

4.14 UTILITIES AND SERVICE SYSTEMS

This section describes the utility providers within whose jurisdiction the project site is located and evaluates the potential impacts of the proposed project on utilities and service systems. This section is based on multiple data sources, including: the *Ganahl Lumber Project Conceptual Utility Plans*, (Joseph C. Truxaw and Associates, 2018); Section 4.5, Energy; Section 4.9, Hydrology and Water Quality; utility provider websites; adopted planning documents of utility providers; and the City of San Juan Capistrano General Plan. This section addresses the following utilities and service systems (service providers are noted in parentheses):

- Electricity and Natural Gas (San Diego Gas and Electric [(SDG&E)])
- Solid Waste (Prima Deshecha Landfill; Orange County Waste and Recycling [OCWR])
- Wastewater and Potable Domestic Water (South Orange County Wastewater Authority [SOCWA]; City of San Juan Capistrano Utility Department)
- Stormwater Drainage (City of San Juan Capistrano Utility Department; Orange County Flood Control)

4.14.1 Scoping Process

The City of San Juan Capistrano (City) received 11 comment letters during the public review period of the Initial Study/Notice of Preparation (IS/NOP). For copies of the IS/NOP comment letters, refer to Appendix A of this EIR. One comment letter included comments related to utilities and service systems.

The letter from South Coast Water District (SCWD) received on June 20, 2019, included multiple suggestions and requests:

- SCWD suggested that the entrance to the Ganahl Lumber site be constructed to properly accommodate both the north-bound traffic entering the site, as well as south-bound traffic heading southerly into SCWD's access road and their site;
- SCWD requested that the City of San Juan Capistrano coordinate with both SCWD and the City of Dana Point in the layout, design, construction, and implementation of a well-coordinated signalization plan for the proposed Stonehill Drive and Ganahl Lumber project site intersection;
- SCWD suggested that the City of San Juan Capistrano grant a non-exclusive road, access, and utility easement at least 24 feet wide to SCWD, and that secondary access through the Ganahl Lumber property be granted to SCWD for ingress/egress to Stonehill Drive. SCWD provided a proposed conceptual site plan depicting the suggested access road easement (see Appendix A);
- SCWD requested information regarding the Ganahl Lumber site potable water and sanitary sewer connections, which will potentially require authorization and permitting by SCWD.

4.14.2 Methodology

The impact analysis is based on data obtained through websites, planning documents adopted by utility providers, and the *Ganahl Lumber Conceptual Utility Plans* (Joseph C. Truxaw and Associates, 2018).

4.14.3 Existing Environmental Setting

4.14.3.1 Wastewater

The City owns operates, and maintains its own sewer service, which includes a sanitary sewer collection and conveyance system of approximately 120 miles of sewer lines in sizes up to 27 inches in diameter.¹ Wastewater generated from the proposed project would be directed to the City's sanitary sewer system, which connects to trunk sewers operated by the South Orange County Wastewater Authority (SOCWA). SOCWA is Joint Powers Authority with ten member agencies, consisting of local retail water agencies and cities. SOCWA operates three treatment plans and two ocean outfalls, as well as multiple programs to meet the needs of its member agencies and the requirements of the Clean Water Act and applicable National Pollution Discharge Elimination System (NPDES) permits.² SOCWA's three primary treatment facilities have a treatment capacity of 26 million gallons of wastewater per day (mgd). Historically, approximately half of this wastewater is treated for recycled water use, while the other half is treated and discharged through two ocean outfalls.³ The City is one of 10 member agencies that own treatment capacity in the SOCWA wastewater treatment facilities. Wastewater entering the SOCWA trunk sewer lines from the City is delivered to and treated at the J.B. Latham Regional Treatment Plan (J.B. Latham Plant), located in the City of Dana Point, approximately 0.6 mi south of the project site.

The J.B. Latham Plant has a total design capacity of 13 mgd and currently treats an average wastewater flow of 6.7 mgd.⁴ Therefore, the J.B. Latham Plant is currently operating at approximately 52 percent of its daily design capacity. The City owns 4 million gallons per day (mgd) of the liquids treatment capacity (30.8 percent) of the J.B. Latham Plant.⁵

4.14.3.2 Water Supply

The City's Utilities Department provides water services to the project site. The Utilities Department receives its domestic water supply from the following three sources: (1) water purchased from the Municipal Water District of Orange County (MWDOC); (2) the City's Groundwater Recovery Plant; and (3) local groundwater wells within the City. The largest source of water for the City is purchased

¹ City of San Juan Capistrano. Utilities Department. System Facts & Figures. Website: <http://sanjuan-capistrano.org/Departments/Utilities/Utility-Services> (accessed July 8, 2019).

² South Orange County Wastewater Authority. About SOCWA. Website: <https://www.socwa.com/about-socwa/> (accessed July 8, 2019).

³ SOCWA. Infrastructure. Website: <https://www.socwa.com/infrastructure/> (accessed July 8, 2019).

⁴ SOCWA. J.B. Latham Treatment Plant. Website: <https://www.socwa.com/infrastructure/jb-latham-treatment-plant> (accessed July 8, 2019).

⁵ Ibid.

water from MWDOC, which accounts for approximately 64 percent of the City's water supply portfolio.¹

The City's water supply system provides reliable service to a population of nearly 39,047 within the service area. The City delivers potable water to residential and commercial uses through 11,474 municipal connections. The City's Final 2015 Urban Water Management Plan (UWMP) outlines how the City will provide customers with a reliable supply of drinking water over the 5-year period from 2015 to 2020. The State requires the City to update its UWMP every 5 years. The UWMP provides the California Department of Water Resources with information on the present and future water resources and demands and provides an assessment of the City's water resource needs.

As described above, the City relies on a combination of purchased or imported water, groundwater, and recycled water to meet its water needs. According to the City's 2015 UWMP, the City's total water supply was approximately 8,531 acre-feet² per year (afy) in 2015. This consists of 5,457 afy of imported or purchased water wholesaled by the Metropolitan Water District (MWD) through the MWDOC, 2,572 acre-feet (af) of groundwater from the San Juan Groundwater Basin, and 502 af of recycled water.³ Imported water makes up the largest portion of the City's total water supply, at approximately 64 percent.

4.14.3.3 Existing Water Demand

There are no existing domestic water lines on the project site; however, a City water main is located beneath Stonehill Drive near the southern boundary of the project site. Due to the undeveloped nature of the project site, which is used for short-term vehicle storage, it does not currently generate any demand for water.

The City's total water demand as of 2015 was 8,531 afy, consisting of 8,029 afy of potable and raw water and 502 afy of recycled water demand.

4.14.3.4 Water Supply and Demand Projections

The City's total water demand is projected to increase to 8,618 afy in 2020, 8,688 afy in 2025 and then remain stable through 2040 during normal years. The City's projected water demand for 2020 and 2040 is 8,618 and 8,688 af per year, respectively, which would be equal to the City's projected water supply for 2020 and 2040 (8,618 and 8,688 af per year, respectively). According to the 2015 UWMP, the City's available supply will meet the future projected demand because the City has entitlements to receive imported water from the MWD and also has significant water reserves from local groundwater supplies. In addition, the 2015 UWMP water demand forecast for South Orange County (which includes the City of San Juan Capistrano) is based on projected demographics (U.S. Census Bureau data) provided by the Center for Demographic Research to each water agency in

¹ City of San Juan Capistrano. *2015 Urban Water Management Plan*. July 2016.

² An acre-foot is the amount of water necessary to cover 1 acre of surface area to a depth of 1 foot and is approximately 326,000 gallons of water.

³ City of San Juan Capistrano, *2015 Urban Water Management Plan*. June 2016.

Orange County. Based on these projections, along with the City’s access to imported water and local groundwater, the City would have adequate water supplies to meet full service demands.

The supply and demand forecasts for the third dry-year scenario (considered to be the worst-case scenario) included in the City’s 2015 UWMP are shown in Table 4.14.A. Table 4.14.A shows that these projections reflect a 9 percent increase in water demand during the third year of a multiple dry-year scenario. As described above, the City depends on a combination of imported and local supplies to meet its water demands. As shown in Table 4.14.A, the City’s projected water supplies are anticipated to match the forecast demand for water because the City is capable of meeting demand in multiple dry years from 2020 through 2040 through reserves held by MWD, local groundwater supplies, and conservation.

**Table 4.14.A: Water Supply and Demand Projections
Comparison Third Dry-Year Scenario (2020-2040)**

Year	Water Supply (afy)	Water Demand (afy)	Difference (afy)
2020	9,394	9,394	0
2025	9,470	9,470	0
2030	9,470	9,470	0
2035	9,470	9,470	0
2040	9,470	9,470	0

Source: City of San Juan Capistrano, 2015 Urban Water Management Plan, Table 3-8.

Note: An acre-foot is the amount of water necessary to cover 1 acre of surface area to a depth of 1 foot and is approximately 326,000 gallons of water.

afy = acre-feet per year

4.14.3.5 Storm Drains

The City’s stormwater control systems are currently owned and operated by the City of San Juan Capistrano in cooperation with the Orange County Flood Control District (OCFCD). In the existing condition, the project site is undeveloped and consists of primarily pervious surfaces. Stormwater on the project site flows from east to west and discharges to San Juan Creek, which is immediately west of the project site. A substantial portion of off-site run-on from the adjacent LOSSAN rail corridor and the hillside located to the east of the project site is bypassed through the property via an underground storm drain pipe and natural swales where it is discharged into San Juan Creek. On-site and off-site stormwater runoff is discharged into San Juan Creek channel via multiple storm drain outfalls.

Stormwater that outflows to the San Juan Creek is ultimately conveyed to the San Juan Groundwater Basin or the Pacific Ocean. The San Juan Groundwater Basin is a 26 square mile groundwater basin that collects stormwater runoff from the San Juan Creek and Arroyo Trabuco watersheds, and has a capacity of 41,375 af of water per year.^{1,1} The San Juan Groundwater Basin

¹ Wildermuth Environmental Inc. 2015. *Analysis of Storage in the San Juan Groundwater Basin*. November 18, 2015.

underlies portions of Mission Viejo, San Juan Capistrano, Dana Point and unincorporated areas of south Orange County.²

4.14.3.6 Fire Flow

The Orange County Fire Authority (OCFA) is responsible for fire suppression within the City. The OCFA relies on the area's infrastructure, including the adequacy of nearby water supplies, to suppress fire. Thus, the City has adopted the 2016 California Fire Code (CFC) (Section 8-10.01 of the City's Municipal Code) that lists the minimum required fire flow and flow durations. Fire flow is the flow rate of water supply (measures in gallons per minute, or gpm) available for firefighting measured at 20 pounds per square inch (psi) pressure. Available fire flow is the total water flow available at the fire hydrants, also measured in gpm. Section 8-2808.12 of the City's Municipal Code, Water Availability, requires that minimum fire flow to be no less than 500 gpm at 20 psi for a minimum of 1 hour duration for pile heights up to 6 feet and 2 hour duration for pile heights³ over 6 feet. In its existing condition, the project site does not contain any fire suppression facilities, such as fire hydrants or fire lanes.

4.14.3.7 Electricity and Natural Gas

The project site is within the service territory of SDG&E, which provides electricity and natural gas services through a grid of transmission lines and related facilities. SDG&E provides power to 1.4 million businesses and residential customers in a 4,100 square-mile area of two counties in Southern California.⁴ Total gas consumption and electricity consumption in Orange County in 2018 was 575 million therms and 19,858 gWh, respectively. In 2018, the non-residential sector in Orange County used 236 million therms of natural gas and the 13,044 gWh of electricity.^{5,6} Due to the undeveloped nature of the project site, there is no natural gas and electricity usage in the existing condition.

Electricity. Total electricity consumption in the SDG&E service area in 2018 was 18,767 gigawatt-hours (gWh) and 10,323 gWh for the commercial sector.⁷ The California Energy Commission (CEC) prepared three scenarios for forecasting future growth in electrical demand; low-demand, mid-demand, and high-demand. Annual growth from 2016 to 2026 for the CEC 2017 Revised Forecast in the SDG&E Electricity Planning Area averages 1.68 percent, 1.35 percent, and 1.05 percent in the

¹ San Juan Basin Authority. About. Website: <https://www.sjbauthority.com/about/> (accessed October 24, 2019).

² San Juan Basin Authority. About. Website: <https://www.sjbauthority.com/about/> (accessed October 24, 2019).

³ According to the 2016 California Fire Code, "pile height" refers to the height of stored combustible materials in closely packed piles or height of combustible materials on pallets, in racks or on shelves.

⁴ San Diego Gas & Electric (SDG&E). About Us. 2018. Website: <https://www.sdge.com/more-information/our-company/about-us> (accessed July 5, 2019).

⁵ California Energy Commission. 2016c. Gas Consumption by County. Website: <https://ecdms.energy.ca.gov/gasbycounty.aspx> (accessed July 11, 2019).

⁶ California Energy Commission. 2016a. Electricity Consumption by County. Website: <https://ecdms.energy.ca.gov/elecbycounty.aspx> (accessed July 11, 2019).

⁷ California Energy Commission. 2016b. Electricity Consumption by Entity. Website: <https://ecdms.energy.ca.gov/elecbyutil.aspx> (accessed July 9, 2019)

high, mid, and low cases, respectively.¹ As compared to the 2016 CEC Forecast, efficiency programs and a higher EV forecast reduced the projected consumption forecast. According to the CEC, projected baseline electricity consumption in 2020 is projected to reach 21,500, 21,750, and 22,000 gigawatts (gw) in the low-demand, mid-demand, and high-demand cases, respectively.²

Natural Gas. The main natural gas transmission line in the vicinity of the project site travels roughly along the railroad tracks east of the project site, in a north-south direction.³ According to the CEC, total gas consumption in the SDG&E service area in 2018 was 482.4972 million therms and 190.124438 million therms for the commercial sector.⁴ The CEC prepared three scenarios for forecasting future growth in natural gas demand; low-demand, mid-demand, and high-demand. Annual growth from 2016 to 2026 for the California Energy Demand (CED) 2017 Revised Forecast in the SDG&E Natural Gas Planning Area averages 1.6 percent, 1.5 percent, and 1.7 percent in the high, mid, and low cases, respectively⁵. Overall consumption growth reflects projected population growth in the planning area.

4.14.3.8 Telecommunications Facilities.

The primary cable and telephone service providers available within the project site's vicinity (and, more generally, within San Juan Capistrano) are AT&T and Cox Communications. These services are privately operated and offered to each location in the City for a fee defined by the provider.

4.14.4 Regulatory Setting

4.14.4.1 Federal Regulations

No federal regulations for utilities and service systems apply to the proposed project.

4.14.4.2 State Regulations

California Urban Water Management Planning Act. Under the California Water Code and Urban Water Management Planning Act of 1983, all California urban water suppliers are required to prepare and adopt an Urban Water Management Plan (UWMP) every five years, which promotes water conservation and efficiency measures. Urban water suppliers that serve more than 3,000 customers or are supplying more than 3,000 afy of water are subject to this Act. This Act requires that the total project water use be compared to water supply sources over the next 20 years in five-year increments. Planning must occur for all drought years and must include a water recycling analysis that incorporates a description of the wastewater collection and treatment system, outlining existing and potential recycled water uses. In September 2014, the Act was amended by SB

¹ Ibid.

² California Energy Commission. 2018c. California Energy Demand, 2018-2030 Revised Forecast. February. Website: <https://efiling.energy.ca.gov/getdocument.aspx?tn=223244> (accessed July 9, 2019).

³ City of San Juan Capistrano General Plan Program EIR. 1999.

⁴ California Energy Commission. 2016d. Gas Consumption by Entity. Website: <http://www.ecdms.energy.ca.gov/gasbyutil.aspx> (accessed July 9, 2019).

⁵ California Energy Commission. 2018c. California Energy Demand, 2018-2030 Revised Forecast. February. Website: <https://efiling.energy.ca.gov/getdocument.aspx?tn=223244> (accessed July 9, 2019).

1420, which now requires urban water suppliers to provide descriptions of their water demand management measures and similar information.

State Updated Model Landscape Ordinance. The State Updated Model Landscape Ordinance requires the adoption of landscape water conservation ordinances or the adoption of a different ordinance that is at least as stringent as the updated Model Ordinance (MO). The City adopted Water Efficient Landscaping Standards for new and Rehabilitated Landscaping in 2013, as well as the revised SJMC Chapter 15.11.

Water Conservation Act of 2009. The Water Conservation Act of 2009 (SB X7-7) requires all water suppliers to increase water use efficiency by reducing per capita urban water use by 20 percent by December 31, 2020. This bill also set a goal for the state of reducing per capita water use by at least 10 percent by December 31, 2015.

California Public Utilities Commission Decision 18-04-007. On April 27, 2018, the California Public Utilities Commission (CPUC) issued Decision 18-04-007, which amended the Right-of-Way rules to provide competitive local exchange carriers with expanded access to public utility infrastructure for the purpose of installing antennas and wireless telecommunications equipment. Specifically, the CPUC mandated that the use of rights-of-way areas shall be limited to those necessary or useful for the provision of telecommunication services, thereby requiring a nexus between the installation and the provision of a telecommunication service.

Renewables Portfolio Standard Program. Established in 2002 under Senate Bill 1078, California established its Renewables Portfolio Standard (RPS) Program, which was accelerated in 2006 under Senate Bill 107. The RPS required 20 percent of electricity sales to be served by renewable energy sources by 2010. In 2008, Executive Order S-14-08 was signed into law requiring retail sellers of electricity to serve 33 percent of their load with renewable energy by 2020. In October 2015, SB 350 was enacted to codify California's climate and clean energy goals. SB 350 requires retail sellers of electricity and publicly owned utilities to procure 50 percent of their electricity from renewable sources by 2030.

Title 24 of the California Code of Regulations. Energy and water consumption by new buildings in California is regulated by the California Green Building Standard Standards Code, embodied in California Code of Regulations (CCR) Title 24. The intent of Title 24 is to provide efficiency standards for new construction and the rehabilitation of both residential and nonresidential buildings, including building energy consumption, water conservation, and operational efficiencies. Title 24 regulates building energy consumption for heating, cooling, ventilation, water heating, and lighting with regard to both electricity and natural gas, while also regulating water consumption through the installation of efficient plumbing fixtures. The efficiency standards apply to both new construction and rehabilitation of both residential and nonresidential buildings. The building efficiency standards are enforced through the local building permit process. Local government agencies may adopt and enforce energy standards for new buildings, provided these standards meet or exceed Title 24 Building Code requirements. The 2016 Standards went into effect January 1, 2017, following approval by the California Building Standards Commission.

4.14.4.3 Regional Regulations

Municipal Water District of Orange County 2015 Urban Water Management Plan. The region served by MWDOC is located in Orange County, California, and includes 26 cities (including the City of San Juan Capistrano) and water districts, referred to as MWDOC member agencies. MWDOC's 2015 UWMP documents information on all sources of water supplies for the region—imported water, groundwater, surface water, recycled water, and wastewater—as a summary of information for regional planning. The plan concludes that the MWDOC service area will have sufficient existing and planned supplies to meet full service demands under every water-year hydrologic scenario from 2015 through 2040. The plan also evaluates each source of water in the region. The resource mix for meeting total demand includes local groundwater, recycled water, surface water, and imported water from MWD. The plan documents MWDOC's cooperative efforts with its member agencies in developing local supplies and finds that in the region the percentage of its supply from each source will remain approximately the same for the next 25 years, with 30 percent of its supplies from imported water and 70 percent of its supplies from local sources in 2040, even with projected growth occurring.

4.14.4.4 Local Regulations

City of San Juan Capistrano Municipal Code. The following Municipal Code sections are relevant to utilities and service systems:

- **Article 12 Utilities Commission Section 2-2.1203 Duties:** This section establishes the City Utilities Commissions' authority over water, recycled water, and sewer enterprise fund budgets; storm drain operating budget; water, recycled water, and sewer rates, water; recycled water, and sewer service standards; water and recycled water supply; water conservation; other water, recycled water, and storm drain related matters that may be of concern to the City and/or utility users. This section establishes the Commission's representation on local and regional boards involving any of the above, as designated by the City Council.
- **Section 8-11.114 Standards for Utilities:** This section establishes standards for new and replacement water supply and sanitary sewage systems to minimize or eliminate infiltration of floodwaters into the system and discharge from systems into floodwaters.
- **Section 8-2.03 Underground Utilities Required:** This section defines conditions that necessitate the installation of underground utility services. Properties to be developed with a new or relocated main building require the undergrounding of utilities according to this section.
- **Section 4-6.914 Displacement of Property of Public Utilities:** This section establishes the responsibilities of the applicant to give notice and make deposits as required by the affected utility when the removal or displacement of any wire or other property of any public utility will occur.
- **Section 9-4.529 Utility Undergrounding:** This section requires that all development in the City require the undergrounding of utilities and establishes the City's intent to form underground utility districts where necessary.

City of San Juan Capistrano General Plan. The City of San Juan Capistrano General Plan contains goals, policies, and plans which are intended to guide land use and development decisions. The Public Services & Utilities Element and the Growth Management Element contain goals and policies relevant to utilities and service systems.

Public Services & Utilities Element. The purpose of the Public Services & Utilities Element is to ensure that sufficient levels of public services are provided as San Juan Capistrano develops. The Public Services & Utilities Element plans for the needed expansion of public services and infrastructure to coincide with new development.

Goal 6: Provide sufficient levels of water and sewer service.

Policy 6.1: Provide sufficient levels of water and sewer service to meet the needs of the community.

Goal 7: Work effectively with providers of natural gas, electricity, telephone, cable television and solid waste disposal to provide sufficient levels of these services.

Policy 7.1: Work closely with providers of energy, communications and solid waste disposal in determining and meeting the needs of the community for energy, communications and solid waste disposal.

Policy 7.2: Encourage energy efficient development.

Policy 7.3: Encourage the expansion of telecommunications capabilities to promote economic development of the community.

Growth Management Element. The purpose of the Growth Management Element is to assure that capital facilities are planned and provided in a manner which will adequately serve current and future residents of the City of San Juan Capistrano and the region.

Goal 1: Coordinate rational and orderly growth that assures the economic and efficient provision of public services and infrastructure to new development.

Policy 1.1: Continue to implement service standards for public services and infrastructure which provide sufficient services to community residents and business.

Policy 1.2: Approve only those development proposals for which there is sufficient funding through the developer, City, or other agency to provide a level of public service and infrastructure which meet the established goals.

Policy 1.3: Monitor growth to ensure that service standards are achieved.

City of San Juan Capistrano 2015 Urban Water Management Plan. The City's 2015 UWMP lists and describes the present and future water resources and demands within the City of San Juan Capistrano's service area and assesses the City's water resource needs. The UWMP provides water

supply planning for a 25-year planning period over five-year increments and identifies water supplies necessary to meet existing and future demands. The City provides domestic and non-domestic water service to residential, commercial, and industrial customers within the City and to small areas within the Cities of Dana Point and Mission Viejo. The 2015 UWMP found that under the current supply demands for a multiple-dry-year scenario (i.e., drought conditions), the City would have sufficient supply to meet the projected growing demand from 2020 to 2040 while still meeting statewide reduction targets of 20 percent of 2009 levels by 2020. The City is a member of the Orange County 20x2020 Regional Alliance formed by MWDOC aimed at meeting statewide reduction targets. As of 2015, the region has met the 2020 gallons per capita per day (gpcd) reduction goal, as required by SBx7-7.

4.14.5 Thresholds of Significance

The thresholds for utilities and service system impacts used in this analysis are consistent with Appendix G of the California Environmental Quality Act (CEQA) Guidelines (*State CEQA Guidelines*) and the City's *Local Guidelines for Implementing CEQA* (2019). The proposed project may be deemed to have a significant impact with respect to utilities and service system if it would:

- Threshold 4.14.1: Require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?**
- Threshold 4.14.2: Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?**
- Threshold 4.14.3: Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?**
- Threshold 4.14.4: 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?**
- Threshold 4.14.5: 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 Thresholds 4.14.3, 4.14.4, and 4.14.5 would be less than significant. Wastewater collection and treatment is provided through the City's sewer system to SOCWA, which has been determined to have sufficient capacity to serve the project's projected wastewater demand in addition to existing commitments. The Prima Deshecha landfill has been determined to have adequate daily remaining capacity to accommodate and accept the additional solid waste generated as a result of the proposed project. Finally, operation of the proposed project would comply with existing or future statutes and regulations, including waste diversion programs mandated by City, State, or federal law. Therefore, these thresholds will not be addressed in the following analysis.

4.14.6 Project Impacts

Threshold 4.14.1: Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

Less than Significant with Mitigation Incorporated. The proposed project would allow for the development of a lumber yard and hardware store, drive-through restaurant uses, and a crushed-rock gravel area for long-term vehicle storage. As part of the project, water, wastewater, storm drain, electricity, natural gas, and telecommunications improvements would be implemented at the project site and immediate vicinity. As such, the proposed project may create the need for new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects.

Water. As previously discussed, the City would provide domestic water service. The proposed project would connect to an existing 12-inch water main within Stonehill Drive. This water main would not need to be relocated. As part of the proposed project, water lines would be installed throughout the project site and would connect with the existing main in Stonehill Drive. These water lines would provide domestic water service. The proposed project would increase demand for water as compared to existing conditions, and on-site infrastructure is required for project implementation.

Construction. Short-term demand for water may occur during excavation, grading, and construction activities on site. Water demand for soil watering (fugitive dust control), cleanup, masonry, painting, and other activities would be temporary and would cease at completion of construction. Overall water demand during construction activities would be minimal and is not expected to have any adverse impacts on the existing water system and available water supplies. Therefore, impacts associated with short-term construction activities would not require or result in the construction of new water treatment facilities or the expansion of existing facilities, and construction of the proposed project would not require the need for new or expanded water entitlements. No mitigation is required.

Operation. An increase in long-term demand for water is anticipated to occur during operation of the proposed project. Due to the undeveloped nature of the site, there is no current water demand. As shown in Table 4.14.B, the proposed project would result in a demand of approximately 16,190 gpd (5,908,985 gpy or 18.1 afy) of water, which is 16,190 gpd greater than the current water usage on site.

Table 4.14.B: Project-Related Water Demand

Land Use Type	Demand Factor	Proposed Project	Total Per Day
Commercial/Industrial/Schools	1,785 gallons of water per day/acre	9.07 ac ¹	16,190 gallons/day

Source: City of San Juan Capistrano. Consultation with Maryam Ramsey, Utilities Associate Engineer, City of San Juan Capistrano.

¹ Includes the 7.03 acres associated with the hardware store and lumber yard (Area B) and the 2.04 acres associated with the proposed restaurant lot (Area A). Does not include the 7.46-acre vehicle storage area, which would not generate demand for water.

Because the proposed project would result in a relatively low increase in overall water demand in the City, it could result in the need to provide new or expanded water facilities.

The proposed project includes the installation of water infrastructure which would be constructed by the developer, built to the City's Utility Department standards and dedicated to the Utility Department. The proposed project would include a connection to the existing 12-inch public water line located in Stonehill Drive, which is owned and operated by the City. In order to confirm that there is sufficient water distribution infrastructure to accommodate the project's water needs and fire flow requirements, Mitigation Measure UTL-1 is proposed and requires preparation of a Water Capacity Study. If a deficiency or service problem is found during the permitting process, the project Applicant would be required by existing regulation to fund the required upgrades to adequately serve the project. With the incorporation of Mitigation Measure UTL-1, impacts to water are considered less than significant.

In its existing condition, the project site does not contain any fire suppression facilities, such as fire hydrants or fire lanes. Fire suppression facilities, including dedicated pipes for fire service, fire department connectors, six on-site fire hydrants, and a fire riser would be installed as part of the proposed project. In accordance with Chapter 10, Section 2808.12, Water Availability, of the City's Municipal Code,, minimum fire flow would be no less than 500 gpm at 20 psi for a minimum of 1 hour duration for pile heights up to 6 feet and 2 hour duration for pile heights¹ over 6 feet.

As required of all new development in California, the proposed project would comply with California State law regarding water conservation measures, including pertinent provisions of Title 24 of the California Government Code (Title 24) regarding the use of water-efficient appliances and low-flow plumbing fixtures (Regulatory Compliance Measure UTL-1). Incorporation of these water conservation measures would reduce the water demands of the proposed project. The project would also be required to comply with Regulatory Compliance Measure UTL-2, which requires the project Applicant to pay a Domestic Water Fee to further reduce impacts related to water demand.

Therefore, given that the proposed project would comply with the State's standard requirements for water facility and infrastructure planning, existing water entitlements, project compliance with recommendations in the Water Capacity Study (via implementation of Mitigation Measure UTL-1), the City's Utility Department would be able to accommodate the project-generated increase in water demand. The project's impacts related to water conveyance and distribution would be less than significant with mitigation incorporated.

Wastewater. Wastewater collection for the proposed project would be provided by the City's sanitary sewer system, which connects to trunk sewers operated by the South Orange County Wastewater Authority (SOCWA). Wastewater generated by the proposed project would be

¹ According to the 2016 California Fire Code, "pile height" refers to the height of stored combustible materials in closely packed piles or height of combustible materials on pallets, in racks or on shelves.

delivered to and treated at the J.B. Latham Plant in the City of Dana Point. As discussed above, the J.B. Latham Treatment Plant has a total design capacity of 13 mgd and currently treats an average wastewater flow of 6.7 mgd. Therefore, the plant is currently operating at approximately 52 percent of its daily design capacity. Implementation of the proposed project would result in the extension of sewer lines. Sewer pipes and sewer cleanout systems would be installed within the boundaries of the project site and within the public right-of-way along Stonehill Drive.

The project site is currently undeveloped and does not generate any wastewater in its existing condition. A sewer line would be installed within the proposed northern easement, beginning on the adjacent mobile home park property, traversing the project site, and terminating at Area A. In addition, sewer improvements may require a pump system due to the length and lack of fall. An 8-inch sewer pipe would be installed within the public right-of-way in Stonehill Drive and connected to sewer lines installed within the project site.

Construction. No significant increase in wastewater flow is anticipated as a result of construction activities on the project site. Sanitary services during construction would be provided by portable toilet facilities, which transport waste off-site for treatment and disposal. Therefore, during construction, potential impacts to wastewater treatment and wastewater conveyance infrastructure would be less than significant, and no mitigation would be required.

Operation. Project development would include the construction of lumber yard and hardware store, drive-through restaurant uses, and a crushed-rock gravel area for long-term vehicle storage. Implementation of the proposed project is anticipated to result in an increase in wastewater generation during operation. In its existing condition, the project site is undeveloped and does not generate wastewater. As shown in Table 4.14.C, the proposed project is estimated to generate approximately 22,584 gpd (8,243,160 gpy) of wastewater. The estimated increase in wastewater associated with the proposed project would represent 0.17 percent of the J.B. Latham Plant's daily capacity¹ and 0.4 percent of the Plant's daily remaining capacity.² The increase of wastewater generated by the proposed project is a small percentage, and would be accommodated within the existing design capacity of the Treatment Plant, which currently accepts 52 percent of its daily capacity.

¹ 22,584 gpd = 0.023 mgd; 0.023 mgd / 13 mgd = 0.17 percent of daily total capacity

² 0.023 mgd / 6.7 mgd = 0.35 or 0.4 percent of daily remaining capacity

Table 4.14.C: Project Related Wastewater Generation

Land Use	Wastewater Flow Generation Factor	Proposed Project	Project Wastewater Generation (gpd)	Project Wastewater Generation (gal/yr)
Commercial	2,490 gallons of water per day/acre	9.07 ¹	22,584	8,243,160

Source: City of San Juan Capistrano Municipal Code, Section 9-4.523, Table 4-3 Average Sewage Flows – General Land Use Types, and consultation with Maryam Ramsey, Utilities Associate Engineer, City of San Juan Capistrano.

¹ Includes the 7.03 acres associated with the hardware store and lumber yard (Area B) and the 2.04 acres associated with the proposed restaurant lot (Area A). Does not include the 7.46 acres vehicle storage area, which would not generate wastewater flows.

gal/yr = gallons per year

gpd = gallons per day

The J.B. Latham Plant operates in compliance with the San Diego Regional Water Quality Control Board (RWQCB)'s treatment requirements and has the capacity to accommodate the increased wastewater flows from the proposed project. Furthermore, as required on Mitigation Measure UTL-2, preparation of a Sewer Feasibility Study is required so that the City can confirm and ensure that there is sufficient capacity in the local and trunk lines existing in Stonehill Drive to accommodate the wastewater (Mitigation Measure UTL-2). In the unlikely event that the public sewer has insufficient capacity, the project Applicant would be required to pay a fair-share portion of the cost to improve or replace sewer lines to ensure sufficient capacity. A final approval for sewer capacity and connection permit would be made at that time. Any improvements to existing local or trunk lines would occur within the existing right-of-way and would be temporary in nature, similar to repair or maintenance of infrastructure and/or roadways. As such, impacts associated with improvements to the existing local and/or trunk lines would be less than significant. The proposed project would also be required to adhere to Regulatory Compliance Measure UTL-3, which requires the project Applicant to pay a Sewer Connection Fee. Therefore, development of the project would not require or result in the construction of new wastewater treatment facilities or the expansion existing facilities which would cause significant environmental impacts. Project impacts related to expansion and operation of wastewater treatment facilities would, therefore, be less than significant with implementation of Mitigation Measure UTL-2.

Stormwater Drainage. The capacity of the downstream storm drain network is dependent on peak discharge rates entering the system. As discussed further in Section 4.9, Hydrology and Water Quality, the project site is currently undeveloped and consists of pervious surfaces. In its existing condition, stormwater runoff from the project site currently outflows to San Juan Creek, which is immediately west of the site. From there, receiving waters include the San Juan Groundwater Basin and the Pacific Ocean. The San Juan Groundwater Basin collects stormwater runoff, and has a capacity of 41,375 af of water per year.¹

Implementation of the proposed project would increase the impervious surface area on the project site, which would contribute to an increase in stormwater runoff as compared to existing

¹ Wildermuth Environmental Inc. 2015. *Analysis of Storage in the San Juan Groundwater Basin*. November 18, 2015.

conditions. The proposed project would include the installation of a stormwater runoff system, permeable paving, and a swale to support stormwater management on the project site. Pervious areas of the project site would contain landscaping that would minimize on-site erosion and siltation by stabilizing the soil.

Stormwater improvements would include installation of a storm drain line to allow for the continued conveyance of stormwater from the railroad property to the east of the project site to the existing on-site storm drain outfall, and to ultimately be conveyed into the San Juan Creek Channel. Because the City has indicated that this storm drain line should not be a public line, a private line easement would be required. Installation of the deceleration lane on Stonehill Drive would require relocation of the existing catch basin along Stonehill Drive near the existing project site driveway.

A storm drain would be constructed within the proposed northern utility easement, beginning at Avenida Aeropuerto, traversing the project site, and terminating at Area A.

As specified in Regulatory Compliance Measure WQ-4, the project would be required to prepare a Final Water Quality Management Plan (WQMP), which would specify the Best Management Practices (BMPs) that would be implemented to target pollutants of concern in runoff from the project site. Because the proposed BMPs would also reduce stormwater runoff, the project would not exceed the capacity of the downstream storm drain lines or result in off-site flooding. Additionally, as specified in Regulatory Compliance Measure WQ-5, a Final Hydrology and Hydraulics Analysis would be prepared for the project to confirm that the on-site storm drains, on-site detention systems, and any other drainage structures are appropriately sized to accommodate stormwater runoff from the project site so that the capacity of downstream storm drain facilities would not be exceeded. Therefore, development of the project would not require or result in the construction of new stormwater drainage facilities or the expansion of existing facilities which would cause significant environmental impacts. Project impacts related to expansion and operation of wastewater treatment facilities would, therefore, be less than significant.

Electricity. The proposed project includes connection to the existing SDG&E lines surrounding the project site and extension of the surrounding electrical system throughout the site. Electrical utility lines would be connected to existing boxes located at the perimeter of the project site along Stonehill Drive. Installation of the deceleration lane on Stonehill Drive would require relocation of the existing utility lines. In compliance with the City's Municipal Code (Section 9-4.529 Utility Undergrounding), all proposed electrical utilities would be undergrounded. A discussion of electricity use during construction and operation of the proposed project is included below.

Construction. Short-term construction activities would be limited to providing power to the staging area and portable construction equipment and would not substantially increase demand for electricity. Heavy equipment used for construction is primarily powered by diesel fuel. Temporary electric power would be provided via an existing utility pole located Stonehill Drive along the project site's current access driveway. Given the limited potential

demand for electricity during construction, impacts to regional electricity supplies would be less than significant.

Operation. Operation of the proposed project would increase on-site electricity demand compared to existing conditions. Due to the undeveloped nature of the project site in its existing condition, there is no current electricity usage on the project site.

As discussed in Section 4.5, Energy, the proposed project is estimated to consume a total of 1,840,033 kilowatt-hours of electricity per year. Therefore, the proposed project would require an increase of approximately 1,840,033 kwh of electricity per year compared to existing conditions.

The proposed project will reduce electricity consumption by incorporating the following energy efficiency measures in the design:

- Increased insulation values in walls
- Controlling energy losses in the HVAC system (specifying high SEER rated equipment and reducing duct leakage)
- Incorporate high efficiency windows and doors
- Installing highly efficient lighting and lighting control systems

In February 2018, the California Energy Commission (CEC) published the final California Energy Demands for 2018 through 2030.¹ Electricity consumption (and supply) in the SDG&E service area is projected to reach between 21,500 gigawatt-hours (gWh) in the low-demand scenario and 22,000 gWh in the high-demand scenario by 2020. Based on the CEC's projections for the SDG&E service area in 2020, the maximum project-related annual consumption of 1.8 gWh² of electricity per year would represent approximately 0.01 percent³ of the forecasted average energy load in the year 2020. Therefore, the proposed project's maximum project-related annual electric consumption would be within the SDG&E forecasted demand. Moreover, the proposed project is consistent with the General Plan designation of Quasi-Industrial for the project site. As such, projections for future electricity demand anticipated the proposed land use. The relationship between supply and demand involves the availability of energy resources and the net incremental demand generated by a given project or service area. Service providers utilize demand forecasts in order to provide an adequate supply or plan for surplus in the service area. Due to the inability of service providers to store electricity for future demand, the supply and delivery of electricity to customers is directly based on demand projections. Therefore, because the proposed project would only represent a small fraction of projected demand, and because the project

¹ California Energy Commission. 2018c. California Energy Demand, 2018–2030 Revised Forecast. February. Website: <https://efiling.energy.ca.gov/getdocument.aspx?tn=223244> (accessed July 9, 2019).

² 1,840,033 kilowatt = 1.840033 gigawatt (gWh) or approximately 1.8 gWh.

³ The average peak electricity demand in 2020 would be 20,000 gWh. $1.8 \text{ gWh} / 20,000 \text{ gWh} = 0.00009$ or 0.01 percent.

would be consistent with the General Plan land uses anticipated for the site, the proposed project would be within the projected SDG&E electrical power demand and supply.

The supply and distribution network within the area surrounding the project site would remain unchanged, and would be expanded throughout the project site. The proposed project would not increase electrical demand beyond existing projections from the CEC and SDG&E. The project site is in an area with existing demand, and the demand generated by the proposed project is typical of the area and within the normal capabilities of SDG&E. Therefore, the proposed project would not require the construction of any physical improvements related to the provision of electricity service that would result in significant environmental impacts and the project's potential impacts would be less than significant. No mitigation is required.

Natural Gas. Gas distribution services would be extended through the project site and would connect to an existing gas line in the public right-of-way in Stonehill Drive. The developer would be responsible for construction connections to these distribution facilities.

Construction. Short-term construction activities would not result in demand for natural gas since construction activities/equipment would not require natural gas supplies. Therefore, construction activities would have no impact related to natural gas services, and the proposed project would not require new or physically altered gas transmission facilities. No mitigation is required.

Operation. Operation of the proposed project would result in increased demand for natural gas compared to existing conditions. Due to the undeveloped nature of the site, there is no existing natural gas usage on-site. The estimated natural gas demands of the proposed project as provided in Section 4.5, Energy is 19,536 therms/year. Therefore, the proposed Project would require an increase of approximately 19,536 therms of natural gas per year compared to existing conditions. A natural gas line would be installed within the proposed northern easement, beginning at Avenida Aeropuerto, traversing the project site, and terminating at Area A. Electrical conduits, transformers, switch pads, capacity pads, emergency transformer diesel generators, and pull boxes would be constructed throughout the project site.

Based on CEC projections for the SDG&E service area, the 2024 forecasted low-demand and high-demand scenarios were approximately 540 million therms and 560 million therms, respectively¹. By 2030, the forecasted low-demand scenario is anticipated to be approximately 560 million therms and the high-demand scenario is anticipated to be approximately 600 million therms. Service providers utilize demand forecasts in order to provide an adequate supply or plan for surplus in the service area. Because natural gas demand for the SDG&E service area is expected to increase overall, and because the proposed project would only represent a small fraction of projected demand for natural gas,

¹ California Energy Commission. 2018c. California Energy Demand 2018–2030 Revised Forecast. Figure 73, <https://efiling.energy.ca.gov/getdocument.aspx?tn=223244> (accessed July 9, 2019).

the proposed project would be within the projected demand for through all forecasted years. Furthermore, the proposed project would be consistent with the General Plan designation of Quasi-Industrial for the site. As such, projections for future natural gas demand anticipated the proposed land use. Existing natural gas facilities are expected to have adequate capacity to serve the proposed project.

Therefore, the supply and distribution network within the area surrounding the project site would remain unchanged, with the exception of standard on-site improvements. Levels of service to off-site users would not be adversely affected. Natural gas service to the project would be provided and maintained by SDG&E through existing and extended gas facilities. The project site is in an area with existing demand, and the demand generated by the proposed project is typical of the area and within the normal capabilities of SDG&E. The proposed project would not increase natural gas demand beyond existing projections. The estimated increase in natural gas demand associated with the proposed project would represent a very small fraction of the forecast natural gas demand. With the incorporation of Regulatory Compliance Measure UTL-1, which would require the project to comply with the 2019 Building Energy Efficiency Standards (Title 24), project-related impacts to natural gas generation would be further minimized. Therefore, the proposed project would not require the construction of any physical improvements related to the provision of natural gas service that would result in significant environmental impacts and the project's potential impacts would be less than significant. No mitigation is required.

Telecommunications Facilities. Telephone, cable, and internet services existing within the project area would be extended into the project site at the project site's main entrance driveway along Stonehill Drive. As part of the proposed project, a telephone line with associated riser pull box will be installed per telephone company requirements within the project site near the access driveway on Stonehill Drive. Telecommunication utility lines would be connected to existing boxes located at the perimeter of the project site along Stonehill Drive. Installation of the deceleration lane on Stonehill Drive would require relocation of the existing utility lines. The project Applicant will be responsible for constructing adequate telecommunication facility extensions to the various structures on the project site. Additionally, cable box locations will be carefully planned and coordinated with the utility company, the landscape architect, and the Developer to be unobtrusive and screened from public view where possible.

The construction and expansion of these facilities would occur on site during the site preparation and earthwork phase and are not expected to impact any off-site telephone, cable, or internet services that serve the surrounding areas. Therefore, the proposed impacts associated with the relocation or construction of new or expanded telecommunication facilities, and impacts would be less than significant. No mitigation is required.

Threshold 4.14.2: Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?

Less than Significant Impact. The proposed project would allow for the development of a lumber yard and hardware store, drive-through restaurant uses, and a crushed-rock gravel area for long-term vehicle storage. As such, the proposed project would increase the demand for water on-site.

As shown in Table 4.14.B, the proposed project is estimated to demand approximately 16,190 gpd (18.1 afy) of water. According to the City's 2015 UWMP, citywide water supply and demand for potable water was 8,531 afy in 2015 and is expected to increase to 8,618 afy by 2020 and 8,688 afy by 2040 under a normal-year scenario. The 2015 UWMP projections include population increases of approximately 0.3 percent per year, as well as anticipated water conservation strategies.

According to the 2015 UWMP, the City is able to meet all water demand with significant reserves held by MWDOC, local groundwater supplies, and conservation under all conditions through 2040, taking into consideration a nine percent increase over normal demand.¹ The supply and demand forecasts for the third dry-year scenario (considered to be the worst-case scenario) are shown above in Table 4.14.A. The relatively small increase in water use, as discussed under Threshold 4.14.1, which would represent approximately 0.2 percent of the City's 2020 projected annual water demand, would be accounted for in the anticipated growth rates for the City.

Moreover, the proposed project is consistent with the General Plan designation of Quasi-Industrial for the project site. As such, the additional water use anticipated with the proposed development has already been considered and planned for in the City's current land use and water management planning documents, including the UWMP. Overall, the City's per-capita water use is projected to continue to decrease into the future, thereby keeping demand relatively constant over the next 25 years. Therefore, impacts related to water supplies would be considered less than significant.

4.14.7 Level of Significance Prior to Mitigation

Impacts related to utilities and service systems requiring or resulting in the relocation or construction of new or expanded water or wastewater treatment facilities, the construction or relocation of which could cause significant environmental effects would be potentially significant. Impacts related to water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years would be less than significant.

4.14.8 Regulatory Compliance Measures and Mitigation Measures

4.14.8.1 Regulatory Compliance Measures (RCMs)

The proposed project would comply with the following regulatory standards.

RCM UTL-1 Title 24 of the California Code of Regulations (CCR). Prior to issuance of building permits, the City of San Juan Capistrano (City) Director of Development Services, or designee, shall ensure that the project design complies with the 2019 Building Energy Efficiency Standards (Title 24 of the California Code of Regulations [CCR]) energy conservation and green building standards.

¹ City of San Juan Capistrano. *2015 Urban Water Management Plan*. July 2016.

- RCM-UTL-2** **Domestic Water Fee.** Prior to issuance of any grading or construction permits, the City of San Juan Capistrano Public Works Director, or designee, shall verify that the project Applicant has paid the proposed project's fair share of Domestic Water Fees in accordance with City Resolution No. 04-05-18-04.
- RCM-UTL-3** **Sewer Connection Fee.** Prior to issuance of any grading or construction permits, the City Public Works Director, or designee, shall verify that the project Applicant has paid the proposed project's fair share of Sewer Connection Fees in accordance with City Resolution No. 04-11-16-05.

In addition, the project would comply with Regulatory Compliance Measures WQ-4 and WQ-5, which are described in Section 4.9, Hydrology and Water Quality.

4.14.8.2 Mitigation Measures (MMs)

The proposed project would comply with the following mitigation measures.

- MM UTL-1** **Water Capacity Study.** Prior to issuance of a grading or building permit, the project Applicant shall submit a Water Capacity Study prepared by a qualified civil engineer to the City of San Juan Capistrano City Engineer, or designee, for review and approval. The Water Capacity Study shall include a review of the existing water distribution system that would serve the project site to confirm that it has available capacity to convey the water required by the proposed project's uses. Any required improvements shall be identified in the Water Capacity Study. The analysis, conclusions, and recommendations in the Water Capacity Study shall be based on final design plans and shall be consistent with all applicable City requirements. In the event a water supply line deficiency is identified in the Water Capacity Study, the project Applicant shall pay a fair-share portion of the cost to improve or replace water lines to ensure sufficient capacity.
- MM UTL-2** **Sewer Feasibility Study.** Prior to issuance of a grading or building permit, the project Applicant shall submit a Sewer Feasibility Study prepared by a qualified civil engineer to the City of San Juan Capistrano City Engineer, or designee, for review and approval. The Sewer Feasibility Study shall include a review of the existing sewer system that would serve the project site to confirm that it has available capacity to accept the wastewater flow generated by the proposed project's uses. Any required improvements shall be identified in the Sewer Feasibility Study. The analysis, conclusions, and recommendations in the Sewer Feasibility Study shall be based on final design plans and shall be consistent with all applicable City requirements. In the event that the Sewer Feasibility Study identifies insufficient sewer capacity to serve the proposed project, the project Applicant would be required to pay a fair-share portion of the cost to improve or replace sewer lines to ensure sufficient capacity.

4.14.9 Level of Significance after Mitigation

Impacts related to the relocation or construction of new or expanded water or wastewater treatment facilities would be less than significant with implementation of Mitigation Measures UTL-1 and UTL-2.

4.14.10 Cumulative Impacts

As defined in the *State CEQA Guidelines*, cumulative impacts are the incremental effects of an individual project when viewed in connection with the effects of past, current, and probable future projects within the cumulative impact area for public services and utilities. The project site is a currently undeveloped lot in the City of San Juan Capistrano that does not contain any permanent structures. The project site is not currently served by any utility providers.

4.14.10.1 Wastewater

The geographic area for the cumulative analysis for wastewater treatment is defined as the City of San Juan Capistrano Utilities Department service area and SOCWA's service area. Project compliance with the recommendations of the Sewer Feasibility Study (Mitigation Measure UTL-2) and all applicable City requirements would ensure that project impacts on City sewer facilities and sewer capacity would not be cumulatively considerable. The proposed project would not generate wastewater above the current capacity of SOCWA's J.B. Latham Regional Treatment Plant. Further, it is anticipated that SOCWA's existing and planned wastewater treatment capacity would be sufficient to accommodate the growth forecasted within its service area, and development that is generally consistent with this forecast can be adequately served by the SOCWA facilities. The proposed project would not induce significant population, employment or housing growth, either directly or indirectly. SOCWA operates two other wastewater treatment facilities in addition to the J.B. Latham Regional Treatment Plant, for a total treatment capacity of 26 mgd within its jurisdiction. In addition, the proposed Project would not contribute wastewater that would exceed the service capacity of J.B. Latham Regional Treatment Plant. Therefore, the proposed project's contribution to wastewater generation in the SOCWA service area would not be cumulatively considerable, and no mitigation is required.

4.14.10.2 Potable Water

The geographic area for the cumulative analysis of water infrastructure is the City's Utilities Department service area. The project-generated increase in water demand represents approximately 0.2 percent of the City's projected 2020 supply. This increase is considered to be minimal and is unlikely to impact the City's existing water supply commitments. Furthermore, the UWMP indicated that sufficient water supplies are available. The UWMP took into consideration cumulative development planned for in the City's General Plan and, therefore, cumulative water demand in the City has already been accounted for in the UWMP projections. Therefore, the proposed project's contribution to water demand in the City would not be cumulatively considerable, and no mitigation is required.

4.14.10.3 Stormwater Drainage

The geographic area for the cumulative analysis of impacts to the provision of stormwater drainage facilities is the San Juan Creek Watershed. The construction and expansion of stormwater drainage facilities for the proposed project would occur on site and is not expected to impact any off-site stormwater drainage facilities that serve the surrounding areas. As specified in Regulatory Compliance Measure WQ-5, a Final Hydrology Report and Hydraulics Analysis would be prepared for the project to confirm that the on-site storm drains, on-site detention systems, and any other drainage structures are appropriately sized to accommodate stormwater runoff from the project site so that the capacity of downstream storm drain facilities would not be exceeded. Implementation of the proposed project would not impact the ability of the existing stormwater drainage system to serve the surrounding area. Therefore, cumulative impacts associated with the relocation or construction of new or expanded stormwater drainage facilities would be less than significant. No mitigation is required.

4.14.10.4 Electricity

The geographic area for the cumulative analysis of impacts to the provision of electricity is the service territory of SDG&E. SDG&E's service area covers approximately 4,100 square miles in two counties and provides power to 1.4 million business and residential customers. The projections of statewide electricity supply capacity demand rates are cumulative in nature. They are based on population and economic growth and General Plan projections, in addition to such physical variables as average temperature and water supplies (important to hydroelectric generation) in a given year. The proposed project would increase electrical demand in the area. However, any increase in electrical demand resulting from the proposed project as it would be incremental compared to an increase in regional electrical demand. Therefore, electric power and infrastructure capacity are available, or have already been planned, to serve past, present, and reasonably foreseeable projects.

Title 24 of the California Administrative Code regulates energy and water consumption in new construction and regulates building energy consumption for heating, cooling, ventilation, water heating, and lighting. Therefore, in relation to the cumulative study area, the proposed project would not generate a significant cumulative increase in demand for electricity or a significant disruption in service or service level. Therefore, the proposed project's contribution to electricity impacts would not be cumulatively considerable, and no mitigation is required.

4.14.10.5 Natural Gas

The geographic area for the cumulative analysis of impacts to the provision of natural gas is the service territory for SDG&E. As discussed above, according to the CEC 2018-2030 Revised Forecast, SDG&E projects total gas demand to increase overall in the low-demand and high-demand scenarios, due to projected population growth in the SDG&E service area. Therefore, sufficient gas supplies and infrastructure capacity are available, or have already been planned, to serve past, present, and reasonably foreseeable projects. Furthermore, like the proposed project, all future projects would be subject to Title 24 requirements and would be evaluated on a case-by-case basis to determine the need for specific distribution improvements. As the natural gas provider has identified adequate capacity and additional development within the SDG&E service area and

because the planning area has taken into account population growth and because the proposed project would comply with Title 24, the proposed project's contribution to natural gas impacts would not be cumulatively considerable, and no mitigation is required.

4.14.10.6 Telecommunications Facilities

The geographic area for the cumulative analysis of impacts to the provision of telecommunications is the service area of telecommunication providers. The construction and expansion of telecommunication facilities for the proposed project would occur on site and is not expected to impact any off-site telephone, cable, or internet services that serve the surrounding areas. Therefore, impacts associated with the relocation or construction of new or expanded telecommunication facilities would be less than cumulatively significant. No mitigation is required.

4.14.11 Project Alternatives

4.14.11.1 Alternative 1 – No Restaurant Uses

Alternative 1 would allow for the future construction of a 161,385-square-foot (sf) Ganahl Lumber hardware store and lumber yard and a 399-space vehicle storage facility, but no drive-through restaurant uses would be developed. Alternative 1 represents a reduction of 6,000 sf of drive-through restaurant use as compared to the proposed project. Under Alternative 1, Area A would provide 150 parking spaces, compared to 62 parking spaces provided in Area A as part of the proposed project.

Most components of the proposed project, such as outdoor lighting, circulation and access, signage, utilities and drainage, sustainability features, landscaping, and construction phasing, and grading, would not significantly change with the implementation of Alternative 1. Components specific to Area A, such as the location of walkways, retaining walls fences, and gates, would also not change under Alternative 1. The modification and installation of existing and new utilities and infrastructure associated with the proposed project would still occur under Alternative 1. Although Alternative 1 would not involve the development of structures on Area A as the proposed project would, the entirety of Area A would still be cleared, excavated, graded, and paved to accommodate surface parking.

Although Alternative 1 would not include any drive-through restaurant uses, the Ganahl Lumber hardware store, lumber yard, and vehicle storage facility would be constructed and all of the same utilities required for the proposed project would also be required for Alternative 1. Although specific estimates for the water demand and wastewater generation attributed to the proposed project's drive-through restaurant uses cannot be developed using the general land use factors supplied by the City's Utilities Department (these factors rely on the number of acres of each land use rather than the actual building square footage that is proposed), it is reasonable to conclude that Alternative 1 would result in an incrementally lower demand for water and would generate incrementally less wastewater than the proposed project because, unlike the proposed project, it would not include any drive-through restaurant uses.

Additionally, as described in Section 4.5, Energy, natural gas consumption would be reduced by approximately 80 percent under Alternative 1, and electricity consumption would be reduced by approximately 12 percent during operation as compared to the proposed project.

Similar to the proposed project, Alternative 1 would also require compliance with Regulatory Compliance Measures UTL-1 through UTL-3 and Mitigation Measures UTL-1 and UTL-2 because it would still be required to comply with the 2019 Building Energy Efficiency Standards and would also connect to the City's domestic water and sewer system. Similar to the proposed project, Alternative 1 would change the use on the project site, increase impervious surface area, and increase stormwater runoff. A Final WQMP and Hydrology and Hydraulics Analysis would be required to be prepared and implemented for Alternative 1 (Regulatory Compliance Measures WQ-4 and WQ-5). Implementation of drainage infrastructure would be required to convey stormwater runoff in compliance with and City requirements. With the incorporation of mitigation, Alternative 1 would have less than significant impacts with respect to utilities and service systems. Overall, impacts to utilities and service systems under Alternative 1 are reduced, but similar to impacts associated with the proposed project.

Because utility and service system demands for Alternative 1 would be less than those associated with the proposed project, cumulative impacts would also be less than cumulatively significant, and no mitigation would be required.

4.14.11.2 Alternative 2 – 2,000 Square Feet of Restaurant Uses

Alternative 2 would allow for the future construction of a 161,385 sf Ganahl Lumber hardware store and lumber yard, a 399-space vehicle storage facility, and 2,000 sf of drive-through restaurant uses, which represents a reduction of 4,000 sf of drive-through restaurant uses as compared to the proposed project. Specifically, Alternative 2 would provide 80 parking spaces, compared to 62 parking spaces provided in Area A as part of the proposed project.

Most components of the proposed project, such as outdoor lighting, circulation and access, signage, utilities and drainage, sustainability features, landscaping, and construction phasing and grading, would not significantly change with the implementation of Alternative 2. Components specific to Area A, such as the location of walkways, retaining walls, fences, and gates, would also not change under Alternative 2. The modification and installation of existing and new utilities and infrastructure associated with the proposed project would still occur under Alternative 2. Under Alternative 2, similar to the proposed project, the entirety of Area A would be cleared, excavated, graded, and paved to accommodate surface parking and a building pad.

Although Alternative 2 would include less drive-through restaurant square footage, the Ganahl Lumber hardware store, lumber yard, and vehicle storage facility would be constructed and all of the same utilities required for the proposed project would be required for Alternative 2. As described above, specific estimates for the water demand and wastewater generation attributed to the proposed project's drive-through restaurant uses cannot be developed using the general land use factors supplied by the City's Utilities Department; however, it is reasonable to conclude that Alternative 2 would result in an incrementally lower demand for water and would generate

incrementally less wastewater than the proposed project because it would include approximately 67 percent less drive-through restaurant square footage than the proposed project.

Additionally, as described in Section 4.5, Energy, natural gas consumption would be reduced by approximately 53 percent under Alternative 2, and electricity consumption would be reduced by approximately 8 percent during operation as compared to the proposed project.

Similar to the proposed project, Alternative 2 would also require compliance with Regulatory Compliance Measures UTL-1 through UTL-3 and Mitigation Measures UTL-1 and UTL-2 because it would still be required to comply with the 2019 Building Energy Efficiency Standards and would also connect to the City's domestic water and sewer system. Similar to the proposed project, Alternative 2 would change the use on the project site, increase impervious surface area, and increase stormwater runoff. A Final WQMP and Hydrology and Hydraulics Analysis would be required to be prepared and implemented for Alternative 2 (Regulatory Compliance Measures WQ-4 and WQ-5). Implementation of drainage infrastructure would be required to convey stormwater runoff in compliance with and City requirements. With the incorporation of mitigation, Alternative 2 would have less than significant impacts with respect to utilities and service systems. Overall, impacts to utilities and service systems under Alternative 2 are reduced, but similar to impacts associated with the proposed project.

Because utility and service system demands for Alternative 2 would be less than those associated with the proposed project, cumulative impacts would also be less than cumulatively significant, and no mitigation would be required.

4.14.11.3 Alternative 3 – 4,000 Square Feet of Restaurant Uses

Alternative 3 would allow for the future construction of a 161,385 sf Ganahl Lumber hardware store and lumber yard, a 399-space vehicle storage facility, and 4,000 sf of drive-through restaurant uses, which represents a reduction of 2,000 sf of drive-through restaurant use as compared to the proposed project. Specifically, Area A would provide 101 parking spaces, compared to 62 parking spaces provided as part of the project. Under Alternative 3, these additional parking spaces would be used by the drive-through restaurant use.

Most components of the proposed project, such as outdoor lighting, circulation and access, signage, utilities and drainage, sustainability features, landscaping, construction phasing, and grading, would not significantly change under the implementation of Alternative 3. Components specific to Area A, such as the location of walkways, retaining walls, fences, and gates, would also not change under Alternative 3. The modification and installation of existing and new utilities and infrastructure associated with the proposed project would still occur under Alternative 3. Under Alternative 3, similar to the proposed project, the entirety of Area A would be cleared, excavated, graded, and paved to accommodate surface parking and a building pad.

Although Alternative 3 would include less drive-through restaurant square footage, the Ganahl Lumber hardware store, lumber yard, and vehicle storage facility would be constructed and all utilities required for the proposed project would be required for Alternative 3. As described above, specific estimates for the water demand and wastewater generation attributed to the proposed

project's drive-through restaurant uses cannot be developed using the general land use factors supplied by the City's Utilities Department; however, it is reasonable to conclude that Alternative 3 would result in an incrementally lower demand for water and would generate incrementally less wastewater than the proposed project because it would include approximately 33 percent less drive-through restaurant square footage than the proposed project.

Additionally, as described in Section 4.5, Energy, natural gas consumption would be reduced by approximately 26 percent under Alternative 3, and electricity consumption would be reduced by approximately 4 percent during operation as compared to the proposed project.

Similar to the proposed project, Alternative 3 would also require compliance with Regulatory Compliance Measures UTL-1 through UTL-3 and Mitigation Measures UTL-1 and UTL-2 because it would still be required to comply with the 2019 Building Energy Efficiency Standards and would also connect to the City's domestic water and sewer system. Similar to the proposed project, Alternative 3 would change the use on the project site, increase impervious surface area, and increase stormwater runoff. A Final WQMP and Hydrology and Hydraulics Analysis would be required to be prepared and implemented for Alternative 2 (Regulatory Compliance Measures WQ-4 and WQ-5). Implementation of drainage infrastructure would be required to convey stormwater runoff in compliance with and City requirements. With the incorporation of mitigation, Alternative 3 would have less than significant impacts with respect to utilities and service systems. Overall, impacts to utilities and service systems under Alternative 3 are reduced, but similar to impacts associated with the proposed project.

Because utility and service system demands for Alternative 3 would be less than those associated with the proposed project, cumulative impacts would also be less than cumulatively significant, and no mitigation would be required.