3.18 UTILITIES AND SERVICE SYSTEMS

3.18.1 INTRODUCTION

This discussion provides an evaluation of K Line Northern Extension (KNE) as it relates to utility and service systems. It includes descriptions of the federal, state, and local regulatory setting, existing conditions, and the impacts from construction and operation of the proposed alignments and stations, design option, and the maintenance and storage facility (MSF), as well as mitigation measures where applicable. For more detailed information, refer to the KNE Utilities and Service Systems Technical Report (Appendix 3.18-A).

3.18.2 REGULATORY FRAMEWORK

3.18.2.1 FEDERAL

The following federal laws and regulations are relevant to construction and operation of the project:

- Federal Power Act of 1935
- Resource Conservation and Recovery Act (42 United States Code Section 6901 et seq.)
- Title 40 of the Code of Federal Regulations (CFR) Section 256.42
- The Communications Act of 1934 (CFR Title 47)
- Clean Water Act Sections 301, Section 303, Section 401, Section 402, Section 404
- Safe Drinking Water Act

3.18.2.2 STATE

The following state laws and regulations are relevant to construction and operation of the project:

- Assembly Bill 341 – CalRecycle
- Assembly Bill 939 – Integrated Waste Management Act
- Senate Bill 1374 – Construction and Demolition Waste Materials Diversion Requirements
- Section 5.408.1.1 through 5.408.1.3 of the 2022 California Green Building Standards Code (CALGreen)
- Construction General National Pollutant Discharge Elimination System (NPDES) Permit Order No. 2009-0009-DWQ
- Porter-Cologne Water Quality Act
- Industrial General NPDES Permit Order 2014-0057-DWQ
- Metropolitan Water District (MWD) Act of 1928
- California Water Code Sections 10910 through 10915, Sections 10610 through 10656, and Title 22

- State Water Resources Control Board, Division of Drinking Water, Source Water Assessment Program
- California Public Utilities Commission General Orders
- California Code of Regulations Public – Utilities and Energy (Title 20), Utilities Code – Division 1, California Plumbing Code (Title 24 Part 5)
- California Government Code Section 4216 – Protection of Underground Infrastructure – Underground Service Alert

3.18.2.3 REGIONAL

No regional regulations are applicable to the project regarding utilities and service systems.

3.18.2.4 LOCAL

The following local policies and regulations are applicable to utilities and service systems:

- California Urban Water Management Planning Act
- Los Angeles Regional Water Quality Control Board (LARWQCB) Order No. R4-2012-0175 – Los Angeles County Municipal Separate Storm Sewer System (MS4) Permit
- LARWQCB Order No. R4-2013-0095 (NPDES No. CAG994004) - Waste Discharge Requirements for Discharges of Groundwater from Construction and Project Dewatering to Surface Waters in Coastal Watersheds of Los Angeles and Ventura Counties
- LARWQCB Order No. 93-010 - Waste Discharge Requirements for Specified Discharges to Groundwater in the Santa Clara River and Los Angeles River Basins
- LARWQCB Order No. 91-93 - Waste Discharge Requirements for Discharge of Non-Hazardous Contaminated Soils and Other Wastes in Los Angeles River and Santa Clara River Basins
- Watershed Management Programs (WMPs)
- Los Angeles Region Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties
- Enhanced Watershed Management Programs
- Metro's 2020 Moving Beyond Sustainability Strategic Plan (Metro 2020)
- Metro's Water Use and Conservation Policy (Metro 2009)
- Metro's Water Action Plan (Metro 2010)
- Metro Rail Design Criteria (MRDC)

Los Angeles County and the Cities of Los Angeles and West Hollywood have codes, ordinances, and general plans that regulate permitting, construction, and operational activities as they pertain to utilities and service systems. These ordinances and policies pertain to water supply and conservation, wastewater infrastructure, stormwater management, recycling, solid waste, and construction and demolition waste recycling requirements.

3.18.3 METHODOLOGY

3.18.3.1 CEQA METHODOLOGY

The purpose of this analysis is to evaluate the project against California Environmental Quality Act (CEQA) thresholds of significance as the basis for determining the level of impacts related to utilities and service systems.

3.18.3.2 SIGNIFICANCE THRESHOLDS

In accordance with Appendix G of the 2022 CEQA Guidelines, the project would have a significant impact related to utilities and service systems if it would:

- Impact UTL-1: Require or result in the relocation or construction of new or expanded water, wastewater treatment, stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects.
- Impact UTL-2: Result in insufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years.
- Impact UTL-3: Result in a determination by the wastewater treatment provider, which serves or may serve the project, that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments.
- Impact UTL-4: Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals.
- Impact UTL-5: Result in noncompliance with federal, state, and local management and reduction statutes and regulations related to solid waste.

3.18.4 RESOURCE STUDY AREA

The utilities and service systems resource study area (RSA) is defined as the subsurface and surface area within a 0.5-mile radius around the alignments and stations, the design option, and the MSF, where utilities exist. In assessing demand, utilities are also evaluated within their respective service areas, which vary among utility type and service provider and are regional. Service areas are described below as they relate to the RSAs for the alignments and stations, the design option, and the MSF.

3.18.5 EXISTING SETTING

This existing setting discussion summarizes current conditions related to utilities and service systems within and near the KNE RSA.

3.18.5.1 REGIONAL SETTING

3.18.5.1.1 WATER SUPPLY

The Metropolitan Water District of Southern California (MWD) is the principal distributor of imported water in Southern California, providing water to 26 public water agencies across this region, including agencies located in the RSA (MWD 2021). Member agencies purchase all or a portion of their water from MWD. Los Angeles Department of Water and Power (LADWP) and the City of Beverly Hills are member agencies that receive supplies from MWD and subsequently supply that water to other local supply agencies in the RSA. Local water supply is described in further detail for each urban water supplier.

3.18.5.1.1.1 METROPOLITAN WATER DISTRICT

MWD's service area covers the Southern California coastal plain. MWD currently serves the RSAs related to the alignments. It extends about 200 miles along the Pacific Ocean from the City of Oxnard on the north to the international border with Mexico on the south, and it reaches as far as 70 miles inland from the coast. The total area served is approximately 5,200 square miles, and it includes portions of Los Angeles, Orange, Riverside, San Bernardino, San Diego, and Ventura Counties. Although only 14 percent of the land area of the six Southern California counties is within MWD's service area, approximately 86 percent of the populations of those counties reside within MWD's boundaries.

MWD receives water from the Colorado River through the Colorado River Aqueduct and from the State Water Project through the California Aqueduct. Table 3.18-1 provides existing and project MWD water demand.

TABLE 3.18-1. MWD REGIONAL WATER DEMAND AND POPULATION

	2020 (EXISTING)	2025 (PROJECTED)	2030 (PROJECTED)	2035 (PROJECTED)	2040 (PROJECTED)	2045 (PROJECTED)
Total Population and Population Growth (MWD Service Area)	19,035,000	20,089,000	20,634,000	21,145,000	21,610,000	22,026,000
Total Water Use (Single Dry-Year) (Acre-Feet)	5,219,000	4,929,000	5,037,000	5,160,000	5,265,000	5,378,000
Total Water Use (Drought Lasting Five Consecutive Water Years) (Acre-Feet)	5,219,000	4,877,000	5,064,000	5,182,000	5,299,000	5,410,000
Total Water Use (Normal Water Year) (Acre-Feet)	5,219,000	4,925,000	5,032,000	5,156,000	5,261,000	5,374,000

Source: MWD 2021
MWD = Metropolitan Water District of Southern California

3.18.5.1.1.2 LOS ANGELES DEPARTMENT OF WATER AND POWER

The LADWP is the nation's second largest public water utility, providing services to over 687,000 customers. LADWP's system has 323,820 acre-feet (AF) of storage capacity and operates and maintains 7,340 miles of water pipeline. LADWP is the water supplier for the City of Los Angeles, and it currently serves the RSAs for all alignments and stations, the design option, and the MSF.

Primary sources of water for the LADWP service area are the Los Angeles Aqueduct, local groundwater, State Water Project (supplied by MWD), and the Colorado River Aqueduct (supplied by MWD). Many of LADWP's traditional water supply sources are becoming increasingly constrained due to hydrologic variability, environmental regulations, and groundwater basin contamination. To lessen these constraints on water supply resources, LADWP is investing in sustainable sources such as conservation, water use efficiency, water recycling, stormwater capture, and local groundwater development and remediation, while protecting its imported water supply. Over the last 20 years, demand has undergone a 29 percent reduction to a near record low of 487,591 AF between 2019 and 2020; the average annual water supply between the years 2016 and 2020 was 497,386 AF (Table 3.18-2).

TABLE 3.18-2. LADWP WATER SERVICE AREA DEMANDS AND POPULATION

	2020 (EXISTING)	2025 (PROJECTED)	2030 (PROJECTED)	2035 (PROJECTED)	2040 (PROJECTED)	2045 (PROJECTED)
Total Population (LADWP Service Area)	4,041,284	4,243,478	4,374,240	4,520,870	4,670,693	4,806,396
Total Water Use (Acre-Feet)	487,591	509,501	526,658	536,148	554,486	565,751

Source: LADWP 2021
LADWP = Los Angeles Department of Water and Power

3.18.5.1.1.3 CITY OF BEVERLY HILLS

The City of Beverly Hills currently serves the western side of the City of West Hollywood, and the RSA for the proposed San Vicente/Santa Monica Station that would be associated with the KNE San Vicente–Fairfax Alignment. The service area is north of Beverly Boulevard, south of Sunset Boulevard, west of Huntley Drive, and east of North Doheny Drive. LADWP serves the portions of the City of West Hollywood generally east of Huntley Drive.

The City of Beverly Hills's water service area is approximately 6.35 square miles and consists of the City of Beverly Hills and a portion of the City of West Hollywood, which is about 10 percent of the city's total water service area. Based on data from the Southern California Association of Governments (SCAG) and the California Department of Finance, the City of Beverly Hills's water service area population was 43,371 in 2020 (Table 3.18-3) (City of Beverly Hills 2021). The City of Beverly Hills obtains its water supply from two sources: imported surface water purchased from MWD and local groundwater extracted from the local Hollywood Basin.

TABLE 3.18-3. CITY OF BEVERLY HILLS WATER SERVICE AREA DEMANDS AND POPULATION

	2020 (EXISTING)	2025 (PROJECTED)	2030 (PROJECTED)	2035 (PROJECTED)	2040 (PROJECTED)	2045 (PROJECTED)
Total Population (City of Beverly Hills Water Service Area)	43,371	44,176	44,618	45,214	45,712	46,279
Total Water Use (Acre-Feet)	9,565	10,053	10,523	10,993	11,463	11,933

Source: City Beverly Hills 2021

3.18.5.1.1.4 CITY OF INGLEWOOD

City of Inglewood infrastructure exists within the eastern side of the KNE MSF RSA but does not provide water services to the site.

3.18.5.1.2 SANITARY SEWER

3.18.5.1.2.1 CITY OF LOS ANGELES BUREAU OF SANITATION

The three collection systems owned and operated by the City of Los Angeles convey wastewater via approximately 6,439 miles of gravity mains, 33 miles of force mains, and 46 pumping plants. Currently, an average wastewater flow rate of approximately 272 million gallons per day (MGD) is generated in the system. The three collection systems also convey the flows of 29 satellite sanitary districts to plants for treatment. The City of Los Angeles currently serves the RSAs related to all alignments and the design option.

KNE would be served by Hyperion Treatment Plant, also detailed in the City of West Hollywood discussion below. The Hyperion Collection System has approximately 6,043 miles of gravity mains, 12 miles of force mains, and an average wastewater flow rate of 260 MGD. The Hyperion Treatment Plant has a dry weather average design treatment capacity of 450 MGD and a wet weather peak hydraulic capacity of approximately 850 MGD.

3.18.5.1.2.2 LOS ANGELES COUNTY SANITATION DISTRICTS

The Sanitation Districts of Los Angeles County (LACSD), which comprise 24 independent districts, provide wastewater treatment services to approximately 5.6 million residents in 78 cities and unincorporated areas in Los Angeles County. The City of West Hollywood is served by District 4.

3.18.5.1.2.3 CITY OF WEST HOLLYWOOD

The City of West Hollywood owns a sanitary sewer system comprised of approximately 39.37 miles of gravity flow sewer collection lines (City of West Hollywood 2019). The collection system is comprised of clay, gravity flow, eight-inch to 18-inch diameter collection lines, and approximately 885 precast concrete and brick manholes. The City of West Hollywood's sanitary sewer and stormwater conveyance systems are separate. The City of West Hollywood is a part of LACSD District 4. Its collection system conveys wastewater into the Hyperion Collection System and Hyperion Treatment Plant that is owned and operated by the City

of Los Angeles. Capacity and average daily flow of the Hyperion Collection System are described above in the City of Los Angeles District of Sanitation discussion. The City of West Hollywood sewer collection lines currently serve the KNE San Vicente–Fairfax and Fairfax Alignments RSAs.

3.18.5.1.2.4 CITY OF INGLEWOOD

Although City of Inglewood infrastructure exists within the eastern side of the KNE MSF RSA, it would not provide sanitary sewer services to the site. The City of Inglewood has a collection sewer system comprised of 145 miles of gravity sewer pipes ranging from four inches to 15 inches in diameter (City of Inglewood 2015).

3.18.5.1.3 SOLID WASTE

3.18.5.1.3.1 CITY OF LOS ANGELES

Solid waste generated in the City of Los Angeles is hauled to materials recovery/transfer stations in the Los Angeles area and is managed by City of Los Angeles Bureau of Sanitation (LASAN). Those transfer stations have numerous landfills where the solid waste produced is deposited. Once a landfill reaches its maximum accepted tonnage for the day, haulers are sent to another landfill to deposit solid waste. Most of the solid waste generated in the City of Los Angeles is disposed of at the Calabasas and Chiquita Canyon Landfills. LASAN currently serves the RSAs related to all KNE alignments and stations, the design option, and the MSF. Table 3.18-4 lists active and regulatory permitted solid waste facilities that serve the City of Los Angeles, with their permitted capacity and anticipated closure dates.

TABLE 3.18-4. CITY OF LOS ANGELES SOLID WASTE DISPOSAL LANDFILL CAPACITY

LANDFILL SITE NAME	LOCATION	MAX. PERMIT CAPACITY (Cubic Yards)	REMAINING CAPACITY (Cubic Yards)	MAX. THROUGHPUT (Tons/Day)	REMAINING CAPACITY DATE	CLOSURE
Antelope Valley Public	Palmdale	30,200,000	17,911,225	5,548	10/31/2017	4/1/2044
Avenal Regional Landfill	Avenal	36,300,000	28,900,000	6,000	8/31/2020	3/31/2056
Azusa Land Reclamation Co. Landfill	Azusa	216,000	N/A	8,000	N/A	7/11/2018
Bakersfield Metropolitan (Bena) Secured Landfill Facility	Bakersfield	53,000,000	32,808,260	4,500	7/1/2013	4/1/2046
Burbank Landfill Site	Burbank	5,933,365	5,174,362	240	1/1/2010	1/1/2053
El Sobrante Landfill	Corona	209,910,000	143,977,170	16,054	4/1/018	1/1/2051
Calabasas Landfill	Agoura	69,300,000	14,500,000	3,500	12/31/2014	1/1/2029
Chiquita Canyon Sanitary	Castaic	110,366,00	60,408,000	12,000	8/24/2018	1/1/2047

LANDFILL SITE NAME	LOCATION	MAX. PERMIT CAPACITY (Cubic Yards)	REMAINING CAPACITY (Cubic Yards)	MAX. THROUGHPUT (Tons/Day)	REMAINING CAPACITY DATE	CLOSURE
CWMI, KHF (MSW Landfill B-19)	Kettleman City	4,200,000	303,125	2,000	1/1/2013	12/31/2010
Kettleman Hills – B18 Nonhaz Codisposal	Kettleman City	10,700,000	15,600,000	9,000	2/25/2020	N/A
Olinda Alpha Sanitary Landfill	Santa Ana	148,800,000	17,500,000	8,000	10/1/2020	12/31/2036
Prima Deshecha Landfill	San Juan Capistrano	172,100,000	134,300,000	4,000	11/1/2018	12/31/2102
Sunshine Canyon	Sylmar	140,900,000	77,900,000	12,100	5/31/2018	10/31/2037
Scholl Canyon	Glendale	58,900,000	9,900,000	3,400	4/7/2011	4/1/2030
Simi Valley Landfill & Recycling Center	Simi Valley	119,600,000	82,954,873	9,250	1/1/2019	3/31/2063
Toland Road Landfill	Santa Paula	30,000,000	16,068,864	2,864	12/3/2018	4/30/2033
Total		**1,059,859,365**	**640,294,654**	**100,908**		

Source: CalRecycle 2022
N/A = not applicable

3.18.5.1.3.2 LOS ANGELES COUNTY

LACSD serves the solid waste management needs of a large portion of Los Angeles County (including the City of West Hollywood), with several solid waste landfills, recycling centers, materials recovery/transfer facilities, and waste to energy facilities. Los Angeles County Department of Public Works (LACDPW) annually monitors landfill capacity and disposal rates to ensure that there is sufficient 15-year disposal capacity for the 88 cities within the county and unincorporated communities (LACDPW 2020). LACSD currently serves the RSAs for the KNE San Vicente–Fairfax and Fairfax Alignments.

The Los Angeles County Public Health Department manages enforcement and permitting for facilities that receive and dispose of solid waste. Table 3.18-5 lists the largest active and regulatory permitted solid waste facilities that serve Los Angeles County with their permitted capacity and anticipated closure dates.

Los Angeles County achieved an estimated landfill diversion rate of 60 percent in 2012; 60 percent of solid waste generated in the county was reused, recycled, or diverted from landfills and transformation facilities (LACDPW 2019).

TABLE 3.18-5. LOS ANGELES COUNTY SOLID WASTE DISPOSAL LANDFILL CAPACITY

LANDFILL SITE NAME	LOCATION	MAX. PERMIT CAPACITY (Cubic Yards)	REMAINING CAPACITY (Cubic Yards)	MAX. THROUGHPUT (Tons/Day)	REMAINING CAPACITY DATE	CLOSURE
Antelope Valley Public	Palmdale	30,200,000	17,911,225	5,548	10/31/2017	4/1/2044
Burbank Landfill Site	Burbank	5,933,365	5,174,362	240	1/1/2010	1/1/2053
Calabasas Landfill	Agoura	69,300,000	14,500,000	3,500	12/31/2014	1/1/2029
Chiquita Canyon Sanitary	Castaic	110,366,00	60,408,000	12,000	8/24/2018	1/1/2047
Durbin Inert Debris Engineered Fill Site	Irwindale	1,248,000	N/A	4,000	N/A	12/31/2034
Hanson Aggregates	Irwindale	1,000,000	N/A	4,000	N/A	N/A
Lancaster Landfill and Recycling Center	Lancaster	27,700,000	14,514,648	5,100	8/25/2012	3/1/2044
Peck Road Gravel Pit	Monrovia	3,500,000	3,500,000	4,000	6/1/2009	N/A
Reliance Landfill	Irwindale	2,187,000	N/A	6,000	N/A	1/1/2025
Savage Canyon	Whittier	19,337,450	9,510,833	3,350	12/31/2011	12/31/2055
Scholl Canyon	Glendale	58,900,000	9,900,000	3,400	4/7/2011	4/1/2030
Sunshine Canyon	Sylmar	140,900,000	77,900,000	12,100	5/31/2018	10/31/2037
United Rock Products Pit #2	Irwindale	1,200,000	N/A	3,288	N/A	12/31/2061
Total		**361,405,815**	**213,319,068**	**66,526**		

Source: CalRecycle 2022
N/A = not applicable

3.18.5.1.4 STORMWATER FACILITIES

Urban runoff in the alignment, design option, and MSF RSAs is captured by gutters, catch basins, and culverts and conveyed into underground storm drain systems. The collected stormwater flows through a network of pipes and open channels and is then typically released directly into the Pacific Ocean. Los Angeles County Flood Control District (LACFCD) stormwater infrastructure, including drains, channels, catch basins, and debris basins, is present throughout the KNE alignment and station RSAs and the MSF RSAs. Additionally, within city boundaries, local storm drain facilities are owned and operated by each city's public works departments. The LACFCD serves all RSAs for the KNE alignments and stations, the design option, and the MSF.

3.18.5.1.5 NATURAL GAS

The Southern California Gas Company (SoCalGas) provides natural gas service to the KNE RSA. It also provides service to customers in the Cities of Los Angeles, West Hollywood, and Inglewood. Like other private utility suppliers, SoCalGas is regulated by the California Public Utilities Commission. Natural gas from SoCalGas is transported through gas mains located throughout urbanized areas that are maintained by the company. Natural gas comes from the ground and is considered a "fossil fuel" similar to coal and oil. As the Cities of Los Angeles, West Hollywood, and Inglewood experience urban growth, demand for natural gas will increase. New facilities to support this growth would be provided by SoCalGas in accordance with demand.

3.18.5.1.6 TELECOMMUNICATIONS

Telecommunication services include fiber optics, phone, and television cable. Transmission of internet service is available through various broadband technologies such as fiber optic, cable, or fixed wireless. Fiber optic utility owners within the RSAs include AT&T, Spectrum, Airtouch Cellular, Zayo Communications, CenturyLink, and Verizon Business. Telephone service providers include Verizon and AT&T. The RSAs are served by a variety of internet service providers and internet transmission infrastructure and have extensive mobile phone coverage.

3.18.5.1.7 ENERGY

The California Energy Commission's (CEC) 2021 Integrated Energy Policy Report identifies that the state's electricity sector is adapting in response to climate policy and market changes. This includes decarbonizing the state's gas system as a fuel source for electric generation to meet air quality, climate, and other environmental goals. In 2021, total system generation for California was 277,764 gigawatt-hours (GWh), an increase of two percent, or 5,188 GWh, from 2020 (CEC 2021); California experienced above average temperatures and experienced the fourth hottest year since 1895 as drought conditions continued in the state. As a result, annual in-state hydroelectric generation fell by 32 percent from 2020 levels to 14,566 GWh (CEC 2021).

3.18.5.1.7.1 LOS ANGELES DEPARTMENT OF WATER AND POWER

LADWP provides power to an area covering 465 square miles that includes over 4 million residents and 1.4 million power customers. LADWP serves the City of Los Angeles. As of 2021, energy sources consisted of 26 percent natural gas, 35 percent renewable sources, 19 percent coal, 14 percent nuclear, and seven percent hydroelectric resources (LADWP 2021). Total daily generation capacity is over 7,880 megawatts (LADWP 2016). According to CEC data, LADWP customers consumed a total of approximately 20,891 million kilowatt hours (kWh) of electricity in 2021 (CEC 2021).

3.18.5.1.7.2 SOUTHERN CALIFORNIA EDISON

Southern California Edison (SCE) currently serves the City of West Hollywood. SCE, a subsidiary of Edison International, provides electricity to approximately 15 million people in California and is one of the largest electric utilities in the United States (SCE 2019). SCE provides electricity to approximately 180 cities in 11

counties across Central and Southern California. The total electricity usage in the SCE planning area in 2021 was 81,129 million kWh (CEC 2021). As outlined in its 2021 Sustainability Report, SCE aims to deliver 100 percent carbon-free power to retail-sales customers by 2045 (SCE 2021). Sources for carbon-free energy include solar, geothermal, wind, hydro, biomass and biowaste, and nuclear energy.

3.18.6 PROJECT MEASURES

Project measures are design features, best management practices, or other commitments that Metro would implement as part of all proposed alignments, the design option, and the MSF to reduce or avoid environmental effects associated with project construction and operation. Project measures are not the same as mitigation measures, which are used to reduce an environmental impact's significance level. Where applicable, project measures are also discussed in Section 3.18.7 as part of the evaluation of environmental impacts.

There are no project measures specific to utilities and service systems that have been identified.

3.18.7 IMPACT EVALUATION AND MITIGATION MEASURES

This analysis presents the construction and operational impacts for utilities and service systems, as well as any applicable mitigation measures, associated with KNE. A summary of the impact conclusions and applicable mitigation measures is found in Table 3.18-6 in Section 3.18.7.7.

3.18.7.1 IMPACT UTL-1: UTILITY RELOCATION OR CONSTRUCTION OF NEW OR EXPANDED FACILITIES

Impact UTL-1: Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment, stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

3.18.7.1.1 KNE SAN VICENTE–FAIRFAX ALIGNMENT

3.18.7.1.1.1 CONSTRUCTION IMPACTS

Less than Significant Impact. Construction of the KNE San Vicente–Fairfax Alignment would either relocate or protect-in-place utilities that would conflict with the cut-and-cover excavations, permanent structures, or the final roadway configuration. Stormwater drainage, sanitary sewers, water lines, electric power lines, natural gas pipelines, oil pipelines, and telecommunications lines would require relocation. Electric power and telecommunication lines within the RSA are sometimes underground in duct banks and sometimes overhead on poles.

When construction of the alignment would conflict with utilities, protecting-in-place is the method of choice because it is less disruptive to streets. However, if a utility mainline conflicts with the temporary engineering, permanent structure, or final roadway configuration, relocation of the utility line would be required. Utility relocations would be coordinated with the utility owner. Relocation of underground utilities would generally be conducted in the following sequence: excavation to the depth of the proposed

utility line, laying of the utility line, tie-in, and then backfilling of the utility line. Utility relocations often entail temporary service interruptions during tie-in, which are typically planned for periods of minimum use (such as nights or weekends) when outages have the least effect on users. After the tie-in with the existing line is complete, the utility line that was in conflict would be removed.

Utilities within the proposed cut-and-cover station excavations, such as high-pressure water mains and gas lines, would be relocated around the construction area or would be lowered and supported in place by hanging from deck beams during construction. The contractor, in coordination with the utility owners, would determine whether to relocate or hang utility lines that cross the cut-and-cover excavation unless it was determined that the utility would be relocated as part of an Advanced Utility Relocation contract related to KNE.

Utility design criteria and operations would conform to applicable sections of the latest federal, state, and local codes and regulations, including ordinances, general regulations, and safety orders, and as required by law. Utility relocations would be designed and constructed in accordance with all applicable provisions set forth by uniform codes, city ordinances, public works standards and any agreement established between Metro and the utility agency.

In addition to utility relocations, new utility service feeds would be installed to accommodate construction needs. These include, but are not limited to, electrical service feeds, telecommunication and fiber service drops, sewer connections for temporary offices located at construction staging sites, and water service feeds for construction equipment, including the tunnel boring machine (TBM). However, impacts of these new utility service feeds would be temporary and would not result in a substantial change in usage of the service providers in the RSA. Most of the light rail transit (LRT) guideway tunnel would be constructed using a TBM that would require electricity. The electricity used to power the TBM would be sourced through a local substation and is not expected to exceed the capacity of the substation. Further discussion with LADWP following the advancement of project design would confirm that substation capacity is adequate for TBM demand.

Watering of construction staging sites would be implemented to reduce fugitive dust. Tunneling would require water for TBM mining (tunneling) and for jet grouting. Tunneling would require the use of slurry, or an engineered mixture of bentonite (a clay-like mineral), and water. The contractor would inject slurry into the front chamber of the TBM to balance soil and groundwater pressures and to carry the excavated material back to the surface. Similarly, the support-of-excavation for the underground stations would require jet grouting, which is typically used to create a groundwater barrier wall. Jet grouting is an engineered technique that injects water, air, and cement-based grout with high-pressure jets of water or grout to remove and loosen soil and replace the removed soil with cement-based grout. While alignment construction would require water, water demand of this magnitude would be temporary and the amount of water consumed would be much less than the projected future capacity shown in Table 3.18-1, Table 3.18-2, and Table 3.18-3 could accommodate. Construction of the project would not use natural gas.

As described above, the alignment would not have significant environmental effects related to relocation or construction of new or expanded water, sewer treatment, stormwater drainage, electric power, natural gas, or telecommunications facilities. Therefore, the KNE San Vicente–Fairfax Alignment would have a less than significant impact during construction.

3.18.7.1.1.2 OPERATIONAL IMPACTS

The subsections below describe potential operational impacts related to utility relocation or construction of new or expanded facilities.

WATER SUPPLY FACILITIES

Less than Significant Impact. Operation of the KNE San Vicente–Fairfax Alignment would not substantially increase water usage within the RSA. Water would be needed for landscaping, irrigation, and to supply fire sprinkler systems, but the amount required for these operational activities would be much less than the projected future capacity (as shown in Table 3.18-1, Table 3.18-2, and Table 3.18-3) could accommodate and would not have a significant effect on water supply within the RSA. Existing water mains throughout the RSA would provide the infrastructure necessary to support project-related water services. Therefore, the KNE San Vicente–Fairfax Alignment would have a less than significant impact during operation.

WASTEWATER FACILITIES

Less than Significant Impact. Operation of the KNE San Vicente–Fairfax Alignment would introduce minimal increases in wastewater treatment needs. The alignment would be served by LADWP for all stations, except the San Vicente/Santa Monica Station, which would be served by the City of Beverly Hills water supply service area. The alignment would connect to existing wastewater infrastructure for drainage of sump pumps during events when water accumulates in underground stations and the LRT guideway, as needed. Station operation and maintenance would also require connection to existing wastewater infrastructure to support station staff and cleaning. Such activities would minimally alter wastewater mainline flows since they would occur in limited quantities and/or intermittent intervals during events such as maintenance and rainfall. While the alignment would require the construction of new service feeds, it would not require the expansion of any existing wastewater facilities. Therefore, the KNE San Vicente–Fairfax Alignment would have a less than significant impact during operation.

STORMWATER FACILITIES

Less than Significant Impact. Roadway and drainage improvements for the KNE San Vicente–Fairfax Alignment would occur in the areas surrounding the proposed stations. These areas are densely urbanized where existing stormwater infrastructure serves surrounding land uses and roadways. Roadway and drainage improvements for the alignment would introduce minimal to no increases in impervious surfaces and would therefore minimally increase stormwater flow. The alignment would require connection to stormwater facilities to protect project-related equipment during operation by removing any excess water accumulation at underground stations and the LRT guideway. Such activities would minimally alter stormwater mainline flows since they would occur in intermittent intervals during events such as rainfall or initiation of the fire sprinkler systems, when and if needed. Operation of the alignment would comply with stormwater-related federal, local, and state requirements. Existing storm drain facilities have adequate capacity to accommodate stormwater flows associated with the project. Therefore, the KNE San Vicente–Fairfax Alignment would have a less than significant impact during operation.

ELECTRIC POWER

Less than Significant Impact. Operation of the KNE San Vicente–Fairfax Alignment would require electricity to power light rail vehicles (LRVs), lighting, and equipment (such as elevators, escalators, and switches) throughout the LRT guideway and underground stations. Operation of the alignment would require 4,786,003 kWh of annual net electricity use to power the LRT (refer to Section 3.7, Energy, for additional details related to electricity consumption). LADWP delivered more than 20,891 million kWh of electricity to its service area in 2021 and would reasonably be able to accommodate this 0.023 percent increase in electricity use required by the alignment (CEC 2021). SCE delivered 81,128.9 million kWh in its service area and would reasonably be able to accommodate this 0.0059 percent increase in electricity use required by the alignment (CEC 2021). Therefore, the KNE San Vicente–Fairfax Alignment would have a less than significant impact during operation.

NATURAL GAS

No Impact. There would be no demand for natural gas with the operation of the KNE San Vicente–Fairfax Alignment. Therefore, the alignment would not require the expansion of any existing facilities or construction of any new facilities, and it would have no impact during operation.

TELECOMMUNICATION

Less than Significant Impact. Telecommunication connections for a distributed antenna system would be installed at stations and in certain locations along the LRT guideway. A distributed antenna system is used to allow wireless signal coverage for cellular service and Wi-Fi in otherwise unserviceable areas, such as the underground stations and tunnel; it places several smaller, less-powerful antennas in different locations instead of one large, powerful antenna. The alignment would install 50-foot-tall antenna towers in the vicinity of station portals. Such telecommunication connections would require tie-in to existing telecommunication infrastructure. However, since the alignment is located in a densely urbanized setting where overhead and underground telecommunication infrastructure exists, such expansion to accommodate the antennas, additional cables, and utility cabinets would not cause significant environmental effects.

The project would also require an additional communication transmission system to operate train signals and security cameras. The communication transmission system would be a new system installed within the tunnel and underground stations that would be owned and maintained by Metro. The communication transmission system would not require coordination with third-party utility owners nor cause significant environmental effects. Therefore, the KNE San Vicente–Fairfax Alignment would have a less than significant impact during operation.

UTILITY RELOCATION AND CONSTRUCTION OPERATIONAL IMPACT CONCLUSION

Less than Significant Impact. Based on the impact evaluation described in the subsections above, the KNE San Vicente–Fairfax Alignment would have a less than significant impact overall related to utility relocation and construction of new or expanded facilities during operation.

3.18.7.1.2 KNE FAIRFAX ALIGNMENT

3.18.7.1.2.1 CONSTRUCTION IMPACTS

Less than Significant Impact. Construction of the KNE Fairfax Alignment would either relocate or protect-in-place utilities that would conflict with the cut-and-cover excavations, permanent structures, or the final roadway configuration. Stormwater drainage, sanitary sewers, water lines, electric power lines, natural gas pipelines, oil pipelines, and telecommunications lines would require relocation. Electric power and telecommunication lines within the RSA are sometimes underground in duct banks and sometimes overhead on poles.

When construction of the alignment would conflict with utilities, protecting-in-place is the method of choice because it is less disruptive to streets. However, if a utility mainline conflicts with the temporary engineering, permanent structure, or final roadway configuration, relocation of the utility line would be required. Utility relocations would be coordinated with the utility owner. Relocation of underground utilities would generally be conducted in the following sequence: excavation to the depth of the proposed utility line, laying of the utility line, tie-in, and then backfilling of the utility line. Utility relocations often entail temporary service interruptions during tie-in, which are typically planned for periods of minimum use (such as nights or weekends) when outages have the least effect on users. After the tie-in with the existing line is complete, the utility line that was in conflict would be removed.

Utilities within the proposed cut-and-cover station excavations, such as high-pressure water mains and gas lines, would be relocated around the construction area or would be lowered and supported in place by hanging from deck beams during construction. The contractor, in coordination with the utility owners, would determine whether to relocate or hang utility lines that cross the cut-and-cover excavation unless it was determined that the utility would be relocated as part of an Advanced Utility Relocation contract related to KNE.

Utility design criteria and operations would conform to applicable sections of the latest federal, state, and local codes and regulations, including ordinances, general regulations, and safety orders, and as required by law. Utility relocations would be designed and constructed in accordance with all applicable provisions set forth by uniform codes, city ordinances, public works standards, and any agreement established between Metro and the utility agency.

In addition to utility relocations, new utility service feeds would be installed to accommodate construction needs. These include, but are not limited to, electrical service feeds, telecommunication and fiber service drops, sewer connections for temporary offices located at construction staging sites, and water service feeds for construction equipment, including the TBM. However, impacts of these new utility service feeds would be temporary and would not result in a substantial change in usage of the service providers in the RSA. Most of the LRT guideway tunnel would be constructed using a TBM that would require electricity. The electricity used to power the TBM would be sourced through a local substation and is not expected to exceed the capacity of the substation. Further discussion with LADWP following the advancement of project design would confirm that substation capacity is adequate for TBM demand.

Watering of construction staging sites would be implemented to reduce fugitive dust. Tunneling would require water for TBM tunneling and for jet grouting. Tunneling would require the use of slurry, or an engineered mixture of bentonite (a clay-like mineral), and water. The contractor would inject slurry into the front chamber of the TBM to balance soil and groundwater pressures and to carry the excavated material back to the surface. Similarly, the support-of-excavation for the underground stations would require jet grouting, which is typically used to create a groundwater barrier wall. Jet grouting is an engineered technique that injects water, air, and cement-based grout with high-pressure jets of water or grout to remove and loosen soil and replace the removed soil with cement-based grout. While alignment construction would require water, water demand of this magnitude would be temporary and the amount of water consumed would be much less than the projected future capacity (shown in Table 3.18-1, Table 3.18-2, and Table 3.18-3) could accommodate. Construction of the project would not use natural gas.

As described above, the alignment would not have significant environmental effects related to relocation or construction of new or expanded water, sewer treatment, stormwater drainage, electric power, natural gas, or telecommunications facilities. Therefore, the KNE Fairfax Alignment would have a less than significant impact during construction.

3.18.7.1.2.2 OPERATIONAL IMPACTS

The subsections below describe potential operational impacts related to utility relocation or construction of new or expanded facilities.

WATER SUPPLY FACILITIES

Less than Significant Impact. Operation of the KNE Fairfax Alignment would not substantially increase water usage within the RSA. Water would be needed for landscaping, irrigation, and to supply fire sprinkler systems, but the amount of water needed for operational activities would still be much less than the projected future capacity (as shown in Table 3.18-1 and Table 3.18-2) could accommodate and would not have a significant effect on the water supply within the RSA. Existing water mains throughout the RSA would provide the infrastructure necessary to support project-related water services. Therefore, the KNE Fairfax Alignment would have a less than significant impact during operation.

WASTEWATER FACILITIES

Less than Significant Impact. Operation of the KNE Fairfax Alignment would introduce minimal increases in wastewater treatment needs. The alignment would be served by LADWP for all stations. The alignment would connect to existing wastewater infrastructure for drainage of sump pumps during events when water accumulates in underground stations and the LRT guideway, as needed. Station operation and maintenance would also require connection to existing wastewater infrastructure to support station staff and cleaning. Such activities would minimally alter wastewater mainline flows since they would occur in limited quantities and/or intermittent intervals during events such as maintenance and rainfall. While the alignment would require the construction of new service feeds, it would not require the expansion of any existing wastewater facilities. Therefore, the KNE Fairfax Alignment would have a less than significant impact during operation.

STORMWATER FACILITIES

Less than Significant Impact. Roadway and drainage improvements for the KNE Fairfax Alignment would occur in the areas surrounding the proposed stations. These areas are densely urbanized where existing stormwater infrastructure serves surrounding land uses and roadways. Roadway and drainage improvements for the alignment would introduce minimal to no increases in impervious surfaces and would therefore minimally increase stormwater flow. The alignment would require connection to stormwater facilities to protect project-related equipment during operation by removing any excess water accumulation at underground stations and the LRT guideway. Such activities would minimally alter stormwater mainline flows since they would occur in intermittent intervals during events such as rainfall or initiation of the fire sprinkler systems, when and if needed. Operation of the alignment would comply with stormwater-related federal, local, and state requirements. Existing storm drain facilities have adequate capacity to accommodate stormwater flows associated with the project. Therefore, the KNE Fairfax Alignment would have a less than significant impact during operation.

ELECTRIC POWER

Less than Significant Impact. Operation of the KNE Fairfax Alignment would require electricity to power LRVs, lighting, and equipment (such as elevators, escalators, and switches) throughout the LRT guideway and underground stations. Operation of the alignment would require 3,789,853 kWh of annual net electricity use to power the LRT (refer to Section 3.7, Energy, for additional details related to electricity consumption). LADWP delivered more than 20,891 million kWh of electricity to its service area in 2021 and would reasonably be able to accommodate this 0.018 percent increase in electricity use required by the alignment (CEC 2021). Similarly, SCE delivered 81,129 million kWh in 2021 and would be able to accommodate this 0.0047 percent increase in electricity use required by the alignment (CEC 2021). Therefore, the KNE Fairfax Alignment would have a less than significant impact during operation.

NATURAL GAS

No Impact. There would be no demand for natural gas for operation of the KNE Fairfax Alignment. Therefore, the alignment would not require the expansion of any existing facilities or construction of any new facilities, and it would have no impact during operation.

TELECOMMUNICATION

Less than Significant Impact. Telecommunication connections for a distributed antenna system would be installed at stations and in certain locations along the LRT guideway. A distributed antenna system is used to allow wireless signal coverage for cellular service and Wi-Fi in otherwise unserviceable areas, such as the underground stations and tunnel; it places several smaller, less-powerful antennas in different locations instead of one large, powerful antenna. The alignment would install 50-foot-tall antenna towers in the vicinity of station portals. Such telecommunication connections would require tie-in to existing telecommunication infrastructure. However, since the alignment is located in a densely urbanized setting where overhead and underground telecommunication infrastructure exists, such expansion to accommodate the antennas, additional cables, and utility cabinets would not cause significant environmental effects.

The project would also require an additional communication transmission system to operate train signals and security cameras. The communication transmission system would be a new system installed within the tunnel and underground stations that would be owned and maintained by Metro. The communication transmission system would not require coordination with third-party utility owners nor cause significant environmental effects. Therefore, the KNE Fairfax Alignment would have a less than significant impact during operation.

UTILITY RELOCATION AND CONSTRUCTION OPERATIONAL IMPACT CONCLUSION

Less than Significant Impact. Based on the impact evaluation described in the subsections above, the KNE Fairfax Alignment would have a less than significant impact overall related to utility relocation and construction of new or expanded facilities during operation.

3.18.7.1.3 KNE LA BREA ALIGNMENT

3.18.7.1.3.1 CONSTRUCTION IMPACTS

Less than Significant Impact. Construction of the KNE La Brea Alignment would either relocate or protect-in-place utilities that would conflict with the cut-and-cover excavations, permanent structures, or the final roadway configuration. Stormwater drainage, sanitary sewers, water lines, electric power lines, natural gas pipelines, oil pipelines, and telecommunications lines would require relocation. Electric power and telecommunication lines within the RSA are sometimes underground in duct banks and sometimes overhead on poles.

When construction of the alignment would conflict with utilities, protecting-in-place is the method of choice because it is less disruptive to streets. However, if a utility mainline conflicts with the temporary engineering, permanent structure, or final roadway configuration, relocation of the utility line would be required. Utility relocations would be coordinated with the utility owner. Relocation of underground utilities would generally be conducted in the following sequence: excavation to the depth of the proposed utility line, laying of the utility line, tie-in, and then backfilling of the utility line. Utility relocations often entail temporary service interruptions during tie-in, which are typically planned for periods of minimum use (such as nights or weekends) when outages have the least effect on users. After the tie-in with the existing line is complete, the utility line that was in conflict would be removed.

Utilities within the proposed cut-and-cover station excavations, such as high-pressure water mains and gas lines, would be relocated around the construction area or would be lowered and supported in place by hanging from deck beams during construction. The contractor, in coordination with the utility owners, would determine whether to relocate or hang utility lines that cross the cut-and-cover excavation unless it was determined that the utility would be relocated as part of an Advanced Utility Relocation contract related to KNE.

Utility design criteria and operations would conform to applicable sections of the latest federal, state, and local codes and regulations, including ordinances, general regulations, and safety orders, and as required by law. Utility relocations would be designed and constructed in accordance with all applicable provisions

set forth by uniform codes, city ordinances, public works standards, and any agreement established between Metro and the utility agency.

In addition to utility relocations, new utility service feeds would be installed to accommodate construction needs. These include, but are not limited to, electrical service feeds, telecommunication and fiber service drops, sewer connections for temporary offices located at construction staging sites, and water service feeds for construction equipment, including the TBM. However, impacts of these new utility service feeds would be temporary and would not result in a substantial change in usage of the service providers in the RSA. Most of the LRT guideway tunnel would be constructed using a TBM that would require electricity. The electricity used to power the TBM would be sourced through a local substation and is not expected to exceed the capacity of the substation. Further discussion with LADWP following the advancement of project design would confirm that substation capacity is adequate for TBM demand.

Watering of construction staging sites would be implemented to reduce fugitive dust. Tunneling would require water for TBM tunneling and for jet grouting. Tunneling would require the use of slurry, or an engineered mixture of bentonite (a clay-like mineral), and water. The contractor would inject slurry into the front chamber of the TBM to balance soil and groundwater pressures and to carry the excavated material back to the surface. Similarly, the support-of-excavation for the underground stations would require jet grouting, which is typically used to create a groundwater barrier wall. Jet grouting is an engineered technique that injects water, air, and cement-based grout with high-pressure jets of water or grout to remove and loosen soil and replace the removed soil with cement-based grout. While alignment construction would require water, water demand of this magnitude would be temporary and the amount of water consumed would be much less than the projected future capacity (shown in Table 3.18-1, Table 3.18-2, and Table 3.18-3) could accommodate. Construction of the project would not use natural gas.

As described above, the alignment would not have significant environmental effects related to relocation or construction of new or expanded water, sewer treatment, stormwater drainage, electric power, natural gas, or telecommunications facilities. Therefore, the KNE La Brea Alignment would have a less than significant impact during construction.

3.18.7.1.3.2 OPERATIONAL IMPACTS

The subsections below describe potential operational impacts related to utility relocation or construction of new or expanded facilities.

WATER SUPPLY FACILITIES

Less than Significant Impact. Operation of the KNE La Brea Alignment would not substantially increase water usage within the RSA. Water would be needed for landscaping, irrigation, and to supply fire sprinkler systems, but the amount of water needed for operational activities would still be much less than the projected future capacity (shown in Table 3.18-1 and Table 3.18-2) could accommodate and would not have a significant effect on the water supply within the RSA. Existing water mains throughout the RSA would provide the infrastructure necessary to support project-related water services. Therefore, the KNE La Brea Alignment would have a less than significant impact during operation.

WASTEWATER FACILITIES

Less than Significant Impact. Operation of the KNE La Brea Alignment would introduce minimal increases in wastewater treatment needs. The alignment would be served by LADWP for all stations. The alignment would connect to existing wastewater infrastructure for drainage of sump pumps during events when water accumulates in underground stations and the LRT guideway, as needed. Station operation and maintenance would also require connection to existing wastewater infrastructure to support station staff and cleaning. Such activities would minimally alter wastewater mainline flows since they would occur in limited quantities and/or intermittent intervals during events such as maintenance and rainfall. While the alignment would require the construction of new service feeds, it would not require the expansion of any existing wastewater facilities. Therefore, the KNE La Brea Alignment would have a less than significant impact during operation.

STORMWATER FACILITIES

Less than Significant Impact. Roadway and drainage improvements for the KNE La Brea Alignment would occur in the areas surrounding the proposed stations. These areas are densely urbanized where existing stormwater infrastructure serves surrounding land uses and roadways. Roadway and drainage improvements for the alignment would introduce minimal to no increases in impervious surfaces and would therefore minimally increase stormwater flow. The alignment would require connection to stormwater facilities to protect project-related equipment during operation by removing any excess water accumulation at underground stations and the LRT guideway. Such activities would minimally alter stormwater mainline flows since they would occur in intermittent intervals during events such as rainfall or initiation of the fire sprinkler systems, when and if needed. Operation of the alignment would comply with stormwater-related federal, local, and state requirements. Existing storm drain facilities have adequate capacity to accommodate stormwater flows associated with the project. Therefore, the KNE La Brea Alignment would have a less than significant impact during operation.

ELECTRIC POWER

Less than Significant Impact. Operation of the KNE La Brea Alignment would require electricity to power LRVs, lighting, and equipment (such as elevators, escalators, and switches) throughout the LRT guideway and underground stations. Operation of the alignment would require 2,969,648 kWh of annual net electricity use to power the LRT (refer to Section 3.7, Energy, for additional details related to electricity consumption). LADWP delivered more than 20,891 million kWh of electricity to its service area in 2021 and would reasonably be able to accommodate this 0.014 percent increase in electricity use required by the alignment (CEC 2021). Similarly, SCE delivered 81,129 million kWh in 2021 and would be able to accommodate this 0.0037 percent increase in electricity use required by the alignment (CEC 2021). Therefore, the KNE La Brea Alignment would have a less than significant impact during operation.

NATURAL GAS

No Impact. There would be no demand for natural gas for operation of the KNE La Brea Alignment. Therefore, the alignment would not require the expansion of any existing facilities or construction of any new facilities, and it would have no impact during operation.

TELECOMMUNICATION

Less than Significant Impact. Telecommunication connections for a distributed antenna system would be installed at stations and in certain locations along the LRT guideway. A distributed antenna system is used to allow wireless signal coverage for cellular service and Wi-Fi in otherwise unserviceable areas, such as the underground stations and tunnel; it places several smaller, less-powerful antennas in different locations instead of one large, powerful antenna. The alignment would install 50-foot-tall antenna towers in the vicinity of station portals. Such telecommunication connections would require tie-in to existing telecommunication infrastructure. However, since the alignment is located in a densely urbanized setting where overhead and underground telecommunication infrastructure exists, such expansion to accommodate the antennas, additional cables, and utility cabinets would not cause significant environmental effects.

The project would also require an additional communication transmission system to operate train signals and security cameras. The communication transmission system would be a new system installed within the tunnel and underground stations that would be owned and maintained by Metro. The communication transmission system would not require coordination with third-party utility owners nor cause significant environmental effects. Therefore, the KNE La Brea Alignment would have a less than significant impact during operation.

UTILITY RELOCATION AND CONSTRUCTION OPERATIONAL IMPACT CONCLUSION

Less than Significant Impact. Based on the impact evaluation described in the subsections above, the KNE La Brea Alignment would have a less than significant impact overall related to utility relocation and construction of new or expanded facilities during operation.

3.18.7.1.4 HOLLYWOOD BOWL DESIGN OPTION

3.18.7.1.4.1 CONSTRUCTION IMPACTS

Less than Significant Impact. The Hollywood Bowl Design Option would use the sequential excavation method (SEM) for construction of the alignment and the proposed Hollywood Bowl Station instead of the TBM and the cut-and-cover approach used for the alignments and stations. Since excavation would not alter the street-level surface, utility hanging and relocations would not be necessary for the Hollywood Bowl Station excavation. Relocations would be anticipated for the build-out of the station and final configuration of the roadway. Utility relocations would be designed and constructed in accordance with all applicable provisions set forth by uniform codes, city ordinances, and public works standards.

Construction of the design option would have similar effects on utilities service and systems as described for the alignments and would not require significant construction of new facilities beyond those already addressed as part of the project; therefore, construction of the design option would result in a less than significant impact on water, wastewater, stormwater, electric power, and telecommunication facilities. Natural gas would not be used during construction of the design option, and there would be no impact to natural gas facilities. Therefore, the Hollywood Bowl Design Option would have a less than significant impact during construction.

3.18.7.1.4.2 OPERATIONAL IMPACTS

The subsections below describe potential operational impacts related to utility relocation or construction of new or expanded facilities.

WATER SUPPLY FACILITIES

Less than Significant Impact. Operation of the Hollywood Bowl Design Option would not substantially increase water usage within the region. Water would be needed for landscaping, irrigation, and to supply fire sprinkler systems. The amount consumed would be much less than the projected future capacity (shown in Table 3.18-1 and Table 3.18-2) could accommodate and would not have a significant effect on the water supply. Existing watermains throughout the design option RSA would provide the infrastructure necessary to connect to project-related water services, and expansion of existing facilities or construction of new facilities would not be required. Therefore, the Hollywood Bowl Design Option would have a less than significant impact during operation.

WASTEWATER FACILITIES

Less than Significant Impact. Operation of the Hollywood Bowl Design Option would introduce minimal increases in wastewater treatment needs. The design option would connect to existing wastewater infrastructure for drainage during events when water accumulates in underground stations and the LRT guideway, as needed. Station operation and maintenance would also require connection to existing wastewater infrastructure to support station staff and cleaning. Such activities would minimally alter wastewater mainline flows since they would occur in limited quantities and/or intermittent intervals during events such as maintenance and rainfall. While the design option would require the construction of new service feeds, it would not require the expansion of any existing wastewater facilities. Therefore, the Hollywood Bowl Design Option would have a less than significant impact during operation.

STORMWATER FACILITIES

Less than Significant Impact. Roadway and drainage improvements for the Hollywood Bowl Design Option would occur at the areas surrounding the proposed Hollywood Bowl Station. These areas are densely urbanized where existing stormwater infrastructure serves surrounding land uses and roadways. Roadway and drainage improvements for the design option would introduce minimal to no increases in impervious surfaces and would therefore minimally increase stormwater flow. Additionally, operation of the design option would require connection to stormwater facilities to protect project-related equipment by removing any excess water accumulation at the underground station and the guideway. Such activities would minimally alter stormwater mainline flows since they would occur in intermittent intervals during events such as rainfall or fire sprinkler systems when and if needed. Existing storm drain infrastructure has adequate capacity to accommodate stormwater flows associated with the design option without requiring expansions. Operation of the design option would comply with stormwater-related federal, local, and state requirements. Therefore, the Hollywood Bowl Design Option would have a less than significant impact during operation.

ELECTRIC POWER

Less than Significant Impact. Operation of the Hollywood Bowl Design Option would require electricity to power LRVs, lighting, and equipment (such as elevators, escalators, and switches) throughout the LRT guideway and underground station. Operation of the design option would require 529,668 kWh of annual net electricity use to power the LRT (refer to Section 3.7, Energy, for additional details related to electricity consumption). LADWP delivered more than 20,891 million kWh of electricity to its service area in 2021 and would reasonably be able to accommodate this 0.0025 percent increase in electricity use required by the design option (CEC 2021). Therefore, the Hollywood Bowl Design Option would have a less than significant impact during operation.

NATURAL GAS

No Impact. There would be no demand for natural gas for operation of the Hollywood Bowl Design Option. Therefore, the design option would not require the expansion of any existing facilities or construction of any new facilities, and it would have no impact during operation.

TELECOMMUNICATION

Less than Significant Impact. Minor telecommunication connections for a distributed antenna system would be installed at the station and in certain locations along the LRT guideway. A distributed antenna system is used to allow wireless signal coverage for cellular service and Wi-Fi in otherwise unserviceable areas, such as the underground stations and tunnel; it places several smaller, less-powerful antennas in different locations instead of one large, powerful antenna. The design option would install a 50-foot-tall antenna tower in the vicinity of the station portal. Such telecommunication connections would require tie-in to existing telecommunication infrastructure. However, since the design option is located in a densely urbanized setting where overhead and underground telecommunication infrastructure exists, such expansion to accommodate the antennas, additional cables, and utility cabinets would not cause significant environmental effects.

The project would also require an additional communication transmission system to operate train signals and security cameras. The communication transmission system would be a new system installed within the tunnel and underground stations that would be owned and maintained by Metro. The communication transmission system would not require coordination with third-party utility owners nor cause significant environmental effects. Therefore, the Hollywood Bowl Design Option would have a less than significant impact during operation.

UTILITY RELOCATION AND CONSTRUCTION OPERATIONAL IMPACT CONCLUSION

Less than Significant Impact. Based on the impact evaluation described in the subsections above, the Hollywood Bowl Design Option would have a less than significant impact overall related to utility relocation and construction of new or expanded facilities during operation.

3.18.7.1.5 MAINTENANCE AND STORAGE FACILITY

3.18.7.1.5.1 CONSTRUCTION IMPACTS

Less than Significant Impact. Various new utility service feeds would be installed to accommodate construction and operation needs for the MSF. These include, but are not limited to, electrical service feeds and water service feeds for maintenance of the construction service yard. Natural gas would not be used during construction of the MSF, and no expanded utility mainlines would be necessary for construction of the MSF. The MSF would have a less than significant impact on water, wastewater treatment, stormwater drainage, electric power, and telecommunications facilities during construction. Because natural gas would not be used during construction of the MSF, there would be no impact on natural gas facilities during construction. Therefore, the MSF would have a less than significant impact during construction.

3.18.7.1.5.2 OPERATIONAL IMPACTS

The subsections below describe potential operational impacts related to utility relocation or construction of new or expanded facilities.

WATER SUPPLY FACILITIES

Less than Significant Impact. During operations, the MSF would consume water for landscaping irrigation, vehicle washing, and employee breakroom/kitchen uses. The MSF would be located within the MWD and LADWP service areas. Projected future demand within the service areas is shown in Table 3.18-1 and Table 3.18-2. It is anticipated that operation of the MSF would result in an increase in water use; however, the amount consumed would be much less than the projected future capacity could accommodate and would not have a significant effect on the water supply. Therefore, the MSF would have a less than significant impact during operation.

WASTEWATER FACILITIES

Less than Significant Impact. Operation of the MSF would produce wastewater related to washing LRVs and use of employee restrooms. The City of Los Angeles has sufficient wastewater treatment capacity to serve the MSF because only a minimal amount of wastewater would be generated by the project. Therefore, the MSF would have a less than significant impact during operation.

STORMWATER FACILITIES

Less than Significant Impact. Roadway and drainage improvements would occur in the area surrounding the MSF. This area is densely urbanized, and existing stormwater infrastructure serves the surrounding land uses and roadways. During operations, the MSF would introduce minimal to no impervious surfaces and would minimally increase stormwater flow. Operation of the MSF would comply with stormwater-related federal, local, and state stormwater requirements. Existing storm drain facilities have adequate capacity to accommodate stormwater flows associated with the MSF. Therefore, the MSF would have a less than significant impact during operation.

ELECTRIC POWER

Less than Significant Impact. Operation of the MSF would require electricity to power lighting and maintenance equipment and would require approximately 310,088 kWh of annual net electricity use. This would represent a 0.0015 percent increase in electricity use, which LADWP would reasonably be able to accommodate (CEC 2021). Therefore, the MSF would have a less than significant impact during operation.

NATURAL GAS

Less than Significant Impact. Operation of the MSF would require 49,347 kBtu of annual natural gas for space and water heating (refer to Section 3.7, Energy, for additional details related to electricity consumption). In 2021, SCG delivered 50,998 million kBtu for its service area (CEC 2021). SCG declares itself a "reactive" utility that would provide natural gas as customers request its services and would be able to accommodate the 0.0000097 percent increase in natural gas consumption from the MSF. SCG would have adequate supply of natural gas to serve the MSF. Therefore, the MSF would have a less than significant impact during operation.

TELECOMMUNICATION

Less than Significant Impact. During operations, the MSF would use its own telecommunications infrastructure (e.g., server rooms, network equipment, cabling systems, intercom systems, phones). Therefore, the MSF would have a less than significant impact during operation.

UTILITY RELOCATION AND CONSTRUCTION OPERATIONAL IMPACT CONCLUSION

Less than Significant Impact. Based on the impact evaluation described in the subsections above, the MSF would have a less than significant impact overall related to utility relocation and construction of new or expanded facilities during operation.

3.18.7.2 IMPACT UTL-2: WATER SUPPLIES

Impact UTL-2: Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?

3.18.7.2.1 KNE SAN VICENTE–FAIRFAX ALIGNMENT

3.18.7.2.1.1 CONSTRUCTION IMPACTS

Less than Significant Impact. Construction activities associated with the KNE San Vicente–Fairfax Alignment would not substantially increase water usage. Construction needs include water service feeds for temporary offices located at construction staging sites. Tunneling would require water for TBM mining and jet grouting when needed. Watering of construction staging sites would be anticipated for dust control; the amount of water used for dust control would vary depending on the amount of exposed soil requiring dust suppression and the weather conditions when soil is exposed (e.g., increased frequency of wetting exposed soils would be required during hot and dry conditions as opposed to a lower frequency during cool and moist conditions). Therefore, the amount of water used during construction would vary.

Further, any water use would comply with Metro's Water Use and Conservation Policy, which limits use of potable water during construction when feasible.

The amount of water consumed for construction of the alignment would be much less than the projected future capacity (shown in Table 3.18-1, Table 3.18-2, and Table 3.18-3) could accommodate and would not have a significant effect on the water supply. The increase in water use associated with the alignment during construction would not significantly contribute to the overall projected increase in water use in MWD, LADWP, and the City of Beverly Hills' service areas compared to existing uses. MWD, LADWP, and the City of Beverly Hills have adequate water supplies to meet future demand; water supply quantities are listed in their respective 2020 Urban Water Management Plans (UWMPs) for normal, dry, or multiple dry years (MWD 2021; LADWP 2021; City of Beverly Hills 2021). Future water supply demand in the UWMPs is based on SCAG's 2020 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), which accounts for KNE in its project list (SCAG 2020b). Construction-related water use would not necessitate new water deliveries to the region.

As described above, construction activities would not substantially deplete water supplies during normal, dry, or multiple dry years. Therefore, the KNE San Vicente–Fairfax Alignment would have a less than significant impact during construction.

3.18.7.2.1.2 OPERATIONAL IMPACTS

Less than Significant Impact. Operation of the KNE San Vicente–Fairfax Alignment would not substantially increase water usage. The 2020 UWMPs for MWD, LADWP, and the City of Beverly Hills considers population growth within the RSA in their projections of future water use demands within their service areas. The KNE San Vicente–Fairfax Alignment would not result in the creation of housing or infrastructure that would induce or accelerate population or household growth that is not already anticipated in SCAG's regional growth projections.

Operational activities or features that would require long-term, permanent sources of water use include landscape irrigation and fire water systems if and when needed. This water demand would be a slight increase and would not affect water supplies. Further, any water use would comply with Metro's Water Use and Conservation Policy, which requires water efficiency and conservation methods to be adopted and maintained.

The increase in water use associated with operation of the alignment would not significantly contribute to the overall projected increase in water use in MWD, LADWP, and the City of Beverly Hills service areas compared to their existing uses. MWD, LADWP, and the City of Beverly Hills have adequate supplies to meet future demand; water supply quantities are listed in their respective 2020 UWMPs for normal, dry, or multiple dry years (MWD 2021; LADWP 2021; City of Beverly Hills 2021). Future water supply demand in the UWMPs is based on SCAG's 2020 RTP/SCS, which accounts for KNE in its project list (SCAG 2020b).

As described above, operation of the KNE San Vicente–Fairfax Alignment would not significantly deplete municipal water supplies during normal, dry, or multiple dry years. Therefore, the KNE San Vicente–Fairfax Alignment would have a less than significant impact during operation.

3.18.7.2.2 KNE FAIRFAX ALIGNMENT

3.18.7.2.2.1 CONSTRUCTION IMPACTS

Less than Significant Impact. Construction activities associated with the KNE Fairfax Alignment would not substantially increase water usage. Construction needs include water service feeds for temporary offices located at construction staging sites. Tunneling would require water for TBM mining and jet grouting when needed. Watering of construction staging sites would be anticipated for dust control; the amount of water used for dust control would vary depending on the amount of exposed soil requiring dust suppression and the weather conditions when soil is exposed (e.g., increased frequency of wetting exposed soils would be required during hot and dry conditions as opposed to a lower frequency during cool and moist conditions). Therefore, the amount of water used during construction would vary. Further, any water use would comply with Metro's Water Use and Conservation Policy, which limits use of potable water during construction when feasible.

The amount of water consumed for construction of the alignment would be much less than the projected future capacity (shown in Table 3.18-1 and Table 3.18-2) could accommodate and would not have a significant effect on the water supply. The increase in water use associated with the alignment during construction would not significantly contribute to the overall projected increase in water use in MWD and LADWP's service areas compared to existing uses. MWD and LADWP have adequate water supplies to meet future demand; water supply quantities are listed in their respective 2020 UWMPs for normal, dry, or multiple dry years (MWD 2021; LADWP 2021). Future water supply demand in the UWMPs is based on SCAG's 2020 RTP/SCS, which accounts for KNE in its project list (SCAG 2020b). Construction-related water use would not necessitate new water deliveries to the region.

As described above, construction activities would not substantially deplete water supplies during normal, dry, or multiple dry years. Therefore, the KNE Fairfax Alignment would have a less than significant impact during construction.

3.18.7.2.2.2 OPERATIONAL IMPACTS

Less than Significant Impact. Operation of the KNE Fairfax Alignment would not substantially increase water usage. The 2020 UWMPs for MWD and LADWP consider population growth within the RSA to project future water use demands within their service areas. The KNE Fairfax Alignment would not result in the creation of housing or infrastructure that would induce or accelerate population or household growth that is not already anticipated in SCAG's regional growth projections.

Operational activities or features that would require long-term, permanent sources of water use include landscape irrigation and fire water systems if and when needed. This water demand would be a slight increase and would not affect water supplies. Further, any water use would comply with Metro's Water Use and Conservation Policy, which requires water efficiency and conservation methods to be adopted and maintained.

The increase in water use associated with operation of the alignment would not significantly contribute to the overall projected increase in water use in MWD and LADWP service areas compared to their existing uses. MWD and LADWP have adequate supplies to meet future demand, and water supply quantities are listed in their respective 2020 UWMPs for normal, dry, or multiple dry years (MWD 2021; LADWP 2021b). Future water supply demand in the UWMPs is based on SCAG's 2020 RTP/SCS, which accounts for KNE in its project list (SCAG 2020b).

For the reasons described above, operation of the KNE Fairfax Alignment would not substantially deplete municipal water supplies during normal, dry, or multiple dry years. Therefore, the KNE Fairfax Alignment would have a less than significant impact during operation.

3.18.7.2.3 KNE LA BREA ALIGNMENT

3.18.7.2.3.1 CONSTRUCTION IMPACTS

Less than Significant Impact. Construction activities associated with the KNE La Brea Alignment would not substantially increase water usage. Construction needs include water service feeds for temporary offices located at construction staging sites. Tunneling would require water for TBM mining and jet grouting when needed. Watering of construction staging sites would be anticipated for dust control; the amount of water used for dust control would vary depending on the amount of exposed soil requiring dust suppression and the weather conditions when soil is exposed (e.g., increased frequency of wetting exposed soils would be required during hot and dry conditions as opposed to a lower frequency during cool and moist conditions). Therefore, the amount of water used during construction would vary. Further, any water use would comply with Metro's Water Use and Conservation Policy, which limits use of potable water during construction when feasible.

The amount of water consumed for construction of the alignment would be much less than the projected future capacity (shown in Table 3.18-1 and Table 3.18-2) could accommodate and would not have a significant effect on the water supply. The increase in water use associated with the alignment during construction would not significantly contribute to the overall projected increase in water use in MWD and LADWP's service areas compared to existing uses. MWD and LADWP have adequate water supplies to meet future demand; water supply quantities are listed in their respective 2020 UWMPs for normal, dry, or multiple dry years (MWD 2021; LADWP 2021). Future water supply demand in the UWMPs is based on SCAG's 2020 RTP/SCS, which accounts for KNE in its project list (SCAG 2020b). Construction-related water use would not necessitate new water deliveries to the region.

As described above, construction activities would not substantially deplete water supplies during normal, dry, or multiple dry years. Therefore, the KNE La Brea Alignment would have a less than significant impact during construction.

3.18.7.2.3.2 OPERATIONAL IMPACTS

Less than Significant Impact. Operation of the KNE La Brea Alignment would not substantially increase water usage. The 2020 UWMPs for MWD and LADWP consider population growth within the RSA to project future water use demands within their service areas. The KNE La Brea Alignment would not result

in the creation of housing or infrastructure that would induce or accelerate population or household growth that is not already anticipated in SCAG's regional growth projections.

Operational activities or features that would require long-term, permanent sources of water use include landscape irrigation and fire water systems if and when needed. This water demand would be a slight increase and would not affect water supplies. Further, any water use would comply with Metro's Water Use and Conservation Policy, which requires water efficiency and conservation methods to be adopted and maintained.

The increase in water use associated with operation of the alignment would not significantly contribute to the overall projected increase in water use in MWD and LADWP service areas compared to their existing uses. MWD and LADWP have adequate supplies to meet future demand, and water supply quantities are listed in their respective 2020 UWMPs for normal, dry, or multiple dry years (MWD 2021; LADWP 2021b). Future water supply demand in the UWMPs is based on SCAG's 2020 RTP/SCS, which accounts for KNE in its project list (SCAG 2020b).

For the reasons described above, operation of the KNE La Brea Alignment would not substantially deplete municipal water supplies during normal, dry, or multiple dry years. Therefore, the KNE La Brea Alignment would have a less than significant impact during operation.

3.18.7.2.4 HOLLYWOOD BOWL DESIGN OPTION

3.18.7.2.4.1 CONSTRUCTION IMPACTS

Less than Significant Impact. The Hollywood Bowl Design Option would not substantially increase water usage during construction activities. Tunneling would require water for SEM mining and jet grouting when needed. Any water use would comply with Metro's Water Use and Conservation Policy, which limits use of potable water during construction when feasible.

The amount of water consumed for construction of the design option would be much less than the projected future capacity (shown in Table 3.18-1 and Table 3.18-2) could accommodate and would not have a significant effect on the water supply. The increase in water use during construction would not significantly contribute to the overall projected increase in water use in the MWD and LADWP service areas compared to existing uses. MWD and LADWP have adequate supplies to meet future demand; water supply quantities are listed in the respective 2020 UWMPs for normal, dry, or multiple dry years (MWD 2021; LADWP 2021b). Future water supply demand in the UWMPs is based on SCAG's 2020 RTP/SCS, which accounts for KNE in its project list (SCAG 2020b). Construction-related water use would not necessitate new water deliveries to the region.

For the reasons described above, construction activities would not substantially deplete water supplies during normal, dry, or multiple dry years. Therefore, the Hollywood Bowl Design Option would have a less than significant impact during construction.

3.18.7.2.4.2 OPERATIONAL IMPACTS

Less than Significant Impact. Operation of the Hollywood Bowl Design Option would not substantially increase water usage. The 2020 UWMPs for MWD and LADWP consider population growth within the RSA to project future water use demands within their service areas. The design option would not result in the creation of housing or infrastructure that would induce or accelerate population or household growth that is not already anticipated in SCAG's regional growth projections.

Operational activities or features that would require long-term, permanent sources of water use include landscape irrigation and fire water systems if and when needed. This water demand would be a slight increase and would not affect water supplies. Further, any water use would comply with Metro's Water Use and Conservation Policy, which requires water efficiency and conservation methods to be adopted and maintained.

The increase in water use associated with the design option would not significantly contribute to the overall projected increase in water use in the MWD and LADWP service areas compared to their existing uses. MWD and LADWP have adequate supplies to meet future demand and water supply quantities are listed in their respective 2020 UWMPs for normal, dry, or multiple dry years (MWD 2021; LADWP 2021b). Future water supply demand in the UWMPs is based on SCAG's 2020 RTP/SCS, which accounts for KNE in its project list (SCAG 2020b).

For the reasons described above, operation of the Hollywood Bowl Design Option would not substantially deplete municipal water supplies during normal, dry, or multiple dry years. Therefore, the Hollywood Bowl Design Option would have a less than significant impact during operation.

3.18.7.2.5 MAINTENANCE AND STORAGE FACILITY

3.18.7.2.5.1 CONSTRUCTION IMPACTS

Less than Significant Impact. New water utility service feeds would be installed to accommodate construction and operation of the MSF. The MSF would be located within the MWD and LADWP service areas. Construction needs include water service feeds for temporary offices located at construction staging sites. Watering of construction staging sites would be needed for dust control. The amount of water used for dust control would vary depending on the amount of exposed soil requiring dust suppression and the weather conditions when soil is exposed (e.g., increased frequency of wetting exposed soils would be required during hot and dry conditions as opposed to a lower frequency during cool and moist conditions). Therefore, the amount of water used during construction would vary. Further, any water use would comply with Metro's Water Use and Conservation Policy, which limits use of potable water during construction when feasible.

The amount of water consumed for construction of the MSF would be much less than the projected future capacity could accommodate and would not have a significant effect on the water supply. Future demand within the service area is described in Table 3.18-1 and Table 3.18-2. The increase in water use during construction would not significantly contribute to the overall projected increase in water use in MWD and LADWP's service areas compared to existing uses. MWD and LADWP have adequate supplies to

meet future normal, dry, or multiple dry years. Projected water supplies quantities are included in their respective 2020 UWMPs for normal, dry, or multiple dry years (MWD 2021; LADWP 2021b). Future water supply demand in the UWMPs is based on SCAG's 2020 RTP/SCS, which accounts for KNE in its project list (SCAG 2020b). Construction-related water use would not necessitate new water deliveries to the region.

New water utility service feeds would be installed to accommodate construction and operation of the MSF. Therefore, the MSF would have a less than significant impact during construction.

3.18.7.2.5.2 OPERATIONAL IMPACTS

Less than Significant Impact. During operation, the MSF would consume water for landscape irrigation, vehicle washing, and employee breakroom/kitchen uses. The MSF would be located within the MWD and LADWP service areas. Operation of the MSF would result in a slight increase in water use; however, the amount consumed would be much less than the projected future capacity could accommodate and would not have a significant effect on the water supply. Future demand is described in Table 3.18-1 and Table 3.18-2.

Operation of the MSF would not substantially increase water usage in municipal water use service areas. The 2020 UWMPs for MWD and LADWP consider population growth within the RSA to project future water use demands within their service areas. The MSF would not result in the creation of housing or infrastructure that would induce or accelerate population or household growth that is not already anticipated in SCAG's regional growth projections. Water demand for the MSF would be a slight increase compared to existing conditions and would not affect water supplies. Further, any water use would comply with Metro's Water Use and Conservation Policy, which specifies that water efficiency and conservation methods be adopted and maintained.

The increase in water use for the MSF would not significantly contribute to the overall projected increase in water use in MWD's and LADWP's service areas compared to their existing uses. MWD and LADWP have adequate supplies to meet future demand, and water supplies are included in their respective 2020 UWMPs for normal, dry, or multiple dry years (MWD 2021; LADWP 2021a). Future water supply demand in the UWMPs is based on SCAG's 2020 RTP/SCS, which accounts for KNE in its project list (SCAG 2020b).

Therefore, the MSF would have a less than significant impact during operation.

3.18.7.3 IMPACT UTL-3: WASTEWATER FACILITIES

Impact UTL-3: Would the project result in a determination by the wastewater treatment provider, which serves or may serve the project, that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

3.18.7.3.1 KNE SAN VICENTE–FAIRFAX ALIGNMENT

3.18.7.3.1.1 CONSTRUCTION IMPACTS

Less than Significant Impact. Construction of the KNE San Vicente–Fairfax Alignment would generate wastewater through the use of temporary worker restrooms at field offices. Wastewater generation rates assume 120 gallons per day for each field office (City of Los Angeles Bureau of Engineering 2019). There would be a field office at each of the nine proposed stations during construction; therefore, the alignment would have a generation rate of approximately 1,080 gallons per day. The Hyperion Treatment Plant operates below capacity and has an average daily treatment volume of 260 MGD. With a dry weather average design treatment capacity of 450 MGD and a wet weather peak hydraulic capacity of 850 MGD, the Hyperion Treatment Plant has adequate capacity to treat the alignment's projected demands. Wastewater generation from the temporary worker restrooms at field offices would be marginal compared to the Hyperion Treatment Plant's existing capacity. The wastewater demand would not result in a determination by the wastewater treatment provider that it has inadequate capacity to serve KNE's projected demand. Therefore, the KNE San Vicente–Fairfax Alignment would have a less than significant impact during construction.

3.18.7.3.1.2 OPERATIONAL IMPACTS

Less than Significant Impact. The KNE San Vicente–Fairfax Alignment would introduce minimal increases in wastewater treatment needs and would not require the expansion of any existing wastewater facilities. Therefore, the KNE San Vicente–Fairfax Alignment would have a less than significant impact during operation.

3.18.7.3.2 KNE FAIRFAX ALIGNMENT

3.18.7.3.2.1 CONSTRUCTION IMPACTS

Less than Significant Impact. Construction of the KNE Fairfax Alignment would generate wastewater through the use of temporary worker restrooms at field offices. Wastewater generation rates assume 120 gallons per day for each field office (City of Los Angeles Bureau of Engineering 2019). There would be a field office at each of the seven proposed stations during construction; therefore, the alignment would have a generation rate of approximately 840 gallons per day. The Hyperion Treatment Plant operates below capacity and has an average daily treatment volume of 260 MGD. With a dry weather average design treatment capacity of 450 MGD and a wet weather peak hydraulic capacity of 850 MGD, the Hyperion Treatment Plant has adequate capacity to treat the alignment's projected demands. Wastewater generation from the temporary worker restrooms at field offices would be marginal compared to the Hyperion Treatment Plant's existing capacity. The wastewater demand would not result in a determination by the wastewater treatment provider that it has inadequate capacity to serve KNE's projected demand. Therefore, the KNE Fairfax Alignment would have a less than significant impact during construction.

3.18.7.3.2.2 OPERATIONAL IMPACTS

Less than Significant Impact. The KNE Fairfax Alignment would introduce minimal increases in wastewater treatment needs and would not require the expansion of any existing wastewater facilities. Therefore, the KNE Fairfax Alignment would have a less than significant impact during operation.

3.18.7.3.3 KNE LA BREA ALIGNMENT

3.18.7.3.3.1 CONSTRUCTION IMPACTS

Less than Significant Impact. Construction of the KNE La Brea Alignment would generate wastewater through the use of temporary worker restrooms at field offices. Wastewater generation rates assume 120 gallons per day for each field office (City of Los Angeles Bureau of Engineering 2019). There would be a field office at each of the six proposed stations during construction; therefore, the alignment would have a generation rate of approximately 720 gallons per day. The Hyperion Treatment Plant operates below capacity and has an average daily treatment volume of 260 MGD. With a dry weather average design treatment capacity of 450 MGD and a wet weather peak hydraulic capacity of 850 MGD, the Hyperion Treatment Plant has adequate capacity to treat the alignment's projected demands. Wastewater generation from the temporary worker restrooms at field offices would be marginal compared to the Hyperion Treatment Plant's existing capacity. The wastewater demand would not result in a determination by the wastewater treatment provider that it has inadequate capacity to serve KNE's projected demand. Therefore, the KNE La Brea Alignment would have a less than significant impact during construction.

3.18.7.3.3.2 OPERATIONAL IMPACTS

Less than Significant Impact. The KNE La Brea Alignment would introduce minimal increases in wastewater treatment needs and would not require the expansion of any existing wastewater facilities. Therefore, the KNE La Brea Alignment would have a less than significant impact during operation.

3.18.7.3.4 HOLLYWOOD BOWL DESIGN OPTION

3.18.7.3.4.1 CONSTRUCTION IMPACTS

Less than Significant Impact. Construction of the Hollywood Bowl Design Option would generate wastewater through the use of temporary worker restrooms at field offices. There would be a field office for the proposed Hollywood Bowl Station during construction; therefore, the design option would have a generation rate of approximately 120 gallons per day. The Hyperion Treatment Plant operates below capacity and has an average daily treatment volume of 260 MGD. With a dry weather average design treatment capacity of 450 MGD and a wet weather peak hydraulic capacity of 850 MGD, the Hyperion Treatment Plant has adequate capacity to treat the design option's projected demands. Wastewater generation from the temporary worker restrooms at field offices would be marginal compared to the Hyperion Treatment Plant's existing capacity. The wastewater demand would not result in a determination by the wastewater treatment provider that it has inadequate capacity to serve KNE's

projected demand. Therefore, the Hollywood Bowl Design Option would have a less than significant impact during construction.

3.18.7.3.4.2 OPERATIONAL IMPACTS

Less than Significant Impact. The Hollywood Bowl Design Option would introduce minimal increases in wastewater treatment needs and would not require the expansion of any existing wastewater facilities. Therefore, the Hollywood Bowl Design Option would have a less than significant impact during operation.

3.18.7.3.5 MAINTENANCE AND STORAGE FACILITY

3.18.7.3.5.1 CONSTRUCTION IMPACTS

Less than Significant Impact. Construction of the MSF would generate wastewater through the use of temporary worker restrooms at field offices. The MSF would have a field office during construction and would have a generation rate of approximately 120 gallons per day. The Hyperion Treatment Plant operates below capacity and has an average daily treatment volume of 260 MGD. With a dry weather average design treatment capacity of 450 MGD and a wet weather peak hydraulic capacity of 850 MGD, the Hyperion Treatment Plant has adequate capacity to treat the design option's projected demands. Wastewater generation from the temporary worker restrooms at field offices would be marginal compared to the Hyperion Treatment Plant's existing capacity. The wastewater demand would not result in a determination by the wastewater treatment provider that it has inadequate capacity to serve KNE's projected demand. Therefore, the MSF would have a less than significant impact during construction.

3.18.7.3.5.2 OPERATIONAL IMPACTS

Less than Significant Impact. Operation of the MSF would produce wastewater related to washing LRVs and use of employee restrooms. The Hyperion Treatment Plant operates below capacity and has an average daily treatment volume of 260 MGD. With a dry weather average design treatment capacity of 450 MGD and a wet weather peak hydraulic capacity of 850 MGD, the Hyperion Treatment Plant has adequate capacity to treat the MSF's projected demands. Wastewater demand would not result in a determination by the wastewater treatment provider that it has inadequate capacity to serve KNE's projected demand. Therefore, the MSF would have a less than significant impact during operation.

3.18.7.4 IMPACT UTL-4: SOLID WASTE GENERATION

Impact UTL-4: Would the project generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

3.18.7.4.1 KNE SAN VICENTE–FAIRFAX ALIGNMENT

3.18.7.4.1.1 CONSTRUCTION IMPACTS

Less than Significant Impact. Construction of the KNE San Vicente–Fairfax Alignment would involve the generation and removal of solid waste to accommodate demolition and other construction activities. At the proposed stations where demolition of existing buildings is anticipated, generated waste may include bulky, heavy materials such as concrete, wood, metals, glass, and building components. Demolition of structures containing hazardous materials such as asbestos and lead-based materials require specialized procedures and equipment and appropriately certified personnel (for more information, see Section 3.11, Hazards and Hazardous Materials).

For construction of underground LRT guideway and surface elements, the removal of debris (e.g., soil, asphalt, concrete) is anticipated. This would result in an incremental and temporary increase in solid waste disposal at landfills and other waste disposal facilities. With two TBMs, the KNE San Vicente–Fairfax Alignment would generate the majority of its solid waste from spoils (excavated material from TBM construction activities). The project would comply with the provisions set forth in Section 5.408.3 of the 2022 CALGreen Building code, which requires 100 percent of soils resulting primarily from land clearing to be reused or recycled. Some excavated soil would be used as backfill material on-site or reused, and the remaining excavated soil would be hauled off-site for disposal at any of the area landfills that accept and/or recycle construction and demolition materials or to local landfill site(s) if not suitable for fill or contains contaminated soils. As discussed in Section 3.11, Hazards and Hazardous Materials, transportation of hazardous materials would comply with applicable laws and regulations. The cut-and-cover excavations would also involve construction of temporary structures. After completion of construction, the temporary structures would need to be removed, which would generate solid waste.

Metro, the City of Los Angeles, the City of West Hollywood, and Los Angeles County have construction and demolition waste diversion programs to divert materials generated from construction or demolition projects from landfill disposal to recycling. The Los Angeles County construction and demolition program requires diverting at least 70 percent of construction and demolition waste under the Construction and Demolition Debris Recycling and Reuse Ordinance. Per the City of West Hollywood Municipal Code Section 19.20.060 Green Building, contractors shall divert a minimum of 80 percent of all construction and demolition waste away from landfills in accordance with any standards set by the Director of Public Works. Under the City of Los Angeles' Green New Deal Sustainable City pLAn, the City of Los Angeles targets recycling and reusing 80 percent of construction and demolition waste (City of Los Angeles 2019). While targets have not been adopted by a City of Los Angeles ordinance, Section 5.408 of the 2022 CALGreen Building code enforces at least 65 percent recycling and reuse of the total construction and demolition debris. In 2020, Metro exceeded their targeted 85 percent construction landfill diversion rate with a 98.7 percent diversion rate for construction and demolition waste (Metro 2023). The 2022 CALGreen Building Code Provisions under Section 5.408.1.1. through 5.408.1.3 enforces a 65 percent construction and demolition waste landfill diversion rate requirement or the local requirement, whichever is more stringent. KNE would comply with the 2022 CALGreen Building Code and, therefore, would comply with Metro's Moving Beyond Sustainability Plan, which establishes the most stringent of the diversion rates discussed above and sets forth an 85 percent construction landfill diversion rate (Metro 2020).

The City of Los Angeles and Los Angeles County contract with landfills to process solid waste. Landfills that would serve the KNE San Vicente–Fairfax Alignment are shown in Table 3.18-4 and Table 3.18-5, which indicate the landfills' design capacity can cumulatively serve up to 66,526 tons per day for Los Angeles County and 100,908 tons per day for the City of Los Angeles (CalRecycle 2022). Based on landfill capacity, the solid waste contribution to the landfills that serve the alignment would be much less than the allowed daily capacity.

As described above, construction of the alignment would not generate solid waste in excess of state or local standards, in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals and would comply with federal, state, and local management and reduction statutes and regulations related to solid waste. Therefore, the KNE San Vicente–Fairfax Alignment would have a less than significant impact during construction.

3.18.7.4.1.2 OPERATIONAL IMPACTS

Less than Significant Impact. Operation of the KNE San Vicente–Fairfax Alignment would not include a direct source of solid waste. Indirectly, solid waste would be generated by transit users. Stations would include waste bins and recycle bins, but the disposal of solid waste collected at each station would have no notable potential to affect landfill capacity or impair attainment of solid waste reduction goals.

Assembly Bill (AB) 939 requires a Solid Waste Diversion Program and diversion of at least 50 percent of the solid waste from landfills to recycling facilities. Los Angeles County achieved an estimated landfill diversion rate of 60 percent in 2012 (Los Angeles County 2013). The City of Los Angeles achieved a landfill diversion rate of 76.4 percent at the end of 2011 (City of Los Angeles, University of California Los Angeles 2013). Both the City of Los Angeles and Los Angeles County currently exceed AB 939's 50 percent diversion rate, and KNE would be required to participate in these efforts to minimize waste disposed of in landfills.

The City of Los Angeles and Los Angeles County contract with landfills to process solid waste. Landfills that would serve the KNE San Vicente–Fairfax Alignment are shown in Table 3.18-4 and Table 3.18-5, which indicate the landfills' design capacity can cumulatively serve up to 66,526 tons per day for Los Angeles County and 100,908 tons per day for the City of Los Angeles (CalRecycle 2022). Based on landfill capacity, the solid waste contribution from the KNE San Vicente–Fairfax Alignment to the landfills that serve the alignment would be much less than the allowed daily capacity.

As described above, operation of the alignment would not generate solid waste in excess of state or local standards, in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals. Therefore, the KNE San Vicente–Fairfax Alignment would have a less than significant impact during operation.

3.18.7.4.2 KNE FAIRFAX ALIGNMENT

3.18.7.4.2.1 CONSTRUCTION IMPACTS

Less than Significant Impact. Construction of the KNE Fairfax Alignment would involve the generation and removal of solid waste to accommodate demolition and other construction activities. At the proposed stations where demolition of existing buildings is anticipated, generated waste may include bulky, heavy materials such as concrete, wood, metals, glass, and building components. Demolition of structures containing hazardous materials such as asbestos and lead-based materials require specialized procedures and equipment and appropriately certified personnel (for more information, see Section 3.11, Hazards and Hazardous Materials).

For construction of underground LRT guideway and surface elements, the removal of debris (e.g., soil, asphalt, concrete) is anticipated. This would result in an incremental and temporary increase in solid waste disposal at landfills and other waste disposal facilities. With two TBMs, the KNE Fairfax Alignment would generate the majority of its solid waste from spoils (excavated material from TBM construction activities). The project would comply with the provisions set forth in Section 5.408.3 of the 2022 CALGreen Building code, which requires 100 percent of soils resulting primarily from land clearing to be reused or recycled. Some excavated soil would be used as backfill material on-site or reused, and the remaining excavated soil would be hauled off-site for disposal at any of the area landfills that accept and/or recycle construction and demolition materials or to local landfill site(s) if not suitable for fill or contains contaminated soils. As discussed in Section 3.11, Hazards and Hazardous Materials, transportation of hazardous materials would comply with applicable laws and regulations. The cut-and-cover excavations would also involve construction of temporary structures. After completion of construction, the temporary structures would need to be removed, which would generate solid waste.

Metro, the City of West Hollywood, the City of Los Angeles, and Los Angeles County have construction and demolition waste diversion programs to divert materials generated from construction or demolition projects from landfill disposal to recycling. The Los Angeles County construction and demolition program requires diverting at least 70 percent of construction and demolition waste under the Construction and Demolition Debris Recycling and Reuse Ordinance. Per the City of West Hollywood Municipal Code Section 19.20.060 Green Building, contractors shall divert a minimum of 80 percent of all construction and demolition waste away from landfills in accordance with any standards set by the Director of Public Works. Under the City of Los Angeles' Green New Deal Sustainable City pLAn, the City of Los Angeles targets recycling and reusing 80 percent of construction and demolition waste (City of Los Angeles 2019). While targets have not been adopted by a City of Los Angeles ordinance, Section 5.408 of the 2022 CALGreen Building code enforces at least 65 percent recycling and reuse of the total construction and demolition debris. In 2020, Metro exceeded their targeted 85 percent construction landfill diversion rate with a 98.7 percent diversion rate for construction and demolition waste (Metro 2023). The 2022 CALGreen Building Code Provisions under Section 5.408.1.1. through 5.408.1.3 enforces a 65 percent construction and demolition waste landfill diversion rate requirement or the local requirement, whichever is more stringent. KNE would comply with the 2022 CALGreen Building Code and, therefore, would comply with Metro's Moving Beyond Sustainability Plan, which establishes the most stringent of

the diversion rates discussed above and sets forth an 85 percent construction landfill diversion rate (Metro 2020).

The City of Los Angeles and Los Angeles County contract with landfills to process solid waste. Landfills that would serve the KNE Fairfax Alignment are shown in Table 3.18-4 and Table 3.18-5, which indicate the landfills' design capacity can cumulatively serve up to 66,526 tons per day for Los Angeles County and 100,908 tons per day for the City of Los Angeles (CalRecycle 2022). Based on landfill capacity, the solid waste contribution to the landfills that serve the alignment would be much less than the allowed daily capacity.

As described above, construction of the alignment would not generate solid waste in excess of state or local standards, in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals and would comply with federal, state, and local management and reduction statutes and regulations related to solid waste. Therefore, the KNE Fairfax Alignment would have a less than significant impact during construction.

3.18.7.4.2.2 OPERATIONAL IMPACTS

Less than Significant Impact. Operation of the KNE Fairfax Alignment would not include a direct source of solid waste. Indirectly, solid waste would be generated by transit users. Stations would include waste bins and recycle bins, but the disposal of solid waste collected at each station would have no notable potential to affect landfill capacity or impair attainment of solid waste reduction goals.

AB 939 requires a Solid Waste Diversion Program and diversion of at least 50 percent of the solid waste from landfills to recycling facilities. Los Angeles County achieved an estimated landfill diversion rate of 60 percent in 2012 (Los Angeles County 2013). The City of Los Angeles achieved a landfill diversion rate of 76.4 percent at the end of 2011 (City of Los Angeles, University of California Los Angeles 2013). Both the City of Los Angeles and Los Angeles County currently exceed AB 939's 50 percent diversion rate, and KNE would be required to participate in these efforts to minimize waste disposed of in landfills.

The City of Los Angeles and Los Angeles County contract with landfills to process solid waste. Landfills that would serve the KNE Fairfax Alignment are shown in Table 3.18-4 and Table 3.18-5, which indicate the landfills' design capacity can cumulatively serve up to 66,526 tons per day for Los Angeles County and 100,908 tons per day for the City of Los Angeles (CalRecycle 2022). Based on landfill capacity, the solid waste contribution from the KNE Fairfax Alignment to the landfills that serve the alignment would be much less than the allowed daily capacity.

As described above, operation of the alignment would not generate solid waste in excess of state or local standards, in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals. Therefore, the KNE Fairfax Alignment would have a less than significant impact during operation.

3.18.7.4.3 KNE LA BREA ALIGNMENT

3.18.7.4.3.1 CONSTRUCTION IMPACTS

Less than Significant Impact. Construction of the KNE La Brea Alignment would involve the generation and removal of solid waste to accommodate demolition and other construction activities. At the proposed stations where demolition of existing buildings is anticipated, generated waste may include bulky, heavy materials such as concrete, wood, metals, glass, and building components. Demolition of structures containing hazardous materials such as asbestos and lead-based materials require specialized procedures and equipment and appropriately certified personnel (for more information, see Section 3.11, Hazards and Hazardous Materials).

For construction of underground LRT guideway and surface elements, the removal of debris (e.g., soil, asphalt, concrete) is anticipated. This would result in an incremental and temporary increase in solid waste disposal at landfills and other waste disposal facilities. With two TBMs, the KNE La Brea Alignment would generate the majority of its solid waste from spoils (excavated material from TBM construction activities). The project would comply with the provisions set forth in Section 5.408.3 of the 2022 CALGreen Building code, which requires 100 percent of soils resulting primarily from land clearing to be reused or recycled. Some excavated soil would be used as backfill material on-site or reused, and the remaining excavated soil would be hauled off-site for disposal at any of the area landfills that accept and/or recycle construction and demolition materials or to local landfill site(s) if not suitable for fill or contains contaminated soils. As discussed in Section 3.11, Hazards and Hazardous Materials, transportation of hazardous materials would comply with applicable laws and regulations. The cut-and-cover excavations would also involve construction of temporary structures. After completion of construction, the temporary structures would need to be removed, which would generate solid waste.

Metro, the City of Los Angeles, the City of West Hollywood, and Los Angeles County have construction and demolition waste diversion programs to divert materials generated from construction or demolition projects from landfill disposal to recycling. The Los Angeles County construction and demolition program requires diverting at least 70 percent of construction and demolition waste under the Construction and Demolition Debris Recycling and Reuse Ordinance. Per the City of West Hollywood Municipal Code Section 19.20.060 Green Building, contractors shall divert a minimum of 80 percent of all construction and demolition waste away from landfills in accordance with any standards set by the Director of Public Works. Under the City of Los Angeles' Green New Deal Sustainable City pLAn, the City of Los Angeles targets recycling and reusing 80 percent of construction and demolition waste (City of Los Angeles 2019). While targets have not been adopted by a City of Los Angeles ordinance, Section 5.408 of the 2022 CALGreen Building code enforces at least 65 percent recycling and reuse of the total construction and demolition debris. In 2020, Metro exceeded their targeted 85 percent construction landfill diversion rate with a 98.7 percent diversion rate for construction and demolition waste (Metro 2023). The 2022 CALGreen Building Code Provisions under Section 5.408.1.1. through 5.408.1.3 enforces a 65 percent construction and demolition waste landfill diversion rate requirement or the local requirement, whichever is more stringent. KNE would comply with the 2022 CALGreen Building Code and, therefore, would comply with Metro's Moving Beyond Sustainability Plan, which establishes the most stringent of

the diversion rates discussed above and sets forth an 85 percent construction landfill diversion rate (Metro 2020).

The City of Los Angeles and Los Angeles County contract with landfills to process solid waste. Landfills that would serve the KNE La Brea Alignment are shown in Table 3.18-4 and Table 3.18-5, which indicate the landfills' design capacity can cumulatively serve up to 66,526 tons per day for Los Angeles County and 100,908 tons per day for the City of Los Angeles (CalRecycle 2022). Based on landfill capacity, the solid waste contribution to the landfills that serve the alignment would be much less than the allowed daily capacity.

As described above, construction of the alignment would not generate solid waste in excess of state or local standards, in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals and would comply with federal, state, and local management and reduction statutes and regulations related to solid waste. Therefore, the KNE La Brea Alignment would have a less than significant impact during construction.

3.18.7.4.3.2 OPERATIONAL IMPACTS

Less than Significant Impact. Operation of the KNE La Brea Alignment would not include a direct source of solid waste. Indirectly, solid waste would be generated by transit users. Stations would include waste bins and recycle bins, but the disposal of solid waste collected at each station would have no notable potential to affect landfill capacity or impair attainment of solid waste reduction goals.

AB 939 requires a Solid Waste Diversion Program and diversion of at least 50 percent of the solid waste from landfills to recycling facilities. Los Angeles County achieved an estimated landfill diversion rate of 60 percent in 2012 (Los Angeles County 2013). The City of Los Angeles achieved a landfill diversion rate of 76.4 percent at the end of 2011 (City of Los Angeles, University of California Los Angeles 2013). Both the City of Los Angeles and Los Angeles County currently exceed AB 939's 50 percent diversion rate, and KNE would be required to participate in these efforts to minimize waste disposed of in landfills.

The City of Los Angeles and Los Angeles County contract with landfills to process solid waste. Landfills that would serve the KNE La Brea Alignment are shown in Table 3.18-4 and Table 3.18-5, which indicate the landfills' design capacity can cumulatively serve up to 66,526 tons per day for Los Angeles County and 100,908 tons per day for the City of Los Angeles (CalRecycle 2022). Based on landfill capacity, the solid waste contribution from the KNE La Brea Alignment to the landfills that serve the alignment would be much less than the allowed daily capacity.

As described above, operation of the alignment would not generate solid waste in excess of state or local standards, in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals. Therefore, the KNE La Brea Alignment would have a less than significant impact during operation.

3.18.7.4.4 HOLLYWOOD BOWL DESIGN OPTION

3.18.7.4.4.1 CONSTRUCTION IMPACTS

Less than Significant Impact. Construction of the Hollywood Bowl Design Option would involve the generation and removal of solid waste to accommodate demolition and construction activities. For construction of underground guideway and surface elements, the removal of debris (e.g., soil, asphalt, concrete) is anticipated. This would result in an incremental and temporary increase in solid waste disposal at landfills and other waste disposal facilities. The design option would generate a majority of its solid waste from SEM activities. The project would comply with the provisions set forth in Section 5.408.3 of the 2022 CALGreen Building Code, which requires 100 percent of soils resulting primarily from land clearing to be reused or recycled. Some excavated soil would be used as backfill material on-site or reused, and the remaining excavated soil would be hauled off-site for disposal at any of the area's landfills that accept and/or recycle construction and demolition materials or to local landfill site(s) if not suitable for fill or contains contaminated soils. As discussed in Section 3.11, Hazards and Hazardous Materials, transportation of hazardous materials would comply with applicable laws and regulations. The construction of the tunnel and station would also involve temporary structures. After completion of construction, the temporary structures would need to be removed, which would generate solid waste.

Metro and the City of Los Angeles have construction and demolition waste diversion programs to divert materials generated from construction or demolition projects from landfill disposal to recycling. Under the City of Los Angeles' Green New Deal Sustainable City pLAn, the City of Los Angeles targets recycling and reusing 80 percent of construction and demolition waste (City of Los Angeles 2019). While targets have not been adopted by a City of Los Angeles ordinance, Section 4.408 of the 2022 CALGreen Building Code enforces at least 65 percent recycling and reuse of the total construction and demolition debris. In 2020, Metro exceeded their targeted 85 percent construction landfill diversion rate with a 98.7 percent diversion rate for construction and demolition waste (Metro 2023). The 2022 CALGreen Building Code Provisions under Section 5.408.1.1. through 5.408.1.3 enforces a 65 percent construction and demolition waste landfill diversion rate requirement or the local requirements, whichever is more stringent. The project would comply with the 2022 CALGreen Building Code and, therefore, would comply with Metro's Moving Beyond Sustainability Plan, which establishes the most stringent of the diversion rates discussed above and sets forth an 85 percent construction landfill diversion rate (Metro 2020).

The City of Los Angeles and Los Angeles County contract with landfills to process solid waste. Landfills that would serve the design option are shown in Table 3.18-4 and Table 3.18-5, which indicate the landfills' design capacity can cumulatively serve up to 66,526 tons per day for Los Angeles County and 100,908 tons per day for the City of Los Angeles (CalRecycle 2022). Based on landfill capacity, the solid waste contribution to the landfills that serve the design option would be much less than the allowed daily capacity.

As described above, construction of the design option would not generate solid waste in excess of state or local standards, in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals and would comply with federal, state, and local management and reduction

statutes and regulations related to solid waste. Therefore, the Hollywood Bowl Design Option would have a less than significant impact during construction.

3.18.7.4.4.2 OPERATIONAL IMPACTS

Less than Significant Impact. Operation of the Hollywood Bowl Design Option would not include a direct source of solid waste. Indirectly, solid waste would be generated by transit users. The station would include waste bins and recycle bins, but the disposal of solid waste collected at the station would have no notable potential to affect landfill capacity or impair attainment of solid waste reduction goals.

AB 939 requires a Solid Waste Diversion Program and diversion of at least 50 percent of the solid waste from landfills to recycling facilities. Los Angeles County achieved an estimated landfill diversion rate of 60 percent in 2012 (Los Angeles County 2013). The City of Los Angeles achieved a landfill diversion rate of 76.4 percent at the end of 2011 (City of Los Angeles, University of California Los Angeles 2013). Both the City of Los Angeles and Los Angeles County currently exceed AB 939's 50 percent diversion rate, and KNE would be required to participate in these efforts to minimize waste disposed of in landfills.

The City of Los Angeles and Los Angeles County contract with landfills to process solid waste. Landfills that would serve the Hollywood Bowl Design Option are shown in Table 3.18-4 and Table 3.18-5, which indicate the landfills' design capacity can cumulatively serve up to 66,526 tons per day for Los Angeles County and 100,908 tons per day for the City of Los Angeles (CalRecycle 2022). Based on landfill capacity, the solid waste contribution to the landfills that serve the design option would be much less than the allowed daily capacity.

Based upon the analysis described above, operation of the design option would not generate solid waste in excess of state or local standards, in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals. Therefore, the Hollywood Bowl Design Option would have a less than significant impact during operation.

3.18.7.4.5 MAINTENANCE AND STORAGE FACILITY

3.18.7.4.5.1 CONSTRUCTION IMPACTS

Less than Significant Impact. Construction of the MSF would involve the generation and removal of solid waste to accommodate demolition and other construction activities, including demolition of existing buildings. Generated waste may include bulky, heavy materials such as concrete, wood, metals, glass, and building components. Demolition of structures containing hazardous materials such as asbestos and lead-based materials require specialized procedures and equipment and appropriately certified personnel (for more information, see Section 3.11, Hazards and Hazardous Materials).

For construction of surface elements, the removal of debris (e.g., soil, asphalt, concrete) is anticipated. This would result in an incremental and temporary increase in solid waste disposal at landfills and other waste disposal facilities. Excavation associated with the MSF would also involve construction of temporary structures. After completion of construction, the temporary structures would need to be removed, which would generate solid waste.

Metro, the City of Los Angeles, and Los Angeles County have construction and demolition waste diversion programs to divert materials generated from construction or demolition projects from landfill disposal to recycling. The Los Angeles County construction and demolition program requires diverting at least 70 percent of construction and demolition waste under the Construction and Demolition Debris Recycling and Reuse Ordinance. Under the City of Los Angeles' Green New Deal Sustainable City pLAn, the City of Los Angeles targets recycling and reusing 80 percent of construction and demolition waste (City of Los Angeles 2019). While targets have not been adopted by a City of Los Angeles ordinance, Section 5.408 of the 2022 CALGreen Building code enforces at least 65 percent recycling and reuse of the total construction and demolition debris. In 2020, Metro exceeded their targeted 85 percent construction landfill diversion rate with a 98.7 percent diversion rate for construction and demolition waste (Metro 2023). The 2022 CALGreen Building Code Provisions under Section 5.408.1.1. through 5.408.1.3 enforces a 65 percent construction and demolition waste landfill diversion rate requirement or the local requirement, whichever is more stringent. KNE would comply with the 2022 CALGreen Building Code and, therefore, would comply with Metro's Moving Beyond Sustainability Plan, which establishes the most stringent of the diversion rates discussed above and sets forth an 85 percent construction landfill diversion rate (Metro 2020).

The City of Los Angeles and Los Angeles County contract with landfills to process solid waste. Landfills that would serve the MSF are shown in Table 3.18-4 and Table 3.18-5, which indicate the landfills' design capacity can cumulatively serve up to 66,526 tons per day for Los Angeles County and 100,908 tons per day for the City of Los Angeles (CalRecycle 2022). Based on landfill capacity, the solid waste contribution to the landfills that serve the MSF would be much less than the allowed daily capacity.

As described above, construction of the MSF would not generate solid waste in excess of state or local standards, in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals and would comply with federal, state, and local management and reduction statutes and regulations related to solid waste. Therefore, the MSF would have a less than significant impact during construction.

3.18.7.4.5.2 OPERATIONAL IMPACTS

Less than Significant Impact. Operation of the MSF would generate small volumes of solid waste, such as product packaging, broken equipment, and site litter, which would not result in a net increase in project-related solid waste generation in excess of state or local standards, or in excess of the capacity of the local infrastructure, or otherwise impair the attainment of solid waste reduction goals.

AB 939 requires a Solid Waste Diversion Program and diversion of at least 50 percent of the solid waste from landfills to recycling facilities. Los Angeles County achieved an estimated landfill diversion rate of 60 percent in 2012 (Los Angeles County 2013). The City of Los Angeles achieved a landfill diversion rate of 76.4 percent at the end of 2011 (City of Los Angeles, University of California Los Angeles 2013). Both the City of Los Angeles and Los Angeles County currently exceed AB 939's required 50 percent diversion rate, and the MSF would be required to participate in these efforts to minimize waste disposed of in landfills.

The City of Los Angeles and Los Angeles County contract with landfills to process solid waste. Landfills that would serve the MSF are shown in Table 3.18-4 and Table 3.18-5, which indicate the landfills' design capacity can cumulatively serve up to 66,526 tons per day for Los Angeles County and 100,908 tons per day for the City of Los Angeles (CalRecycle 2022). Based on landfill capacity, the solid waste contribution to the landfills that serve the MSF would be much less than the allowed daily capacity.

The disposal of solid waste collected at the MSF would have no notable potential to affect landfill capacity or impair attainment of solid waste reduction goals. Therefore, the MSF would have a less than significant impact during operation.

3.18.7.5 IMPACT UTL-5: SOLID WASTE DISPOSAL REGULATIONS

Impact UTL-5: Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

3.18.7.5.1 KNE SAN VICENTE–FAIRFAX ALIGNMENT

3.18.7.5.1.1 CONSTRUCTION IMPACTS

Less than Significant Impact. Construction of the KNE San Vicente–Fairfax Alignment would be required to comply with all applicable federal, state, and local statutes and regulations pertaining to solid waste disposal. As discussed under Impact UTL-4 above, solid waste would be generated during construction of the alignment; however, Metro requires contractors to comply with the most stringent applicable waste regulations. Therefore, the KNE San Vicente–Fairfax Alignment would have a less than significant impact during construction.

3.18.7.5.1.2 OPERATIONAL IMPACTS

Less than Significant Impact. AB 939 requires a Solid Waste Diversion Program and diversion of at least 50 percent of the solid waste from landfills to recycling facilities. Los Angeles County achieved an estimated landfill diversion rate of 60 percent in 2012. The City of Los Angeles achieved a landfill diversion rate of 76.4 percent at the end of 2011 (LACDPW 2019; City of Los Angeles, University of California Los Angeles 2013). Both jurisdictions currently exceed the required diversion rate, and the project would be required to participate in these efforts to minimize waste disposed of in landfills. As discussed under Impact UTL-4, small amounts of solid waste would be generated during operation of the alignment. Therefore, the KNE San Vicente–Fairfax Alignment would have a less than significant impact during operation.

3.18.7.5.2 KNE FAIRFAX ALIGNMENT

3.18.7.5.2.1 CONSTRUCTION IMPACTS

Less than Significant Impact. Construction of the KNE Fairfax Alignment would be required to comply with all applicable federal, state, and local statutes and regulations pertaining to solid waste disposal. As discussed under Impact UTL-4 above, solid waste would be generated during construction of the

alignment; however, Metro requires contractors to comply with the most stringent applicable waste regulations. Therefore, the KNE Fairfax Alignment would have a less than significant impact during construction.

3.18.7.5.2.2 OPERATIONAL IMPACTS

Less than Significant Impact. AB 939 requires a Solid Waste Diversion Program and diversion of at least 50 percent of the solid waste from landfills to recycling facilities. Los Angeles County achieved an estimated landfill diversion rate of 60 percent in 2012. The City of Los Angeles achieved a landfill diversion rate of 76.4 percent at the end of 2011 (LACDPW 2019; City of Los Angeles, University of California Los Angeles 2013). Both jurisdictions currently exceed the required diversion rate, and the project would be required to participate in these efforts to minimize waste disposed of in landfills. As discussed under Impact UTL-4, small amounts of solid waste would be generated during operation of the alignment. Therefore, the KNE Fairfax Alignment would have a less than significant impact during operation.

3.18.7.5.3 KNE LA BREA ALIGNMENT

3.18.7.5.3.1 CONSTRUCTION IMPACTS

Less than Significant Impact. Construction of the KNE La Brea Alignment would be required to comply with all applicable federal, state, and local statutes and regulations pertaining to solid waste disposal. As discussed under Impact UTL-4 above, solid waste would be generated during construction of the alignment; however, Metro requires contractors to comply with the most stringent applicable waste regulations. Therefore, the KNE La Brea Alignment would have a less than significant impact during construction.

3.18.7.5.3.2 OPERATIONAL IMPACTS

Less than Significant Impact. AB 939 requires a Solid Waste Diversion Program and diversion of at least 50 percent of the solid waste from landfills to recycling facilities. Los Angeles County achieved an estimated landfill diversion rate of 60 percent in 2012. The City of Los Angeles achieved a landfill diversion rate of 76.4 percent at the end of 2011 (LACDPW 2019; City of Los Angeles, University of California Los Angeles 2013). Both jurisdictions currently exceed the required diversion rate, and the project would be required to participate in these efforts to minimize waste disposed of in landfills. As discussed under Impact UTL-4, small amounts of solid waste would be generated during operation of the alignment. Therefore, the KNE La Brea Alignment would have a less than significant impact during operation.

3.18.7.5.4 HOLLYWOOD BOWL DESIGN OPTION

3.18.7.5.4.1 CONSTRUCTION IMPACTS

Less than Significant Impact. Construction of the Hollywood Bowl Design Option would be required to comply with all applicable federal, state, and local statutes and regulations pertaining to solid waste disposal. As discussed under Impact UTL-4 above, solid waste would be generated during construction of the design option; however, Metro requires contractors to comply with the most stringent applicable waste regulations. Therefore, the Hollywood Bowl Design Option would have a less than significant impact during construction.

3.18.7.5.4.2 OPERATIONAL IMPACTS

Less than Significant Impact. AB 939 requires a Solid Waste Diversion Program and diversion of at least 50 percent of the solid waste from landfills to recycling facilities. Los Angeles County achieved an estimated landfill diversion rate of 60 percent in 2012. The City of Los Angeles achieved a landfill diversion rate of 76.4 percent at the end of 2011 (LACDPW 2019; City of Los Angeles, University of California Los Angeles 2013). Both jurisdictions currently exceed the required diversion rate, and the project would be required to participate in these efforts to minimize waste disposed of in landfills. As discussed under Impact UTL-4, small amounts of solid waste would be generated during operation of the design option. Therefore, the Hollywood Bowl Design Option would have a less than significant impact during operation.

3.18.7.5.5 MAINTENANCE AND STORAGE FACILITY

3.18.7.5.5.1 CONSTRUCTION IMPACTS

Less than Significant Impact. Construction of the MSF would be required to comply with all applicable federal, state, and local statutes and regulations pertaining to solid waste disposal. As discussed under Impact UTL-4 above, solid waste would be generated during construction of the MSF; however, Metro requires contractors to comply with the most stringent applicable waste regulations. Therefore, the MSF would have a less than significant impact during construction.

3.18.7.5.5.2 OPERATIONAL IMPACTS

Less than Significant Impact. AB 939 requires a Solid Waste Diversion Program and diversion of at least 50 percent of the solid waste from landfills to recycling facilities. Los Angeles County achieved an estimated landfill diversion rate of 60 percent in 2012. The City of Los Angeles achieved a landfill diversion rate of 76.4 percent at the end of 2011. Both jurisdictions currently exceed the required diversion rate, and the project would be required to participate in these efforts to minimize waste disposed of in landfills. As discussed under Impact UTL-4, small amounts of solid waste would be generated during operation of the MSF. Therefore, the MSF would have a less than significant impact during operation.

3.18.7.6 MITIGATION MEASURES

As the impact analysis above demonstrates, construction and operation of any of the KNE alignments and stations, the design option, and the MSF would result in either no impact or a less than significant impact related to utilities and service systems. Therefore, no mitigation is required under CEQA.

3.18.7.7 SUMMARY OF IMPACT SIGNIFICANCE CONCLUSIONS AND MITIGATION MEASURES

Table 3.18-6 summarizes the utilities and service systems impact significance conclusions and applicable mitigation measures. As indicated above, there are no significant utilities and service systems impacts that would require mitigation.

TABLE 3.18-6. KNE SUMMARY OF IMPACT SIGNIFICANCE CONCLUSIONS AND MITIGATION MEASURES

IMPACT		IMPACT SIGNIFICANCE CONCLUSIONS AND MITIGATION MEASURES				
		KNE SAN VICENTE–FAIRFAX ALIGNMENT	KNE FAIRFAX ALIGNMENT	KNE LA BREA ALIGNMENT	HOLLYWOOD BOWL DESIGN OPTION	MAINTENANCE AND STORAGE FACILITY
Impact UTL-1: Utility Relocation or Construction of New or Expanded Facilities	Impact Before Mitigation	Construction: LTS Operation: LTS	Construction: LTS Operation: LTS	Construction: LTS Operation: LTS	Construction: LTS Operation: LTS	Construction: LTS Operation: LTS
	Mitigation Measures	None Required	None Required	None Required	None Required	None Required
	Impact After Mitigation	Construction: LTS Operation: LTS	Construction: LTS Operation: LTS	Construction: LTS Operation: LTS	Construction: LTS Operation: LTS	Construction: LTS Operation: LTS
Impact UTL-2: Water Supplies	Impact Before Mitigation	Construction: LTS Operation: LTS	Construction: LTS Operation: LTS	Construction: LTS Operation: LTS	Construction: LTS Operation: LTS	Construction: LTS Operation: LTS
	Mitigation Measures	None Required	None Required	None Required	None Required	None Required
	Impact After Mitigation	Construction: LTS Operation: LTS	Construction: LTS Operation: LTS	Construction: LTS Operation: LTS	Construction: LTS Operation: LTS	Construction: LTS Operation: LTS
Impact UTL-3: Wastewater Facilities	Impact Before Mitigation	Construction: LTS Operation: LTS	Construction: LTS Operation: LTS	Construction: LTS Operation: LTS	Construction: LTS Operation: LTS	Construction: LTS Operation: LTS
	Mitigation Measures	None Required	None Required	None Required	None Required	None Required
	Impact After Mitigation	Construction: LTS Operation: LTS	Construction: LTS Operation: LTS	Construction: LTS Operation: LTS	Construction: LTS Operation: LTS	Construction: LTS Operation: LTS
Impact UTL-4: Solid Waste Generation	Impact Before Mitigation	Construction: LTS Operation: LTS	Construction: LTS Operation: LTS	Construction: LTS Operation: LTS	Construction: LTS Operation: LTS	Construction: LTS Operation: LTS
	Mitigation Measures	None Required	None Required	None Required	None Required	None Required
	Impact After Mitigation	Construction: LTS Operation: LTS	Construction: LTS Operation: LTS	Construction: LTS Operation: LTS	Construction: LTS Operation: LTS	Construction: LTS Operation: LTS

IMPACT		IMPACT SIGNIFICANCE CONCLUSIONS AND MITIGATION MEASURES				
		KNE SAN VICENTE–FAIRFAX ALIGNMENT	KNE FAIRFAX ALIGNMENT	KNE LA BREA ALIGNMENT	HOLLYWOOD BOWL DESIGN OPTION	MAINTENANCE AND STORAGE FACILITY
Impact UTL-5: Solid Waste Disposal Regulations	Impact Before Mitigation	Construction: LTS Operation: LTS	Construction: LTS Operation: LTS	Construction: LTS Operation: LTS	Construction: LTS Operation: LTS	Construction: LTS Operation: LTS
	Mitigation Measures	None Required	None Required	None Required	None Required	None Required
	Impact After Mitigation	Construction: LTS Operation: LTS	Construction: LTS Operation: LTS	Construction: LTS Operation: LTS	Construction: LTS Operation: LTS	Construction: LTS Operation: LTS

Source: Connect Los Angeles Partners 2024
LTS = less than significant