;
- Reduce Vehicle Miles Traveled per capita by at least 13 percent by 2025; 39 percent by 2035; and 45 percent by 2050;
- Ensure 57 percent of new housing units are built within 1,500 feet of transit by 2025; and 75 percent by 2035;
- Increase the percentage of zero emission vehicles in the City to 25 percent by 2025; 80 percent by 2035; and 100 percent by 2050;
- Create 300,000 green jobs by 2035; and 400,000 by 2050;
- Convert all City fleet vehicles to zero emission where technically feasible by 2028;
- Reduce municipal GHG emissions 55 percent by 2025 and 65 percent by 2035 from 2008 baseline levels, reaching carbon neutral by 2045.

(c) City of Los Angeles General Plan Framework

The Citywide General Plan Framework Element (General Plan Framework) establishes the conceptual basis for the City's General Plan. The General Plan Framework sets forth a comprehensive Citywide long-range growth strategy and defines Citywide policies regarding land use, housing, urban form and neighborhood design, open space and conservation, economic development, transportation, infrastructure, and public services. Chapter 9, Infrastructure and Public Services, of the City's General Plan Framework identifies goals, objectives, and policies for City utilities including water service. Goal 9C is to provide adequate water supply, storage facilities, and delivery system to serve the needs of existing and future water needs. The goals, objectives and policies are addressed by the City in its ordinances and preparation of its UWMP.

(d) Los Angeles Municipal Code

The City has adopted several ordinances to reduce water consumption in the City. These include measures undertaken pursuant to the City's green building efforts, encouragement of sustainable development and initiatives to address potential water shortages due to changing supply availability. The ordinances are discussed below.

(i) Ordinance No. 180,182: Water Efficiency Requirements Ordinance

The Water Efficiency Requirements Ordinance, City Ordinance No. 180,822, effective December 1, 2009, established water efficiency requirements for new development and renovation of existing buildings, mandating installation of high-efficiency plumbing fixtures in residential and commercial buildings.

(ii) Ordinance Nos. 181,480, 182,849, 184,248, and 184,692 Los Angeles Green Building Code

The City's Green Building Code, Ordinance No. 181,480, subsequently amended by Ordinance No. 182,849, creates a set of development standards and guidelines to further energy efficiency and the reduction of greenhouse gas emissions. It builds upon and sets higher standards than those incorporated in the CALGreen Code. Amongst its provisions are efficiency standards regarding water consumption fixtures and appliances in new buildings. Additionally, the Green Building Code sets further restrictive water efficiency standards for plumbing fixtures, such as 1.2 gpm and 1.8 gpm maximum for lavatory faucets and showerheads, respectively. The Green Building Code is implemented through the building permit review process, during which projects are evaluated for compliance with the required water conservation features.

(iii) Ordinance No. 170,978: Landscape Ordinance

In 1996, Ordinance No. 170,978 amended Los Angeles Municipal Code (LAMC) Sections 12.40 through 12.43 to establish consistent landscape requirements for new projects within the City. This ordinance requires numerous water conservation measures in landscape, installation, and maintenance including but not limited to the use of drip irrigation and soak hoses in lieu of sprinklers to lower the amount of water lost to evaporation and overspray; setting automatic sprinkler systems to irrigate during the early morning or evening hours to minimize water loss due to evaporation; and watering less in the cooler months and during the rainy season. The ordinance also provides guidance intended to increase the "residence time of precipitation" within a given watershed.

(iv) Ordinance Nos. 181,999 and 183,833: Low Impact Development

In 2011, the City adopted the Citywide Low Impact Development (LID) Ordinance (LID Ordinance). LID is a stormwater management strategy with the goal of mitigating the impacts of increased runoff and stormwater pollution as close to its source as possible. Among other provisions regarding drainage, the LID Ordinance promotes the collection and use of on-site stormwater for irrigation of landscaping and recharge to the groundwater table where/if appropriate. A related ordinance, Ordinance No. 183,833, the

Stormwater and Urban Runoff Pollution Control Ordinance, establishes City requirements to meet its obligation under its Municipal Separate Storm Sewer System (MS4) Permit. The ordinance further delineates implementation procedures for meeting the City's LID requirements.

(v) Ordinance Nos. 166,080, 181,288, 183,608, and 184,250: Emergency Water Conservation Plan

The *City's Emergency Water Conservation Plan* was originally adopted in July of 1990 (Ordinance No. 166,080) and has been revised on numerous occasions since. This Ordinance mandates water conservation when available water supplies are reduced as the result of drought conditions, lowered groundwater levels, service disruptions, etc. The Ordinance establishes six phases of water conservation requirements where each phase, starting from Phase I, imposes increasingly stringent restrictions to address increasingly severe water shortage emergencies. Such restrictions include limited watering of hardscape, limited landscape irrigation, pool covers, restricted washing of vehicles, restricted filling of decorative fountains with potable water, and more. Phase VI includes all of the prohibited uses from Phase I through V, and also authorizes the Board to implement additional prohibitions based on the water supply situation and to establish appropriate penalties for prohibited uses.

In August 2009, and again in August 2010, the City updated the Emergency Water Conservation Plan Ordinance (Ordinance No. 181,288) by clarifying prohibited uses of water, modifying certain water conservation requirements, and developing new phases of conservation depending on the severity of water shortages. In June 2015, the City amended Ordinance No. 181,288 with the new Ordinance No. 183,608. Ordinance No. 183,608 clarified prohibited uses and added an additional phase to allow for outdoor watering two days a week. In April 2016, the City once again amended Ordinance No. 183,608 with Ordinance No. 184,250, which defined and added fines for unreasonable uses of water. The Ordinance is expected to improve the City's ability to comply with current regulations and respond to the ongoing drought conditions.

Phase II of the Water Conservation Ordinance was enacted in August 2010 and is currently in effect. In addition to Phase I restrictions, Phase II also limits landscape irrigation to three days per week, and limits watering times for non-conserving nozzles (spray head sprinklers and bubblers) to eight minutes per watering day per station.

(e) Service Advisory Request (SAR) and Fire Service Pressure Flow Report (FSPFR) Requirements

LADWP requires new development projects that are installing new, dedicated fire service lines to have a capacity analysis conducted to determine whether there is sufficient capacity in the water infrastructure proposed to serve the project. The analysis includes

the submission of requests for an approved Service Advisory Request (SAR) for domestic water service, and an approved Fire Service Pressure Flow Report (FSPFR) for fire flow, from LADWP. LADWP performs the analysis using their electronic water distribution system data.

(f) Resilient Los Angeles

The *Resilient Los Angeles Plan*, released in March 2018, includes initiatives to address modernizing the City's infrastructure, creating economic security, adapting to climate change, and preparing for disaster and recovery scenarios.[20] Goal 11 focuses on restoring rebuilding, and modernizing Los Angeles' infrastructure. Specific objectives of Goal 11, pertaining to water supply, include expanding the City's seismic resilient pipe network, replacing aging infrastructure, expansion and protection of water sources to reduce the dependence on imported water, and strengthening the City's local water supply.

(g) Los Angeles Water Rate Ordinance

The City's Water Rate Ordinance was adopted in June 1995 and last amended in March 2016 under the Los Angeles Water Rate Ordinance (Ordinance No. 184,130), which revised the existing tiered water rate schedules through the Department of Water and Power (DWP) for single-dwelling unit customers, multi-dwelling unit customers, commercial, industrial, and government customers and temporary construction, recycled water service, private water service, publicly sponsored irrigation, recreational, agricultural, horticultural, and floricultural uses, community gardens, and youth sports. Specifically, the goal of Ordinance No. 184,130 is to promote water conservation while recovering the higher costs of providing water to high volume users and accelerating development of sustainable local water supply. In addition, this ordinance intends to maintain cost-of-service principles, incremental tier pricing based on the cost of water supply, and added pumping and storage costs.[21]

b) Existing Conditions

According to the LADWP 2015 UWMP, the primary LADWP sources of water supplies are water purchased from the Metropolitan Water District, surface water imported via the Los Angeles Aqueduct, and local groundwater. Recycled water projects are progressing and expected to be a greater portion of LADWP water supply in the future. Overall, these sources of water provide the necessary water to meet LADWP's water supply needs. The

[20] *City of Los Angeles, Resilient Los Angeles, March 2018.*
[21] *City of Los Angeles, Ordinance No. 184,130.*

LADWP 2015 UWMP water demand projection for 2040 is approximately 709,500 acre-feet per year, based on normal weather conditions.[22]

(1) City-Controlled Water Supplies

(a) Los Angeles Aqueduct

The Los Angeles Aqueduct, local groundwater, and recycled water constitute the City-controlled water supplies. The Los Angeles Aqueduct conveys snowmelt runoff from the eastern Sierra Nevada Mountains and has a capacity of holding a flow of 485 cubic feet per second (cfs) of water.[23] Secondarily, the Los Angeles Aqueduct water supplies are supplemented by groundwater pumping. The Los Angeles Aqueduct supplies fluctuate from year to year due to varying annual snowfall and hydrological conditions. In recent years, the Los Angeles Aqueduct supplies have decreased because of environmental obligations to dedicate water resources to mitigate groundwater pumping in the Owens Valley, restore the water level of Mono Lake, and mitigate dust emissions from Owens Lake.

The Los Angeles Aqueduct system extends approximately 340 miles from the Mono Basin to the City. From 1995 through 2004, the Los Angeles Aqueduct supplied about half of the City's water needs. The City owns approximately 312,000 acres of property in the Owens Valley and appropriates groundwater from its lands in the Owens Valley pursuant to a long-term groundwater management plan with Inyo County.[24] The City and Inyo County prepared a long-term groundwater management agreement, known as the *Green Book for the Long-Term Groundwater Management Plan for the Owens Valley and Inyo County*.[25] This agreement sets forth plans and procedures to prevent overdraft conditions from groundwater pumping as well as to manage vegetation in the Owens Valley. In July 1998, LADWP and the Great Basin Unified Air Pollution Control District entered into a Memorandum of Agreement to mitigate dust emissions from Owens Lake.

(b) Groundwater

In addition to groundwater extraction from nine wellfields throughout the Owens Valley, the LADWP also extracts from three local groundwater basins: San Fernando, Sylmar, and Central. The LADWP plans to continue future pumping from the local basins, with limitations based on water quality and overdraft protection. The LADWP's groundwater pumping strategy is based on a "safe yield" strategy, in which the amount of water

[22] *Los Angeles Department of Water and Power, 2015 Urban Water Management Plan, June 2016, page ES-22.*
[23] *Los Angeles Department of Water and Power website, Facts & History.*
[24] *Los Angeles Department of Water and Power website, Facts & History.*
[25] *Inyo County and City of Los Angeles, Green Book for the Long-Term Groundwater Management Plan for the Owens Valley and Inyo County, June 1990.*

removed over a period of time equals the amount of water entering the groundwater basin through native and imported groundwater recharge. Further, protection from potential overdraft conditions is provided by the court-appointed Los Angeles River Area Watermaster for the San Fernando and Sylmar Basins, and a court-appointed Watermaster Panel for the Central Basin. The Watermaster Panel consists of three separate arms; first arm is the Administrative Body, performed by the Water Replenishment District of Southern California (WRD), which administers the Watermaster accounting and reporting functions; second arm is the Central Basin Water Rights Panel (CBWRP), which enforces issues related to pumping rights defined in the adjudication; and the third arm is the Storage Panel, which is comprised of the CBWRP and the WRD Board of Directors. Annually, the Watermaster prepares a Watermaster Service Report indicating groundwater extractions, replenishment operations, imported water use, recycled water use, finances of Watermaster services, administration of the water exchange pool, and significant water-related events in the Central Basin.[26] Additionally, a long-term groundwater management agreement between the City and Inyo County ensures the protection of LADWP's groundwater resources within Owens Valley from overdraft conditions.

Local groundwater provides approximately 12 percent of the total water supply to the City and has provided nearly 23 percent of the supply in drought years. On average, about 89 percent of the LADWP's groundwater supply is extracted from the Upper Los Angeles River Area, while the Central Basin provides 11 percent. The Upper Los Angeles River Area has three local groundwater basins:

- San Fernando,
- Sylmar, and
- Eagle Rock.[27]

LADWP groundwater rights in the basins are adjudicated, meaning they are confirmed and apportioned by judgments of the California Superior Courts. The adjudications are based on maintaining long-term groundwater extractions that will not create an overdraft condition in the basin as well as to manage vegetation in the Owens Valley. The San Fernando, Sylmar, and Eagle Rock basins are subject to the judgment in *The City of Los Angeles vs. the City of San Fernando, et al.*[28] Pumping is reported to the court-appointed Upper Los Angeles River Area Watermaster. The average LADWP San Fernando,

[26] *Los Angeles Department of Water and Power, 2015 Urban Water Management Plan, June 2016, page 6-15.*
[27] *Los Angeles Department of Water and Power website, Groundwater.*
[28] *City of Los Angeles v. City of San Fernando et al. (1975) 14 Cal.3d 199.*

Sylmar, and Eagle Rock basin entitlements under the judgment are 87,000 acre-feet per year, 3,405 acre-feet per year, and 500 acre-feet per year, respectively.[29] In addition, as of October 2013, LADWP accumulated nearly 537,453 acre-feet of stored water credits in the San Fernando Basin. This stored water credit is water that LADWP can withdraw from the basin during normal and dry years or in an emergency.

The Central Basin and West Coast Basin water rights were established through the Central Basin Judgment and West Coast Basin Judgment, respectively. Pumping is reported to a Watermaster Panel, comprised of WRD and CBWR. The Central Basin Judgment entitlement for the LADWP is 15,000 acre-feet per year. The West Coast Basin Judgment entitles LADWP to approximately 1,503 acre-feet per year. LADWP does not currently exercise its water rights in the West Basin.[30]

As shown in **Table IV.M.1-1, Groundwater Production Forecasts**, LADWP plans to continue production from its groundwater basins in the coming years to offset reductions in imported supplies. Extraction from the basins will, however, be limited by water quality and overdraft protection. Both LADWP and the California Department of Water Resources have programs in place to monitor wells to prevent overdrafting.

Table IV.M.1-1
Groundwater Production Forecasts

Basin	2014/2015 (Actual)	2019/2020	2024/2025	2029/2030	2034/2035	2039/2040
	AFY					
San Fernando[1]	80,097	90,000	88,000	84,000	92,000	92,000
Sylmar[2]	0	4,170	4,170	4,170	4,170	3,570
Central[2]	6,948	18,500	18,500	18,500	18,500	18,500
Total	87,045	112,670	110,670	106,670	114,670	114,070

1 SFB remediation facilities are expected to be in operation in FY 2021/22. Use of groundwater storage credits allows for increased pumping above safe yield.
2 Use of groundwater storage credits in Sylmar Basin and Central Basin allows for temporary increase in pumping above safe yield until stored water credits have been expended.

In response to contamination issues and declining groundwater levels, the LADWP is working to clean up the San Fernando Basin's groundwater and is making investments to recharge local groundwater basins through stormwater recharge projects, while collaborating on the rehabilitation of aging stormwater capture and spreading facilities,

[29] *Los Angeles Department of Water and Power, 2015 Urban Water Management Plan, June 2016, pages 6-6, 6-13.*
[30] *Los Angeles Department of Water and Power, 2015 Urban Water Management Plan, June 2016, pages 6-15, 6-17.*

with the long range goal of increasing the contribution of groundwater to overall City water supplies.

(c) Secondary Sources

Secondary sources of water supply for the City include water conservation, recycling, and integrated planning. The LADWP has implemented water conservation and recycling programs with efforts to increase the percentage the City's water demand satisfied through these methods. It is expected that water conservation and planning will play an increasing role in meeting future water demand. Integrated planning will also play a crucial role in ensuring the reliability of the City's future water demand.

The City, together with the Metropolitan Water District, other regional water providers, and various stakeholder groups is developing and implementing programs to reduce overall water use by forming partnerships with other agencies, institutions, and organizations, addressing risk and uncertainty, and incorporating multiple objectives, including reliability, cost, water quality, environmental stewardship, and quality of life. In this way, water-use efficiency and recycling activities are maximized and potential alternative supplies such as water transfer, desalination, and stormwater runoff reuse are considered to be potential contributors to the City's future water supplies.[31]

(d) Recycled Water

The use of recycled water reduces the demand for potable water in the area. LADWP presently uses recycled water for industrial and irrigation purposes. LADWP uses recycled water produced by four wastewater treatment plants:

- Los Angeles-Glendale Water Reclamation Plant,
- Donald C. Tillman Water Reclamation Plant,
- Terminal Island Treatment Plant, and
- Hyperion Treatment Plant.[32]

LADWP restores wastewater to a level of quality specified by the California Department of Health Services and distributes it for landscaping and industrial uses. The sustainability of the City's water supplies is dependent on the City's ability to maximize water conservation and increase recycled water use. LADWP's Action Plan states that the City will develop significant additional water conservation and water recycling, as well as other water resources, to ensure a reliable water supply. LADWP is currently engaged

[31] *Los Angeles Department of Water and Power, 2015 Urban Water Management Plan, June 2016.*
[32] *Los Angeles Department of Water and Power, 2015 Urban Water Management Plan, June 2016, page 4-9 to 4-10.*

in an aggressive planning and outreach program to expand recycled water supplies and implement the use of recycled water for groundwater recharge. The City's goal is to increase the use of recycled water to 75,400 acre-feet per year by 2040.[33] Water recycling and reuse is reducing Southern California's demand for potable water.

(2) Purchased Water

The remainder of the City's water demand is supplied by purchases from Metropolitan Water District. The Metropolitan Water District imports its water supplies from Northern California through the State Water Project's California Aqueduct and from the Colorado River by way of the Metropolitan Water District's Colorado River Aqueduct. LADWP is one of 26 member-agencies that have preferential rights to purchase water from the Metropolitan Water District. LADWP has a preferential right to purchase water from the Metropolitan Water District pursuant to Metropolitan Water District Act Section 135. As a percentage of the City's total water supply, purchases of Metropolitan Water District water have historically varied from 4 percent in 1983-84 to 71 percent in 2008-09, with a five-year average 52 percent between 2005-06 and 2009-10. The City relies on the Metropolitan Water District even more in dry years and has increased its dependence in recent years as Los Angeles Aqueduct supply has been reduced. Although the City plans to reduce its reliance on Metropolitan Water District supply, it has made significant investments in the Metropolitan Water District anticipating that the City will continue to rely on the wholesaler to meet its current and future supplemental water needs.[34] The LADWP 2015 UWMP projects that LADWP's reliance on the Metropolitan Water District water supplies will be reduced significantly; from the five year average of 57 percent of total demand to 11 percent under average weather conditions by 2040.[35]

Accounting for current water supplies, planned future water conservation and planned future water supplies, LADWP projects that it will be able to reliably provide water to its customers through the 25-year planning period covered by the LADWP 2015 UWMP. The LADWP's 2015 UWMP currently shows that with its investments in storage, water transfers and improving the reliability of the Delta, water shortages are not expected to occur within the next 25 years.[36]

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[33] *Los Angeles Department of Water and Power, 2015 Urban Water Management Plan, June 2016, page 4-27.*

[34] *Los Angeles Department of Water and Power, 2015 Urban Water Management Plan, June 2016, page 8-1.*

[35] *Los Angeles Department of Water and Power, 2015 Urban Water Management Plan, June 2016.*

[36] *Los Angeles Department of Water and Power, 2015 Urban Water Management Plan, June 2016, page 8-1.*

(3) Fire Flow and Infrastructure

In addition to supplying water for domestic uses, the LADWP also supplies water for fire protection services, in accordance with Fire Code (see discussion in **Section IV.J.1, Public Services - Fire Protection** of this Draft EIR). Fire flow requirements are closely related to land use as the quantity of water necessary for fire protection varies with the type of development, life hazard, type and level of occupancy, and degree of fire hazard (based on such factors as building age or type of construction). City-established fire flow requirements vary from 2,000 gallons per minute (gpm) in low-density residential areas to 12,000 gpm in high-density commercial or industrial areas. In any instance, a minimum residual water pressure of 20 pounds per square inch (psi) is to remain in the water system while the required gpm is flowing.

There is existing fire infrastructure serving the Project Site. There is an existing hydrant on the southwest corner of the intersection of Industrial Street and Mateo Street. Multiple additional fire hydrants are located in the greater vicinity of the Project Site.

(4) Current and Future Water Use

As discussed previously, in accordance with the California Urban Water Management Planning Act of 1984, all urban water suppliers that provide municipal and industrial water to more than 3,000 customers, or supply more than 3,000 acre-feet per year of water, are required to prepare and adopt an UWMP. As previously discussed, according to the LADWP 2015 UWMP, water use in the City in 2015 was approximately equal to water use in the 1970s, although the City population has increased by over one million people during this period. The LADWP 2015 UWMP projects yearly water demand to reach approximately 709,500 acre-feet by 2040. California law requires the UWMP to be updated every five years, which includes an update of water supply and demand projections. As also discussed previously, the LADWP's Action Plan strategizes for the implementation of water conservation measures and water recycling to promote a reliable future water supply. The City plans to meet all future increases in water demand through water conservation and recycling efforts, thereby decreasing its reliance on imported water. Further, the MWD's current IRP aims to outline a strategy for reliable future water supplies through 2040. Successful implementation of the IRP has resulted in reliable supplemental water supplies for the City from the MWD. Finally, State Water Code Section 350-354 regulates water distribution during periods of extreme drought, ensuring that when the distributor of a public water supply declares a water shortage emergency within its service area, water will be allocated to meet domestic, sanitation, and fire protection needs.

(5) Local Water Infrastructure and Consumption

The Project Site is currently developed with an industrial building constructed in 1978 as a warehouse and office building that occupies approximately 26,740 square feet and an associated surface parking lot. LADWP maintains water infrastructure to the Project Site. Based on available record data provided by the City, there is a 12-inch water main in Mateo Street and 6-inch water main in Imperial Street.[37] In addition, there are two domestic water meters that serve the Project Site. As shown in **Table IV.M.1-2, Existing Average Daily Water Consumption,** the existing uses consume approximately 963 gallons per day (gpd) of water.

Table IV.M.1-2
Existing Average Daily Water Consumption

Land Use	Size (square feet)	Consumption Rate (gpd/sf)[a]	Total Water Consumption (gpd)
Warehouse	26,740 sf	36 gpd/1,000 sf	963
Existing Water Consumption			**963**

Notes: gpd = gallons per day; sf = square feet
[a] *The average daily flow based on 120% of City of Los Angeles Bureau of Sanitation sewerage generation factors.*
Source (table): KPFF, 2020.

3. Project Impacts

a) Thresholds of Significance

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

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

b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years.

The *L.A. CEQA Thresholds Guide* identifies the following criteria to evaluate water supply and infrastructure impacts:

[37] *676 Mateo Street Mixed-Use Project Utility Infrastructure Technical Report: Water, prepared by KPFF, July 21, 2020,* ***Appendix N.1*** *to this Draft EIR.*

(1) Water

- *The total estimated water demand for the project;*
- *Whether sufficient capacity exists in the water infrastructure that would serve the project, taking into account the anticipated conditions at project buildout;*
- *The amount by which the project would cause the projected growth in population, housing or employment for the Community Plan area to be exceeded in the year of the project completion; and*
- *The degree to which scheduled water infrastructure improvements or project design features would reduce or offset service impacts.*

The potential for the Project to result in impacts to water supply and infrastructure is based on the *State CEQA Guidelines* Appendix G thresholds and criteria identified in the *L.A. CEQA Thresholds Guide* that provide supplemental analysis to the Appendix G thresholds, where applicable. The City's threshold criteria above are considerations that were made as part of the analysis of the Appendix G thresholds for water supply and infrastructure.

b) Methodology

The Project is a mixed-use project that does not exceed the thresholds pursuant to SB 610 detailed in the regulatory setting above; therefore, a WSA is not required. The environmental impacts of the Project with respect to water are determined based on the proposed increase in water demand and the capacity of existing and proposed infrastructure. The existing and proposed water demand is based upon available Project Site and Project information, and utilizes 120 percent of the Bureau of Sanitation (BOS) sewerage generation factors. The future water demand impacts were determined by subtracting the existing uses water demand from the Project's total water demand to determine the Project's net water demand. The resulting net water demand associated with the Project was then analyzed in relationship to LADWP's existing and planned future water supplies to determine if LADWP would be able to accommodate the Project's water demands.

LADWP performed a hydraulic analysis of their water system to determine if adequate fire flow is available to the fire hydrants surrounding the Project Site and to determine if available water conveyance exists for future development. LADWP's approach consists of analyzing their water system model near the Project Site. Based on the results, LADWP determines whether they can meet the Project's fire hydrant flow needs based on existing infrastructure.

c) Project Design Features

No specific Project Design Features have been identified with regard to water.

d) Analysis of Project Impacts

As compared to the Project, the Flexibility Option would change the use of the second floor from residential to commercial, and would not otherwise change the Project's land uses or size. The overall commercial square footage provided would be increased by 22,493 square feet to 45,873 square feet and, in turn, there would be a reduction in the number of live/work units from 185 to 159 units and an increase in the number of bicycle spaces from 154 to 161. The overall building parameters would remain unchanged and the design, configuration, and operation of the Flexibility Option would be comparable to the Project. In the analysis of Project impacts presented below, where similarity in land uses, operational characteristics and project design features between the Project and the Flexibility Option would be essentially the same, the conclusions regarding the impact analysis and impact significance determination presented below for the Project would be the same under the Flexibility Option. For those thresholds where numerical differences exist because of the differences in project parameters between the Project and Flexibility Option, the analysis is presented separately.

Threshold a) Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

Threshold b) Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?

Numerical differences exist for these thresholds because of the differences in project parameters between the Project and Flexibility Option, therefore these analyses are presented separately.

The following analysis discusses the Project impacts in regards to the relocation or construction of new or expanded water facilities. Refer to **Section IV.F, Hydrology and Water Quality**, **threshold (ciii)** of this Draft EIR, for an impact analysis discussion on stormwater drainage facilities. Refer to **Section IV.M.2, Utility and Service Systems – Wastewater, threshold (b)** of this Draft EIR, for an impact analysis discussion on wastewater treatment facilities. Refer to **Section IV.M.4, Utility and Service Systems – Dry Utilities,** of this Draft EIR, for an impact analysis discussion on electric power, natural gas, and telecommunication facilities.

(1) Impact Analysis

(a) Project

(i) Construction

Water demand for construction of the Project would be required for dust control, cleaning of equipment, excavation/export, removal, and re-compaction. Based on a review of construction projects of similar size and duration, a conservative estimate of construction water use ranges from 1,000 to 2,000 gpd.[38] While temporary construction water use would be more than the existing water consumption of 963 gpd at the Project Site, this estimated construction-period demand is significantly less than the Project's estimated operational demand, which, as described below, can be accommodated by the existing infrastructure. It is therefore anticipated that the existing water infrastructure would similarly meet the limited and temporary water demand associated with construction of the Project.

The Project would require construction of new, on-site water distribution lines to serve the new building. Construction impacts associated with the installation of water distribution lines would primarily involve trenching in order to place the water distribution lines below surface and would be limited to on-site water distribution, and minor off-site work associated with connections to the public main. Prior to ground disturbance, Project contractors would coordinate with LADWP to identify the locations and depth of all lines. Further, LADWP would be notified in advance of proposed ground disturbance activities to avoid water lines and disruption of water service. Activities associated with the installation of the water distribution lines would be in accordance with the actions and procedures outlined in the Project's Construction Staging and Traffic Management Plan (CSTMP) (see PDF TR-1 in **Section IV.K, Transportation**, of this Draft EIR). **Therefore, the Project's impacts on water infrastructure associated with construction activities would be less than significant**. **No mitigation measures are required.**

(ii) Operation

(a) Water Supply

The LADWP ensures the reliability and quality of its water supply through an extensive distribution system that includes more than 7,263 miles of pipes, and more than 100 storage tanks and reservoirs. Much of the water flows north to south, entering Los Angeles at the Los Angeles Aqueduct Filtration Plant (LAAFP) in Sylmar, which is owned

[38] *676 Mateo Street Mixed-Use Project Utility Infrastructure Technical Report: Water, prepared by KPFF, July 21, 2020,* ***Appendix N.1*** *to this Draft EIR.*

and operated by LADWP. Water entering the LAAFP undergoes treatment and disinfection before being distributed throughout the LADWP's Water Service Area. In 2014, ultraviolet treatment was added to the LAAFP treatment process. The LAAFP treats approximately 600 million gallons of water per day.[39]

Project water use has been estimated and is presented below in **Table IV.M.1-3, Estimated Daily Water Consumption**. The Project would consume a net total of approximately 36,624 gpd or 0.036 million gallons per day (mgd) of water.

Table IV.M.1-3
Estimated Daily Water Consumption

Land Use	Size	Consumption Rate	Total Consumption (gpd)	Total Consumption (AF/y)
Apartment: 1 Bedroom	159 du	185/du[a]	29,415	32.9
Apartment: 2 Bedroom	26 du	225/du[a]	5,850	6.57
Commercial and Art Production Space	23,380 sf	60/1,000 sf[b]	1,403	1.6
Open Space	15,320 sf	60/1,000 sf[b]	919	1.0
Total Project Water Consumption			*37,587*	*42.1*
Existing Water Consumption			***963***	***1.1***
Net Total Water Consumption			**36,624**	**41.0**

Notes: gpd = gallons per day; AF/y = acre-feet per year; sf = square feet; du = dwelling unit
[a] *The consumption rates are comprised of an artist space in addition to living space.*
[b] *The average daily flow based on 120 percent of City of Los Angeles Bureau of Sanitation sewerage generation factors.*
Source (table): KPFF, 2020.

The LADWP 2015 UWMP water demand projection for 2040 is approximately 675,700 af/y for average years, 709,500 af/y for single-dry years and for multiple-dry years.[40] As shown in **Table IV.M.1-3, Estimated Daily Water Consumption**, the Project is anticipated to consume a net increase of approximately 41.0 af/y of water. This projected water demand from the Project falls within the LADWP 2015 UWMP's projected water supplies through 2040, representing approximately 0.0061 percent of the projected water supply during average years (675,700 af/y) and approximately 0.0058 percent of the projected water supplies during single-dry and multiple-dry years (709,500 af/y). The City is also making efforts to increase the availability of water supplies, including increasing recycled water use and identification of alternative water supplies, such as water transfer, desalination, and stormwater runoff reuse, as well as implementing management agreements for long-term groundwater use strategies to prevent overdraft. Therefore, with the City's existing sources of water supply, coupled with the combined effect of these City efforts to increase available water supplies, it is expected that there would be

[39] *Los Angeles Department of Water and Power, 2015 Briefing Book.*
[40] *Los Angeles Department of Water and Power, 2015 Urban Water Management Plan, June 2016, pages 11-11, 11-12, and 11-13.*

adequate water supplies for the LADWP service area through at least 2040. Therefore, the amount of new annual demand from the Project would be insignificant relative to available supplies through 2040, projected growth in Los Angeles, and planned water resource development by LADWP.

Furthermore, the above projections are considered to the conservative as the Bureau of Sanitation generation rates used to calculate the water consumption do not account for any water conservation features required by local and state policies and regulations. The Project would be required to implement water saving features to reduce the amount of water used by the Project including high efficiency toilet and urinals, low flow showerheads and private and commercial faucets, draught tolerant and native plants, drip/subsurface, zoned irrigation with weather-based irrigation controllers, water-conserving turf, high-efficiency residential and commercial clothes washers, water-saving pool filters, and leak detection systems for pools and jacuzzis. All fixtures would be required to meet applicable flush volumes and flow rates. In addition, the Project would be prohibited from using single-pass cooling systems. Compliance with these requirements and water conservation measures, including Title 20 and 24 of the California Administrative Code, would further reduce the above projected water demand below the sewage generation factors assumed by the City's Bureau of Sanitation.

(b) Water Supply Infrastructure and Fire Flow

The Ten-Year Capital Improvement Program for the Fiscal Years 2010-2019 of the LADWP, is in a 10-year process of capital upgrades to the water infrastructure system of the City and increasing its water resources, enhance the quality of water it distributes, and improve the security of the water supply. These goals are accomplished by replacing and/or adding to the water system infrastructure, complying with and/or exceeding all state and federal water regulations, looking for new sources of water supply as well as conserving those already in existence, and adopting new and improved security measures to ensure the safety of the city's water. Through this program, it is expected that the LADWP can provide reliable sources of water to the residents of the City.[41]

The Project proposes to connect to the existing 12-inch main in Mateo Street for the domestic service. There are two types of connections that can be made to the City main. One type of connection is a combo service, which has one connection to the main and splits to serve both fire and domestic. The second type of connection is to have independent connections for fire and domestic. A Service Advisory Requests (SAR) was performed for Mateo Street. DWP added a note that a combo service would be allowed. In addition, the services would include backflows and be metered separately per City

[41] *Los Angeles Department of Water and Power, Water Services Organization, Ten-Year Capital Improvement Program for the Fiscal Years 2010-2019.*

requirements. The approved SAR confirms that sufficient infrastructure capacity is available for the Project.[42]

Based on fire flow standards set forth in LAMC Section 57.507.3, and as determined by the LAFD, the Project falls within the industrial and commercial category, which has a required fire flow of 6,000 to 9,000 gallons per minute (gpm) from four to six adjacent hydrants flowing simultaneously with a residual pressure of 20 pounds per square inch (psi). Hydrants can typically deliver up to 1,500 gpm, which is consistent with the requirement for 9,000 gpm from six hydrants simultaneously. Therefore, an Information of Fire Flow Availability Request (IFFAR) identifying six adjacent public hydrants was submitted to LADWP to confirm that LADWP's infrastructure is capable of delivering the required flow of 9,000 gpm while maintaining a minimum pressure of 20 psi. The completed IFFAR shows six nearby hydrants flowing simultaneously for a combined flow of 9,000 gpm at 20 psi. As shown by the IFFAR, the Project Site has adequate fire flow available to demonstrate compliance with LAMC Section 57.507.3.[43]

Furthermore, LAMC Section 57.513, Supplemental Fire Protection, states that:

> *Where the Chief determines that any or all of the supplemental fire protection equipment or systems described in this section may be substituted in lieu of the requirements of this chapter with respect to any facility, structure, group of structures or premises, the person owning or having control thereof shall either conform to the requirements of this chapter or shall install such supplemental equipment or systems. Where the Chief determines that any or all of such equipment or systems is necessary in addition to the requirements of this chapter as to any facility, structure, group of structures or premises, the owner thereof shall install such required equipment or systems.*

The Project would incorporate a fire sprinkler suppression system to reduce or eliminate the public hydrant demands, which would be subject to Fire Department review and approval during the design and permitting of the Project. Based on LAMC Section 94.2020.0 that adopts by reference NFPA 14-2013 including Section 7.10.1.1.5, the maximum allowable fire sprinkler demand for a fully or partially sprinklered building would be 1,250 gpm. As noted, an SAR was submitted to LADWP in order to determine if the existing public water infrastructure could meet the demands of the Project. The SAR for the 12-inch main in Mateo Street shows a static pressure of 79 pounds per square inch

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[42] *676 Mateo Street Mixed-Use Project Utility Infrastructure Technical Report: Water, Exhibit 1, prepared by KPFF, July 21, 2020,* ***Appendix N.1*** *to this Draft EIR.*

[43] *676 Mateo Street Mixed-Use Project Utility Infrastructure Technical Report: Water, Exhibit 1, prepared by KPFF, July 21, 2020,* ***Appendix N.1*** *to this Draft EIR.*

and that a flow of up to 2,500 gpm can be delivered to the Project Site with a residual pressure of 73 pounds per square inch, which exceeds the 20 pounds per square inch requirement for the surrounding public hydrants. As shown by the SAR, and through compliance with LAFD and LADWP requirements, the Project's fire flow impacts to water infrastructure would be less than significant.[44]

(c) Water Conservation Features

Installation of the required water saving fixtures and features described above and compliance with water conservation measures, including Title 20 and 24 of the California Administrative Code, would contribute towards a reduced water usage. Chapter XII of the LAMC comprises the City of Los Angeles Emergency Water Conservation Plan. The Emergency Water Conservation Plan stipulates conservation measures pertaining to water closets, showers, landscaping, maintenance activities, and other uses. At the state level, Title 24 of the California Administrative Code contains the California Building Standards, including the California Plumbing Code (Part 5), which promotes water conservation. Title 20 of the California Administrative Code addresses public utilities and energy, and includes appliance efficiency standards that promote conservation. Various sections of the Health and Safety Code also regulate water use.

(d) Summary

As detailed above, the amount of new annual demand from the Project is insignificant relative to available supplies of an average (0.0061 percent) and single- and multiple-dry (0.0058) years through 2040, projected growth in Los Angeles, and planned water resource development by LADWP. Additionally, the Project Site has adequate fire flow available to demonstrate compliance with LAMC Section 57.507.3 and would comply with the maximum allowable fire sprinkler demand requirements of the LAMC Section 94.2020.0. Furthermore, the Project would implement water conservation features as required by local (Chapter XII of the LAMC and the City of Los Angeles Emergency Water Conservation Plan) and state (Title 20 and Title 24 of the California Administrative Code) standards and regulations, which would reduce the water demand projected for the Project. **Therefore, sufficient water supplies would be available to serve the Project during operation from existing entitlements and the relocation or construction of new or expanded water facilities, the construction or relocation of which could cause significant environmental effects would not be required. Accordingly, the impact would be less than significant. No mitigation measures are required.**

[44] *676 Mateo Street Mixed-Use Project Utility Infrastructure Technical Report: Water, Exhibit 1, prepared by KPFF, July 21, 2020,* ***Appendix N.1*** *to this Draft EIR.*

(b) Increased Commercial Flexibility Option

Under the Flexibility Option, the commercial square footage provided would be increased to 45,873 square feet within the same building parameters and, in turn, there would be a reduction in the overall number of live/work units for a total of 159 units (Flexibility Option). Overall, the design, configuration, and operation of the Flexibility Option would be comparable to the Project.

(i) Construction

Similar to the Project, water demand for construction of the Flexibility Option would be required for dust control, cleaning of equipment, excavation/export, removal, and re-compaction. As construction of the Flexibility Option would be the same as the construction of the Project, the existing water infrastructure would similarly meet the limited and temporary water demand associated with construction of the Flexibility Option.

Similar to the Project, the Flexibility Option would require construction of new, on-site water distribution lines to serve the new building. Prior to ground disturbance, contractors would coordinate with LADWP to identify the locations and depth of all lines and would be notified in advance of proposed ground disturbance activities to avoid water lines and disruption of water service. **Therefore, the Flexibility Option's impacts on water infrastructure associated with construction activities would be less than significant. No mitigation measures are required.**

(ii) Operation

(a) Water Supply

The Flexibility Option water use has been estimated and is presented below in **Table IV.M.1-4, Estimated Daily Water Consumption for the Flexibility Option**. The Flexibility Option would consume a net total of approximately 34,043 gpd or 0.034 mgd of water.

Table IV.M.1-4
Estimated Daily Water Consumption for the Flexibility Option

Land Use	Size	Consumption Rate	Total Consumption (gpd)	Total Consumption (af/y)
Apartment: 1 Bedroom	135 du	185/du[a]	24,975	28.1
Apartment: 3 Bedroom	24 du	265/du[a]	6,360	7.3
Commercial and Art Production Space	45,873 sf	60/1,000 sf[b]	2,752	3.1
Open Space	15,320 sf	60/1,000 sf[b]	919	1.3
Total Increased Commercial Flexibility Option Water Consumption			*35,006*	*39.8*
Existing Water Consumption			***963***	***1.1***

Table IV.M.1-4
Estimated Daily Water Consumption for the Flexibility Option

Land Use	Size	Consumption Rate	Total Consumption (gpd)	Total Consumption (af/y)
Net Total Water Consumption			**34,043**	**38.7**

Notes: gpd = gallons per day; af/y = acre-feet per year; sf = square feet; du = dwelling unit
[a] *The consumption rates are comprised of an artist space in addition to living space.*
[b] *The average daily flow based on 120 percent of City of Los Angeles Bureau of Sanitation sewerage generation factors.*
Source (table): KPFF, 2020.

Similar to the Project, this projected net water demand from the Flexibility Option (38.7 af/y) falls within the LADWP 2015 UWMP's projected water supplies, representing approximately 0.0057 percent of average years (675,700 af/y) and approximately 0.0055 percent of single-dry and multiple-dry years (709,500 af/y). The City is also making efforts to increase the availability of water supplies, including increasing recycled water use and identification of alternative water supplies, such as water transfer, desalination, and stormwater runoff reuse, as well as implementing management agreements for long-term groundwater use strategies to prevent overdraft. Therefore, with the City's existing sources of water supply, coupled with the combined effect of City efforts to increase available water supplies, it is expected that there would be adequate water supplies for the LADWP service area through at least 2040. Therefore, the amount of new annual demand from the Flexibility Option would be insignificant relative to available supplies, projected growth in Los Angeles, and planned water resource development by LADWP. Furthermore, the above projections are considered to the conservative as the Bureau of Sanitation generation rates used to calculate the water consumption do not account for any water conservation features required by local and state policies and regulations. As with the Project, the Flexibility Option would be required to implement the same water conservation features as required by local (Chapter XII of the LAMC and the City of Los Angeles Emergency Water Conservation Plan) and state (Title 20 and Title 24 of the California Administrative Code) standards and regulations, which would further reduce the above projected demands below the sewage generation factors assumed by the City's Bureau of Sanitation.

(b) Water Supply Infrastructure and Fire Flow

Similar to the Project, the Flexibility Option proposes to connect to the existing 12-inch main in Mateo Street for the domestic service. A SAR was performed for Mateo Street and confirmed that sufficient infrastructure capacity is available.[45] Furthermore, the

[45] *676 Mateo Street Mixed-Use Project Utility Infrastructure Technical Report: Water, Exhibit 1, prepared by KPFF, July 21, 2020,* ***Appendix N.1*** *to this Draft EIR.*

completed IFFAR shows six nearby hydrants flowing simultaneously for a combined flow of 9,000 gpm at 20 psi. As shown by the IFFAR, the Project Site has adequate fire flow available to demonstrate compliance with LAMC Section 57.507.3.[46]

The Flexibility Option would incorporate a fire sprinkler suppression system to reduce or eliminate the public hydrant demands, which would be subject to Fire Department review and approval during the design and permitting of the Flexibility Option. As shown by the SAR, and through compliance with LAFD and LADWP requirements, fire flow impacts to water infrastructure would be less than significant.[47]

(c) Water Conservation Features

Similar to the Project, installation of the required water saving fixtures and features required by Chapter XII of the LAMC and the City of Los Angeles Emergency Water Conservation Plan, as well as compliance with water conservation measures, including Title 20 and 24 of the California Administrative Code, would contribute towards reduced water usage for the Flexibility Option.

(d) Summary

As detailed above, the amount of new annual demand from the Flexibility Option would be insignificant relative to available supplies of an average (0.0057 percent) and single-dry and multiple-dry (0.0055 percent) years through 2040, projected growth in Los Angeles, and planned water resource development by LADWP. Additionally, the Project Site has adequate fire flow available to demonstrate compliance with LAMC Section 57.507.3 and would comply with the maximum allowable fire sprinkler demand requirements of the LAMC Section 94.2020.0. Furthermore, the Flexibility Option would implement the same water conservation features as the Project, as required by local (Chapter XII of the LAMC and the City of Los Angeles Emergency Water Conservation Plan) and state (Title 20 and Title 24 of the California Administrative Code) standards and regulations, which would reduce the water demand projected for the Flexibility Option. **Therefore, sufficient water supplies would be available to serve the Flexibility Option during operation from existing entitlements and the relocation or construction of new or expanded water facilities, the construction or relocation of which could cause significant environmental effects would not be required. Accordingly, the impact would be less than significant. No mitigation measures would be required.**

[46] *676 Mateo Street Mixed-Use Project Utility Infrastructure Technical Report: Water, Exhibit 1, prepared by KPFF, July 21, 2020,* ***Appendix N.1*** *to this Draft EIR.*

[47] *676 Mateo Street Mixed-Use Project Utility Infrastructure Technical Report: Water, Exhibit 1, prepared by KPFF, July 21, 2020,* ***Appendix N.1*** *to this Draft EIR.*

Refer to **Section IV.F, Hydrology and Water Quality**, **threshold (ciii)** of this Draft EIR, for an impact analysis discussion on stormwater drainage facilities. Refer to **Section IV.M.2, Utility and Service Systems-Wastewater, threshold (b)** of this Draft EIR, for an impact analysis discussion on wastewater treatment. Refer to **Section IV.M.4, Utility and Service Systems-Dry Utilities,** of this Draft EIR, for an impact analysis discussion on electric power, natural gas, and telecommunication facilities. As discussed in **Section IV.F, Hydrology and Water Quality, Section IV.M.2, Utility and Service Systems – Wastewater,** and **Section IV.M.4, Utility and Service Systems – Dry Utilities,** the Project would not impact wastewater, stormwater, electric power, natural gas, or telecommunication facilities, and would not require the relocation or construction of wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities. No mitigation measures are needed.

(2) Mitigation Measures

Project-level impacts for the Project and the Flexibility Option, with regard to water supply and infrastructure, would be less than significant; no mitigation measures would be required.

(3) Level of Significance After Mitigation

Project-level impacts for the Project and the Flexibility Option, with regard to water supply and infrastructure, would be less than significant without mitigation.

4. Cumulative Impacts

Numerical differences exist regarding the impact analysis and impact significance determination presented below because of the differences in project parameters between the Project and Flexibility Option, therefore these analyses are presented separately.

a) Impact Analysis

(1) Project

The geographic context for the cumulative impact analysis on water infrastructure and supply is the LADWP service area, which includes the entirety of the City. LADWP, as a public water service provider, is required to prepare and periodically update an UWMP to plan and provide for water supplies to serve existing and projected demands. The LADWP 2015 UWMP prepared by LADWP accounts for existing development within the City, as well as projected growth through the year 2040.

Additionally, under the provisions of Senate Bill 610, LADWP is required to prepare a comprehensive water supply assessment for every new development "project" (as

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

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

There are 20 Related Projects, which consist of residential, commercial, schools, retail, restaurants, museums, hotels, and office uses. As shown in **Table IV.M.1-5, Estimated Daily Water Consumption of the Related Projects**, the total increase in water demand for the Related Projects is approximately 1.86 million gallons per day (mgpd). Combined with the Project, the net increase in water demand is approximately 1.90 mgd. The LADWP 2015 UWMP has estimated a water demand of 475 mgd by the year 2025, which means the Project combined with the Related Projects would account for approximately 0.40 percent of the total daily demand.

Table IV.M.1-5
Estimated Daily Water Consumption for the Related Projects

Land Use	Units	Consumption Rate[2] (gpd/unit)	Total Consumption (gpd)
Residential	5,306 DU[1]	180/DU	955,080
Retail	398,854 SF	30/1000 SF	11,966
School	300 Students	14/Student	4,200
Restaurant	9,110 Seats[3]	36/Seat	327,960
Grocery	72,212 SF	60/1000 SF	4,333
Museum	42,770 SF	36/1000 SF	1,540
Warehouse	316,632 SF	36/1000 SF	11,399
Hotel	863 Rooms	144/Room	124,272
Office	2,277,312 SF	144/1000 SF	327,933
Industrial	94,849 SF	60/1000 SF	5,691
Event Space	93,617 SF	420/1000 SF	39,319
Gym	62,148 SF	780/1000 SF	48,475
Meeting Space	3,235 SF	144/1000 SF	466

Table IV.M.1-5
Estimated Daily Water Consumption for the Related Projects

Land Use	Units	Consumption Rate[2] (gpd/unit)	Total Consumption (gpd)
Related Project Total			**1,862,634**
Project Net Total			**36,624**
Total Cumulative Consumption with Project			**1,899,258**
Increased Commercial Flexibility Option Net Total Consumption			**34,043**
Total Cumulative Consumption with Increased Commercial Flexibility Option			**1,896,677**

Notes: SF = square feet; gpd = gallons per day; DU = dwelling unit
[1] Assumes all units as 2-bedroom units.
[2] Consumption Rates Based on 120% of the Bureau of Sanitation Sewer Generation Factors for Residential and Commercial Categories.
[3] Assumes 30 square feet per seat.

Development of the Project and future new development in the vicinity of the Project Site would cumulatively increase demands on the existing water infrastructure system. Similar to the Project, Related Projects would be subject to LADPW review to assure the existing public infrastructure would be adequate to meet the domestic and fire water demands of each project and individual projects would be subject to LADWP and City requirements regarding infrastructure improvements needed to meet respective water demands, flow and pressure requirements. LADWP confirmed that six nearby hydrants that serve the Project Site provide sufficient flow and pressure to satisfy the needs of the fire suppression for the Project. Furthermore, LADWP through the five year updates of the LADWP 2015 UWMP, Los Angeles Department of Public Works, and the LAFD project specific checks would conduct on-going evaluations of its infrastructure.

Based on the above, LADWP would be able to supply the water demands of the Project as well as future growth. **Therefore, cumulative impacts on water supply and water infrastructure would be less than significant and no mitigation measures are required**.

Refer to **Section IV.F, Hydrology and Water Quality**, **threshold (ciii)** of this Draft EIR, for a cumulative impact analysis discussion on stormwater drainage facilities. Refer to **Section IV.M.2, Utility and Service Systems-Wastewater, threshold (b)** of this Draft EIR, for a cumulative impact analysis discussion on wastewater treatment. Refer to **Section IV.M.4, Utility and Service Systems-Dry Utilities,** of this Draft EIR, for a cumulative impact analysis discussion on electric power, natural gas, and telecommunication facilities. As discussed in **Section IV.F, Hydrology and Water Quality, Section IV.M.2, Utility and Service Systems – Wastewater,** and **Section IV.M.4, Utility and Service Systems – Dry Utilities,** the Project would not impact

wastewater, stormwater, electric power, natural gas, or telecommunication facilities on a cumulative level, and cumulative impacts would not require the relocation or construction of wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities. No mitigation measures are needed.

(2) Increased Commercial Flexibility Option

Similar to the Project, the geographic context for the cumulative impact analysis on water infrastructure and supply is the LADWP service area, which includes the entirety of the City. LADWP, as a public water service provider, is required to prepare and periodically update an Urban Water Management Plan to plan and provide for water supplies to serve existing and projected demands. Additionally, under the provisions of Senate Bill 610, LADWP is required to prepare a comprehensive water supply assessment for every new development "project" (as defined by Section 10912 of the Water Code) within its service area that reaches certain thresholds. Furthermore, through LADWP's 2015 UWMP process and the City's Securing L.A.'s Water Supply, the City will meet all new demand for water due to projected population growth to the year of 2040.

There are 20 Related Projects, which consist of residential, commercial, schools, retail, restaurants, museums, hotels, offices, industrial, medical offices, gyms, cinemas, and event space. The total increase in water demand for the Related Projects is approximately 1.86 mgpd. As shown in **Table IV.M.1-5, Estimated Daily Water Consumption of the Related Projects**, combined with the Flexibility Option, the net increase in water demand would be approximately 1.90 mgd. The 2015 Urban Water Management plan has estimated a water demand of 475 mgd by the year 2025, which means the Flexibility Option combined with the Related Projects would account for approximately 0.40 percent of the total daily demand.

Based on the above, it is anticipated that LADWP would be able to supply the water demands of the Flexibility Option as well as future growth. **Therefore, cumulative impacts, pertaining to the Flexibility Option, on water supply would be less than significant and no mitigation measures are required.**

Refer to **Section IV.F, Hydrology and Water Quality**, **threshold (ciii)** of this Draft EIR, for a cumulative impact analysis discussion on stormwater drainage facilities. Refer to **Section IV.M.2, Utility and Service Systems-Wastewater, threshold (b)** of this Draft EIR, for a cumulative impact analysis discussion on wastewater treatment. Refer to **Section IV.M.4, Utility and Service Systems-Dry Utilities,** of this Draft EIR, for a cumulative impact analysis discussion on electric power, natural gas, and telecommunication facilities. As discussed in **Section IV.F, Hydrology and Water Quality, Section IV.M.2, Utility and Service Systems – Wastewater,** and **Section IV.M.4, Utility and Service Systems – Dry Utilities,** the Flexibility Option would not

impact wastewater, stormwater, electric power, natural gas, or telecommunication facilities on a cumulative level, and cumulative impacts would not require the relocation or construction of wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities. No mitigation measures are needed

b) Mitigation Measures

Cumulative impacts related to water supply and infrastructure for both the Project and Flexibility Option would be less than significant; no mitigation measures would be required.

c) Level of Significance After Mitigation

Cumulative impacts related to water supply and infrastructure for both the Project and Flexibility Option were determined to be less than significant without mitigation.

IV. Environmental Impact Analysis

M. Utility and Service Systems

2. Wastewater

1. Introduction

This subsection describes the potential impacts of the Project on the wastewater infrastructure serving the Project Site. This subsection uses information from the following resources: the *City of Los Angeles Integrated Resources Plan Facilities Plan*, and the Department of Public Works Bureau of Sanitation website. This section incorporates the *676 Mateo Street Mixed-Use Project Utility Infrastructure Technical Report: Wastewater* (Infrastructure Technical Report: Wastewater), prepared by KPFF, July 21, 2020. The *Infrastructure Technical Report: Wastewater* is included as **Appendix N.2** to this Draft EIR.

Refer to **Section IV.F, Hydrology and Water Quality**, **threshold (ciii)** of this Draft EIR, for an impact analysis discussion on stormwater drainage facilities. Refer to **Section IV.M.1, Utility and Service Systems – Water, threshold (a)** of this Draft EIR, for an impact analysis discussion on water supply and treatment. Refer to **Section IV.M.4, Utility and Service Systems – Dry Utilities,** of this Draft EIR, for an impact analysis discussion on electric power, natural gas, and telecommunication facilities. As discussed in **Section IV.F, Hydrology and Water Quality, Section IV.M.1, Utility and Service Systems – Water** and **Section IV.M.4, Utility and Service Systems – Dry Utilities,** the Project would not impact stormwater, water supply, electric power, natural gas, or telecommunication facilities, and would not require the relocation or construction of water treatment or storm water drainage, electric power, natural gas, or telecommunications facilities. No mitigation measures are needed.

2. Environmental Setting

a) Regulatory Framework

(1) State

(a) CALGreen Building Code

The California Green Building Standards Code (*CAL*Green) sets minimum standards that all new structures can meet to minimize significantly the state's overall carbon output.

Local jurisdictions retain the administrative authority to exceed the *CAL*Green standards. The *CAL*Green standards are set forth in Part 11 of Title 24 of the California Code of Regulations.

*CAL*Green requires that new buildings reduce water consumption, employ building commissioning, increase building system efficiencies, divert construction waste from landfills, and install low pollutant emitting finish materials.[48] *CAL*Green's mandatory measures establish a minimum for green construction practices and incorporate environmentally responsible buildings into the everyday fabric of California cities without significantly driving up construction costs in a slow economy.

*CAL*Green has mandatory measures as well as more stringent, voluntary provisions that have been placed in the appendix for optional use. Some key mandatory measures for commercial occupancies include specified parking for clean air vehicles, a 20 percent reduction of potable water use within buildings, a 50 percent construction waste diversion from landfills, use of building finish materials that emit low levels of volatile organic compounds, and commissioning for new, nonresidential buildings over 10,000 square feet.[49] *CALGreen* has recently been updated and will become mandatory in January 2020. The construction waste diversion rate will increase from 50 percent to 65 percent.[50]

Key optional measures are included in a two-tiered system designed to allow jurisdictions to adopt codes that go beyond the state's mandatory provisions. The non-residential tiers include increased reduction in energy usage by 15 or 30 percent and increased reduction in potable water use, parking for clean air vehicles, cool roofs, construction waste diversion, use of recycled materials, and use of low-emitting resilient flooring and thermal insulation.

(2) Local

(a) Integrated Resources Plan/Water Facilities Plan

The City sewer system is subject to Section 201 of the Federal Clean Water Act. According to the Clean Water Act, the City must adopt a wastewater facilities plan in accordance with the United States EPA Rules and Regulations, 40 Code of Federal Regulations, Section 35.917. Section 201 states the following:

> *Facilities planning will demonstrate the need for facilities and, by a systematic evaluation of feasible alternatives, will also demonstrate that the proposed measures represent the most cost-effective means of*

[48] *CALGreen, Guide to the 2016 California Green Building Standards Code, January 2017, page 55.*
[49] *CALGreen, Guide to the 2016 California Green Building Standards Code, January 2017, page 55.*
[50] *CALGreen, 2019 California Green Building Standards Code, July 2019, page 46.*

meeting established effluent and water quality goals while recognizing environmental and social considerations.[51]

The City prepared a Wastewater Facilities Plan in 1982 and updated it in 1991. The 1991 Wastewater Facilities Plan update planned for facilities through 2010 and currently regulates wastewater facilities in the City. In 1990, to respond to the problem of insufficient sewer capacity, the City adopted Ordinance No. 166,060, which is discussed in detail later in this subsection. In summary, Ordinance No. 166,060 established sewer permit allocation regulations for projects that discharge sewage to the Hyperion Treatment Plant (HTP).

As a follow-up to these plans and programs, the City adopted the IRP in 2006 that incorporates a new City-prepared Wastewater Facilities Plan for facilities through 2020, as the City was faced with the task to meet future wastewater needs of more than 4.9 million residents expected to live within the City by 2020. The IRP serves to update the information prepared in the 1991 Wastewater Facilities Plan, while also considering the City's recycled water and urban runoff system needs. Specifically, the IRP was developed to accommodate the projected increase in wastewater flow over the next 20 years while maximizing the beneficial reuse of recycled water and urban runoff and, as a result, optimizing the use of the City's existing facilities and water resources. Demographic (population and employment) projections and data sources used in the IRP were based on the SCAG 2001 Regional Transportation Plan (RTP), which estimates that the population of the City would reach more than 4.9 million people in 2020.

In order to meet the needs of increased wastewater generation, the City chose to expand its current overall treatment capacity, while maximizing the potential to reuse recycled water through groundwater replenishment in future years. According to the IRP, the only water reclamation plant capable of providing recycled water for replenishment is the Donald Tillman Water Reclamation Plant in the Sepulveda Basin in the Van Nuys community of the City. As identified in the IRP, the HTP can currently serve roughly 450 million gallons per day (mgd) of wastewater, while the Donald Tillman Water Reclamation Plant can accommodate approximately 80 mgd. With an expected 18.7 percent population growth to occur in the City, the Donald Tillman Water Reclamation Plant may be increased in size to convey approximately 100 mgd of wastewater by 2020.

These improvements, along with new sewer pipelines, will ensure that untreated wastewater is not discharged to rivers or the ocean, thereby, protecting the environment. As stated previously, the IRP also proposes to maximize recycled water reuse through groundwater replenishment, as this is considered to be a valuable potential benefit since

[51] *City of Los Angeles Department of Public Works, Bureau of Sanitation, City of Los Angeles Integrated Resources Plan Facilities Plan, Volume 1, July 2004, revised November 2005, page 3-1.*

it would allow the City to reduce the need to import water from other regions. However, the IRP states that if the City does not implement groundwater replenishment by the time additional treatment capacity is needed, the expansion of wastewater treatment capacity would occur at the HTP rather than at the Donald Tillman Water Reclamation Plant. This will result in additional wastewater capacity levels at the HTP and improved sewer facilities and pipelines.

In general, implementation of the IRP will enable the City to adequately convey wastewater to the treatment plants with minimal potential for sewage spills, which will result in the protection of public health and safety. It will also enable the City to treat future wastewater flows that protects public health and safety and meets regulatory requirements, thereby protecting the environment, in general, and surface waters, in particular.[52] The IRP is periodically reviewed and updated; the most recent review was in June 2012.[53]

(b) Collection System Settlement Agreement

The Collection System Settlement Agreement (CSSA) is a settlement between the City and several organizations including the USEPA, the LARWQCB, the Santa Monica Baykeeper, and community groups representing residents in South Los Angeles. In January 2001, a lawsuit was filed against the City which alleged that the City's Sanitary Sewer Overflows (SSOs) and odor problems violated the Clean Water Act and the terms and conditions of the National Pollutants Discharge Elimination System (NPDES) Permits for the Hyperion Treatment Plant and the Terminal Island Water Reclamation Plant for the operation and maintenance of the City's sewer system. In October 29, 2004, the Court officially approved and implemented the Collection System Settlement Agreement (CSSA) between the City of Los Angeles and the EPA.[54] In the event of excessive rain, the City's sanitary sewer systems can experience unusually large numbers of sanitary sewer overflows (SSOs). As a result of the CSSA, the City has prepared annual SSOs since 2001. SSOs have been reduced by 82%, contributing to significant water quality improvements in the City's waterways, bays, and ocean.[55]

[52] *City of Los Angeles Department of Public Works, Bureau of Sanitation, City of Los Angeles Integrated Resources Plan, IRP Findings and Statement of Overriding Considerations, September 2006, page 33.*
[53] *City of Los Angeles Department of Public Works, Bureau of Sanitation, and Department of Water and Power, Water IRP 5-Year Review FINAL Documents, June 2012.*
[54] *City of Los Angeles, Wastewater Engineering Service Division, Bureau of Sanitation, Sewer Odor Control Master Plan, website.*
[55] *Los Angeles Waterkeeper website.*

(c) One Water LA 2040 Plan

In April 2018, the City prepared the *One Water LA 2040 Plan* (One Water LA Plan), an integrated approach to Citywide recycled water supply, wastewater treatment, and stormwater management, which builds upon the premise of the IRP to maximize water resources and extends the planning horizon of the IRP from 2020 to 2040.[56] The new plan sets the bar for more sustainable measures to manage the City's future water needs with the goal to make the City more resilient to the impacts of climate change.[57] The One Water LA Plan proposes a collaborative approach to managing the City's future water, wastewater treatment, and stormwater needs with the goal of yielding sustainable, long-term water supplies for Los Angeles to ensure greater resiliency to drought conditions and climate change. The One Water LA Plan is also intended as a step toward meeting the Mayor's Executive Directive to reduce the City's purchase of imported water by 50 percent by 2024.[58] Major challenges addressed in the One Water LA Plan include recurring drought, climate change, and the availability of recycled water in the future in light of declining wastewater volumes. The *One Water LA Plan* is organized into two phases. Phase 1 includes developing initial planning baselines and guiding principles for water management and citywide facilities planning in coordination with City departments, other agencies and stakeholders. Phase 2 includes development of technical studies and updated facilities plan for stormwater and water.[59] The *One Water LA Plan* (Phase 2) has been completed and the associated programmatic environmental impact report is in the process of being developed.[60]

In order to meet the needs of increased wastewater generation, the City chose to expand its current overall treatment capacity, while maximizing the potential to reuse recycled water through groundwater replenishment in future years. According to the *One Water LA Plan* (Phase 2), the only water reclamation plant capable of providing recycled water for replenishment is the Donald Tillman Water Reclamation Plant in the Sepulveda Basin in the Van Nuys community of the City.[61] As identified in the *One Water LA Plan* (Phase 2), the HTP can currently serve roughly 450 million gallons per day (mgd) of wastewater,[62]

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56 *City of Los Angeles, One Water LA 2040 Plan, Volume 1, Summary Report, April 2018.*
57 *The Planning Report, One Water LA Update: Region's Progress on Building A Resilient Water Supply, May 7, 2017.*
58 *City of Los Angeles, Office of the Mayor, Executive Directive No. 5, Emergency Drought Response - Creating a Water Wise City, October 14, 2014.*
59 *City of Los Angeles, One Water LA, Plan Development.*
60 *City of Los Angeles, One Water LA 2040 Plan.*
61 *City of Los Angeles, One Water LA 2040 Plan, Volume 2, Wastewater Facilities Plan, page 5-27.*
62 *City of Los Angeles, One Water LA 2040 Plan, Volume 2, Wastewater Facilities Plan, page 4-1.*

while the Donald Tillman Water Reclamation Plant can accommodate approximately 80 mgd.[63]

These improvements, along with new sewer pipelines, will ensure that untreated wastewater is not discharged to rivers or the ocean, thereby, protecting the environment. As stated previously, the *One Water LA Plan* (Phase 2) also proposes to maximize recycled water reuse through groundwater replenishment, as this is considered to be a valuable potential benefit since it would allow the City to reduce the need to import water from other regions. Groundwater replenishment operations at the Donald Tillman Water Reclamation Plant are planned to begin in 2023.[64]

In general, implementation of the *One Water LA Plan* (Phase 2) will enable the City to adequately convey wastewater to the treatment plants with minimal potential for sewage spills, which will result in the protection of public health and safety. It will also enable the City to treat future wastewater flows that protects public health and safety and meets regulatory requirements, thereby protecting the environment, in general, and surface waters, in particular. It is anticipated that the *One Water LA Plan* (Phase 2) will be updated in approximately ten years to incorporate system modifications as well as changes in flow conditions, regulatory framework, and overall vision for wastewater system operations and water reuse.[65]

(d) Sewer Allocation Ordinance (City of Los Angeles Ordinance No. 166,060)

City Ordinance No. 166,060, also known as the Sewer Allocation Ordinance, was adopted in 1990 and established specific regulations for projects that discharge to the HTP. The ordinance established an annual sewage allotment of 5.0 mgd, of which 34.5 percent (1.725 mgd) is allocated for priority projects, 8.0 percent (0.4 mgd) for public benefit projects, and 57.5 percent (2.875 mgd) for non-priority projects (65 percent of this allocation is for residential projects and 35 percent for non-residential projects).

The City Department of Public Works Bureau of Sanitation's Wastewater Engineering Services Division is charged with the task of evaluating the local sewer conditions and to determine if available wastewater capacity exists for future developments. This evaluation, also referred to as a Sewer Capacity Availability Request (SCAR) analysis, would also determine cumulative sewer impacts and guide the planning process for any future sewer improvement projects needed to provide future capacity as the City grows and develops. Before the City Department of Building and Safety (LADBS) formally accepts a set of plans and specifications for a project for Plan Check, the Wastewater

[63] *City of Los Angeles, One Water LA 2040 Plan, Volume 2, Wastewater Facilities Plan, page 5-1.*
[64] *City of Los Angeles, One Water LA 2040 Plan, Volume 2, Wastewater Facilities Plan, page 5-28.*
[65] *City of Los Angeles, One Water LA 2040 Plan, Volume 2, Wastewater Facilities Plan, page ES-1.*

Engineering Services Division must first determine if there is allotted sewer capacity available for the project. The Wastewater Engineering Services Division will not make such a determination until LADBS has established that the project's plans and specifications are acceptable for Plan Check. If LADBS determines that allotted sewer capacity is available for the project, LADBS will accept the plans and specifications for Plan Check upon the payment of Plan Check fees. If the project is eligible to receive an allocation as a non-priority project, and the monthly sewage allotment has been used, then the project would be placed on a waiting list for the next month's allocation. At the request of a project applicant, LADBS may 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 Wastewater Engineering Services Division, 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.

(e) City of Los Angeles Municipal Code

The LAMC includes regulations that allow the City to assure available sewer capacity for new projects and require fees for improvements to the infrastructure system. LAMC Section 64.15 requires that the City perform a SCAR analysis when any person seeks a sewer permit to connect a property to the City's sewer collection system, proposes additional discharge through their existing public sewer connection, or proposes a future sewer connection or future development that is anticipated to generate 10,000 gallons or more of sewage per day. A SCAR is an analysis of the existing sewer collection system to determine if there is adequate capacity existing in the sewer collection system to safely convey the newly generated sewage to the appropriate sewage treatment plant.

LAMC Section 64.11.2 requires the payment of fees for new connections to the sewer system to assure the sufficiency of sewer infrastructure. New connections to the sewer system are assessed a Sewerage Facilities Charge. The rate structure for the Sewerage Facilities Charge is based upon wastewater flow strength, as well as volume. The determination of wastewater strength for each applicable project is based on City guidelines for the average wastewater concentrations of two parameters (biological oxygen demand and suspended solids) for each type of land use. Fees paid to the Sewerage Facilities Charge fees are deposited in the City's Sewer Construction and Maintenance Fund for sewer and sewage-related purposes, including but not limited to industrial waste control and water reclamation purposes.

(f) Bureau of Engineering Special Order No. SO06-0691

In addition, the City establishes design criteria for sewer systems to assure that new infrastructure provides sewer capacity and operating characteristics to meet City Standards (Bureau of Engineering Special Order No. SO06-0691). Per this Special

Order, laterals sewers, which are sewers 18 inches or less in diameter, must be designed for a planning period of 100 years. The Special Order also requires that sewers be designed so that the peak dry weather flow depth during their planning period shall not exceed one-half the pipe diameter.[66]

(g) Sewer System Management Plan

The State of California, via the State Water Quality Control Board's May 2, 2006 Statewide General Waste Discharge Requirements (WDRs), requires a Sewer System Management Plan (SSMP) to be prepared for all publicly owned sanitary sewer systems. The plans include measures to control and mitigate sewer spills and must be made available to the public. Accordingly, the City has prepared three SSMPs, one for each of the three separate sanitary sewer systems owned and operated by LA Sanitation: the Hyperion Sanitary Sewer System, which serves the Project Site; City of Los Angeles Regional Sanitary Sewer System; and the Terminal Island Water Reclamation Plant Sanitary Sewer System. The City's SSMPs were last updated in February 2017 as part of a required biennial internal audit. The SMMPs address the proper management, operation, and maintenance of all parts of the systems. The SSMP establishes design and performance standards for the sewer system; provides procedures for evaluating the system and providing capacity assurance; and establishes a performance standard to identify sewers in need of replacement or relief. The City's SSMP is in full compliance with the WDRs and meets applicable WDR objectives.

b) Existing Conditions

The City of Los Angeles has one of the largest sewer systems in the world including more than 6,700 miles of sewers serving a population of more than four million. The Los Angeles sewer system is comprised of three smaller systems: Hyperion Sanitary Sewer System, Terminal Island Water Reclamation Sewer System and Regional Sanitary Sewer System.

The Project Site lies within the Hyperion Service Area served by the Hyperion Sanitary Sewer System and the Hyperion Treatment Plant (HTP). In February 2017, a Sewer System Manage Plan (SSMP) was prepared for the Hyperion Sewer System pursuant to the State Water Control Board's (SWRCB) May 2, 2006, Statewide General Waste Discharge Requirements (WDRs).[67]

[66] *L.A. CEQA Thresholds Guide.*

[67] *City of Los Angeles Department of Public Works, Bureau of Sanitation, Sewer System Management Plan Hyperion Sanitary Sewer System, February 2017, page 1.*

(1) Wastewater Infrastructure

The Project Site lies within the Hyperion Service Area, which has an existing design capacity of approximately 550 mgd consisting of 450 mgd at the Hyperion Treatment Plant, 80 mgd at the Donald C. Tillman Water Reclamation Plant, Reclamation Plant, and 20 mgd at the Los Angeles–Glendale Water Reclamation Plant.[68]

Wastewater generated within the western portion of the County of Los Angeles (County) and the greater City metropolitan area is treated at the HTP, which has the capacity to treat approximately 450 mgd of wastewater to full secondary treatment level and currently treats 260 mgd. The remaining capacity at the HTP is approximately 190 million gpd or approximately 42 percent of its total capacity.[69]

Wastewater conveyed into the HTP initially passes through screens and basins to remove coarse debris and grit. Primary treatment consisting of a physical separation process is then conducted 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 liquid portion that remains (called primary effluent) is treated through a secondary treatment using a natural biological process. Living microorganisms are added to the primary effluent to consume organic constituents. These microorganisms are later harvested and removed as sludge. After secondary treatment is completed, the treated effluent is conveyed approximately five miles offshore at a depth of approximately 200 feet. As this treated effluent enters the ocean environment, it is diluted at a ratio of over 80 parts seawater to one part treated effluent at the discharge point. Monitoring occurs throughout the treatment process and after the treated effluent is discharged into the marine environment.

The sludge that is collected at the plant is also treated. The sludge is anaerobically digested to reduce its volume and to produce reusable methane gas for energy use. Excess water that remains in the digested sludge is separated by centrifuge type dewatering equipment. The resultant material is reused in a variety of beneficial methods. At present, 100 percent of the sludge is beneficially reused, either as an agricultural soil amendment, compost, fuel source in an energy recovery system, or a chemically treated soil substitute for landfill cover.

In addition to the HTP, the City operates other plants that serve the region, including the Donald Tillman Water Reclamation Plant, which has a capacity of approximately 80 mgd,[70] and uses a conventional activated sludge process with dual filters to produce treated effluent to a tertiary level that meets the State of California's requirements for

[68] *City of Los Angeles, One Water LA 2040 Plan, Volume 2, Wastewater Facilities Plan.*
[69] *City of Los Angeles, One Water LA 2040 Plan, Volume 2, Wastewater Facilities Plan, page 59.*
[70] *City of Los Angeles, One Water LA 2040 Plan, Volume 2, Wastewater Facilities Plan, page 5-1.*

recycled water use. The City provides recycled water throughout its service areas that can be used for irrigation, commercial toilets, or industrial purposes from the reclamation plant. The remaining sludge is returned to the Donald Tillman Water Reclamation Plant main sewer outfall for final treatment at the HTP. The primary responsibility of the Bureau of Sanitation is to collect, clean, and recycle solid and liquid waste generated by residential, commercial, and industrial users in the City and surrounding communities. The Wastewater Engineering Services Division carries out its responsibilities by the management and administration of three primary programs:

(1) Wastewater collection, conveyance, treatment, and disposal;

(2) Solid resources collection, recycling, and disposal; and

(3) Watershed protection.

The City requires that, as part of the normal construction/building permit process, the Applicant or its successor confirms with the City that the capacity of the local and trunk lines are sufficient to accommodate a Project's sewer flows during the construction and operation phases. Furthermore, a Project shall implement any upgrades to the sewer system serving the Project that could be needed to accommodate the Project's wastewater generation.

Based on available record data provided by the City, there is an 8-inch vitrified clay pipe (VCP) sewer line in Mateo Street flowing south. Based upon the City of Los Angeles Bureau of Engineering's online Navigate LA database, the capacity of this line is 0.76 cubic feet per second (cfs) (491,167 gpd).[71] Available records indicate that Mateo Street has four sewer wyes allocated to the Project Site.

Based on available record data provided by the City, there is an 8-inch VCP sewer line in Imperial Street flowing south. Based upon the Navigate LA database, the capacity of the 8-inch line is 0.80 cfs (517,883 gpd). Available records indicate the 8-inch main in Imperial Street has three sewer wyes allocated to the Project Site.[72]

(2) Wastewater Generation

The Project Site is currently developed with an industrial building constructed in 1978 as a warehouse and office building that occupies approximately 26,740 square feet and an associated surface parking lot. As shown on **Table IV.M.2-1, Existing Average Daily**

[71] *City of Los Angeles Navigate LA website, Bureau of Engineering Department of Public Works.*

[72] *676 Mateo Street Mixed-Use Project Utility Infrastructure Technical Report: Wastewater, prepared by KPFF, July 21, 2020,* ***Appendix N.2*** *to this Draft EIR.*

Wastewater Generation, the existing uses generate approximately 802 gpd of wastewater.

Table IV.M.2-1
Existing Average Daily Wastewater Generation

Land Use	Size (square feet)	Generation Rate (gpd/sf)[1]	Total Sewage Generation (gpd)
Warehouse	26,740 sf	30 gpd/1,000 sf	802
Total Existing Wastewater Generation			**802**

Notes: gpd = gallons per day; sf = square feet
[1] Generation Rates per the Bureau of Sanitation Sewer Generation Factors for Residential and Commercial Categories.
Source (table): KPFF, 2020.

3. Project Impacts

a) Thresholds of Significance

In accordance with guidance provided in Appendix G to the *State CEQA Guidelines*, the Project could have a significant impact if it were to:

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

b) 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.

The *L.A. CEQA Thresholds Guide* identifies the following criteria to evaluate wastewater impacts:

(1) Wastewater

- *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[73].*

[73] The One Water LA 2040 Plan includes a Wastewater Facilities Plan and builds upon the IRP.

The potential for the Project to result in impacts to wastewater is based on the *State CEQA Guidelines* Appendix G thresholds and criteria identified in the *L.A. CEQA Thresholds Guide* that provide supplemental analysis to the Appendix G thresholds, where applicable. The City's threshold criteria above are considerations that were made as part of the analysis of the Appendix G thresholds for wastewater.

b) Methodology

The environmental impacts of the Project with respect to wastewater are determined based on the proposed increase in wastewater generation and the capacity of existing and proposed wastewater infrastructure, and utilizes BOS sewerage generation factors. The existing sewer capacity and wastewater generation is compared to the Project's wastewater generation and future sewer capacity, including improvements associated with the Project.

The Response to Request for Wastewater Services Information (WWSI) was submitted to see whether the existing public infrastructure can accommodate the Project. Pursuant to LAMC Section 64.15, the Bureau of Sanitation Wastewater Engineering Division made a preliminary analysis of the local and regional sewer conditions to determine if available wastewater conveyance and treatment capacity exists for future development of the Project Site. The Bureau of Sanitation's approach consisted of the study of a worst-case scenario envisioning peak demands from the relevant facilities occurring simultaneously on the wastewater system. A combination of flow gauging data and computed results from the City's hydrodynamic model were used to project current and future impacts due to additional sewer discharge.

c) Project Design Features

No specific Project Design Features are proposed with regard to wastewater.

d) Analysis of Project Impacts

As compared to the Project, the Flexibility Option would change the use of the second floor from residential to commercial, and would not otherwise change the Project's land uses or size. The overall commercial square footage provided would be increased by 22,493 square feet to 45,873 square feet and, in turn, there would be a reduction in the number of live/work units from 185 to 159 units and an increase in the number of bicycle spaces from 154 to 161. The overall building parameters would remain unchanged and the design, configuration, and operation of the Flexibility Option would be comparable to the Project. In the analysis of Project impacts presented below, where similarity in land uses, operational characteristics and project design features between the Project and the Flexibility Option would be essentially the same, the conclusions regarding the impact

analysis and impact significance determination presented below for the Project would be the same under the Flexibility Option. For those thresholds where numerical differences exist because of the differences in project parameters between the Project and Flexibility Option, the analysis is presented separately.

Threshold a) Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunication facilities, the construction of or relocation of which could cause significant environmental effects?

Numerical differences exist for this threshold because of the differences in project parameters between the Project and Flexibility Option, therefore these analyses are presented separately.

(1) Impact Analysis

(a) Project

(i) Construction

The Project would require construction of new on-site infrastructure to serve the new building, and potential upgrade and/or relocation of existing infrastructure. Construction impacts associated with wastewater infrastructure would primarily be confined to trenching for miscellaneous utility lines and connections to public infrastructure. Installation of wastewater infrastructure would be limited to on-site wastewater distribution, and minor off-site work associated with connections to the public main. Although no upgrades to the public main are anticipated, minor off-site work along the Project frontage is required in order to connect to the public main. Therefore, as part of the Project, a Construction Staging and Traffic Management Plan (CSTMP) (see PDF TR-1 in **Section IV.K, Transportation**, of this Draft EIR) would be implemented to reduce any temporary pedestrian and traffic impacts during construction, including maintaining two lanes of travel and ensuring safe pedestrian access and adequate emergency vehicle access. Overall, when considering impacts resulting from the installation of any required wastewater infrastructure, all impacts are of a relatively short-term duration (i.e., months) and would cease to occur once the installation is complete.

Construction activities for the Project would result in a temporary increase in wastewater generation as a result of construction activities at the Project Site. Wastewater generation would occur incrementally throughout construction of the Project as a result of construction workers on-site. Construction workers would utilize portable restrooms, which would not contribute to wastewater flows to the adjacent sewer infrastructure;

however, it is assumed that the waste removed from the portable restrooms would ultimately be emptied within the service boundaries of the HTP, which is shown below under the analysis of operational impacts to have adequate capacity to treat the amount of wastewater projected to be produced by operation of the Project. Given that the amount of wastewater that would be produced by construction of the Project would be less than that produced by operation, which as discussed below can be adequately handled by existing wastewater facilities, the HTP would have adequate capacity to treat the waste removed from the portable restrooms as well.

Therefore, construction of the Project would not require the relocation or construction of new or expanded wastewater treatment facilities, the construction or relocation of which could cause significant environmental effects and the impact would be less than significant. No mitigation measures are required.

(ii) Operation

Implementation of the Project would increase the average and peak daily wastewater flows from the Project Site. As shown in **Table IV.M.2-2, Project Average Daily Wastewater Generation,** the Project is estimated to generate a net increase of approximately 36,398 gpd.

Table IV.M.2-2
Project Average Daily Wastewater Generation

Type of Use	Size	Sewage Generation Rate (gpd)[a]	Total Sewage Generated (gpd)
Apartment: 1 Bedroom	159 du	185/du[b]	29,415
Apartment: 2 Bedroom	26 du	225/du[b]	5,850
Commercial and Art Production Space	23,380 sf	50/1,000 sf	1,169
Open Space	15,320 sf	50/1,000 sf[c]	766
Total Project Wastewater Generation			*37,200*
Existing Wastewater Generation			***802***
Total Wastewater Generation			**36,398**

Notes: gpd = gallons per day; sf = square feet; du = dwelling unit
[a] *The average daily flow based on 100 percent of City of Los Angeles Bureau of Sanitation sewerage generation factors.*
[b] *The generation rates are comprised of an artist space in addition to living space.*
[c] *Letter from City of Los Angeles Bureau of Sanitation, Wastewater Engineering Services Division, Ali Poosti, Division Manager, July 21, 2020.*
Source (table): KPFF, 2020.

As previously stated, a WWSI letter was submitted to ascertain whether the existing public infrastructure can accommodate the Project. The Bureau of Sanitation has analyzed the Project demands in conjunction with existing conditions and forecasted growth and has

approved the Project to discharge up to 37,438 gpd of wastewater.[74] Furthermore, as stated above, the existing capacity of the 8-inch sewer line in Mateo Street is approximately 0.76 cfs (491,167 gpd). The Project's net increase in sewage generation would be approximately 36,398 gpd, which would represent approximately 7.4 percent of the existing infrastructure's capacity. Accordingly, the existing sewer infrastructure would be able to accommodate the projected wastewater generated by operation of the Project. Additionally, the existing design capacity of the Hyperion Service Area is approximately 550 million gallons per day (consisting of 450 mgd at the HTP, 80 mgd at the Donald C. Tillman Water Reclamation Plant, Reclamation Plant, and 20 mgd at the Los Angeles–Glendale Water Reclamation Plant).[75] The Project's estimated wastewater generation would be approximately 0.036 mgd. Currently, up to 260 mgd is treated at the HTP resulting in an available treatment capacity of 190 mgd, which means the Project would use far less than one percent of the available capacity.

Because the projected wastewater generation amount would represent an insignificant amount of the existing sewer line and treatment plant capacities and would be less than the amount approved by the Bureau of Sanitation for discharge by the Project, no new water or wastewater treatment facilities or expansion of existing facilities would be required and impacts would be less than significant during operation of the Project. No mitigation measures are required.

(b) Increased Commercial Flexibility Option

Under the Flexibility Option, the commercial square footage provided would be increased to 45,873 square feet within the same building parameters and, in turn, there would be a reduction in the overall number of live/work units for a total of 159 units. Overall, the design, configuration, and operation of the Flexibility Option would be comparable to the Project.

(i) Construction

Similar to the Project, wastewater generated by construction workers would not be discharged to the adjacent sewer system; however, it is assumed that it would ultimately be discharged by the portable bathroom rental company within the service area of the Hyperion Treatment Plant. As with the Project, because the amount of wastewater generated by construction of the Flexibility Option would be less than that generated by operation, which the Hyperion Treatment Plant is shown below to have adequate capacity

[74] *676 Mateo Street Mixed-Use Project Utility Infrastructure Technical Report: Wastewater, Exhibit 1, prepared by KPFF, July 21, 2020,* ***Appendix N.2*** *to this Draft EIR.*

[75] *676 Mateo Street Mixed-Use Project Utility Infrastructure Technical Report: Wastewater, Exhibit 1, prepared by KPFF, July 21, 2020,* ***Appendix N.2*** *to this Draft EIR.*

to treat, wastewater generated during construction would also not exceed the available treatment capacity.

Similar to the Project, the Flexibility Option would require construction of new on-site infrastructure to serve the new building, and potential upgrade and/or relocation of existing infrastructure. Therefore, as part of the Flexibility Option, a CSTMP (see PDF TR-1 in **Section IV.K, Transportation**, of this Draft EIR) would be implemented to reduce any temporary pedestrian and traffic impacts during construction, including maintaining two lanes of travel and ensuring safe pedestrian access and adequate emergency vehicle access. Overall, when considering impacts resulting from the installation of any required wastewater infrastructure, all impacts are of a relatively short-term duration (i.e., months) and would cease to occur once the installation is complete. **Therefore, the Flexibility Option's impacts on wastewater associated with construction activities would be less than significant and no mitigation measures are required.**

(ii) Operation

Implementation of the Flexibility Option would increase the average and peak daily wastewater flows from the Project Site. As shown in **Table IV.M.2-3, Flexibility Option Average Daily Wastewater Generation,** the Project is estimated to generate a net increase of approximately 33,593 gpd.

Table IV.M.2-3
Flexibility Option Average Daily Wastewater Generation

Type of Use	Size	Sewage Generation Rate (gpd)[a]	Total Sewage Generated (gpd)
Apartment: 1 Bedroom	135 du	185/du[b]	24,975
Apartment: 3 Bedroom	24 du	265/du[b]	6,360
Commercial and Art Production Space	45,873 sf	50/1,000 sf	2,294
Open Space	15,320 sf	50/1,000 sf	766
		Total Project Wastewater Generation	*34,395*
		Existing Wastewater Generation	***802***
		Total Wastewater Generation	**33,593**

Notes: gpd = gallons per day
[a] *The average daily flow based on 100 percent of City of Los Angeles Bureau of Sanitation sewerage generation factors.*
[b] *The generation rates are comprised of an artist space in addition to living space.*
Source (table): KPFF, 2020.

The projected wastewater discharge from the Project Site under operation of the Flexibility Option would be approximately 33,593 gpd, which would be less than the 37,438 gpd approved for discharge from the Project Site by the Bureau of Sanitation.[76]

[76] *676 Mateo Street Mixed-Use Project Utility Infrastructure Technical Report: Wastewater, Exhibit 1, prepared by KPFF, July 21, 2020,* ***Appendix N.2*** *to this Draft EIR.*

Further, this 33,593 gpd of discharge would represent approximately 6.8 percent of the capacity of the existing 8-inch sewer line in Mateo Street. Additionally, the Flexibility Option's projected wastewater discharge would represent far less than one percent of the 190 mgd available capacity of the Hyperion Treatment Plant. **Therefore, as with the Project, because the projected wastewater generation amount of the Flexibility Option would represent an insignificant amount of the existing sewer line and treatment plant capacities would be less than the amount approved by the Bureau of Sanitation for discharge from the Project Site. No new water or wastewater treatment facilities or expansion of existing facilities would be required and impacts would be less than significant during operation of the Flexibility Option**. **No mitigation measures are required.**

(2) Mitigation Measures

Project-level impacts for the Project and the Flexibility Option, with regard to wastewater treatment facilities, would be less than significant; no mitigation measures would be required.

(3) Level of Significance After Mitigation

Project-level impacts for the Project and the Flexibility Option, with regard to wastewater treatment facilities, would be less than significant without mitigation.

Threshold b) 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?

Due to the similarity in land uses, operational characteristics and project design features between the Project and the Flexibility Option the conclusions regarding the impact analysis and impact significance determination presented below for the Project would be the same under the Flexibility Option.

(1) Impact Analysis

(a) Construction

As discussed in **Threshold a)** above, during construction, a minimal amount of wastewater would be generated by the construction employees. Portable toilets would be provided by a private company and the wastewater would be disposed off-site. Furthermore, no new connections to the sewer system would be required to accommodate the construction. Overall, there would be a negligible potential impact on sewer facilities and there would not be an increase in wastewater flows beyond the available capacity of the existing conveyance and treatment systems. Furthermore, the

Bureau of Sanitation has sent a Response to Request for WWSI letter indicating that the sewer capacity at the Hyperion Water Reclamation Plant is able to handle the anticipated discharge of the Project.[77] **Therefore, Project or Flexibility Option construction impacts to wastewater treatment capacity would be less than significant and no mitigation measures are required**.

(b) Operation

Based on the current hydraulic capacity available in the local sewer system, the City has determined that there is capacity available to handle the anticipated discharge from the Project.[78] In addition, before the LADBS formally accepts a set of plans and specifications for a project for plan check, the LADPW must confirm that there is allotted sewer capacity available for the Project. The Bureau of Sanitation has sent a Response to Request for WWSI letter indicating that there appears to be sewer capacity available to handle the anticipated discharge of the Project.[79] However, further detailed gauging and evaluation will be needed as part of the permit process to identify a specific sewer connection. If at that time it is determined that the public sewer has insufficient capacity then the Applicant will be required to build sewer lines to a point in the sewer system with sufficient capacity. If sewer lines are to be built, the Applicant shall follow the regulatory compliance permitting process. Impacts pertaining to the construction of new wastewater lines have been addressed elsewhere in this Draft EIR (refer to S**ections I.V.A, Air Quality, IV.D, Greenhouse Gas Emissions**, and **IV.H, Noise**). **In conclusion, wastewater impacts would be less than significant because the existing local sewer system will have the capacity for the discharge of the Project or the Flexibility Option**. **No mitigation measures are required.**

(2) Mitigation Measures

Project-level impacts for the Project and the Flexibility Option, with regard to wastewater treatment capacity, would be less than significant; no mitigation measures would be required.

(3) Level of Significance After Mitigation

Project-level impacts for the Project and the Flexibility Option, with regard to wastewater treatment capacity, would be less than significant without mitigation.

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[77] *676 Mateo Street Mixed-Use Project Utility Infrastructure Technical Report: Wastewater, Exhibit 1, prepared by KPFF, July 21, 2020,* ***Appendix N.2*** *to this Draft EIR.*

[78] *676 Mateo Street Mixed-Use Project Utility Infrastructure Technical Report: Wastewater, Exhibit 1, prepared by KPFF, July 21, 2020,* ***Appendix N.2*** *to this Draft EIR.*

[79] *676 Mateo Street Mixed-Use Project Utility Infrastructure Technical Report: Wastewater, Exhibit 1, prepared by KPFF, July 21, 2020,* ***Appendix N.2*** *to this Draft EIR.*

4. Cumulative Impacts

Numerical differences exist regarding the impact analysis and impact significance determination presented below because of the differences in project parameters between the Project and Flexibility Option, therefore these analyses are presented separately.

a) Impact Analysis

(1) Project

The Project would result in the additional generation of sewer flow. However, as discussed above, the Bureau of Sanitation has conducted an analysis of existing and planned capacity and determined that adequate capacity exists to serve the Project. Similarly, future projects connecting to the same sewer system are required to obtain a sewer connection permit and submit a SCAR to the Bureau of Sanitation, which is a formal request to authorize connection. The analysis by the Bureau of Sanitation takes into consideration previously approved SCARs as part of their review. If system upgrades are required as a result of a given project's additional flow, arrangements would be made between the future project and the Bureau of Sanitation to construct the necessary improvements.

In addition to the City's SCAR analysis, a Related Projects list has been generated. There are 20 Related Projects, which consist of residential, commercial, schools, retail, restaurants, museums, hotels, and offices uses. As shown in **Table IV.M.2-4, Estimated Daily Wastewater Generation for the Related Project**, the total increase in wastewater generation for the Related Projects is approximately 1.55 million gallons per day (mgd). Combined with the Project, the net increase in waste water generation is approximately 1.59 mgd.

Table IV.M.2-4
Estimated Daily Wastewater Generation for the Related Projects

Land Use	Units	Generation Rate[2] (gpd/unit)	Total Generation (gpd)
Residential	5,306 DU[1]	150/DU	795,900
Retail	398,854 SF	25/1000 SF	9,971
School	300 Students	11/Student	3,300
Restaurant	9,110 Seats[3]	30/Seat	273,300
Grocery	72,212 SF	50/1000 SF	3,611
Museum	42,770 SF	30/1000 SF	1,283
Warehouse	316,632 SF	30/1000 SF	9,499
Hotel	863 Rooms	120/Room	103,560
Office	2,277,312 SF	120/1000 SF	273,277

Table IV.M.2-4
Estimated Daily Wastewater Generation for the Related Projects

Land Use	Units	Generation Rate[2] (gpd/unit)	Total Generation (gpd)
Industrial	94,849 SF	50/1000 SF	4,742
Event Space	93,617 SF	350/1000 SF	32,766
Gym	62,148 SF	650/1000 SF	40,396
Meeting Space	3,235 SF	120/1000 SF	388
Related Project Total			**1,551,993**
Project Net Total			**36,398**
Total Cumulative Generation with Project			**1,588,391**
Increased Commercial Flexibility Option Net Total Generation			**33,593**
Total Cumulative Generation with Increased Commercial Flexibility Option			**1,585,586**

Notes: SF = square feet; gpd = gallons per day; DU = dwelling unit
[1] Assumes all units as 2-bedroom units.
[2] Consumption Rates Based on of the Bureau of Sanitation Sewer Generation Factors for Residential and Commercial Categories.
[3] Assumes 30 square feet per seat.

Wastewater generated by the Project, and Related Projects, would be conveyed via the existing wastewater conveyance systems for treatment at the HTP system. As previously stated, based on information from the Bureau of Sanitation, the existing design capacity of the Hyperion Treatment Area is approximately 550 mgd and the existing average daily flow for the system is approximately 260 mgd.[80] The remaining capacity at the Hyperion Treatment Area is approximately 290 million gpd or approximately 52 percent of its total capacity.[81] The estimated wastewater generation increase of the Project and Related Projects combined would be 1.59 mgd, which represents approximately 0.55 percent of the available capacity in the system. The Related Projects would also be required to adhere to the Bureau of Sanitation's annual wastewater flow increase allotment.

Based on these forecasts the Project's increase in wastewater generation would be adequately accommodated within the Hyperion Service Area. In addition, the Bureau of Sanitation analysis confirms that the HTP has sufficient capacity and regulatory allotment for the Project, combined with all Related Projects. **Therefore, cumulative impacts to wastewater treatment capacity and wastewater infrastructure would be less than significant and no mitigation measures are required.**

[80] *City of Los Angeles Department of Public Works, Bureau of Sanitation, Sewer System Management Plan Hyperion Sanitary Sewer System, page 59.*
[81] *City of Los Angeles Department of Public Works, Bureau of Sanitation, Sewer System Management Plan Hyperion Sanitary Sewer System, page 59.*

(2) Increased Commercial Flexibility Option

Similar to the Project, the Flexibility Option would result in the additional generation of sewer flow. However, as discussed above, the Bureau of Sanitation has conducted an analysis of existing and planned capacity and determined that adequate capacity exists to serve the Project Site. Similarly, future projects connecting to the same sewer system are required to obtain a sewer connection permit and submit a SCAR to the Bureau of Sanitation. The analysis by the Bureau of Sanitation takes into consideration previously approved SCARs as part of their review. If system upgrades are required as a result of a given project's additional flow, arrangements would be made between the related project and the Bureau of Sanitation to construct the necessary improvements.

As shown in **Table IV.M.2-4, Estimated Daily Wastewater Generation for the Related Project,** the total increase in wastewater generation for the Related Projects is approximately 1.55 mgd. Combined with the Flexibility Option, the net increase in waste water generation is approximately 1.59 mgd.

Similar to the Project, wastewater generated by the Flexibility Option would be conveyed via the existing wastewater conveyance systems for treatment at the Hyperion Treatment Area, which has the capacity to treat approximately 550 mgd of wastewater to full secondary treatment level and currently treats 260 mgd. The remaining capacity at the Hyperion Treatment Area is approximately 290 million gpd or approximately 52 percent of its total capacity.[82] The estimated wastewater generation increase of the Flexibility Option and Related Projects combined would be 1.59 mgd, which represents approximately 0.55 percent of the available capacity in the system. The Related Projects would also be required to adhere to the Bureau of Sanitation's annual wastewater flow increase allotment.

Based on these forecasts the Flexibility Option's increase in wastewater generation would be adequately accommodated within the Hyperion Service Area. In addition, the Bureau of Sanitation analysis confirms that the Hyperion Treatment Plant has sufficient capacity and regulatory allotment for the Flexibility Option, combined with all Related Projects. **Therefore, cumulative impacts to wastewater treatment capacity would be less than significant and no mitigation measures are required.**

b) Mitigation Measures

Cumulative impacts related to wastewater for both the Project and Flexibility Option would be less than significant; no mitigation measures would be required.

[82] *City of Los Angeles Department of Public Works, Bureau of Sanitation, Sewer System Management Plan Hyperion Sanitary Sewer System, page 59.*

c) Level of Significance After Mitigation

Cumulative impacts related to wastewater for both the Project and Flexibility Option were determined to be less than significant without mitigation.

IV. Environmental Impact Analysis

M. Utility and Service Systems

3. Solid Waste

1. Introduction

This subsection describes the potential impacts of the Project on the solid waste services generated by the Project during its construction and operation periods and whether an existing landfill(s) has capacity to serve the Project's solid waste needs. This subsection includes information from the following resources:

- *AB 939 2000 Report*,
- *Countywide Integrated Waste Management Plan 2018 Annual Report*,
- City of Los Angeles, *Zero Waste Progress Report,*
- County of Los Angeles, *Conversion Technology Evaluation Report*,
- City of Los Angeles, Department of Public Works website,
- Solid Waste Information System website, and
- City Department of Public Works Bureau of Sanitation website.

2. Environmental Setting

a) Regulatory Framework

(1) State

(a) California Integrated Waste Management Act of 1989

The California Integrated Waste Management Act of 1989 (AB 939) was enacted to reduce, recycle, and reuse solid waste generated in the state to the maximum extent feasible. Specifically, AB 939 required cities and counties to identify an implementation schedule to divert 50 percent of the total waste stream from landfill disposal by 2000. AB 939 also required each city and county to promote source reduction, recycling, and safe disposal or transformation. Cities and counties were required to maintain 50 percent

diversion past the year 2000. The City surpassed the state-mandated 50 percent diversion rate for 2000 and achieved a 58.8 percent diversion rate.[83] In 2017, the City adopted the Zero Waste LA Program, which establishes a waste and recycling collection program for all commercial, industrial, and large multifamily customers in the City of Los Angeles. The goal for Zero Waste LA is to reduce landfill disposal by one million tons by the year 2025 and to reduce waste by 65% in all of the City's 11 service areas.[84]

AB 939 further requires each city to conduct a Solid Waste Generation Study and to prepare a Source Reduction and Recycling Element (SRRE) to describe how it would reach the goals. The SRRE contains programs and policies for fulfillment of the goals of AB 939, including the diversion goals and must be updated annually to account for changing market and infrastructure conditions. As projects and programs are implemented, the characteristics of the waste stream, the capacities of the current solid waste disposal facilities, and the operational status of those facilities are upgraded, as appropriate. California cities and counties are required to submit annual reports to the California Integrated Waste Management Board to update it on their progress toward the AB 939 goals (i.e., source reduction, recycling and composting, and environmentally safe land disposal).[85] To date, implementation of AB 939 has proven to be a successful method of reducing landfill waste in the City. Furthermore, the City's Solid Waste Integrated Resources Plan (City SWIRP) (also known as the Zero Waste Plan) is a long-range master plan aimed at addressing the City's solid waste management policies, programs, and environmental infrastructure.[86] The Framework Element of the City of Los Angeles General Plan (Framework Element) also supports AB 939 and its goals by encouraging "an integrated solid waste management system that maximizes source reduction and materials recovery and minimizes the amount of waste requiring disposal."[87]

(b) Assembly Bill 1327 – California Solid Waste Reuse and Recycling Access Act of 1991

The California Solid Waste Reuse and Recycling Access Act of 1991 (AB 1327) required CalRecycle to develop a model ordinance for adoption of recyclable materials in development projects by March 1, 1993. Local agencies were then required to adopt the model, or an ordinance of their own, governing adequate areas for collection and loading of recyclable materials in development projects by September 1, 1993. If, by that date, a local agency had not adopted its own ordinance, the model ordinance adopted by the

[83] *Los Angeles Bureau of Sanitation, AB 939 2000 Report, August 2001, page ES-1.*
[84] *City of Los Angeles, Blog, City Council Passes Zero Waste L.A. Program.*
[85] *California Public Resources Code, §40050 et seq.*
[86] *City of Los Angeles, Department of Public Works, Bureau of Sanitation, Solid Waste Integrated Resources Plan – A Zero Waste Master Plan, October 2013.*
[87] *Los Angeles Department of City Planning, Citywide General Plan Framework, 1996, page 9-11.*

CalRecycle took effect and shall be enforced by the local agency. As further discussed in subsection IV.M.3.a, below, the City has adopted several programs.

(c) Senate Bill 1374 – Construction and Demolition Waste Materials Diversion Requirements

Senate Bill 1374 was signed into law in 2002 to assist jurisdictions with diverting their construction and demolition (C&D) waste material. The legislation requires that the CIWMB (now CalRecycle) complete five items in regards to the diversion of construction and demolition waste: (1) adopt a model ordinance for diverting 50 percent to 75 percent of all construction and demolition debris from landfills; (2) consult with multiple regulators and waste entities (e.g. California State Association of Counties, private and public waste services, building construction materials industry, etc.) during the development of the model ordinance; (3) compile a report on programs that can be implemented to increase diversion of C&D debris; (4) post a report on the agency's website for general contractors on methods that contractors can use to increase diversion of C&D waste materials; (5) post on the agency's website a report for local governments with suggestions on programs to increase diversion of C&D waste materials. Under SB 1374, jurisdictions must also include in their annual AB 939 report a summary of the progress made in diverting construction and demolition waste. The model ordinance was adopted by CalRecycle on March 16, 2004.[88]

(d) California Organics Recycling (Assembly Bill 1826)

AB 1826 requires mandatory recycling of organic waste generated by certain commercial uses such as restaurants and grocery stores. Beginning on April 1, 2016, businesses that generate eight cubic yards (cy) or more of organic waste per week must separate food scraps and yard trimmings and arrange for recycling services for that waste in a specified manner. Beginning January 1, 2017, businesses that generate four cy or more of organic waste per week also are subject to this requirement. Commencing January 1, 2019, businesses that generate four cy or more of commercial solid waste per week will be required to arrange for organic waste recycling services. (Should CalRecycle make a specified determination, this triggering threshold for organics recycling could be reduced to two cy or more of commercial solid waste per week on or after January 1, 2020.) AB 1826 also requires each local jurisdiction, on and after January 1, 2016, to implement an organic waste recycling program to divert organic waste from the subject businesses, except as specified for rural jurisdictions.

[88] *CalRecycle, Senate Bill 1374 (2002), August 24, 2018.*

(e) Assembly Bill 341 – Amendments to the California Integrated Waste Management Act of 1989

AB 341, which took effect on July 1, 2012, amends AB 939 by mandating that jurisdictions meet a solid waste diversion goal of 75 percent by the year 2020, and requires commercial enterprises and public entities that generate four or more cubic yards (cy) per week of solid waste, and multi-family housing complexes with five or more units, to adopt recycling practices that achieve a 75 percent reduction in their waste streams. Such business/residential development must: 1) source separate recyclable materials from the solid waste they are discarding, and either self-haul or arrange for separate collection of the recyclables; and 2) subscribe to a service that includes mixed waste processing that yields diversion results comparable to source separation.

(f) CALGreen Building Code

*CAL*Green requires that new buildings reduce water consumption, employ building commissioning to increase building system efficiencies, divert construction waste from landfills, and install low pollutant emitting finish materials. *CAL*Green has mandatory measures as well as more stringent, voluntary provisions that have been placed in the appendix for optional use. Some key mandatory measures for commercial occupancies include specified parking for clean air vehicles, a 20 percent reduction of potable water use within buildings, and a 50 percent construction waste diversion from landfills. Key optional measures are included in a two-tiered system designed to allow jurisdictions to adopt codes that go beyond the state mandatory provisions. The non-residential tiers include increased reduction in construction waste diversion and use of recycled materials.

(2) Regional

(a) Countywide Integrated Waste Management

Pursuant to AB 939, each County is required to prepare and administer a Countywide Integrated Waste Management (ColWMP), including preparation of an Annual Report. The ColWMP, per AB 939, is to comprise of the various counties' and cities' solid waste reduction planning documents, plus an Integrated Waste Management Summary Plan (Summary Plan) and a Countywide Siting Element (CSE). The Summary Plan describes the steps to be taken by local agencies, acting independently and in concert, to achieve the mandated state diversion rate by integrating strategies aimed toward reducing, reusing, recycling, diverting, and marketing solid waste generated within the County. The County's Department of Public Works is responsible for preparing and administering the Summary Plan and the CSE. The Summary Plan for the County was approved by CalRecycle on June 23, 1999. The latest CSE was approved by CalRecycle in 2012. An EIR for this document was scheduled to be released for public review in early 2016, but as of April 2020 the document has not been published.

The County continually evaluates landfill disposal needs and capacity as part of the preparation of the CoIWMP Annual Report. Within each annual report, future landfill disposal needs over the next 15-year planning horizon are addressed in part by determining the available landfill capacity. The most recent annual report, the CoIWMP 2018 Annual Report, published in December 2019, provides disposal analysis and facility capacities for 2018, as well as projections to the CoIWMP's horizon year of 2033.[89] As stated within the CoIWMP 2018 Annual Report, the County is not anticipating a solid waste disposal capacity shortfall within the next 15 years under current conditions.[90] A variety of strategies, including mandatory commercial recycling, diversion of organic waste, and alternative technologies (e.g., engineered municipal solid waste conversion facilities or anaerobic digestion) would be implemented to ensure that the County would be able to accommodate the solid waste generated through the horizon year of 2033.[91]

(3) Local

(a) City of Los Angeles Solid Waste Programs and Ordinances

The recycling of solid waste materials also contributes to reduced energy consumption. Specifically, when products are manufactured using recycled materials, the amount of energy that would have otherwise been consumed to extract and process virgin source materials is reduced. For example, in 2015, 3.61 million tons of aluminum were produced by recycling in the United States, saving enough energy to provide electricity to 7.5 million homes.[92] In 1989, California enacted AB 939, the California Integrated Waste Management Act which establishes a hierarchy for waste management practices such as source reduction, recycling, and environmentally safe land disposal.[93] The City implements various programs and ordinances related to solid waste. These include: (1) the City of Los Angeles Solid Waste Management Policy Plan, adopted in 1993, which is a long-range policy plan that proposes an approach for the City to achieve a goal of 90-percent diversion by 2025; (2) the RENEW LA Plan, which is a Resource Management Blueprint with the aim to achieve a zero waste goal through reducing, reusing, recycling, or converting the resources now going to disposal so as to achieve an overall diversion level of 90 percent or more by 2025; (3) the Waste Hauler Permit Program (Ordinance No. 181,519), which requires all private waste haulers collecting solid waste, including construction and demolition waste, to obtain AB 939 Compliance Permits and to transport

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89 *County of Los Angeles Department of Public Works, Countywide Integrated Waste Management Plan 2018 Annual Report, December 2019.*

90 *County of Los Angeles Department of Public Works, Countywide Integrated Waste Management Plan 2018 Annual Report, December 2019, page 6.*

91 *County of Los Angeles Department of Public Works, Countywide Integrated Waste Management Plan 2018 Annual Report, December 2019, pages 37 – 41.*

92 *American Geosciences Institute, "How Does Recycling Save Energy?".*

93 *CalRecycle, History of California Solid Waste Law, 1885-1989.*

construction and demolition waste to City certified construction and demolition processing facilities;[94] and (4) the Exclusive Franchise System Ordinance (Ordinance No. 182,986), which, among other requirements, sets maximum annual disposal levels and specific diversion requirements for franchised waste haulers in the City to promote solid waste diversion from landfills in an effort to meet the City's zero waste goals.

(b) City of Los Angeles General Plan Framework Element

Chapter 9, Infrastructure and Public Services, of the City's General Plan Framework (Framework Element) identifies goals, objectives, and policies for utility provision in the City including provision of Solid Waste service. The goals, objectives and policies generally pertain to overall operations of the solid waste management system. Goal 9D provides an overall approach to solid waste management and sets a framework in which individual development projects would operate. Goal 9D calls for "An integrated solid waste management system that maximizes source reduction and materials recovery and minimized the amount of waste requiring disposal."

The Framework Element addresses many of the programs the City has implemented to divert waste from disposal facilities such as source reduction programs and recycling programs (e.g., Curbside Recycling Program and composting). Furthermore, the General Plan Framework Element states that for these programs to succeed, the City should locate businesses where recyclables can be handled, processed, and/or manufactured to allow a full circle recycling system to develop. The General Plan Framework Element indicates that more transfer facilities will be needed to dispose of waste at remote landfill facilities due to the continuing need for solid waste transfer and disposal facilities, as well as the limited disposal capacity of the landfills in Los Angeles. Several landfill disposal facilities accessible by truck and waste-by-rail landfill disposal facilities that could be used by the City are identified to meet its disposal needs.

(c) Los Angeles Municipal Code

LAMC Section 12.21.A.19.c requires projects to be designed to incorporate a recycling area or room. Among its numerous requirements listed in this section, the LAMC sets forth requirements for the size, availability, and safety of the recycling area or room. This LAMC section also requires that the property owner or manager "encourage active participation in recycling to the maximum extent possible" and requires the owner or manager to "inform all tenants and/or employees living or working on the property of the availability and location of the Recycling Area(s) or Room(s), the types of materials that are collected for recycling, that the recycling collection facilities are located on the

[94] *The California Integrated Waste Management Act of 1989 (AB 939), as amended, was enacted to reduce, recycle, and reuse solid waste generation in the state. AB 939 requires city and county jurisdictions to divert 50 percent of the total waste stream from landfill disposal.*

property pursuant to state law requiring the diversion of a substantial portion of solid waste."

(d) Solid Waste Integrated Resources Plan

The City's *Solid Waste Integrated Resources Plan* (SWIRP) (also known as the Zero Waste Plan) is a long-range master plan aimed at addressing the City's solid waste management policies, programs, and environmental infrastructure. The Bureau of Sanitation (LASAN) has developed the SWIRP, as a master plan to reduce solid waste, increase recycling, and manage trash in the City through the year 2030. The SWIRP is intended to provide an outline of the policies, programs, infrastructure, regulations, incentives, new green jobs, technology, and financial strategies necessary to achieve the City's goal of becoming a "zero waste" city by the year 2030.[95]

The term "zero waste" refers to maximizing recycling, minimizing waste, reducing consumption, and encouraging the use of products with recycle/reused materials. As noted by the City, "zero waste" is a goal and not a categorical imperative; the City is seeking to come as close to "zero waste" as possible. The SWIRP is a programmatic plan to develop a series of policies, programs, and facilities required to reach the City's goals of 75 percent diversion by 2013 and 90 percent diversion by 2025 in the City of Los Angeles. The SWIRP has six components for full implementation of the project objectives. These six components will be expanded to improve solid waste management, increase landfill diversion, and accommodate growth. They include the following: (1) Expansion of Existing Residential and Commercial Programs; (2) Implementation of New Downstream Policies and Programs; (3) Implementation of Mandatory Participation Programs; (4) Adoption of Upstream Policies; (5) Development of Processing Facilities; and (6) Disposal of Remaining Residual Waste at Local or Remote Landfills. As the adequacy of solid waste services directly relates to the remaining capacity of existing landfills, increasing solid waste diversion rates will prolong the existing landfills' life expectancy.

(e) City of Los Angeles Green Building Code

On December 20, 2016, the Los Angeles City Council approved Ordinance No. 184,692, which amended Chapter IX of the Los Angeles Municipal Code (LAMC), referred to as the Los Angeles Green Building Code, to alter certain provisions of Article 9 to reflect local administrative changes and incorporate by reference portions of the 2016 CALGreen Code. Projects filed on or after January 1, 2017, must comply with the provisions of the Los Angeles Green Building Code. Specific mandatory requirements and elective measures are provided for three categories: (1) low-rise residential buildings; (2)

[95] *City of Los Angeles, Department of Public Works, Bureau of Sanitation, Solid Waste Integrated Resources Plan – A Zero Waste Master Plan, October 2013.*

nonresidential and high-rise residential buildings; and (3) additions and alterations to nonresidential and high-rise residential buildings. LAMC Article 9, Division 5 includes measures for newly constructed nonresidential and high-rise residential buildings.

(f) City-Wide Exclusive Franchise System for Municipal Solid Waste Collection and Handling (Ordinance No. 182,986)

The City-Wide Exclusive Franchise System for Municipal Solid Waste Collection and Handling, also known as the Zero Waste LA Franchise System, establishes a franchise system for solid waste and recycling collection program for all commercial, industrial, and large multi-family customers in the City of Los Angeles. In April 2014, the City approved the Zero Waste LA Franchise System, which established an exclusive franchise system with 11 zones. With a single trash hauler responsible for each zone, the franchise system creates an efficient collection and sustainable management of solid waste resources and recyclables. Special solid waste streams serviced by permitted private waste haulers including construction and demolition (C&D) waste, medical waste, hazardous waste (including electronic waste), and radioactive waste are not part of the franchise system.[96]

b) Existing Conditions

(1) Solid Waste Collection and Disposal

Within the City, solid waste management, including collection and disposal services and landfill operation, is administered by various public agencies and private companies. Refuse from single-family residential and limited multi-family residential uses on public streets is collected by the Bureau of Sanitation and disposed of at City operated landfills. The Bureau of Sanitation provides collection services primarily to single-family residences and some of the smaller multi-family residences, collecting over one million tons of refuse annually from 750,000 customers including single- and small multi-family residences, averaging 6,652 tons per day.[97] The City is also responsible for collecting waste from the City Hall complex, some public buildings, parks, and fire stations. Large multi-family residences, such as apartment complexes and condominiums, and commercial and industrial buildings, will be serviced through the Zero Waste LA Franchise System.[98]

(2) Landfills

The current waste disposal sites (i.e., landfills) are operated by the County as well as by private companies. In addition, transfer stations temporarily store debris until larger haul trucks are available to transport the materials directly to the landfills. Landfill availability

[96] *City of Los Angele, Ordinance No. 182,986, May 28, 2014.*
[97] *Los Angeles Bureau of Sanitation, Solid Resources website.*
[98] *City of Los Angele, Ordinance No. 182,986, May 28, 2014.*

is limited by several factors, including: (1) restrictions to accepting waste generated only within a particular landfill's jurisdiction and/or wastershed boundary, (2) tonnage permit limitations, (3) types of waste, and (4) operational constraints. Planning to serve long-term disposal needs is constantly being conducted at the regional level (e.g., siting new landfills within the County and transporting waste outside the region). Most commonly, the City is serviced by the Sunshine Canyon Landfill. The landfill accepts residential, commercial, and construction waste. Solid waste from the project area is transported to the Sunshine Canyon Landfill for disposal by private waste haulers.

(a) Sunshine Canyon Landfill

The Sunshine Canyon Landfill is located on both City and County land. The Sunshine Canyon Landfill had approximately 65.3 million tons of remaining capacity, has a permitted maximum daily intake of 12,100 tpd and an estimated closure date in 2037.[99] **Table IV.M.3-1, Landfill Capacity and Intake**, lists the permitted daily intake, average intake, and remaining capacity of the Sunshine Canyon Landfill.

Table IV.M.3-1
Sunshine Canyon Landfill Capacity and Intake

Landfill Facility	Permitted Daily Intake (tons per day)	2018 Average Daily Intake (tons per day)	Estimated Remaining Disposal Capacity (million tons)
Sunshine Canyon	12,100	7,012	65.3
Source: County Department of Public Works, Countywide Integrated Waste Management Plan 2018 Annual Report, December 2019, page 68.			

Additional landfills within the County that may be used include the following:

- Antelope Valley Landfill, with a remaining disposal capacity of 12.0 million tons,
- Burbank Landfill, with a remaining disposal capacity of 2.3 million tons,
- Lancaster Landfill, with a remaining disposal capacity of 10.2 million tons,
- Pebbly Beach Landfill, with a remaining disposal capacity of 34,735 tons,
- San Clemente Island Landfill, with a remaining disposal capacity of 35,650 tons and
- Savage Canyon (Whittier) Landfill, with a remaining disposal capacity of 4.6 million tons.[100]

[99] *County Department of Public Works, Countywide Integrated Waste Management Plan 2018 Annual Report, December 2019, page 68.*

[100] *County of Los Angeles Department of Public Works, Countywide Integrated Waste Management Plan 2018 Annual Report, December 2019.*

As discussed in the ColWMP, the County would meet the disposal capacity requirements of AB 939 by using available or planned out-of-County disposal capacity and developing the necessary infrastructure to facilitate exportation of waste to out-of-County landfills. Landfills outside of the County that may be used include the following:

- Olinda Alpha Sanitary Landfill in Orange County;
- Frank R. Bowerman Sanitary Landfill in Orange County;
- H.M. Holloway Landfill in Kern County;
- Prime Deshecha Sanitary Landfill in Orange County;
- Simi Valley Landfill & Recycling Center in Ventura County;
- El Sobrante Landfill in Riverside County;
- San Timoteo Sanitary Landfill in San Bernardino County;
- Mid-Valley Sanitary Landfill in San Bernardino County; and
- Mesquite Regional Landfill in Imperial County.[101]

(3) Recycling Facilities

As previously discussed, waste generated in the City may also be diverted from landfills and recycled. The Bureau of Sanitation's Solid Resources Citywide Recycling Division develops and implements source reduction, recycling, and reuse programs in the City.[102] The Solid Resources Citywide Recycling Division provides technical assistance to public and private recyclers, manages the collection and disposal programs for Household Hazardous Waste (HHW), and helps create markets for recycled materials.[103] In order to help meet the diversion goals of AB 939 and the City, the City adopted the Citywide Construction and Demolition Waste Recycling Ordinance (Ordinance No. 181,519). This ordinance, which became effective January 1, 2011, requires that all haulers and contractors responsible for handling construction and demolition waste obtain a Private Solid Waste Hauler Permit from the Bureau of Sanitation prior to collecting, hauling, and transporting construction and demolition waste. It requires that all construction and demolition waste generated within City limits be taken to City certified construction and demolition waste processors, where the waste would be recycled to the extent feasible.

[101] *County Department of Public Works, Countywide Integrated Waste Management Plan 2018 Annual Report, December 2019, Appendix E-8.*
[102] *Los Angeles Bureau of Sanitation, Construction and Demolition Recycling Guide.*
[103] *Los Angeles Bureau of Sanitation, Construction and Demolition Recycling Guide.*

(4) Existing Solid Waste Generation

The Project Site is currently developed with one single-story industrial warehouse that occupies 26,740 square feet of floor area, and an associated 18,060 square foot surface parking lot. As shown in **Table IV.M.3-2, Existing Average Daily Solid Waste Generation**, existing uses generate 990 pounds of solid waste per day.

Table IV.M.3-2
Existing Average Daily Solid Waste Generation

Land Use	Size (square feet)	Generation Rate[a] (pounds/employee/day)	Employees[b]	Total Generation (pounds/day)
Warehouse	26,740 sf	10.53	94	990
			Existing Solid Waste Generation	**990**

[a] *Generation rates are from the L.A. CEQA Thresholds Guide, 2006 (commercial rate used).*
[b] *Los Angeles Unified School District, 2018 Developer Fee Justification Study for Los Angeles Unified School District, March 2018. The generation factor for Industrial Business Parks was utilized.*
Source (table): EcoTierra Consulting, 2018.

3. Project Impacts

a) Thresholds of Significance

In accordance with guidance provided in Appendix G of the *State CEQA Guidelines*, the Project would have a significant impact related to solid waste if it would:

a) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impact the attainment of solid waste reduction goals; or

b) Not comply with federal, state, and local management and reduction statutes and regulations related to solid waste.

The *L.A. CEQA Thresholds Guide* identifies the following criteria to evaluate solid waste impacts:

(1) Solid Waste

- *Amount of projected waste generation, diversion, and disposal during demolition, construction, and operation of the project, considering proposed design and operational features that could reduce typical waste generation rates;*

- *Need for an additional solid waste collection route, or recycling or disposal facility to adequately handle project-generated waste; and*

- *Whether the project conflicts with solid waste policies and objectives in the SRRE or its updates, City of Los Angeles Solid Waste Management Policy Plan (CiSWMPP), Framework Element or the Curbside Recycling Program, including consideration of the land use-specific waste diversion goals contained in Volume 4 of the SRRE.*

The potential for the Project to result in impacts to solid waste is based on the *State CEQA Guidelines* Appendix G thresholds and criteria identified in the *L.A. CEQA Thresholds Guide* that provide supplemental analysis to the Appendix G thresholds, where applicable. The City's threshold criteria above are considerations that were made as part of the analysis of the Appendix G thresholds for water supply and infrastructure.

b) Methodology

The environmental impacts of the Project with respect to solid waste are determined based on the proposed increase in solid waste generation and the capacity of existing and proposed solid waste infrastructure. The existing landfill capacities and solid waste generation is compared to the Project's solid waste generation and future landfill capacities, including a discussion of recycling programs and design features that would be implemented with the Project. Projected solid waste generation and future landfill capacities are provided in the SWIRP, which is a 20-year master plan to reduce waste, increase recycling, and manage trash in the City. Project solid waste generation estimates are based on generation rates provided by the Bureau of Sanitation.[104]

c) Project Design Features

No specific Project Design Features are proposed with regards to solid waste.

d) Analysis of Project Impacts

As compared to the Project, the Flexibility Option would change the use of the second floor from residential to commercial, and would not otherwise change the Project's land uses or size. The overall commercial square footage provided would be increased by 22,493 square feet to 45,873 square feet and, in turn, there would be a reduction in the number of live/work units from 185 to 159 units and an increase in the number of bicycle spaces from 154 to 161. The overall building parameters would remain unchanged and the design, configuration, and operation of the Flexibility Option would be comparable to the Project. In the analysis of Project impacts presented below, where similarity in land uses, operational characteristics and project design features between the Project and the Flexibility Option would be essentially the same, the conclusions regarding the impact analysis and impact significance determination presented below for the Project would be the same under the Flexibility Option. For those thresholds where numerical differences

[104] *City of Los Angeles, Board of Public Works, Bureau of Sanitation, "Solid Waste Generation," 1981.*

exist because of the differences in project parameters between the Project and Flexibility Option, the analysis is presented separately.

Threshold a) Would the project generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impact the attainment of solid waste reduction goals?

Numerical differences exist for this threshold because of the differences in project parameters between the Project and Flexibility Option, therefore these analyses are presented separately.

(1) Impact Analysis

(a) Project

(i) Construction

Implementation of the Project would generate construction and demolition waste. Typical construction and demolition debris includes concrete, asphalt, wood, drywall, metals, and other miscellaneous and composite materials. Construction debris would consist primarily of debris from the demolition of the 26,740 square foot warehouse and 18,060 square foot surface parking lot that would be disposed of as inert waste. Pursuant to SB 1374, the Project would be required to implement a construction waste management plan to achieve a minimum 75 percent diversion from landfills. Much of this material would be recycled and salvaged to the maximum extent feasible at a minimum of 75 percent diversion from the landfill.

Construction activities generate a variety of scraps and wastes, with the majority of recyclables being wood waste, drywall, metal, paper, and cardboard. The construction of the Project is estimated to generate a total of approximately 397 tons of solid waste[105] over the entire construction period from 2022 to 2025, and approximately 1,248 tons of demolition debris.[106] As required by City Ordinance 181,519 (Waste Hauler Permit

[105] *A construction waste generation rate of 4.02 pounds per square foot was used. 197,355 square feet of construction multiplied by 4.02 pounds is 793,367.1 pounds (396.68 tons). Source: U.S. EPA, Characterization of Building-Related Construction and Demolition Debris in the United States, Table A-2, June 1998.*

[106] *A building demolition waste generation rate of 0.046 tons per square foot was used. 26,740 square feet of demolition multiplied by 0.046 pounds is 1,230.04 tons. Source: CalEEMod User Guide Appendix A, page 13: 1 sf of building space represents 0.046 ton of waste material. A surface parking demolition waste generation rate of 18,060 square feet of surface area @ 1 foot deep slab = 18,060 cubic feet of demolition volume, or 25 cubic yards was used. The asphalt conversion factor is 1 cubic yard of asphalt/paving = 1,380 pounds of waste. Therefore, the parking areas would generate approximately 34,500 pounds, or 18 tons of demolition debris. Source: California Department of Resources Recycling and Recovery. Total demolition debris is 1,248 tons (1,230.04 + 18 = 1,248.04).*

Program), Project construction waste would be hauled by permitted haulers and taken only to City-certified C&D processing facilities that are monitored for compliance with recycling regulations. The inert solid waste and soil would require disposal at the County's only operating inert landfill (Azusa Land Reclamation) or at any of a number of state-permitted Inert Debris Engineered Fill Operations in the County, such as the Arcadia Reclamation Facility. This does not include any asbestos-containing materials (ACMs), lead-based paints (LBPs), polychlorinated biphenyl (PCB), contaminated soil, or other contaminated waste which would be disposed of at facilities licensed to accept such waste (see **Section IV.E, Hazards and Hazardous Materials**, of this Draft EIR, for further discussion). In compliance with the requirements of SB 1374 and City Ordinance No. 181,519, the Applicant would implement a construction waste management plan to recycle and/or salvage a minimum of 75 percent of non-hazardous demolition and construction debris. This forecasted solid waste generation is a conservative estimate as it assumes no reductions in solid waste generation would occur due to recycling.

Moreover, the ColWMP concludes that there is current capacity of 163.39 million tons available in the County for the disposal of waste.[107] Therefore, the Project-generated demolition debris of 1,248 tons and construction waste of 397 tons (i.e., asphalt and construction debris) would represent approximately 0.0010 percent of the inert waste disposal capacity in the region. **Thus, the Project would not generate construction-generated inert waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impact the attainment of solid waste reduction goals and, therefore, impacts would be less than significant. No mitigation measures would be required.**

(ii) Operation

The Project would generate solid waste that is typical of a residential mixed-use and be consistent with all federal, state, and local statutes and regulations regarding proper disposal. As shown in **Table IV.M.3-3, Project Estimated Daily Solid Waste Generation**, the Project would generate approximately 2,052 ppd of net solid waste.

[107] *County of Los Angeles Department of Public Works, Countywide Integrated Management Plan 2017 Annual Report, April 2019, page 41.*

Table IV.M.3-3
Project Estimated Daily Solid Waste Generation

Land Use	Size (square feet)	Generation Rate[a] (pounds/employee/day)	Employees	Total Generation (pounds/day)
Apartment: 1 Bedroom	159 du	12.23/du	0	1,945
Apartment: 2 Bedroom	26 du	12.23/du	0	318
Commercial and Art Production Space	23,380 sf	10.53	63[b]	663
Office Space[d]	3,900 sf	10.53	11[c]	116
			Total Project Solid Waste Generation	*3,042*
			Existing Solid Waste Generation	***990***
			Total Solid Waste Generation	**2,052**

[a] *Generation rates are from the L.A. CEQA Thresholds Guide, 2006 (commercial rate used).*
[b] *0.00271 employees per average square foot (commercial category) x ____ square feet = ____ employees. Source: Los Angeles Unified School District, Level 1 – Developer Fee Justification Study for Los Angeles Unified School District, March 2018.*
[c] *0.00479 employees per average square foot (commercial category) x ____ square feet = ____ employees. Source: Los Angeles Unified School District, Level 1 – Developer Fee Justification Study for Los Angeles Unified School District, March 2018.*
[d] *In order to provide the most conservative estimate of employment generation for the Project, consistent with the traffic study assumptions, 3,900 square feet of the live/work units was designated as office space and included in the employment calculations.*
Source (table): EcoTierra Consulting, 2020.

All solid waste-generating activities within the City, including the Project, would continue to be subject to the requirements set forth in AB 939. Therefore, it is estimated that the waste generated by the Project would be diverted at a 50 percent rate as required by AB 939, thereby diverting this waste from landfills. Nonetheless, it is conservatively assumed that all 2,052 ppd of the Project's solid waste would be disposed of at regional landfills. As discussed previously, the average daily intake of the Sunshine Canyon Landfill is approximately 7,012 tons and the permitted daily intake is 12,100 tons per day. The Sunshine Canyon Landfill had approximately 65.3 million tons of remaining capacity.[108] As such, the landfill's permitted daily intake of 12,100 tpd would accommodate the net daily operational waste generated by the Project of 2,052 ppd, which represents less than one percent (0.008 percent) of the excess daily tonnage permitted at the Sunshine Canyon Landfill.

As described in the CoIWMP, future disposal needs over the next 15-year planning horizon (2033) would be adequately met through the use of in-County and out-of-County facilities through a number of strategies that would be carried out over the years. It should also be noted that with annual reviews of demand and capacity in each subsequent

[108] *County of Los Angeles Department of Public Works, Countywide Integrated Waste Management Plan 2018 Annual Report, page 32, page 68.*

Annual Report, the 15-year planning horizon provides sufficient lead time for the County to address any future shortfalls in landfill capacity.

Solid waste collection services are currently provided to the Project Site by haulers contracted by the City for this service area. The Project Site is located in an urban area with established solid waste collection routes (i.e., private haulers under contract to LA Sanitation). Transport of the Project's solid waste would occur along one of the established routes. Thus, the Project would not result in the need for additional solid waste collection routes. The Project would not require the expansion or construction of a new solid waste disposal or recycling facility to handle Project-generated waste because the existing facilities have enough capacity to receive the Project's waste.

Based on the above, the Project's operational waste generation would not exceed the permitted capacity of disposal facilities serving the Project, and would not alter the ability of the County to address landfill needs via existing capacity and other planned strategies and measures for ensuring sufficient landfill capacity exists to meet the needs of the County. Therefore, the County's City-certified waste processing facilities would have sufficient permitted capacity to accommodate the Project's operational waste disposal needs.

Thus, the Project would not generate operation-generated inert waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impact the attainment of solid waste reduction goals. Therefore, impacts associated with operational solid waste would be less than significant and no mitigation measures would be required.

(b) Increased Commercial Flexibility Option

Under the Flexibility Option, the commercial square footage provided would be increased to 45,873 square feet within the same building parameters and, in turn, there would be a reduction in the overall number of live/work units for a total of 159 units. Overall, the design, configuration, and operation of the Flexibility Option would be comparable to the Project.

(i) Construction

Similar to the Project, implementation of the Flexibility Option would generate construction and demolition waste from the demolition of the 26,740 square foot warehouse and 18,060 square foot surface parking lot. Pursuant to SB 1374, the Project would be required to implement a construction waste management plan to achieve a minimum 75 percent diversion from landfills. Much of this material would be recycled and salvaged to the maximum extent feasible at a minimum of 75 percent diversion from the landfill.

As the design, configuration, and operation of the Flexibility Option would be comparable to the Project, it is also estimated to generate a total of approximately 397 tons of solid waste[109] over the entire construction period, and approximately 1,248 tons of demolition debris.[110] This would represent a very small percentage of the inert waste disposal capacity in the region. **Thus, the Flexibility Option would not generate project construction-generated inert waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impact the attainment of solid waste reduction goals and, therefore, impacts would be less than significant. No mitigation measures would be required.**

(ii) Operation

Similar to the Project, the Flexibility Option would generate solid waste that is typical of a residential mixed-use and be consistent with all federal, state, and local statutes and regulations regarding proper disposal. As shown in **Table IV.M.3-4, Flexibility Option Estimated Daily Solid Waste Generation**, the Flexibility Option would generate approximately 2,366 ppd of net solid waste.

Table IV.M.3-4
Flexibility Option Estimated Daily Solid Waste Generation

Land Use	Size (square feet)	Generation Rate[a] (pounds/employee/day)	Employees	Total Generation (pounds/day)
Apartment: 1 Bedroom	135 du	12.23/du	0	1,651
Apartment: 3 Bedroom	24 du	12.23/du	0	294
Commercial and Art Production Space	45,873 sf	10.53	124[b]	1,306
Office Space[d]	3,600 sf	10.53	10[c]	105
Total Increased Commercial Flexibility Option Solid Waste Generation				*3,356*
Existing Solid Waste Generation				***990***
Total Solid Waste Generation				**2,366**

[a] *Generation rates are from the L.A. CEQA Thresholds Guide, 2006 (commercial rate used).*

[109] *A construction waste generation rate of 4.02 pounds per square foot was used. 197,355 square feet of construction multiplied by 4.02 pounds is 793,367.1 pounds (396.68 tons). Source: U.S. EPA, Characterization of Building-Related Construction and Demolition Debris in the United States, Table A-2, June 1998.*

[110] *A building demolition waste generation rate of 0.046 tons per square foot was used. 26,740 square feet of demolition multiplied by 0.046 pounds is 1,230.04 tons. Source: CalEEMod User Guide Appendix A, page 12: 1 sf of building space represents 0.046 ton of waste material. A surface parking demolition waste generation rate of 18,060 square feet of surface area at 1-foot deep slab = 18,060 cubic feet of demolition volume, or 25 cubic yards was used. The asphalt conversion factor is 1 cubic yard of asphalt/paving = 1,380 pounds of waste. Therefore, the parking areas would generate approximately 34,500 pounds, or 18 tons of demolition debris. Total demolition debris is 1,248 tons (1,230.04 + 18 = 1,248.04).*

Table IV.M.3-4
Flexibility Option Estimated Daily Solid Waste Generation

Land Use	Size (square feet)	Generation Rate[a] (pounds/employee/ day)	Employees	Total Generation (pounds/day)

[b] *0.00271 employees per average square foot (commercial category) x ____ square feet = ____ employees. Source: Los Angeles Unified School District, Level 1 – Developer Fee Justification Study for Los Angeles Unified School District, March 2018.*

[c] *0.00479 employees per average square foot (commercial category) x ____ square feet = ____ employees. Source: Los Angeles Unified School District, Level 1 – Developer Fee Justification Study for Los Angeles Unified School District, March 2018.*

[d] *In order to provide the most conservative estimate of employment generation for the Project, consistent with the traffic study assumptions, 3,900 square feet of the live/work units was designated as office space and included in the employment calculations.*

Source (table): EcoTierra Consulting, 2020.

Similar to the Project, it is estimated that the waste generated by the Flexibility Option would be diverted at a 50 percent rate as required by AB 939, thereby diverting this waste from landfills. Nonetheless, it is conservatively assumed that all 2,366 ppd of the Flexibility Option's net solid waste would be disposed of at regional landfills. As discussed previously, the average daily intake of the Sunshine Canyon Landfill is approximately 7,012 tons and the permitted daily intake is 12,100 tons per day. The Sunshine Canyon Landfill had approximately 65.3 million tons of remaining capacity.[111] As such, the landfill's permitted daily intake of 12,100 tpd would accommodate the net daily operational waste generated by the Flexibility Option of 2,366 ppd, which represents less than one percent (0.010 percent) of the excess daily tonnage permitted at the Sunshine Canyon Landfill. **Thus, the Flexibility Option would not generate project operation-generated inert waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impact the attainment of solid waste reduction goals. Therefore, impacts associated with operational solid waste would be less than significant and no mitigation measures would be required.**

(2) Mitigation Measures

Project-level impacts for the Project and the Flexibility Option, with regard to solid waste capacity, would be less than significant; no mitigation measures are required.

(3) Level of Significance After Mitigation

Project-level impacts for the Project and the Flexibility Option, with regard to solid waste capacity, would be less than significant without mitigation.

[111] *County of Los Angeles Department of Public Works, Countywide Integrated Waste Management Plan 2018 Annual Report, page 68.*

Threshold b) Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

Due to the similarity in land uses, operational characteristics and project design features between the Project and the Flexibility Option, the consistency of the Project or the Flexibility Option to applicable state, regional and City plans, programs, ordinances, or policies related to solid waste would be essentially the same. Therefore, the conclusions regarding the impact analysis and impact significance determination presented below for the Project would be the same under the Flexibility Option.

(1) Impact Analysis

(a) State

(i) Consistency with California Integrated Waste Management Act of 1989

As discussed previously, the AB 939 requirement to reduce the solid waste stream in landfills by 50 percent means that half of the Project's net total solid waste generated (2,052 ppd) must be recycled rather than disposed of in a landfill. The Project would comply with AB 939 requirements and approximately 50 percent of the Project's waste would be diverted for reuse or recycling; the remaining solid waste generated during operation would be disposed of in landfills. The Project would comply with the Bureau of Sanitation Solid Resources Infrastructure Facility Plan to reduce the amount of solid waste being disposed into landfills by promoting diversion techniques that increase recycling of solid waste, consistent with AB 939. Since the Project would not substantially increase solid waste generation in the City or the amount disposed into the landfills, the Project would comply with AB 939.

(ii) Consistency with Senate Bill 1374-Construction and Demolition Waste Materials Diversion Requirements

As discussed previously, SB 1374 requires jurisdictions to divert 50 percent to 75 percent of all construction and demolition waste from landfills. In compliance with the requirements of SB 1374 and City Ordinance No. 181,519, the Applicant would implement a construction waste management plan to recycle and/or salvage a minimum of 75 percent of non-hazardous demolition and construction debris. This forecasted solid waste generation is a conservative estimate as it assumes no reductions in solid waste generation would occur due to recycling and the Project would comply with SB 1374.

(iii) Consistency with California Organics Recycling (Assembly Bill 1826)

AB 1826 requires mandatory recycling of organic waste generated by certain commercial uses such as restaurants and grocery stores. The Project, which will be comprised of uses that will generate eight cubic yards (cy) or more of organic waste and four cy or more of organic waste per week will separate food scraps and yard trimmings and arrange for recycling services for that waste in a specified manner. Furthermore, the Project will be comprised of businesses that generate four cy or more of commercial solid waste per week and will arrange for organic waste recycling services. As the Project would implement recycling services, the Project would comply with AB 1826.

(iv) Consistency with Assembly Bill 341 – Amendments to the California Integrated Waste Management Act of 1989

AB 341 amends AB 939 by mandating that jurisdictions meet a solid waste diversion goal of 75 percent by the year 2020 and requires multi-family residential developments with five units or more to provide for recycling services on site. Pursuant to SB 1374, the Project would be required to implement a construction waste management plan to achieve a minimum 75 percent diversion from landfills and the Project includes a trash and recycling room on level 1, and trash and recycling rooms on each floor; the Project would comply with these and all regulations related to construction and operational solid waste.

(v) Consistency with CALGreen Building Code

New development projects constructed within California after January 1, 2017, are subject to the mandatory planning and design, energy efficiency, water efficiency and conservation, material conservation and resources efficiency, and environmental quality measures of the CALGreen Building Code. As previously discussed, all operating solid waste-generating activities within the City, including the Project, would continue to be subject to the requirements set forth in AB 939. Therefore, it is estimated that the Project would divert 50 percent of its solid waste generated as required by AB 939, thereby diverting this waste from landfills. The Project would therefore implement the CALGreen Building Code diversion requirements.

(b) Regional

(i) Consistency with Countywide Integrated Waste Management

As discussed previously, pursuant to AB 939, each County is required to prepare and administer a CoIWMP, including preparation of an Annual Report. As stated within the CoIWMP 2018 Annual Report, the County is not anticipating a solid waste disposal capacity shortfall within the next 15 years under current conditions.[112] The Project would comply with AB 939 requirements, as outlined in the CoIWMP, and approximately 50 percent of the Project's waste would be diverted for reuse or recycling; the remaining solid waste generated during operation would be disposed of in landfills. The Project would therefore implement the CoIWMP.

(c) Local

(i) Consistency with City of Los Angeles Solid Waste Programs and Ordinances

The City implements various programs and ordinances related to solid waste. As previously described, these include: (1) the City of Los Angeles Solid Waste Management Policy Plan; (2) the RENEW LA Plan; (3) the Waste Hauler Permit Program (Ordinance No. 181,519); and (4) the Exclusive Franchise System Ordinance (Ordinance No. 182,986). The Project construction waste, as required by City Ordinance 181,519, would be hauled by permitted haulers and taken only to City-certified C&D processing facilities that are monitored for compliance with recycling regulations. Furthermore, all solid waste-generating related to the Project would to be subject to the requirements set forth in AB 939 and further implemented through programs such as RENEW LA, a 20-year plan with the primary goal of shifting from waste disposal to resource recovery within the City, resulting in "zero waste" by 2030.

(ii) Consistency with City of Los Angeles General Plan Framework Element

The Project would implement strategies to create minimal waste and utilize recycled materials, which in turn would reduce the number of refuse haul trips. The Project would include enclosed trash areas and recycling storage areas and divert 50 percent of the construction waste debris away from landfills. The Project would be consistent with the City of Los Angeles General Plan Framework goal of maximizing source reduction and materials recovery, and minimizing the amount of waste requiring disposal through the

[112] *County of Los Angeles Department of Public Works, Countywide Integrated Waste Management Plan 2018 Annual Report, December 2019, page 6.*

accommodation of sufficient solid waste and designated green waste bins. Furthermore, pursuant to SB 1374, the Project would be required to implement a construction waste management plan to achieve a minimum 75 percent diversion from landfills.

(iii) Consistency with the Los Angeles Municipal Code

The LAMC requires a project to be designed to incorporate a recycling area or room.[113] The Project would be required by LAMC to have sufficient containers to accommodate the amount of solid waste and recycling generated by the premises. Landscape waste would be placed in designated green waste bins. In accordance with Senate Bill 1374 and Assembly Bills 939 and 341, Project construction and operation would achieve at least a 65 percent and 50 percent solid waste diversion rate, respectively, until year 2020, and at least a 75 percent solid waste diversion rate thereafter, through source reduction, recycling, composting and other methods. Thus, the Project would promote source reduction and recycling, consistent with AB 939 and the City's Solid Waste Integrated Resources Plan, General Plan Framework Element, LA Green Plan, and Los Angeles Municipal Code.

(iv) Consistency with Solid Waste Integrated Resources Plan

SWIRP, or Zero Waste Plan, was established by the City as a master plan to reduce solid waste, increase recycling, and manage trash in the City through the year 2030. The SWIRP has a series of policies, programs, and facilities required to reach the City's goals of 70 percent diversion by 2013 and 90 percent diversion by 2025 in the City of Los Angeles.[114] The Project would be consistent with the SWIRP goal of minimizing the amount of waste requiring disposal through a solid waste diversion rate target of 65 percent of non-hazardous materials by implementing an operational waste management plan and providing and utilizing designated green waste bins during operation. Furthermore, pursuant to SB 1374, the Project would be required to implement a construction waste management plan to achieve a minimum 75 percent diversion from landfills.

(v) Consistency with City of Los Angeles Green Building Code

As stated previously, in December 2016, the Los Angeles City Council approved various provisions of the CALGreen Code as part of Ordinance No. 184,691, thus codifying certain provisions of the 2016 CALGreen Code as the new LA Green Building Code. Mandatory measures regarding solid waste include a 50 percent diversion of construction

[113] *Los Angeles Municipal Code, Section 12.21.A.19.c.*
[114] *City of Los Angele, Ordinance No. 184.665, December 9, 2016.*

waste to landfills. Pursuant to SB 1374, the Project would be required to implement a construction waste management plan to achieve a minimum 75 percent diversion from landfills. Much of this material would be recycled and salvaged to the maximum extent feasible at a minimum of 75 percent diversion from the landfill.

(vi) Consistency with City-Wide Exclusive Franchise System for Municipal Solid Waste Collection and Handling (Ordinance No. 182,986)

The City-Wide Exclusive Franchise System for Municipal Solid Waste Collection and Handling, also known as the Zero Waste LA Franchise System, creates an efficient collection and sustainable management of solid waste resources and recyclables in the City. As previously discussed, solid waste collection services are currently provided to the Project Site by haulers contracted by the City for this service area. The Project Site is located in an urban area with established solid waste collection routes (i.e., private haulers under contract to LA Sanitation).

Therefore, the Project and the Flexibility Option would comply with applicable state and local statutes and regulations governing solid waste, and impacts would be less than significant. No mitigation measures would be required.

(2) Mitigation Measures

Project-level impacts for the Project and the Flexibility Option, with regard to consistency with applicable federal, state, and local statutes and regulations governing solid waste, would be less than significant; no mitigation measures would be required.

(3) Level of Significance After Mitigation

Project-level impacts for the Project and the Flexibility Option, with regard to consistency with applicable federal, state, and local statutes and regulations governing solid waste, would be less than significant without mitigation.

4. Cumulative Impacts

a) Impact Analysis

Due to the similarity in land uses, operational characteristics and project design features between the Project and the Flexibility Option, the impacts of the Project and the Flexibility Option related to contributions to cumulative impacts would be essentially the same. Therefore, the conclusions regarding the impact analysis and impact significance determination presented below for the Project would be the same under the Flexibility Option.

The solid waste cumulative impacts study area is the County of Los Angeles because the landfills open to the City of Los Angeles serve the entire County. County planning for future landfill capacity addresses cumulative demand over 15-year planning increments. The ColWMP anticipates a 8.35 percent increase in population growth within the County of Los Angeles between 2018 and 2033 and an increase of 11.58 percent in employment.[115] The Project, in combination with the cumulative projects and other reasonably foreseeable growth within the City, would increase solid waste generation during construction and operation.

(1) Construction

The construction of the Project is estimated to generate a total of approximately 397 tons of solid waste[116] over the entire construction period, and approximately 1,248 tons of demolition debris.[117] Similar to the Project, the Related Projects and other reasonably foreseeable growth within the City would generate inert construction and demolition waste. Also similar to the Project, the Related Projects and reasonably foreseeable growth would be subject to Citywide Construction and Demolition Waste Recycling Ordinance, and the construction and demolition waste would be recycled to the extent feasible. As indicated above, the remaining disposal capacity for Sunshine Canyon Landfill is 65.3 million tons;[118] and the Department of Public Works estimates that the life span of the landfill is 19 years based on the 2018 average disposal rate of 7,012 tons per day.[119] Given this future capacity, it is expected that all construction and debris waste can be accommodated for during that time, and cumulative impacts regarding the disposal of construction and debris waste would not occur. Moreover, the ColWMP concludes that there is adequate capacity within permitted solid waste facilities (i.e., landfills) to serve the County through the 15-year planning period of 2018 through

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[115] *County of Los Angeles Department of Public Works, Countywide Integrated Waste Management Plan 2018 Annual Report, Appendix E-2, Table 7.*

[116] *A construction waste generation rate of 4.02 pounds per square foot was used. 197,355 square feet of construction multiplied by 4.02 pounds is 793,367.1 pounds (396.68 tons). Source: U.S. EPA, Characterization of Building-Related Construction and Demolition Debris in the United States, Table A-2, June 1998.*

[117] *A building demolition waste generation rate of 0.046 tons per square foot was used. 26,740 square feet of demolition multiplied by 0.046 pounds is 1,230.04 tons. Source: CalEEMod User Guide Appendix A, page 12: 1 sf of building space represents 0.046 ton of waste material. A surface parking demolition waste generation rate of 18,060 square feet of surface area at 1-foot deep slab = 18,060 cubic feet of demolition volume, or 25 cubic yards was used. The asphalt conversion factor is 1 cubic yard of asphalt/paving = 1,380 pounds of waste. Therefore, the parking areas would generate approximately 34,500 pounds, or 18 tons of demolition debris. Total demolition debris is 1,248 tons (1,230.04 + 18 = 1,248.04).*

[118] *California Integrated Waste Management Board, Solid Waste Information System, Facility/Site Summary Details.*

[119] *County of Los Angeles Department of Public Works, Countywide Integrated Waste Management Plan 2018 Annual Report, page 68.*

2033.[120] **Therefore, the Project and Flexibility Option's cumulative impacts due to demolition and construction waste would be less than significant and no mitigation measures are required**.

(2) Operation

Whereas in the past, solid waste disposal occurred solely within landfills located in the County, the trend in recent years is increased solid waste disposal at landfills located outside of the County. The use of out-of-County landfills will increase in the future given the difficulties associated with permitting new or expanded landfill facilities within the County. As such, the appropriate context within which to view the Project's potential solid waste impacts is total disposal capacity available at landfills located within, as well as outside of, the County. In addition, in order to satisfy the disposal capacity requirements of AB 939, the County is developing facilities utilizing conversion technologies (defined as a wide array of biological, chemical, thermal [excluding incineration] and mechanical technologies capable of converting post-recycled residual solid waste into useful products and chemicals, green fuels, such as hydrogen, natural gas, ethanol and biodiesel, and clean, renewable energy such as electricity).[121]

The City SWMPP, inclusive of its annual reports, serves as the primary planning documents for the County's waste disposal needs, which include solid waste generated throughout the City. The ColWMP forecasts conditions over a 15-year planning horizon. With each subsequent annual report, the 15-year planning horizon is extended by one year, thereby providing sufficient time to address any future shortfalls in landfill capacity. The ColWMP concludes that there is enough capacity within permitted solid waste facilities (i.e., landfills) to serve the County through the 15-year planning period of 2018 through 2033 through a combination of all or some of the following:

- Maximize waste reduction and recycling;
- Expand existing landfills;
- Study, promote, and develop alternative technologies;
- Expand transfer and processing infrastructure; and
- Out-of-county disposal (including waste-by-rail).[122]

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[120] *County of Los Angeles Department of Public Works, Countywide Integrated Waste Management Plan 2018 Annual Report, page 6.*

[121] *County of Los Angeles, Conversion Technology Evaluation Report, Phase II, October 2007, page ES-1.*

[122] *County of Los Angeles Department of Public Works, Countywide Integrated Waste Management Plan 2018 Annual Report, page 50.*

The County will continually address landfill capacity through the preparation of Annual Reports. The preparation of each Annual Report provides sufficient lead time (15 years) to address potential future shortfalls in landfill capacity. **Therefore, the Project and Flexibility Option's combined cumulative operational waste disposal impacts would be less than significant and no mitigation measures would be required**.

Similar to the Project, it is also anticipated that Related Projects and other reasonably foreseeable growth would be subject to environmental review on a case-by-case basis to ensure that they would not conflict with AB 939 waste diversion goals or the solid waste policies and objectives in the ColWMP, CSE, as well as the City's SRRE and its updates, the CiSWMPP, and the General Plan Framework. **Therefore, the Project and Flexibility Option's cumulative impacts associated with solid waste regulations, plans, and programs would be less than significant**. **No mitigation measures would be required.**

(3) Mitigation Measures

Cumulative impacts related to solid waste for both the Project and Flexibility Option would be less than significant; no mitigation measures would be required.

(4) Level of Significance After Mitigation

Cumulative impacts related to solid waste for both the Project and Flexibility Option were determined to be less than significant without mitigation.

IV. Environmental Impact Analysis

M. Utility and Service Systems

4. Electric Power, Natural Gas, and Telecommunications Infrastructure

1. Introduction

This subsection describes the potential impacts of the Project on the electric power, natural gas, and telecommunication service facilities serving the Project Site. This subsection is based on information also presented in **Section IV.N. Energy**, of this Draft EIR.

2. Environmental Setting

a) Regulatory Framework

(1) Federal

(a) Federal Corporate Average Fuel Economy (CAFE) Standards

First established by the U.S. Congress in 1975, the Corporate Average Fuel Economy (CAFE) standards reduce energy consumption by increasing the fuel economy of cars and light trucks. The National Highway Traffic Safety Administration (NHTSA) and U.S. Environmental Protection Agency (USEPA) jointly administer the CAFE standards. The U.S. Congress has specified that CAFE standards must be set at the "maximum feasible level" with consideration given for: (1) technological feasibility; (2) economic practicality; (3) effect of other standards on fuel economy; and (4) need for the nation to conserve energy. When these standards are raised, automakers respond by creating a more fuel-efficient fleet. The NHTSA sets standards to increase CAFE levels rapidly over the next several years, which will improve the nation's energy security and save consumer's money at the gas pump, while also reducing greenhouse gas (GHG) emissions. In 2012, the NHTSA established final passenger car and light truck CAFE standards for model years 2017 through 2021, which the agency projects will require in model year 2021, on average, a combined fleet-wide fuel economy of 40.3 to 41.0 miles per gallons (mpg). In March 2020, the U.S. Department of Transportation (USDOT) and the USEPA issued the

Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule, which amends existing CAFE standards and tailpipe carbon dioxide emissions standards for passenger cars and light trucks and establishes new standards covering model years 2021 through 2026.[123]

Fuel efficiency standards for medium- and heavy-duty trucks have been jointly developed by USEPA and NHTSA. The Phase 1 heavy-duty truck standards apply to combination tractors, heavy-duty pickup trucks and vans, and vocational vehicles for model years 2014 through 2018, and result in a reduction in fuel consumption from 6 to 23 percent over the 2010 baseline, depending on the vehicle type.[124] USEPA and NHTSA have also adopted the Phase 2 heavy-duty truck standards, which cover model years 2021 through 2027 and require the phase-in of a 5 to 25 percent reduction in fuel consumption over the 2017 baseline depending on the compliance year and vehicle type.[125]

(b) Energy Independence and Security Act

The Energy Independence and Security Act of 2007 (EISA) facilitates the reduction of national GHG emissions by requiring the following:

- Increasing the supply of alternative fuel sources by setting a mandatory Renewable Fuel Standard (RFS) that requires fuel producers to use at least 36 billion gallons of biofuel in 2022;
- Prescribing or revising standards affecting regional efficiency for heating and cooling products, procedures for new or amended standards, energy conservation, energy efficiency labeling for consumer electronic products, residential boiler efficiency, electric motor efficiency, and home appliances;
- Requiring approximately 25 percent greater efficiency for light bulbs by phasing out incandescent light bulbs between 2012 and 2014; requiring approximately 200 percent greater efficiency for light bulbs, or similar energy savings, by 2020; and

[123] *Federal Register, Vol. 85, No. 84, Thursday, April 30, 2020, Rules and Regulations: United States Environmental Protection Agency 40 CFR Parts 86 and 600 and United States Department of Transportation, National Highway Traffic Safety Administration, 49 CFR Parts 523, 531, 533, 536, and 537, The Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule for Model Years 2021-2026 Passenger Cars and Light Trucks, Final Rule, Effective June 29, 2020.*

[124] *United States Environmental Protection Agency, Office of Transportation and Air Quality, Regulatory Announcement: EPA and NHTSA Adopt First-Ever Program to Reduce Greenhouse Gas Emissions and Improve Fuel Efficiency of Medium- and Heavy-Duty Vehicles, APE-420-F-11-031, August 2011.*

[125] *Federal Register, Vol. 81, No. 206, Tuesday, October 25, 2016, Rules and Regulations, United States Environmental Protection Agency, 40 CFR Parts 9, 22, 85, 86, 600, 1033, 1036, 1037, 1039, 1042, 1043, 1065, 1066, and 1068, and Department of Transportation, National Highway Traffic Safety Administration, 49 CFR Parts 523, 534, 535, and 538, Greenhouse Gas Emissions and Fuel Efficiency Standards for Medium- and Heavy-Duty Engines and Vehicles—Phase 2, Effective December 27, 2016.*

- While superseded by the USEPA and NHTSA actions described above, (i) establishing miles per gallon targets for cars and light trucks and (ii) directing the NHTSA to establish a fuel economy program for medium- and heavy-duty trucks and create a separate fuel economy standard for trucks.

Additional provisions of EISA address energy savings in government and public institutions, promote research for alternative energy, additional research in carbon capture, international energy programs, and the creation of "green jobs."[126]

(2) State

(a) Title 24 of the California Code of Regulations

Title 24 of the California Code of Regulations (CCR) is the California Building Code, which governs all aspects of building construction. Included therein are standards mandating energy efficiency measures for new construction that are updated every three years to allow new energy efficiency technologies to be considered. These energy measures are known as the State Building Energy Efficiency Standards. The efficiency standards apply to new construction of both residential and non-residential buildings, and regulate energy consumed for heating, cooling, ventilation, water heating, and lighting. The building efficiency standards are enforced through the local building permit process. Local government agencies may adopt and enforce energy standards for new buildings, provided these standards meet or exceed those in the Title 24 guidelines.

(b) California's Renewable Portfolio Standard

First established in 2002 under Senate Bill (SB) 1078, California's Renewable Portfolio Standards (RPS) require retail sellers of electric services to source at least 33 percent of energy from eligible renewable energy resources by 2020.[127] The California Public Utilities Commission (CPUC) and the California Energy Commission (CEC) jointly implement the RPS. The CPUC's responsibilities include: (1) determining annual procurement targets and enforcing compliance; (2) reviewing and approving each investor- owned utility's renewable energy procurement plan; (3) reviewing contracts for RPS-eligible energy; and (4) establishing the standard terms and conditions used in contracts for eligible renewable energy.[128] The CEC's responsibilities include: (1) certifying renewable facilities as eligible for the RPS; and (2) designing and implementing a tracking and verification system to ensure that renewable energy output is counted only

[126] *A "green job," as defined by the United States Department of Labor, is a job in a business that produces goods or provides services that benefit the environment or conserve natural resources.*
[127] *California Public Utilities Commission, California Renewables Portfolio Standard website.*
[128] *California Public Utilities Commission, California Renewables Portfolio Standard website.*

once for the purpose of the RPS and verifying retail product claims in California or other states.

(c) Senate Bill 350

SB 350, signed October 7, 2015, is the Clean Energy and Pollution Reduction Act of 2015. The objectives of SB 350 are: (1) to increase the procurement of our electricity from renewable sources from 33 percent to 50 percent by 2030; and (2) to double the energy efficiency savings in electricity and natural gas final end uses of retail customers through energy efficiency and conservation by 2030.[129]

(d) Senate Bill 100

Senate Bill (SB) 100, signed September 10, 2018, is the 100 Percent Clean Energy Act of 2018. SB 100 updates the goals of California's Renewable Portfolio Standard and SB 350, as discussed above, to the following: achieve 50 percent renewable resources target by December 31, 2026 and achieve a 60 percent target by December 31, 2030. SB 100 also requires that eligible renewable energy resources and zero-carbon resources supply 100 percent of retail sales of electricity to California end-use customers and 100 percent of electricity procured to serve all state agencies by December 31, 2045.[130]

(e) 2018 California Gas Report

The 2018 California Gas Report[131] presents a comprehensive outlook for natural gas requirements and supplies for California through the year 2035. This report is prepared in even-numbered years, followed by a supplemental report in odd-numbered years, in compliance with California Public Utilities Commission Decision D.95-01-039. The below projections in the California Gas Report are for long-term planning and do not necessarily reflect the day-to-day operational plans of the utilities.

California natural gas demand, including volumes not served by utility systems, is expected to decrease at a rate of 0.5 percent per year from 2018 to 2035. The forecast decline is a combination of moderate growth in the Natural Gas Vehicle (NGV) market and across-the-board declines in all other market segments: residential, commercial, electric generation, and industrial markets.

Residential gas demand is expected to decrease at an annual average rate of 1.4 percent. Demand in the commercial and industrial markets are expected to decline at an annual rate of 0.2 percent. Aggressive energy efficiency programs, in addition to the new goals laid out for SB350, which establishes annual targets for statewide energy efficiency

[129] *Senate Bill 350 (2015-2016 Reg. Session) Stats 2015, Ch. 547.*
[130] *Senate Bill 100 (2017-2018 Reg. Session) Stats 2018, Ch. 312.*
[131] *California Gas and Electric Utilities, 2018 California Gas Report, 2018.*

savings and demand reduction, and AB802, which provides state directives to increase the energy efficiency of existing buildings, make a significant impact in managing growth in the residential, commercial, and industrial markets. For the purpose of load-following as well as backstopping intermittent renewable resource generation, gas-fired generation will continue to be the primary technology to meet the ever-growing demand for electric power. However, overall gas demand for electric generation is expected to decline at 1.4 percent per year for the next 17 years due to more efficient power plants, statewide efforts to minimize GHG emissions through aggressive programs pursuing demand-side reductions, and the acquisition of preferred power generation resources that produce little or no carbon emissions.

(3) Regional

(a) Western Electricity Coordinating Council and the North American Electric Reliability Council

The Western Electricity Coordinating Council (WECC) is a voluntary consortium of electrical power providers that is responsible for coordinating and promoting electricity reliability from the Canadian provinces of Alberta and British Columbia in the north of its jurisdiction to the northern Mexican State of Baja California in the south of its jurisdiction, and the 14 western states of the United States.[132] The LADWP is a member of the WECC. The WECC has implemented Standard BAL-STD-002-0 to require reliable operation of the power system while ensuring adequate generating capacity at all times. As a means of ensuring power system reliability, the LADWP maintains an extra reserve margin of power generation resources in the event of a power system disturbance. In order to determine how much extra generation reserves are needed, the LADWP adheres to the WECC Reliability Standard. WECC Standard BAL-STD-002-0 requires its providers to:

- Supply requirements for load variations;
- Replace generating capacity and energy lost due to forced outages of generation or transmission equipment;
- Meet on-demand obligations; and
- Replace energy lost due to curtailment of interruptible imports.

[132] *Western Electricity Coordinating Council website, About WECC.*

(4) Local

(a) 2017 Power Strategic Long-Term Resource Plan

The 2017 Power Strategic Long-Term Resource Plan (SLTRP)[133] document serves as a comprehensive 20-year roadmap that guides the Los Angeles Department of Water and Power's (LADWP) power system in its efforts to supply reliable electricity in an environmentally responsible and cost effective manner. In 2017, LADWP's Power Integrated Resource Plan (IRP) was expanded into the SLTRP. The 2017 SLTRP re-examines and expands the analysis contained in the 2016 IRP, with updates in line with the latest regulatory framework and updates to case scenario assumptions that include a 65 percent Renewable Portfolio Standard (RPS), advanced energy efficiency, and higher levels of local solar, energy storage, and transportation electrification.

The 2017 SLTRP provides detailed analysis and results of several new SLTRP resource cases which investigated the economic and environmental impact of increased local solar and various levels of transportation electrification. In analyzing the SLTRP cases and recommending a strategy to best meet the future electric needs of Los Angeles, the SLTRP uses system modeling tools to analyze and determine the long-term economic, environmental, and operational impact of alternative resource portfolios by simulating the integration of new resource alternatives within our existing mix of assets and providing the analytic results to inform the selection of a recommended case.

The SLTRP also includes a general assessment of the revenue requirements and rate impacts that support the recommended resource plan through 2037. While this assessment will not be as detailed and extensive as the financial analysis to be completed for the ongoing rate action for the 2015/16 fiscal year and beyond, it clearly outlines the general requirements. As a long-term planning process, the SLTRP examines a 20-year horizon in order to secure adequate supplies of electricity. In that respect, it is LADWP's desire that the SLTRP contribute towards future rate actions, by presenting and discussing the programs and projects required to fulfill the City Charter's mandate of delivering reliable electric power to the City of Los Angeles.

Regulatory interpretations of primary regulations and state laws affecting the LADWP Power System, including AB 32, AB 197, SB 1368, SB 1, SB 2 (1X), SB 350, SB 32, US EPA Rule 316(b), and US Clean Power Plan, continue to evolve particularly with certification requirements of existing renewable projects and their applicability towards meeting in-state or out-of-state qualifications. The current SLTRP attempts to incorporate

[133] *Los Angeles Department of Water and Power, 2017 Power Strategic Long-Term Resource Plan, December 2017.*

the latest interpretation of these major regulations and state laws as they are understood today.

(b) City of Los Angeles Information Technology Agency

Mayor Eric Garcetti, established the City of Los Angeles Information Technology Agency (ITA), which is responsible for a broad spectrum of services within 18 divisions that deliver 366 different technology services to both internal and external customers. These services range from classic IT services, such as computer support, enterprise applications, data networks, and a 24/7 data center to progressive digital services, such as a TV station (LACityview), 3-1-1 Call Center, public safety radio/microwave communications, helicopter avionics, enterprise social media, and more.[134] ITA's Video Services Regulation Division regulates and monitors the compliance of video/cable TV services and franchises issued by the CPUC. More specifically, it ensures that video/cable TV service providers comply with local, state, and federal laws and oversees the video/cable TV service interests of City residents.

(c) City of Los Angeles Municipal Code Section 10.5.4

Section 10.5.4 of the City's Municipal Code states that telecommunications providers are required to comply with all City, state, and federal regulations during installation and operation of equipment. Additionally, each lease, sublease, or license facilitated by telecommunications providers are required to seek approval from the City.

b) Existing Conditions

(1) Electricity

(a) Electricity Supplies

LADWP's power system is the nation's largest municipal electric utility, and serves a 465-square-mile area in Los Angeles and much of the Owens Valley. The system supplies more than 26 million megawatt-hours (MWh) of electricity a year for the City of Los Angeles' 1.5 million residential and business customers as well as over 5,000 customers in the Owens Valley. LADWP has over 7,880 megawatts (MW) of generation capacity from a diverse mix of energy sources including renewable energy, natural gas, nuclear, large hydro, coal, and other sources.[135]

[134] *City of Los Angeles Information Technology Agency website, About ITA.*
[135] *City of Los Angeles Department of Water and Power website, Facts & Figures.*

(b) Electricity Distribution System

As discussed in **Section IV.N. Energy**, of this Draft EIR, the power supplied to LADWP customers is distributed through a network of approximately 6,752 miles of overhead distribution lines and approximately 3,626 miles of underground distribution lines.[136] The Project Site is currently developed with one single-story industrial warehouse that occupies 26,740 square feet of floor area, and an associated 18,060 square foot surface parking lot and total electricity consumption is approximately 919 kilowatt-hours per day (kWh/day) (refer to **Table IV.N-1, Existing Electricity Consumption**, in **Section IV.N. Energy**, of this Draft EIR).

(2) Natural Gas

(a) Natural Gas Supplies

As discussed in **Section IV.N. Energy**, of this Draft EIR, the Southern California Gas Company (SCG) provides natural gas resources to the City and most of Southern and Central California from the United States/Mexico border to the City of Visalia, California. The availability of natural gas is based upon present conditions of gas supply and regulatory policies as the SCG is under the jurisdiction of the California Public Utilities Commission (CPUC) and other federal regulatory agencies. In addition, SCG makes available to its customers energy efficiency programs with rebates and incentives for the purpose of reducing natural gas consumption.

(b) Natural Gas Distribution Systems

(i) Interstate Distribution System

Natural gas is supplied to the Southern California region through a system of interstate pipelines. The *2018 California Gas Report* projects that California natural gas demand is expected to decline at an annual rate of 0.5 percent per year from 2018 to 2035 in the SCG service area.[137] Current capacities in the interstate pipeline system can provide approximately 6,665 million cubic feet of gas per day for Southern California customers.[138]

(ii) Local Distribution System

SCG provides natural gas resources to the City through existing gas mains located under the streets and public rights-of-way. Natural gas services are provided in accordance with SCG's policies and extension rules on file with the CPUC at the time contractual

[136] *City of Los Angeles Department of Water and Power website, Facts & Figures.*
[137] *The California Gas and Electric Utilities, 2018 California Gas Report, page 4.*
[138] *The California Gas and Electric Utilities, 2018 California Gas Report, page 83.*

agreements are made. Natural gas is delivered to the Project Site through natural gas facilities underneath the adjacent public streets.

The Project Site is currently developed with one single-story industrial warehouse that occupies approximately 26,740 square feet of floor area, and an associated 18,060 square foot surface parking lot and total gas consumption is approximately 1,451 kBTU/day (refer to **Table IV.N-2, Existing Natural Gas Consumption** in **Section IV.N. Energy**, of this Draft EIR). There are no utility easements that run through the Project Site.[139]

(3) Telecommunication Facilities

Communication systems located throughout the Project area include underground fiber optic cable, telephone transmission lines (overhead and underground), and cellular towers owned or leased by telecommunications service providers.

Landline telephone service in the Project area is provided by various commercial communications companies. The majority of the landline facilities are located in county- or city-owned rights-of-way and on private easements. Telecommunications lines are either copper wire or fiber optic cable and are routed overhead on utility poles and underground.

In addition to landline service, a large number of communications towers have been constructed throughout the downtown area for cellular telephone service. Cellular towers have been erected along major travel corridors to meet emergency service objectives. Cellular service is available, to varying degrees, throughout the downtown area. There are no cable or telephone lines that currently run under the Project Site and there are no communication towers or utility poles on the Project Site.[140]

3. Project Impacts

a) Thresholds of Significance

In accordance with guidance provided in Appendix G of the *State CEQA Guidelines*, the Project would have a significant impact related to electric power, natural gas, or telecommunication facilities if it would:

a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage,

[139] *Alta Survey Sheet for Vesting Tentative Tract No. 74550, KPFF, September 2016.* ***Refer to Appendix N.3.***

[140] *Alta Survey Sheet for Vesting Tentative Tract No. 74550, KPFF, September 2016.* ***Refer to Appendix N.3.***

electric power, natural gas, or telecommunications facilities, the construction of which could cause significant environmental effects.

The analysis analyzes factors and considerations identified in the *L.A. CEQA Thresholds Guide*, as appropriate, to assist in answering the Threshold Questions. Per the *L.A. CEQA Thresholds Guide*, project-related factors to be used in a case-by-case evaluation of significance include the following:

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

b) Methodology

The environmental impacts of the Project with respect to electric power, natural gas, and telecommunications facilities are determined based on the proposed increase in dry utility generation and the capacity of existing and proposed infrastructure. The existing facilities' capacities and generation is compared to the Project's dry utility generation and future facility capacities.

c) Project Design Features

No specific Project Design Features have been identified with regard to electric power, natural gas, or telecommunications facilities.

d) Analysis of Project Impacts

As compared to the Project, the Flexibility Option would change the use of the second floor from residential to commercial, and would not otherwise change the Project's land uses or size. The overall commercial square footage provided would be increased by 22,493 square feet to 45,873 square feet and, in turn, there would be a reduction in the number of live/work units from 185 to 159 units and an increase in the number of bicycle spaces from 154 to 161. The overall building parameters would remain unchanged and the design, configuration, and operation of the Flexibility Option would be comparable to the Project. In the analysis of Project impacts presented below, where similarity in land uses, operational characteristics and project design features between the Project and the Flexibility Option would be essentially the same, the conclusions regarding the impact analysis and impact significance determination presented below for the Project would be the same under the Flexibility Option. For those thresholds where numerical differences

exist because of the differences in project parameters between the Project and Flexibility Option, the analysis is presented separately.

Threshold a) Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction of which could cause significant environmental effects?

Numerical differences exist for this threshold because of the differences in project parameters between the Project and Flexibility Option, therefore these analyses are presented separately.

(1) Impact Analysis

(a) Project

(i) Electricity

(a) Construction

As discussed in **Section IV.N. Energy**, construction activities at the Project Site would require limited and minor quantities of electricity for watering, lighting, power tools, and other support equipment. As existing powerlines are located in the vicinity of the Project Site, temporary power poles would be installed to provide electricity during Project construction. As also discussed in **Section IV.N**, electricity demand during Project construction would be approximately 11.6 percent[141] of the Project's annual electricity consumption during operation, which would be within the supply and infrastructure capabilities of the LADWP.[142] Accordingly, existing off-site infrastructure would not have to be expanded or newly developed to provide electrical service to the Project Site during construction or demolition**.**

The LADWP would supply the entire Project from the existing electrical system. However, the Project would require construction of an on-site transformation facility[143] and may require underground line extensions on public streets.[144] Both the placement of the

[141] *The percentage is derived by taking the total amount of electricity usage during construction (216,357 kWh) and dividing that number by the annual amount of net electricity usage during operation (1,863,199 kWh) to arrive at 11.6 percent.*

[142] *Written correspondence from Chuck Holloway, Manager of Environmental Planning and Assessment, Department of Water and Power, July 20, 2017.*

[143] *Los Angeles Ordinance No. 180,429.*

[144] *Written correspondence from Chuck Holloway, Manager of Environmental Planning and Assessment, Department of Water and Power, July 20, 2017.*

electrical rooms and power lines are typical requirements for all new developments.[145] Activities associated with the installation of the on-site transformation facility would be in accordance with the actions and procedures outlined in the Project's Construction Staging and Traffic Management Plan (CSTMP) (see PDF TR-1 in **Section IV.K, Transportation**, of this Draft EIR). With regard to existing electrical distribution lines, the Project Applicant would be required to coordinate electrical infrastructure connections with the LADWP and comply with site-specific requirements set forth by the LADWP, which would ensure that service disruptions and potential impacts associated with grading, construction, and development within LADWP easements are minimized.

Based on the above, construction of the Project would not result in an increase in demand for electricity that exceeds available supply or distribution infrastructure capabilities that could require the construction of new or expansion of existing electrical facilities and would not adversely affect the existing electrical infrastructure serving the surrounding uses. **As such, impacts related to the construction or relocation of electrical facilities during construction of the Project would be less than significant and no mitigation measures would be required.**

(b) Operation

As presented in **Table IV.N-2** in **Section IV.N. Energy**, of this Draft EIR, the Project's net operational electricity usage would be approximately 1,863,199 kWh per year, which would represent approximately 0.008 percent of LADWP's projected sales in the 2025–2026 fiscal year (the Project's buildout year). In addition, during peak conditions, the Project would represent approximately 0.01 percent of the total LADWP peak load. The LADWP 2017 Power Strategic Long-Term Resource Plan identifies adequate resources (natural gas, coal) to support future generation capacity.[146] Furthermore, the LADWP was contacted to review the Project and has confirmed that electric service is available and will be provided to the Project, and the estimated power requirement is part of the total load growth forecast for the City and has been accounted for in the planned growth of the City's power system.[147]

Based on the above, LADWP's existing infrastructure, planned electricity capacity, and electricity supplies would be sufficient to support the Project's operational electricity demand. **As such, impacts related to the construction or relocation of electrical**

[145] *Email correspondence from Chuck Holloway, Manager of Environmental Planning and Assessment, Department of Water and Power, June 27, 2019. Refer to* ***Appendix K*** *of this Draft EIR.*

[146] *"The 2017 [Power Strategic Long-Term Resource Plan] outlines an aggressive strategy for LADWP to accomplish its goals, comply with regulatory mandates, and provide sufficient resources over the next 20 years given the information presently available." Source: LADWP, 2017 Power Strategic Long-Term Resource Plan, December 2016, page ES-25.*

[147] *Written correspondence from Chuck Holloway, Manager of Environmental Planning and Assessment, Department of Water and Power, July 20, 2017.*

facilities during operation of the Project would be less than significant and no mitigation measures would be required.

(ii) Natural Gas

(a) Construction

As discussed in **Section IV.N. Energy**, of this Draft EIR, construction activities, including construction of new buildings and hardscape, typically do not involve the consumption of natural gas as standard construction equipment is primarily powered by electricity or diesel fuel. If natural gas is used during construction, it would be in limited amounts and on a temporary basis and would specifically be used to replace or offset diesel-fuels equipment and, as such, would not result in substantial on-going demand. **Therefore, no impacts related to the construction or relocation of natural gas facilities would occur during construction of the Project and no mitigation measures would be required.**

(b) Operation

As presented in **Table IV.N-2** in **Section IV.N. Energy**, of this Draft EIR, operation of the Project would consume approximately 5,148,870 net cf of natural gas per year (approximately 14,106 cf per day), which represents approximately 0.0006 percent of the forecasted total consumption in SoCalGas's planning area for 2025 (the Project's buildout year). Furthermore, SoCalGas expects overall natural gas demand to decline through 2035, even accounting for population and economic growth, with efficiency improvements and the state's transition away from fossil fuel-generated electricity to increased renewable energy. The *2018 California Gas Report* projects that California natural gas demand is expected to decline at an annual rate of 0.5 percent per year from 2018 to 2035 in the SCG service area. The Project Site is located in a highly urban infill location that has been previously developed with an existing industrial building and has been served by existing natural gas facilities. In addition, as part of the normal building permit process, SoCalGas would confirm that the Project's natural gas demand can be served by the facilities in the area and the Project would be required to upgrade such facilities as determined by SoCalGas. Based on the Project's small fraction of total natural gas consumption for the region, ongoing SoCalGas long-range planning efforts to provide natural gas for this service region, and sufficient existing infrastructure, SoCalGas' existing and planned natural gas supplies and infrastructure would be sufficient to meet the Project's demand for natural gas. **As such, impacts related to the construction or relocation of natural gas facilities during operation of the Project would be less than significant and no mitigation measures would be required.**

(iii) Telecommunication Facilities

(a) Construction

Construction-related activities, including grading and excavation, could encroach on telecommunication facilities. However, before construction begins, the Project Applicant shall coordinate with applicable regulatory agencies, including the ITA, and telecommunication providers to implement orderly relocation of telecommunication facilities that need to be removed or relocated. This would involve disconnecting existing connections and establishing new connections to the proposed structure. Such improvements would be localized in nature and would utilize existing conduit and service lines. **Therefore, Project impacts related to the need for relocation or construction of new or expanded telecommunication facilities would be less than significant and no mitigation measures would be required.**

(b) Operation

It is not currently known specifically what telecommunications companies have facilities within the Project area, nor which company(ies) serve the existing Project Site uses. However, it is assumed that there are existing Telecommunications/Data/Cable TV conduit in the vicinity of the Project Site. The determination of which facilities would provide service for the Project would be determined by the Applicant at the time service contracts are prepared. When the Applicant submits the Project's electrical plans reflecting the estimated loads and recommended location for the Telecommunications/Data facilities to the respective telephone and cable TV companies, each company would determine the most cost-effective communications/data cable system to provide their service to the Site. The telephone company and the cable TV company would work with the Owner's Project team to design conduit and cable systems to bring the necessary Communications/Data facilities to the Project in a timely manner. **As such, impacts related to the construction of new or expansion of existing telecommunications facilities during operation of the Project would be less than significant and no mitigation measures would be required.**

(b) Increased Commercial Flexibility Option

Under the Flexibility Option, the commercial square footage provided would be increased to 45,873 square feet within the same building parameters and, in turn, there would be a reduction in the overall number of live/work units for a total of 159 units. Overall, the design, configuration, and operation of the Flexibility Option would be comparable to the Project.

(i) Electricity

(a) Construction

As with the Project, as discussed in **Section IV.N. Energy**, of this Draft EIR, construction activities at the Project Site would require limited and minor quantities of electricity for watering, lighting, power tools, and other support equipment and temporary power poles would be installed to provide electricity during Flexibility Option construction. As also discussed in **Section IV.N**, electricity demand during Flexibility Option construction would be approximately 10.5 percent[148] of the Flexibility Option's annual electricity consumption during operation, which, as detailed in **Section IV.N**, would not be substantial or require additional capacity. Accordingly, existing off-site infrastructure would not have to be expanded or newly developed to provide electrical service to the Project Site during construction or demolition associated with the Flexibility Option**.**

As with the Project, the Flexibility Option would require construction of an on-site transformation facility[149] and may require underground line extensions on public streets,[150] which are both typical requirements for all new developments.[151] Activities associated with the installation of the on-site transformation facility would be in accordance with the actions and procedures outlined in the Flexibility Option's Construction Staging and Traffic Management Plan (CSTMP) (see PDF TR-1 in **Section IV.K, Transportation**, of this Draft EIR). With regard to existing electrical distribution lines, the Flexibility Option Applicant would be required to coordinate electrical infrastructure connections with the LADWP and comply with site-specific requirements set forth by the LADWP, which would ensure that service disruptions and potential impacts associated with grading, construction, and development within LADWP easements are minimized.

Based on the above, as with the Project, construction of the Flexibility Option would not result in an increase in demand for electricity that exceeds available supply or distribution infrastructure capabilities that could require the construction of new or expansion of existing electrical facilities and would not adversely affect the existing electrical infrastructure serving the surrounding uses. **As such, impacts related to the construction or relocation of electrical facilities during construction of the**

[148] *The percentage is derived by taking the total amount of electricity usage during construction (216,357 kWh) and dividing that number by the annual amount of net electricity usage during operation (2,058,131 kWh) to arrive at 10.5 percent.*

[149] *Los Angeles Ordinance No. 180,429.*

[150] *Written correspondence from Chuck Holloway, Manager of Environmental Planning and Assessment, Department of Water and Power, July 20, 2017.*

[151] *Email correspondence from Chuck Holloway, Manager of Environmental Planning and Assessment, Department of Water and Power, June 27, 2019. Refer to* ***Appendix K*** *of this Draft EIR*

Flexibility Option would be less than significant and no mitigation measures would be required.

(b) Operation

As presented in **Table IV.N-4** in **Section IV.N. Energy**, of this Draft EIR, the Flexibility Option would consume approximately 2,058,131 kWh of electricity per year, which would represent approximately 0.01 percent of LADWP's projected sales in the 2025-2026 fiscal year (the Flexibility Option's buildout year). In addition, during peak conditions, the Flexibility Option would represent approximately 0.01 percent of the total LADWP peak load. As part of the normal building permit process, LADWP would review the Flexibility Option's estimated electricity consumption in order to ensure that the estimated power requirement would be part of the total load growth forecast for the City and accounted for in the planned growth of the power system. Accordingly, as with the Project, LADWP's existing infrastructure, planned electricity capacity, and electricity supplies would be sufficient to support the Flexibility Option's operational electricity demand. **As such, impacts related to the construction or relocation of electrical facilities during operation of the Flexibility Option would be less than significant and no mitigation measures would be required.**

(ii) Natural Gas

(a) Construction

As with the Project, construction of the Flexibility Option would not be anticipated to consume natural gas as standard construction equipment is primarily powered by electricity or diesel fuel. If natural gas is used during construction, it would be in limited amounts and on a temporary basis and would specifically be used to replace or offset diesel-fuels equipment and, as such, would not result in substantial on-going demand. Furthermore, there are no utility easements that run through the Project Site, which would require relocation of gas lines.[152] **Therefore, no impacts related to the construction or relocation of natural gas facilities would occur during construction of the Flexibility Option and no mitigation measures would be required.**

(b) Operation

As presented in **Table IV.N-4** in **Section IV.N. Energy**, of this Draft EIR, the Flexibility Option would consume approximately 5,093,055 cf of natural gas per year (approximately 13,954 cf per day), which would represent approximately 0.0006 percent of the forecasted total consumption in SoCalGas's planning area for 2025 (the Flexibility Option's buildout

[152] *Alta Survey Sheet for Vesting Tentative Tract No. 74550, KPFF, September 2016.* ***Refer to Appendix N.3.***

year). As with the Project, as part of the normal building permit process, SoCalGas would confirm that the Flexibility Option's natural gas demand can be served by the facilities in the area and the Flexibility Option would be required to upgrade such facilities as determined by SoCalGas. Based on the Flexibility Option's small fraction of total natural gas consumption for the region, ongoing SoCalGas long-range planning efforts to provide natural gas for this service region, and sufficient existing infrastructure, as with the Project, SoCalGas's existing infrastructure and anticipated natural gas supplies would be sufficient to support the Flexibility Option's operational natural gas demand. **As such, impacts related to the construction or relocation of natural gas facilities during operation of the Flexibility Option would be less than significant and no mitigation measures would be required**.

(iii) Telecommunication Facilities

(a) Construction

Similar to the Project, construction-related activities, including grading and excavation, could encroach on telecommunication facilities. However, before construction begins, the Applicant shall coordinate with applicable regulatory agencies, including the ITA, and telecommunication providers to implement orderly relocation of telecommunication facilities that need to be removed or relocated. This would involve disconnecting existing connections and establishing new connections to the proposed structure. Such improvements would be localized in nature and would utilize existing conduit and service lines. **Therefore, Flexibility Option impacts related to the need for relocation or construction of new or expanded telecommunication facilities would be less than significant and no mitigation measures would be required.**

(b) Operation

As with the Project, the determination of which facilities would provide service for the Flexibility Option would be determined by the Applicant at the time service contracts are prepared. The telephone company and the cable TV company would determine the most cost-effective communications/data cable system to provide their service to the Site based on the Flexibility Option's electrical plans and would work with the Owner's Project team to design conduit and cable systems to bring the necessary Communications/Data facilities to the Project in a timely manner. **As such, impacts related to the construction of new or expansion of existing telecommunications facilities during operation of the Flexibility Option would be less than significant and no mitigation measures would be required.**

(2) Mitigation Measures

Project-level impacts for the Project and the Flexibility Option, with regard to dry utilities, would be less than significant; no mitigation measures would be required.

(3) Level of Significance After Mitigation

Project-level impacts for the Project and the Flexibility Option, with regard to dry utilities, would be less than significant without mitigation.

4. Cumulative Impacts

Numerical differences exist regarding the impact analysis and impact significance determination presented below because of the differences in project parameters between the Project and Flexibility Option, therefore these analyses are presented separately.

a) Impact Analysis

(1) Project

(a) Electricity

Buildout of the Project, the 20 Related Projects, and additional growth forecasted to occur in the City would increase electricity consumption during Project construction and operation and, thus, cumulatively increase the need for infrastructure capacity, such as new or expanded energy facilities. As discussed previously in **Section IV.N. Energy**, of this Draft EIR, electricity infrastructure is typically expanded in response to increasing demand, and system expansion and improvements by LADWP are ongoing. LADWP forecasts that its maximum peak demand in the 2025–2026 fiscal year (the Project's buildout year) would be 23,537 GWh of electricity.[153] Based on the Project's estimated new electrical demand of 1,863,199 kWh per year, the Project would account for approximately 0.008 percent of LADWP's maximum peak demand for the Project's build-out year. As described in LADWP's 2017 SLTRP, LADWP would continue to expand delivery capacity as needed to meet demand increases within its service area at the lowest cost and risk consistent with LADWP's environmental priorities and reliability standards. LADWP has indicated that the 2017 SLTRP incorporates the estimated electricity requirement for the Project. The 2017 SLTRP accounts for future energy demand, advances in renewable energy resources and technology, energy efficiency,

[153] *LADWP defines its future electricity supplies in terms of sales that will be realized at the meter. LADWP, 2017 Power Strategic Long-Term Resource Plan, December 2017, Appendix A, Table A-1, p. A-6.*

conservation, and forecast changes in regulatory requirements.[154] Development projects within the LADWP service area would also be anticipated to incorporate site- specific infrastructure improvements, as necessary, including on-site transformation facilities.[155] On-site transformation facilities would be installed in a dedicated electrical room of buildings and for underground line extension (also includes overhead), construction workers would dig trenches to lay down conduit, connecting power line to existing lines. Overall, both things are typical requirements for all new developments and no significant impact would occur.[156] Each of the Related Projects would be reviewed by LADWP to identify necessary power facilities and service connections to meet the needs of their respective projects. Project applicants would be required to provide for the needs of their individual projects, thereby contributing to the electrical infrastructure in the Project area. Furthermore, cumulative impacts pertaining to the installation of the on-site transformation facilities have been addressed elsewhere in this Draft EIR (refer to S**ections I.V.A, Air Quality, IV.D, Greenhouse Gas Emissions**, and **IV.H, Noise**). **As such, the Project's impacts would be less than significant and its contribution to cumulative impacts with respect to electricity infrastructure would not be cumulatively considerable and, thus, cumulative impacts would be less than significant. No mitigation measures would be required.**

(b) Natural Gas

As discussed previously in **Section IV.N. Energy**, of this Draft EIR, natural gas infrastructure is typically expanded in response to increasing demand, and system expansion and improvements by SoCalGas occur as needed. The Project would consume approximately 5,148,870 cf per year, or approximately 14,106 cf per day (refer to **Table IV.N-2, Summary of Annual Energy Use During Project Operation**, in **Section IV.N. Energy**, of this Draft EIR). Based on the 2018 California Gas Report, the California Energy and Electric Utilities estimates natural gas consumption within SoCalGas' planning area will be approximately 2,422 million cf per day in 2025 (the Project's buildout year).[157] Accordingly, the Project would account for approximately 0.0006 percent of the daily 2025 forecasted consumption in SoCalGas' planning area. It is expected that SoCalGas would continue to expand delivery capacity if necessary to meet demand increases within its service area. Furthermore, like the Project, during construction and operation, Related Projects and other future development projects would be expected to incorporate energy conservation features, comply with applicable regulations including CALGreen and state energy standards under Title 24, and

[154] *Los Angeles Department of Water and Power, 2017 Power Strategic Long-Term Resource Plan, December 2016.*
[155] *Los Angeles Ordinance No. 180,429.*
[156] *Email correspondence from Chuck Holloway, Manager of Environmental Planning and Assessment, Department of Water and Power, June 27, 2019. Refer to **Appendix K** of this Draft EIR.*
[157] *California Gas and Electric Utilities, 2018 California Gas Report, p. 102-103.*

incorporate mitigation measures, as necessary. Development projects within its service area would also be anticipated to incorporate site-specific infrastructure improvements, as appropriate. **As such, the Project's cumulative impacts with respect to natural gas facilities would not be cumulatively considerable and, thus, would be less than significant. No mitigation measures would be required.**

(c) Telecommunication Facilities

Similar to the Project each of the Related Projects would be reviewed for environmental impacts. The concentration of business and population in the City of Los Angeles and rapid technological advances offer the opportunity to provide an integrated network serving as the regional hub for public and private users. However, before construction begins, Related Project shall coordinate with applicable regulatory agencies, including the ITA, and telecommunication providers to implement orderly relocation of telecommunication facilities that need to be removed or relocated. Each of the Related Projects would have the telecommunication facilities updated and constructed concurrently with other utilities within roadway rights-of-way to lessen or eliminate potential environmental effects. And similar to the Project, before construction begins, the Related Projects would coordinate with applicable regulatory agencies and telecommunication providers to implement orderly relocation of telecommunication facilities that need to be removed or relocated.

As with the Project, the determination of which facilities would provide service for the Related Projects would be determined by those Related Project's Applicants at the time service contracts are prepared. Necessary Communications/Data facilities that would be required to serve the cumulative demand for such services by the Related Projects would be evaluated, designed, and installed as needed to serve the existing and projected service needs of the area on an on-going basis. **As such, the Project's cumulative impacts with respect to telecommunication facilities would not be cumulatively considerable and, thus, would be less than significant. No mitigation measures would be required.**

(2) Increased Commercial Flexibility Option

(a) Electricity

As previously discussed, the 2017 SLTRP accounts for future energy demand, advances in renewable energy resources and technology, energy efficiency, conservation, and forecast changes in regulatory requirements. LADWP forecasts that its maximum peak demand in the 2025–2026 fiscal year (the Flexibility Option's buildout year) will be 23,537

GWh of electricity.[158] Based on the Flexibility Option's estimated new electrical demand of 2,058,131 kWh of electricity per year, the Project would account for approximately 0.01 percent of LADWP's maximum peak demand for the Flexibility Option's build-out year. Each of the Related Projects would be reviewed by LADWP to identify necessary power facilities and service connections to meet the needs of their respective projects. Project applicants would be required to provide for the needs of their individual projects, thereby contributing to the electrical infrastructure in the area. **As such, the Flexibility Option's cumulative impacts with respect to electricity infrastructure would not be cumulatively considerable and, thus, would be less than significant. No mitigation measures would be required.**

(b) Natural Gas

Natural gas infrastructure is typically expanded in response to increasing demand, and system expansion and improvements by SCG occur as needed. The Flexibility Option would consume approximately 5,093,055 cf of natural gas per year or approximately 13,954 cf per day, (refer to **Table IV.N-4, Summary of Annual Energy Use During Flexibility Option Operation**, in **Section IV.N. Energy**, of this Draft EIR). Based on the 2018 California Gas Report, the California Energy and Electric Utilities estimates natural gas consumption within SoCalGas' planning area will be approximately 2,422 million cf per day in 2025 (the Flexibility Option's buildout year).[159] Accordingly, the Flexibility Option would account for approximately 0.0006 percent of the daily 2025 forecasted consumption in SoCalGas' planning area. It is expected that SoCalGas would continue to expand delivery capacity if necessary to meet demand increases within its service area. Furthermore, like the Flexibility Option, during construction and operation, Related Projects and other future development projects would be expected to incorporate energy conservation features, comply with applicable regulations including CALGreen and state energy standards under Title 24, and incorporate mitigation measures, as necessary. Development projects within its service area would also be anticipated to incorporate site-specific infrastructure improvements, as appropriate. **As such, the Flexibility Option's cumulative impacts with respect to natural gas facilities would not be cumulatively considerable and, thus, would be less than significant. No mitigation measures would be required.**

(c) Telecommunication Facilities

Similar to the Project each of the Related Projects would be reviewed for environmental impacts. The concentration of business and population in the City of Los Angeles and rapid technological advances offer the opportunity to provide an integrated network

[158] *LADWP defines its future electricity supplies in terms of sales that will be realized at the meter. LADWP, 2017 Power Strategic Long-Term Resource Plan, December 2017, Appendix A, Table A-1, p. A-6.*
[159] *California Gas and Electric Utilities, 2018 California Gas Report, p. 102-103.*

serving as the regional hub for public and private users. However, before construction begins, Related Project shall coordinate with applicable regulatory agencies, including the ITA, and telecommunication providers to implement orderly relocation of telecommunication facilities that need to be removed or relocated. Each of the Related Projects would have the telecommunication facilities updated and constructed concurrently with other utilities within roadway rights-of-way to lessen or eliminate potential environmental effects. And similar to the Flexibility Option, before construction begins, the Related Projects would coordinate with applicable regulatory agencies and telecommunication providers to implement orderly relocation of telecommunication facilities that need to be removed or relocated.

As with the Flexibility Option, the determination of which facilities would provide service for the Related Projects would be determined by those Related Project's Applicants at the time service contracts are prepared. Necessary Communications/Data facilities that would be required to serve the cumulative demand for such services by the Related Projects would be evaluated, designed, and installed as needed to serve the existing and projected service needs of the area on an on-going basis. **As such, the Flexibility Option's cumulative impacts with respect to telecommunication facilities would not be cumulatively considerable and, thus, would be less than significant. No mitigation measures would be required.**

b) Mitigation Measures

Cumulative impacts related to electricity, natural gas, and telecommunication facilities for both the Project and Flexibility Option would be less than significant; no mitigation measures would be required.

c) Level of Significance After Mitigation

Cumulative impacts related to electricity, natural gas, and telecommunication facilities for both the Project and Flexibility Option were determined to be less than significant without mitigation.