

5. Environmental Analysis

5.15 UTILITIES AND SERVICE SYSTEMS

This section of the Draft Environmental Impact Report (DEIR) addresses utilities and service systems, including water, electricity, natural gas, and solid waste. The Initial Study/Notice of Preparation substantiated that impacts associated with wastewater would be less than significant. A Sewer Study is included as Appendix C to the Initial Study/Notice of Preparation, included as Appendix A to the DEIR. Storm water system is addressed in Section 5.9, *Hydrology and Water Quality*, of the DEIR. These topics are not addressed in the following analysis.

5.15.1 Environmental Setting

5.15.1.1 REGULATORY BACKGROUND

Water

The Urban Water Management Planning Act (California Water Code, Division 6, Part 2.6, §§ 10610 *et seq.*) was enacted in 1983 and applies to municipal water suppliers that serve more than 3,000 customers or supply more than 3,000 acre-feet per year (afy) of water. The UWMP Act requires these suppliers to prepare and update their urban water management plans (UWMP) every five years to demonstrate an appropriate level of reliability in supplying anticipated short-term and long-term water demands during normal, dry, and multiple-dry years. The UWMP Act specifies the data necessary to document the existing and projected future water demand over 20 years and requires that the projected demands be presented in 5-year increments for the 20-year projection.

The City of Anaheim adopted the City of Anaheim 2015 Urban Water Management Plan in June 2016. The UWMP evaluates City-wide water supply and demand reliability for 25 years into the future and is a baseline document for the preparation of WSAs. Anaheim's 2015 UWMP concluded there was an adequate and reliable supply of water to provide for existing demand and estimated growth through year 2040, based on information then available.

California Green Building Standards

California Green Building Standards (CALGreen) Code, Chapter 5, Nonresidential Mandatory Measures, Division 5.3, Water Efficiency and Conservation, establishes provisions to conserve water used indoors, outdoors, and in wastewater conveyance in nonresidential development. The intent of this code requirement is to reduce potable water use in new or altered buildings by making building owners and/or tenants aware of their daily potable water consumption to encourage voluntary reduction. When the meters are installed, the building operator would have the ability to establish a water consumption baseline to monitor future water use.

California Green Building Standards Code, Chapter 4, Residential Mandatory Measures, Division 4.3, Water Efficiency and Conservation, establishes provisions to conserve water used indoors (e.g., water closets, urinals, showerheads, and faucets), outdoors such as landscape areas, and in water reuse systems in residential development.

5. Environmental Analysis

UTILITIES AND SERVICE SYSTEMS

Local

City of Anaheim Municipal Code, Chapter 10.18, Water Conservation Ordinance No. 6332 (adopted May 19, 2015) outlines the City's water conservation rules and regulations, which were established to "ensure the reasonable and beneficial use of water and maximize its efficient use within the City." If it is forecast that water demand exceeds available supplies, the City shall trigger application of its Water Conservation Ordinance, as prescribed, to require mandatory conservation measures.

City of Anaheim Municipal Code, Chapter 10.19, Landscape Water Efficiency, and the Guidelines for Implementation of the City of Anaheim Landscape Water Efficiency Ordinance promulgated thereunder, establish structure for planning designing, installing, and maintaining and managing water efficient landscapes in new construction and rehabilitated landscape projects, and provisions for water management practices and water waste prevention for existing landscapes.

City of Anaheim Municipal Code, Chapter 10.16, Water and Electricity, allows City Council, by resolution, to establish rules and regulations for the installation charges to be collected for electricity and water services.

Electricity

California's Appliance Efficiency Regulations (CCR Title 20, Parts 1600–1608) contain energy performance, energy design, water performance, and water design standards for appliances (including refrigerators, ice makers, vending machines, freezers, water heaters, fans, boilers, washing machines, dryers, air conditioners, pool equipment, and plumbing fittings) that are sold or offered for sale in California. These standards are updated regularly to allow consideration of new energy efficiency technologies and methods.

The Energy Efficiency Standards for Residential and Nonresidential Buildings (24 CCR Part 6) were established in 1978 in response to a legislative mandate to reduce California's energy consumption. The CEC adopted the 2008 changes to the Building Energy Efficiency Standards in order to (1) "Provide California with an adequate, reasonably-priced, and environmentally-sound supply of energy" and (2) "Respond to Assembly Bill 32, the Global Warming Solutions Act of 2006, which mandates that California must reduce its greenhouse gas emissions to 1990 levels by 2020." Title 24 Part 6 of the 2013 California Building Standards Code, the 2013 California Energy Code, went into effect on July 1, 2014, and includes energy efficiency updates (CBSC 2015). Buildings that are constructed in accordance with the 2013 Building and Energy Efficiency Standards are 25 percent (residential) to 30 percent (nonresidential) more energy efficient than the 2008 standards as a result of better windows, insulation, lighting, ventilation systems, and other features.

Most recently, the CEC adopted the 2016 Building and Energy Efficiency Standards. The 2016 Standards will continue to improve upon the current 2013 Standards for new construction of, and additions and alterations to, residential and nonresidential buildings. These standards will go into effect on January 1, 2017. Under the 2016 Standards, residential buildings are 28 percent more energy efficient than the 2013 Standards, and nonresidential buildings are 5 percent more energy efficient than the 2013 Standards (CEC 2015a).

The 2016 standards will not achieve zero net energy. However, they do get very close to the state's goal and make important steps toward changing residential building practices in California. The 2019 standards will take

5. Environmental Analysis UTILITIES AND SERVICE SYSTEM

the final step to achieve zero net energy for newly constructed residential buildings throughout California (CEC 2015b).

CALGreen (24 CCR Part 11) is a code with mandatory requirements for new residential and nonresidential buildings throughout California. CALGreen is intended to (1) reduce GHG emissions from buildings; (2) promote environmentally responsible, cost-effective, healthier places to live and work; (3) reduce energy and water consumption; and (4) respond to the directives by the governor. The code is established to reduce construction waste, make buildings more efficient in the use of materials and energy, and reduce environmental impacts during and after construction. CALGreen contains requirements for construction site selection, stormwater control during construction, construction waste reduction, indoor water use reduction, material selection, natural resource conservation, site irrigation conservation, and more. The code provides for design options, allowing the designer to determine how best to achieve compliance for a given site or building condition. The code also requires building commissioning, which is a process for verifying that all building systems (e.g., heating and cooling equipment and lighting systems) are functioning at their maximum efficiency.

Solid Waste

AB 939 (Integrated Solid Waste Management Act of 1989; California Public Resources Code 40050 et seq.) established an integrated waste-management system that focused on source reduction, recycling, composting, and land disposal of waste. AB 939 required every California city and county to divert 50 percent of its waste from landfills by the year 2000. Compliance with AB 939 is measured in part by comparing solid waste disposal rates for a jurisdiction with target disposal rates. Actual rates at or below target rates are consistent with AB 939. AB 939 also requires California counties to show 15 years of disposal capacity for all jurisdictions in the county or show a plan to transform or divert its waste.

AB 341 (Chapter 476, Statutes of 2011) increased the statewide solid waste diversion goal to 75 percent by 2020. The law also mandates recycling for commercial and multifamily residential land uses as well as schools and school districts.

AB 1826 (California Public Resources Code §§ 42649.8 et seq.) requires recycling of organic matter by businesses and multifamily residences of five or more units, generating such wastes in amounts over certain thresholds.

SB 1016 (Solid Waste Disposal Measurement Act of 2008) builds on AB 939 compliance requirements by implementing a simplified measure of jurisdiction's performance by changing to a disposal-based indicator—the per capita disposal rate—that uses 1) a jurisdiction's population (or in some cases employment) and (2) its disposal as reported by disposal facilities.

Section 5.408 of the CALGreen (Title 24, California Code of Regulations, Part 11) requires that a minimum of 65 percent of the nonhazardous construction and demolition waste from nonresidential uses be recycled and/or salvaged for reuse.

5. Environmental Analysis UTILITIES AND SERVICE SYSTEMS

5.15.1.2 EXISTING CONDITIONS

Water

Groundwater Supply

The Orange County Basin is managed by the Orange County Water District (OCWD). Pumping from the Basin is managed through a process that uses financial incentives to encourage groundwater producers to pump a sustainable amount of water. The framework for the financial incentives is based on establishing the basin production percentage (BPP), the percentage of each producer's total water supply that comes from groundwater pumped from the Basin. Groundwater production at or below the BPP is assessed a "replenishment assessment," and pumping above the BPP is assessed a "basin equity assessment" in addition to the replenishment assessment, which is calculated based on the Metropolitan Water District of Southern California's (MWD) rates.

The BPP was initially established in 1969 and has ranged from 62 to 77 percent in recent years. Resolution No. 13-1-6, adopted on January 16, 2013, by the OCWD Board of Directors, stated OCWD's goal to develop the necessary supplies and facilities to achieve and maintain a 75 percent BPP long term. OCWD's transition to the 75 percent BPP was due to construction of the Groundwater Replenishment System (GWRS) Initial Expansion Project, which was completed in 2015. This expansion provided an additional 31,000 afy of water for recharging the groundwater basin. OCWD is planning to increase GWRS treatment capacity to 130 mgd through its final expansion. Although the BPP is set at 75 percent, a BPP of 70 percent was assumed in the City's 2015 UWMP through 2040 to be conservative.

Imported Water Supply

The City of Anaheim is one of only three retail member agencies of MWD in Orange County. As a member agency, pursuant to the Metropolitan Act, the City has preferential rights to a certain percentage of water delivered to MWD each year from the State Water Project, the Colorado River Aqueduct, and other supply/storage programs.

The City purchases both treated potable and untreated nonpotable water from MWD. The treated water is delivered through five major feeders: 1) East Orange County Feeder No. 2; 2) Orange County Feeder; 3) Second Lower Feeder; 4) West Orange County Feeder; and 5) Allen-McColloch Pipeline. Untreated MWD water is delivered to the City's Walnut Canyon Reservoir with a total capacity of 2,823 acre-feet (920 million gallons). This water is treated by the City's August F. Lenain Water Treatment Plant (Lenain). Lenain treats up to 15 million gallons of drinking water a day (Arcadis 2016).

Recycled Water Supply

Anaheim indirectly participates in regional water recycling through the GWRS by the OCWD and Orange County Sanitation District (OCSA). In FY 2012, the City started purchasing GWRS water directly from OCWD for use to control and/or reduce air emissions and for landscape irrigation. Anaheim's sewage is part of the wastewater recycled and recharged by OCWD. The City is trying to increase the use of recycled water to reduce dependence on imported water supplies. The potential recycled water users include parks, golf courses, school

5. Environmental Analysis UTILITIES AND SERVICE SYSTEM

yards, homeowners associations, freeway/street landscaping, and industrial facilities. Additionally, the guidelines for implementing the City's landscape ordinance require separate irrigation services for any new landscaped area larger than a certain size. This enables easy conversion to recycled water if and when it becomes available.

Reliability of Water Supplies

The primary source of water for the City is groundwater from the Basin. OCWD is responsible for the protection of water rights to the Santa Ana River in Orange County as well as the management and replenishment of the Basin. OCWD replenishes and maintains the Basin at safe levels while significantly increasing the Basin's annual yield by using the best available technology. Other than recycled water, OCWD primarily recharges the Basin with water from the Santa Ana River and to a lesser extent with imported raw water purchased from MWD.

MWD has taken a number of actions to secure a reliable water source for its member agencies. MWD developed a water supply allocation plan and used it in 2009, 2010, and 2015 to deal with potential shortages. Additional actions taken by MWD over the past several years have significantly increased spending on conservation, local projects, and water supply/reliability enhancements. As such, MWD, in its 2015 UWMP, which estimated its supply capability and projected demands for an average (normal) year, a single dry-year, and for multiple dry years, concluded that there is a projected surplus, even without MWD's supplies under development and potential supplies that could further increase the projected surplus if/when implemented.

City Water Demands

In June 2016, the City adopted the City of Anaheim 2015 Urban Water Management Plan. The City's total water demand in FY 2015 of 62,053 acre feet was 16.7 percent less than the total water demand of 72,400 acre-feet projected five years earlier in the City's 2010 UWMP. This is believed to be primarily attributable to City water conservation efforts associated with the Water Conservation Act of 2009. The Act mandated water demand reductions of 10 percent by 2015, which the City has met, and a reduction of 20 percent by 2020, which the City is on track to meet.

In April 2015, Governor Brown issued Executive Order B-29-15 as a result of one of the most severe droughts in California's history, requiring a collective reduction in statewide urban water use of 25 percent (relative to demands of 2013) by February 2016. Each agency in the state was given a specific reduction target by the State Department of Water Resources. Anaheim's demand reduction was set at 20 percent. In response, the City adopted Ordinance No. 6332, on May 19, 2015, establishing provisions against water waste and implementing higher (more restrictive) stages of the water conservation ordinance. As a result, the City met the water use reduction target from June 2015 through February 2016.

Electricity

Anaheim Public Utilities Department (APUD) provides electricity to the City of Anaheim, including the Project Site, serving approximately 119,000 residential and business customers. APUD's power supply comes from resources in Anaheim and across the western United States. APUD supplies more than 3.7 million megawatt-hours a year, with an annual historic system peak demand of 593 megawatts (Anaheim 2017). APUD owns the

5. Environmental Analysis

UTILITIES AND SERVICE SYSTEMS

largest municipal solar photovoltaic system on top of a convention center in North America, consisting of 7,908 panels and producing 3.5 million kilowatt-hours annually, enough to power 600 homes in Anaheim. To date, 128 circuit miles of overhead power lines have been placed underground since 1990. APUD ranks in the top 25 percent of utilities nationwide for electric system reliability, indicating that the City has fewer and shorter power outages than 75 percent of utilities nationwide.

Natural Gas

Southern California Gas Company (SCG) provides gas service in the City of Anaheim and has facilities throughout the City, including the Project Site.

Solid Waste

Republic Services provides solid waste collection and disposal for the City of Anaheim. The collected wastes are consolidated and sorted at local transfer stations and transported to disposal sites. The nearest transfer station used by Republic Services is the materials recovery facility at 2740 Coronado Street in the City of Anaheim. The materials recovery facility processes an average of 3,200 tons of material each day. Its 800-foot-long automated and manual sorter/conveyor system separates more than 70 types of recyclables. Once the materials have passed through the sorter/conveyer system, they are bundled and transferred for immediate shipment to domestic and international markets. Nonrecyclable waste is moved to the onsite, 40,000-square-foot solid waste transfer operation for final processing and consolidation before delivery to landfills. Household toxic waste is disposed of at the County of Orange Household Hazardous Waste Collection Center at 1071 North Blue Gum Street in Anaheim.

Solid waste landfill capacity is provided to Anaheim by OC Waste & Recycling. Orange County owns and operates three active landfills: Olinda Alpha Landfill at 1942 North Valencia Avenue in Brea; Frank R. Bowerman Landfill at 11002 Bee Canyon Access Road in Irvine; and Prima Deshecha Landfill at 32250 La Pata Avenue in San Juan Capistrano. The waste generated by Anaheim is taken to the Olinda Alpha Landfill. The Olinda Alpha Landfill accepts a maximum of 8,000 tons per day and currently receives an average of approximately 6,000 tons per day. The landfill had an estimated remaining capacity of approximately 43.9 million cubic yards, as of June 30, 2013, and is scheduled to close on December 31, 2021. After it closes, solid waste would be disposed of at the Bowerman Landfill. The Bowerman Landfill accepts up to 11,500 tons per day and currently receives an average of approximately 5,500 tons per day. It had an estimated remaining capacity of 192.3 million cubic yards, as of June 30, 2013, with closure estimated in 2053.

To ensure that the maximum permitted daily tonnage at a particular landfill is not exceeded, waste haulers can be diverted to another OC Recycling landfill or one of the transfer stations throughout the county.

5.15.2 Thresholds of Significance

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project:

5. Environmental Analysis UTILITIES AND SERVICE SYSTEM

- U-1 Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects.
- U-2 Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years.
- U-3 Result in a determination by the waste water treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments.
- U-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.
- U-5 Comply with federal, state, and local management and reduction statutes and regulations related to solid waste.

The Initial Study, included as Appendix A, substantiates that impacts associated with the following thresholds would be less than significant:

- Threshold U-1 [parts relating to wastewater treatment, storm water, and telecommunication facilities]
- Threshold U-3
- Threshold U-5

These impacts will not be addressed in the following analysis.

5.15.3 Plans, Programs, and Policies

Regulatory Requirements

- RR USS-1 The Proposed Project will be required to comply with the following regulations.
- California Building Energy and Efficiency Standards (Title 24, Part 6) and California Green Building Standards Code (CALGreen) (Title 24, Part 11).
 - City of Anaheim Municipal Code Chapter 10.16, Water and Electricity, Electric Rule, Rates, and Regulations
 - SB 610 (Chapter 643, Statutes of 2001) and SB 221 (Chapter 642, Statutes of 2001).
 - California Green Building Standards Code, Chapter 5, Nonresidential Mandatory Measures, Division 5.3, Water Efficiency and Conservation.
 - California Green Building Standards Code, Chapter 4, Residential Mandatory Measures, Division 4.3, Water Efficiency and Conservation.

5. Environmental Analysis

UTILITIES AND SERVICE SYSTEMS

- City of Anaheim Municipal Code, Chapter 10.18, Water Conservation, and Water Shortage Contingency Rules and Regulations
- City of Anaheim Municipal Code, Chapter 10.19, Landscape Water Efficiency Ordinance (Resolution 2010-112) and Guidelines for Implementation of the City of Anaheim Landscape Water Efficiency Ordinance.
- City of Anaheim Municipal Code, Chapter 10.16 Water and Electricity, and Water Rates, Rules, and Regulations
- Energy Efficiency Standards for Residential and Nonresidential Buildings (24 CCR Part 6)
- California's Appliance Efficiency Regulations (CCR Title 20, Parts 1600–1608)

5.15.4 Environmental Impacts

5.15.4.1 IMPACT ANALYSIS

The following impact analysis addresses thresholds of significance for which the Initial Study disclosed potentially significant impacts. The applicable thresholds are identified in brackets after the impact statement.

Impact 5.15-1: The Proposed Project would not require or result in the relocation or construction of new or expanded water, electric power, or natural gas facilities, the construction or relocation of which could cause significant environmental effects. [Threshold U-1]

Water Facilities

Anaheim Public Utilities Department provides water services to the Project Site and would continue to do so. New connections to existing water lines would be coordinated through the Water Engineering Division of APUD during the building permitting process to ensure that the existing water distribution system provides the peak flow rate and fire flow requirements. Any system improvements would comply with Rule No. 15 of the APUD's Water Rates, Rules, and Regulations. Individual water service and/or fire line connections are required for each parcel or residential unit by Rule No. 18 of the Water Rates, Rules, and Regulations. Compliance with the existing regulations would ensure that connection to existing water facilities do not result in significant impact.

Electrical Facilities

The Project Site is already developed with neighborhood commercial uses and served by electric power facilities. The Proposed Project would upgrade existing electric power systems to achieve the current California Building Energy and Efficiency Standards (Title 24, Part 6) and CALGreen standards (Title 24, Part 11). Improvements to existing electrical facilities would not result in significant environmental effects. The existing commercial uses generate approximately 619,923 kWh/yr of electrical demands, and the Proposed Project is anticipated to consume approximately 307,988 (kWh/yr) electricity (PlaceWorks 2019). Therefore, the Proposed Project is anticipated to result in approximately 50 percent net decrease of electricity per year. Therefore, it is anticipated

5. Environmental Analysis UTILITIES AND SERVICE SYSTEM

that no new or expanded electric power facilities would be required, other than required under the existing regulations. Impacts would be less than significant.

Natural Gas Facilities

The Project Site is already developed with neighborhood commercial uses and served by natural gas facilities. The Proposed Project would upgrade existing gas systems to achieve the current California Building Energy and Efficiency Standards and CALGreen standards. Improvements to existing natural gas facilities would not result in significant environmental effects. The existing commercial uses generate approximately 89,730 British Thermal Unit per year (kBtu/yr) of natural gas demands, and the Proposed Project is anticipated consume approximately 1,023,450 kBtu/yr, an increase of 933,720 kBtu/yr (PlaceWorks 2019). Additional gas services infrastructure would be added to the existing system by SCG as necessary to meet the requirements. SCG has indicated that they have the capacity to do what is necessary to provide adequate services. There are extensive and reliable gas services in the area, and the improvements would comply with the SCG's policies and extension rules filed with the Public Utilities Commission when the contractual agreements are made. As a public utility, SCG is under the auspices of the Public Utilities Commission and federal regulatory agencies. Should these agencies take any action that affects gas supply or the conditions under which service is available, gas service would be provided in accordance with revised conditions. Although implementation of the Proposed Project would create additional demands on natural gas supplies and distribution infrastructure, the increased demands are projected to be within the service capabilities of SCG, and impacts would be less than significant.

Level of Significance Before Mitigation: Less than significant.

Impact 5.15-2: Implementation of the Proposed Project would have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years. [Threshold U-2]

APUD provides water to the City's population, including the Project Site. APUD currently obtains water from a combination of imported water, local groundwater, and recycled water. The City works together with two primary agencies, Metropolitan for imported water and OCWD for groundwater to ensure a reliable water supply.

In 2015, the City received approximately 76 percent (46,937 acre feet [af]) of its water supply from its groundwater wells in the Orange County Groundwater Basin, 24 percent (15,045 af) from Metropolitan Water District of Southern California, and 0.1 percent (71 af) from recycled water.

The City's 2015 Urban Water Management Plan was adopted in 2016, and the UWMP's Table 3-6, Normal Year Supply and Demand Comparison; Table 3-7, Single Dry Year Supply and Demand Comparison; and Table 3-8, Multiple Dry Year Supply and Demand Comparison show that there is adequate supply during normal year, single dry year, and multiple dry year conditions in APUD's service area from 2020 to 2040. The UWMP projected that the City's water service area population would increase by 16 percent by 2040.

Residential water use accounts for the majority of the City's water demands, with the single-family residential sector accounting for approximately 36 percent (22,160 af) and multifamily for approximately 20 percent

5. Environmental Analysis

UTILITIES AND SERVICE SYSTEMS

(12,085 af) of total demand in 2015. By 2020, 2030, and 2040, the single-family demands are projected to increase slightly to approximately 39 percent of the total water demands, ranging from 23,908 af to 25,875 af, and multifamily use demands would remain at 20 percent, ranging from 12,250 af to 13,258 af. The UWMP's water consumption by residential sector was projected based on anticipated growth projected by the Center of Demographics Research at California State University, Fullerton. The Proposed Project is anticipated to consume approximately 6,351,000 gallons per year or 19.5 af per year (PlaceWorks 2019a). This represents approximately 0.15 percent of the projected total multifamily water demands, or 0.05 percent of the total residential water demands from 2020 to 2040. Therefore, sufficient water supplies are available in the reasonably foreseeable future to serve the Proposed Project during normal, dry, and multiple dry years.

Furthermore, the Proposed Project would result in direct population growth in the area by adding approximately 202 people—based on the average household size of 3.47 for Anaheim for the proposed 58 residential units (DOF 2018). According to the American FactFinder, Anaheim's 2017 population estimate is 352,479, an increase of 16,232 from 2010 to 2017. Therefore, an additional 16,610 people are projected by 2020, and the Proposed Project would represent approximately 1.2 percent of the anticipated population growth by 2020. The proposed increase in population within the City's boundaries is already anticipated by the City and is consistent with 2015 UWMP assumptions.

The Proposed Project would have minimal impact on the overall water supply availability and would be consistent with the City's future projected water demand. No new or expanded water entitlement would be necessary. Impacts would be less than significant.

Level of Significance Before Mitigation: Less than significant.

Impact 5.15-3: The Proposed Project would not 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.[Threshold U-4]

The Proposed Project would generate 26.68 tons per year of solid waste, based on 0.46 tons per dwelling unit per year (PlaceWorks 2019). The existing 42,526 square feet of commercial uses generate 44.65 tons based on an average generation factor of 1.05 tons per 1,000 square feet per year (PlaceWorks 2019). Therefore, the Proposed Project is anticipated to result in approximately 40 percent net decrease of solid waste generation per year. Furthermore, the City implements municipal codes and ordinances regarding solid waste and recycling services, which reduce waste and increase the diversion rate. Development of the Proposed Project would be required to comply with the AB 341 and AB 1826 goals and would not result in insufficient capacity at any of the Orange County landfills.

Implementation of the Proposed Project would generate construction and demolition wastes such as concrete, asphalt, wood, drywall, metals, and other miscellaneous and composite materials. However, these materials would be recycled and salvaged to the maximum extent feasible and would be hauled and diverted to appropriate recycling facilities or landfills. In compliance with Section 5.408 of CALGreen, the Proposed Project would recycle and/or salvage for reuse at least 65 percent of the nonhazardous construction and

5. Environmental Analysis UTILITIES AND SERVICE SYSTEM

demolition waste from the Project Site. Construction and demolition waste impacts to landfill capacity would be temporary and would not create a need for additional solid waste disposal facilities.

The Proposed Project would not generate operational or construction 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. Impacts would be less than significant.

Level of Significance Before Mitigation: Less than significant.

5.15.5 Cumulative Impacts

Water Supply

The cumulative water supply and distribution system impact area would be the APUD service area. The City's 2015 UWMP projects water demands from the citywide growth, and the Proposed Project and other cumulative projects in the City are within the projected growth forecast. Therefore, the total water supplies available to the City during normal, single-dry, and multi-dry year conditions within a 20-year projection would meet the projected water demand of the Proposed Project and the future growth projected within City's water service area. No additional cumulatively significant water supply impact is anticipated.

Electric Power

The Proposed Project would result in decreased demand for electrical services. As the Project Site and surrounding area are already served by APUD, no major infrastructure improvements are anticipated. The City has adequate electricity power to serve the City, and significant environmental impacts are not anticipated. Additionally, the City already has an appropriate payment mechanism in place to fund and provide necessary improvements. No significant cumulative impacts are anticipated.

Natural Gas

The Proposed Project would result in increased demand for natural gas services. The projected citywide growth per the adopted General Plan would also increase demands for gas services. However, SCG has adequate natural gas capacity to serve the City's projected growth. As the Project Site and the surrounding area are already served by SCG, no major infrastructure improvements would be necessary to result in significant environmental impacts. Additionally, SCG already has an appropriate payment mechanism in place to fund and provide necessary improvements. No significant cumulative impacts are anticipated.

Solid Waste

The Proposed Project would result in decreased demand for solid waste compared to the existing uses. Therefore, the Proposed Project would not cumulatively affect long-term solid waste collection infrastructure in excess of the existing capacity.

Level of Significance Before Mitigation: Less than significant.

5. Environmental Analysis

UTILITIES AND SERVICE SYSTEMS

5.15.6 Level of Significance Before Mitigation

Upon implementation of regulatory requirements and standard conditions of approval, the following impacts would be less than significant: 5.15-1, 5.15-2, and 5.15-3.

5.15.7 Mitigation Measures

No mitigation measures are required.

5.15.8 Level of Significance After Mitigation

The mitigation measures identified above would reduce potential impacts associated with utilities and service systems to a level that is less than significant. Therefore, no significant unavoidable adverse impacts relating to utilities remain.

5.15.9 References

ARCADIS. 2016, June. 2015 Urban Water Management Plan.

California Department of Resources Recycling and Recovery (CalRecycle). 2013. Estimated Solid Waste Generation Rates. <https://www2.calrecycle.ca.gov/WasteCharacterization/General/Rates>.

California Energy Commission (CEC). 2015a. 2016 Building Energy Efficiency Standards, Adoption Hearing Presentation. [http://www.energy.ca.gov/title24/2016standards/rulemaking/documents/ June 10](http://www.energy.ca.gov/title24/2016standards/rulemaking/documents/June%2010).

———. 2015b. 2016 Building Energy and Efficiency Standards Frequently Asked Questions. http://www.energy.ca.gov/title24/2016standards/rulemaking/documents/2016_Building_Energy_Efficiency_Standards_FAQ.pdf.

PlaceWorks. 2019. CalEEMod Model Input Assumptions.