5.10 UTILITIES AND SERVICE SYSTEMS

This section of the Draft Environmental Impact Report (DEIR) addresses utilities and service systems, including wastewater, electricity, and natural gas. The Initial Study/Notice of Preparation substantiated that impacts associated with water and solid waste would be less than significant. Impacts to the stormwater system are addressed in Section 5.5, *Hydrology and Water Quality*, of the DEIR, and not addressed in the following analysis.

5.10.1 Environmental Setting

5.10.1.1 REGULATORY BACKGROUND

Wastewater

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.

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 that are sold or offered for sale in California (including refrigerators, ice makers, vending machines, freezers, water heaters, fans, boilers, washing machines, dryers, air conditioners, pool equipment, and plumbing fittings). 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 California Energy Commission (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 went 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 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.

5.10.1.2 EXISTING CONDITIONS

Wastewater

The project site is in the Consolidated Sewer Maintenance District (CSMD), managed by the County of Los Angeles Public Works Sewer Maintenance Division (SMD). CSMD provides sewage collection service to over 2 million customers in unincorporated County areas (including Hacienda Heights), 37 member cities, and 2 contracted cities. The collected sewer is then conveyed to regional trunk lines and treated by the Sanitation Districts of Los Angeles County treatment facility. There are existing sewer lines along Eagle Park Road, Wedgeworth Drive, and along north boundary of the project site in a sewer easement.

Electricity

Southern California Edison (SCE) provides electrical power service in Hacienda Heights, including the project site. The existing Wedgeworth ES is served by the existing 12 kilovolt (kV) overhead powerline along east boundary of the project from opposite side of the 60 freeway. There's also an existing 150 kilovolt-ampere (KVA).

Natural Gas

Southern California Gas Company (SCG) provides gas service in Hacienda Heights, including the project site. There are existing SCG distribution lines along Eagle Park Road and Wedgeworth Drive that provide natural gas services to the neighborhoods east of Eagle Park Road and south of Wedgeworth Drive. The existing Wedgeworth ES is served by a 3-inch distribution line from Wedgeworth Drive.

5.10.2 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:

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 (part)
- Threshold U-2
- Threshold U-4
- Threshold U-5

These impacts will not be addressed in the following analysis.

5.10.3 Plans, Programs, and Policies

Regulatory Requirements

RR USS-1 The proposed project's sewer utilities are required to be designed, constructed, and operated in accordance with the County of Los Angeles standards and specifications. All wastewater discharges into the Consolidated Sewer Maintenance District facilities shall be required to comply with the discharge standards set forth to protect the public sewage system.

RR USS-2 Pursuant to the California Health and Safety Code, the Sanitation Districts of Los Angeles County charges a fee for the privilege of connecting (directly or indirectly) to the Sanitation District's sewage system for increasing the strength or quantity of wastewater discharged from connected facilities. The proposed project is required to pay this connection fee before a permit to connect to the sewer is issued. In determining the impact to the sewage system and applicable connection fees, the Sanitation District's Chief Engineer and General Manager will determine the user category that best represents the actual anticipated use of the parcel or facilities on the parcel.

RR USS-3 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).
- SB 610 (Chapter 643, Statutes of 2001) and SB 221 (Chapter 642, Statutes of 2001).
- California Green Building Standards Code, Chapter 4, Residential Mandatory Measures, Division 4.3, Water Efficiency and Conservation.
- Energy Efficiency Standards for Residential and Nonresidential Buildings (24 CCR Part 6)
- California's Appliance Efficiency Regulations (CCR Title 20, Parts 1600–1608)
- County of Los Angeles Municipal Code Title 20, Utilities, and Title 28, Plumbing Code.

5.10.4 Environmental Impacts

5.10.4.1 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 5.10-1: The proposed project would require relocation or construction of new or expanded electric power and natural gas facilities, but the construction or relocation of these facilities would not cause significant environmental effects. [Threshold U-1]

Electrical Facilities

The project site is developed as a K-5 school and is served by electric power by SCE. The proposed project would require upgrading of the 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). The proposed project would connect to the existing 12 kV powerline along the east boundary that serves the existing Wedgeworth ES and some of the upgrades would include extending of the existing overhead lines, construction of a new SCE pole, installation of new utility enclosure, main switchboard, and a transformer, replacement of the existing transformer that fed the baseball fields, installation of pull boxes, etc. Appendix K provides electrical site plan for the new school. These improvements to existing electrical facilities are part of the proposed construction, and would not result in additional significant environmental impacts. The future residential units would require additional upgrades to the existing electrical system, and would require coordination with SCE at the time of application submittal with the County. The existing uses generate approximately 181,210 kWh/year of electrical demands, and the proposed project is anticipated to consume approximately 1,447,255 kWh/year of electricity (PlaceWorks 2019). SCE is the primary electricity supplier for much of southern California that provides extensive and reliable electricity services in Hacienda Heights. Although expanded electric power facilities would be required, which may require trenching, installation of transformers, and construction of power poles, the project site and surrounding area are already served by SCE, and no major offsite improvements are anticipated. Therefore, impacts would be less than significant. If any major offsite utilities improvements are required to serve the future residential development project, a separate discretionary action by the County would be required, and it would be a separate project outside of the jurisdiction of the District.

Natural Gas Facilities

The project site is already served with natural gas facilities from SCG. The proposed project would upgrade existing gas systems to achieve the current California Building Energy and Efficiency Standards and CALGreen standards. The proposed project would connect to the existing natural gas distribution line from Wedgeworth Drive. Connecting to the existing gas distribution line would require trenching as part of the project construction, and would not result in additional significant environmental impacts. The future residential units would require connection to the existing gas distribution line in coordination with SCG at the time of application submittal with the County. The required improvements for future residential uses are anticipated to be included as part of future construction. The existing elementary school generate approximately 246,602 British Thermal Unit per year (kBTU/yr) of natural gas demands, and the proposed project is anticipated consume approximately 3,612,475 kBTU/yr, an increase of 3,365,873 kBTU/yr (PlaceWorks 2019). Improvements to existing natural gas facilities are limited to onsite, except for the offsite connection within the existing street right-of-way. Therefore, the prosed gas improvements would not result in significant environmental impacts. SCG is a regional public utility company, and it is assumed that there is adequate capacity to provide services to the proposed project. 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. If any major offsite utilities improvements are required to serve the future residential development project, a separate discretionary action by the County would be required, and it would be a separate project outside of the jurisdiction of the District.

Level of Significance Before Mitigation: Less than significant impact.

Impact 5.10-2: The proposed project would result in a determination by the wastewater treatment provider that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments. [Threshold U-3]

The proposed project would increase the enrollment capacity from 600 K-5 students to 1,200 K-8 students, therefore increasing the demands for wastewater treatment service to the project site. The project site is in the Consolidated Maintenance District of Los Angeles County Public Works Department. There is existing 10-inch sewer line in Wedgeworth Drive to the south, which is connected to an 18-inch main in the sewer easement along the north property line before being conveyed to the Sanitation Districts of Los Angeles County's Joint Outfall H Unit 7C Trunk Sewer along the north side of the San Jose Creek. The Sanitation District's 33-inch diameter trunk sewer has a capacity of 24.1 million gallons per day (mgd) and conveyed a peak flow of 11.4 mgd when last measured in 2015. According to the Public Works Department's Estimated Average Daily Sewage Flows for Various Occupancies, elementary or junior high schools' average daily sewer loading factor is 10 gallons per student. Therefore, the proposed project would increase sewer demands from 6,000 gallons per day to approximately 1,200 gallons per day (DWP 2019). The FPL and Associates, Inc., a civil engineering firm retained by the District, contacted County of Los Angeles Public Works Department for sewer service and was informed that adequate capacity is available to serve the additional 600 students. It should also be noted that although there would be increased student capacity, the new K-8 school would be constructed in compliance with the CALGreen (California Code of Regulations, Title 24, Part 11) and the LID Standard Manual, which require water-efficient plumbing fixtures. When compared to the old plumbing fixtures used in the existing K-5 school, the impacts are not anticipated to be significant.

The residential development would also increase the wastewater service demands. According to the Public Works Department's Estimated Average Daily Sewage Flows for Various Occupancies, a two-bedroom dwelling unit's average daily sewer loading factor is 250 gallons; therefore, the proposed project of up to 160 units would generate 40,000 gpd. Once the residential development plan is available, the project applicant would be required to contact the Los Angeles County Public Works Department and prepare a Sewer Area Study to evaluate the capacity of existing sewer system for the additional sewage discharge generated by the proposed development. The Sewer Area Study is required to be prepared in accordance with the County's standards by a California Registered Civil Engineer. The proposed project would be designed and constructed

in accordance with the County standards, and treated by the County's treatment plant. The San Jose Creek WRP has a treatment capacity of 100 mgd (112,000 acre-feet per year) and provides primary, secondary, and tertiary treatment for a residential population of approximately one million people. The San Jose Creek WRP currently processes an average flow of approximately 58.5 mgd. Therefore, there is remaining treatment capacity to handle the proposed increase in sewer flow. In 2015, the San Jose WRP collected approximately 66.3 mgd of wastewater, and approximately 43 mgd (74,040 acre-feet per year) of recycled water is produced on average. The proposed project is anticipated to generate approximately 46,000 gallons per day of wastewater, representing a negligible increase to the collected wastewater to be treated (less than 0.001 percent). The proposed project would not result in inadequate treatment capacity. Provided that the proposed project adheres to the existing regulations identified in RR USS-1 and RR USS-2, impacts would be less than significant.

Level of Significance Before Mitigation: Less than significant with implementation of RR USS-1 and RR USS-2.

5.10.5 Cumulative Impacts

Wastewater

The cumulative wastewater impact area would be the CSMD and Sanitation Districts of Los Angeles County (LACSD) service area, as the sewers would be collected by the CSMD pipelines before flowing to the LACSD trunk to be treated. The proposed project, along with other development projects in the area, would increase the collection and treatment volume within CSMD's and LACSD's service boundaries. However, upon implementation of regulatory requirements and standards (RR USS-1 and RR USS-2), CSMD and LACSD have capacity to manage and maintain adequate level of service. Additionally, as discussed in the Initial Study Section 3.11, Land Use (included as Appendix A to the DEIR), the proposed project is consistent with the projected growth forecast for the unincorporated County; therefore, it would be consistent with the future growth projected within wastewater service areas. No additional cumulatively significant water supply impact is anticipated.

Electric Power

The proposed project, when combined with other related cumulative projects would result in increased demand for electrical services. As with the proposed project, each development project is required to be reviewed by SCE for necessary infrastructure improvements and upgrades during site design phase to ensure that adequate service is provided. SCE is a large regional utility provider and it is assumed that supplies and demands for electricity are projected during regional strategic planning phase using larger scale growth forecast, and individual projects such as the proposed project and other development projects are accounted for in SCE's projections and planning. It is also anticipated that SCE provides ongoing assessment of the SCE system and supplies within its service boundary to ensure the long-term functionality of the SCE's facilities. Therefore, is it determined that there is adequate electric power capacity to serve the projected growth within its service boundaries, and no major infrastructure improvements would be necessary to result in significant environmental impacts. No significant cumulative impacts are anticipated.

Natural Gas

The proposed project would result in increased demand for natural gas services, and other cumulative projects in the area would also increase the demand for natural gas service. As with the proposed project, each development project is required to be reviewed by SCG for necessary infrastructure improvements and upgrades during site design phase to ensure that adequate service is provided. SCG is a large regional utility provider and it is assumed that supplies and demands for natural gas are projected during regional strategic planning phase using larger scale growth forecast, and individual projects such as the proposed project and other development projects are accounted for in SCG's projections and planning. It is also anticipated that SCG provides ongoing assessment of the natural gas system and supplies within its service boundary to ensure the long-term functionality of the SCG's facilities. As the project site and the surrounding area are already served by SCG, and there are existing distribution lines in the area, 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.

Level of Significance Before Mitigation: Less than significant with implementation of RR USS-1 and RR USS-2.

5.10.6 Level of Significance Before Mitigation

Upon implementation of regulatory requirements and standard conditions of approval, the following impacts would be less than significant: 5.10-1 and 5.10-2.

5.10.7 Mitigation Measures

No mitigation measures are required.

5.10.8 Level of Significance After Mitigation

No significant impacts related to utilities and service systems have been identified.

5.10.9 References

County of Los Angeles Department of Public Works (DWP). August, 2019 (accessed). Sewer Area Study Approval Process, Sewer Area Study Preparation, Estimated Average Daily Sewage Flows for Various Occupancies. https://dpw.lacounty.gov/ldd/lddservices/sewerAreaStudy/docs/Estimated%20Average%20Daily%20Sewage%20Flow%20for%20Various%20Occupancies.pdf