3.14 Utility Services

Section 3.14, Utility Services, provides the following:

- A description of the existing utilities currently serving the project site.
- A discussion on the methodology and thresholds used to determine whether the proposed project would result in a significant impacts associated with utilities.
- An analysis of the proposed project’s impacts associated with utilities.
- A description of any conditions of approval that the City would impose, or mitigation measures proposed to reduce significant impacts, if applicable.
- An analysis of cumulative impacts associated with utilities.
- A description of significant and unavoidable impacts associated with utilities, if any.

3.14.1 Introduction

This section describes the existing utilities (wastewater, potable water, solid waste, and energy [electricity and natural gas]) within the proposed project area, describes the regulatory framework associated with utilities, and analyzes whether new facilities would need to be constructed which would have environmental impacts that have not been addressed as part of the proposed project.

3.14.2 Environmental Setting

**Wastewater**

The County of Los Angeles Sanitation District (LACSD) provides wastewater services for the project site. LACSD is a public agency created under state law to manage wastewater and solid waste on a regional scale and consists of 24 independent special districts serving approximately 5.5 million people in Los Angeles County. The service area covers approximately 824 square miles and encompasses 78 cities and unincorporated territory within the county. The wastewater system includes approximately 1,400 miles of sewers, 48 active pumping plants, and 11 wastewater treatment plants that transport and treat about half of the wastewater in Los Angeles County. The project site is within the boundaries of LACSD District 5.

Wastewater generated within the City of Redondo Beach (City) is conveyed to the Joint Water Pollution Control District (JWPCP), located in the City of Carson, via LACSD interceptor sewers (City of Torrance 2015). The JWPCP is one of the largest wastewater treatment plants in the world and is the largest of the LACSD’s wastewater treatment plants. The facility provides both primary and secondary treatment for approximately 280 million gallons of wastewater per day (mgd) under existing conditions, and has a total permitted capacity of 400 mgd. Treated wastewater from the JWPCP is disposed into an outfall into the Pacific Ocean located 2 miles offshore from White Point on the Palos Verde Peninsula (LACSD 2016).

Municipal wastewater is generated in the Torrance Municipal Water’s (TMW) service area from a combination of residential, commercial, and industrial sources. It is estimated that TMW
customers generated wastewater based on 80 percent of potable water demand (City of Torrance 2015). The JWPCP has a capacity of treating 400 million gallons per day (mgd) and currently processes an average flow of 280 million gallons of wastewater per day (LACSD 2016). The JWPCP is part of the Joint Outfall System, a regional interconnected system that provides wastewater conveyance and treatment, water reuse, and effluent disposal for residential, commercial, and industrial users within Los Angeles County. The Sanitation Districts conduct facilities planning efforts to ensure the ability to meet wastewater management needs associated with growing populations, changing regulatory requirements, and aging infrastructure. Because the wastewater treated at JWPCP is discharged to the ocean, none of the wastewater generated within the TMW service area is treated to recycled water standards. According to the California Emissions Estimator Model (CalEEMod) projections prepared for the proposed project, the project site currently generates 104 million gallons per year (Mgal/year). All of the wastewater generated at the project site is sent to the sewer (Appendix G). Currently, on-site sewers are connected to off-site sewers in Hawthorne Boulevard (8-inch) and Kingsdale Avenue (10-inch). The off-site sewers in Kingsdale Avenue and Hawthorne Boulevard run south to 182nd Street where they connect to the El Nido trunk sewer.

**Potable Water**

The potable water supply for the project site is provided by TMW. The service area for TMW is approximately 10,350 acres and serves approximately 105,400 individuals (2015 UWMP, Section 1.8). In accordance with SB 650, a Water Supply Assessment (WSA) was prepared which includes a discussion with regard to whether the public water system’s total projected water supplies available during normal, single dry, and multiple dry water years during a 20-year projection will meet the projected water demand associated with the proposed project, in addition to the public water system’s existing and planned future uses. The WSA is included in Appendix J of the Draft EIR. The WSA relied upon data from various sources to determine existing conditions and proposed future supplies, including the 2015 Urban Water Management Plan (UWMP) for the City of Torrance. The 2015 UWMP was adopted on July 19, 2016, and is incorporated herein by reference. The 2015 UWMP provides a more detailed discussion of Water Sources and Supplies, Water Quality, Reliability Planning, Conservation Measures, Contingency Planning, and Water Recycling. The 2015 UWMP is available online through the Torrance Municipal Water Department’s website at: http://www.torranceca.gov/PDF/UWMPTorrance2015Final2016-07-27.pdf.

**Climate**

Climate has a significant influence on water demand on a seasonal and annual basis. This influence increases with the portion of water demand for outside uses, specifically normal climate conditions, but also during drought. The City of Torrance experiences semi-arid, Mediterranean climate, characterized by dry summers and wet winters with year-round moderate to warm temperatures. Reflecting this pattern, TMW water demand is greater in the summer than in the winter.

Climate change may affect the TMW’s future water supply availability by reducing water availability, changing local precipitation patterns, and increasing water demands. The TMW has
developed a portfolio of different water supplies, including imported water from the Metropolitan Water District of Southern California, groundwater, desalinated groundwater, and recycled water (Todd Groundwater 2017). As outlined in greater detail in the UWMP, the TMW is currently in the process of constructing additional water supply projects, such as improvements to its desalter facilities and recycled water facilities.

**Water Demand**

Table 3.14-1 shows the historical water demand for the TMW service area by water sectors from 2010 through 2015. During the 5-year period from 2010–2015, water use declined, reflecting the success of water conservation programs in the TMW service area, among other factors (Todd Groundwater 2017).

<table>
<thead>
<tr>
<th>Customer Type</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single-Family Residential</td>
<td>6,963</td>
<td>6,882</td>
<td>6,808</td>
<td>6,924</td>
<td>6,967</td>
<td>6,243</td>
</tr>
<tr>
<td>Multi-Family Residential</td>
<td>3,794</td>
<td>4,131</td>
<td>3,679</td>
<td>3,562</td>
<td>3,765</td>
<td>3,656</td>
</tr>
<tr>
<td>Commercial/Institutional</td>
<td>2,857</td>
<td>3,468</td>
<td>3,241</td>
<td>3,643</td>
<td>4,035</td>
<td>3,454</td>
</tr>
<tr>
<td>Industrial</td>
<td>2,859</td>
<td>3,393</td>
<td>3,383</td>
<td>2,643</td>
<td>3,789</td>
<td>3,126</td>
</tr>
<tr>
<td>Landscape Irrigation</td>
<td>810</td>
<td>763</td>
<td>790</td>
<td>830</td>
<td>926</td>
<td>851</td>
</tr>
<tr>
<td>Other</td>
<td>155</td>
<td>147</td>
<td>9</td>
<td>50</td>
<td>50</td>
<td>61</td>
</tr>
<tr>
<td>Agricultural/Nursery</td>
<td>27</td>
<td>92</td>
<td>84</td>
<td>73</td>
<td>85</td>
<td>78</td>
</tr>
<tr>
<td>Wholesale</td>
<td>571</td>
<td>245</td>
<td>1,582</td>
<td>1,495</td>
<td>985</td>
<td>851</td>
</tr>
<tr>
<td><strong>Total Potable Sales</strong></td>
<td>18,035</td>
<td>19,121</td>
<td>19,576</td>
<td>19,375</td>
<td>20,602</td>
<td>18,320</td>
</tr>
<tr>
<td>Industrial Recycled</td>
<td>6,173</td>
<td>5,551</td>
<td>6,069</td>
<td>6,314</td>
<td>6,183</td>
<td>4,937</td>
</tr>
<tr>
<td>Landscaped Irrigation Recycled</td>
<td>272</td>
<td>137</td>
<td>312</td>
<td>270</td>
<td>318</td>
<td>348</td>
</tr>
<tr>
<td><strong>Total Recycled Sales</strong></td>
<td>6,445</td>
<td>5,688</td>
<td>6,381</td>
<td>6,584</td>
<td>6,501</td>
<td>5,285</td>
</tr>
<tr>
<td><strong>Total Water Sales</strong></td>
<td>24,481</td>
<td>24,809</td>
<td>25,957</td>
<td>25,859</td>
<td>27,103</td>
<td>23,605</td>
</tr>
<tr>
<td>Unaccounted for Water</td>
<td>676</td>
<td>645</td>
<td>838</td>
<td>1,160</td>
<td>354</td>
<td>67</td>
</tr>
<tr>
<td><strong>Total Water Consumption</strong></td>
<td>25,157</td>
<td>25,454</td>
<td>26,795</td>
<td>27,019</td>
<td>27,457</td>
<td>23,672</td>
</tr>
</tbody>
</table>

**SOURCE:** City of Torrance 2015

TMW also provides estimates for future water use projections, which consider significant factors on water demand, such as development and/or redevelopment, including climate patterns. For planning purposes, TMW’s projected water use is based on a consumption rate of 142 gallons per capita daily (gpcd) for 2020–2040 and is broken down by sector and is shown on Table 3.14-2 below. This estimate is considered conservative given that the Service Area Population achieved an average consumption of 127 gpcd over the last 5 years (2015 UWMP, Table 4.7).
Based on the data provided in Table 3.11-2, the projected potable demands under consumption rate of 142 gpcd can be met through 2040 by TMW’s anticipated local supply capacity based on a Tier 1 limit of 20,967 from Metropolitan Water District of Southern California (MWD) and production capacities of up to 2,000 gallons per minute (gpm) from its wells and the Robert W. Goldsworthy Desalter facility (Goldsworthy Desalter), respectively (UWMP 2015).

On April 1, 2015, Governor Jerry Brown issued Executive Order (EO) B-29-15 mandating a 25 percent reduction in urban potable water use in response to the recent drought. In May 2015, in response to EO B-29-15, the City of Torrance approved Level 2 water conservation measures, which called for 20 percent reduction in water use. Level 2 water conservation measures include limiting outside watering to only 10 minutes, two days a week, between 6:00 p.m. and 8:00 a.m.; requiring that leaks are fixed within 4 days; prohibiting watering within 48 hours after a rain event; and emplacing restrictions on filling and refilling pools, spas, and ponds. In accordance with the City of Torrance Water Conservation Ordinance 3717 of 2009 (amended in 2015 by Ordinance No. 3782), water use restrictions apply to any entity using potable water provided by the City of Torrance. However, the Governor of California ended the official drought declaration for the Redondo Beach area on April 7, 2017 (Executive order B-40-17).

### Table 3.14-2
**Projected Cumulative Water Demand by Sector (AF)**

<table>
<thead>
<tr>
<th>Customer Type</th>
<th>2020</th>
<th>2025</th>
<th>2030</th>
<th>2035</th>
<th>2040</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single-Family Residential</td>
<td>6,219</td>
<td>6,392</td>
<td>6,571</td>
<td>6,754</td>
<td>6,942</td>
</tr>
<tr>
<td>Multi-Family Residential</td>
<td>3,446</td>
<td>3,542</td>
<td>3,641</td>
<td>3,742</td>
<td>3,847</td>
</tr>
<tr>
<td>Commercial/Institutional</td>
<td>3,152</td>
<td>3,240</td>
<td>3,330</td>
<td>3,423</td>
<td>3,519</td>
</tr>
<tr>
<td>Industrial</td>
<td>2,929</td>
<td>3,011</td>
<td>3,095</td>
<td>3,181</td>
<td>3,270</td>
</tr>
<tr>
<td>Landscape Irrigation</td>
<td>759</td>
<td>780</td>
<td>801</td>
<td>824</td>
<td>847</td>
</tr>
<tr>
<td>Other</td>
<td>72</td>
<td>74</td>
<td>77</td>
<td>79</td>
<td>81</td>
</tr>
<tr>
<td>Agricultural/Nurseries</td>
<td>80</td>
<td>82</td>
<td>84</td>
<td>85</td>
<td>87</td>
</tr>
<tr>
<td>Wholesale</td>
<td>1,000</td>
<td>1,000</td>
<td>1,000</td>
<td>1,000</td>
<td>1,000</td>
</tr>
<tr>
<td><strong>Total Water Sales:</strong></td>
<td><strong>17,657</strong></td>
<td><strong>18,121</strong></td>
<td><strong>18,598</strong></td>
<td><strong>19,089</strong></td>
<td><strong>19,593</strong></td>
</tr>
<tr>
<td>Industrial Recycled</td>
<td>6,200</td>
<td>6,200</td>
<td>6,200</td>
<td>6,200</td>
<td>6,200</td>
</tr>
<tr>
<td>Landscape Irrigation Recycled</td>
<td>400</td>
<td>440</td>
<td>480</td>
<td>520</td>
<td>560</td>
</tr>
<tr>
<td><strong>Total Recycled Sales</strong></td>
<td><strong>6,600</strong></td>
<td><strong>6,640</strong></td>
<td><strong>6,680</strong></td>
<td><strong>6,720</strong></td>
<td><strong>6,760</strong></td>
</tr>
<tr>
<td><strong>Total Sales (including Recycled)</strong></td>
<td><strong>24,257</strong></td>
<td><strong>24,761</strong></td>
<td><strong>25,278</strong></td>
<td><strong>25,809</strong></td>
<td><strong>26,353</strong></td>
</tr>
<tr>
<td>Unaccounted for Water</td>
<td>636</td>
<td>654</td>
<td>672</td>
<td>691</td>
<td>711</td>
</tr>
<tr>
<td><strong>Total Water Consumption (Total Supply Into System)</strong></td>
<td><strong>24,893</strong></td>
<td><strong>25,415</strong></td>
<td><strong>25,950</strong></td>
<td><strong>26,500</strong></td>
<td><strong>27,064</strong></td>
</tr>
</tbody>
</table>

**SOURCE:** Todd Groundwater 2017.
Water Supply

Water is supplied to the TMW primarily as imported water from the MWD. The TMW has five imported water connections with a total capacity of 33,666 gallons per minute (or 54,300 acre-feet per year) to receive imported water from MWD. The City typically imports up to its Tier 1 limit of 20,967 acre-feet per year (AFY) in order to avoid additional costs of MWD’s Tier 2 pricing. In addition to imported water, TMW has one active well and one inactive well or standby well to pump groundwater from the West Coast Basin (City of Torrance 2015). The TMW also receives desalinated water (brackish groundwater) from Goldsworthy Desalter. Goldsworthy Desalter is owned by the Water Replenishment District of Southern California (WRD) and operated by TMW. The desalinated water produced from this plant is for exclusive use by TMW and the plant can provide up to 10 percent of the total water supply and has room for expansion.

The facility is in the process of being expanded to 5.0 million gallons per day (mgd) and the expanded Desalter is scheduled to be on-line by late 2017. Finally, TMW receives recycled water from West Basin Municipal Water District (WBMWD). WBMWD receives secondary effluent from the City of Los Angeles Hyperion Wastewater Treatment Plant and provides tertiary treatment to meet Title 22 standards. The recycled water comes from the West Basin Water Recycling Plant located in El Segundo (City of Torrance 2015). To meet the increasing needs of its customers and to provide additional supply capacity to the region, WBMWD developed the Phase V Expansion for the Edward C. Little Water Recycling Facility (ECLWRF). In May 2013, the project was completed and increased treatment capacity from about 30 mgd to approximately 40 mgd. The project expanded the Title 22 (pretreatment and filtration processes) recycled water system, the microfiltration (MF) treatment system, the reverse osmosis (RO) treatment system and ultraviolet (UV) disinfection treatment systems, installation of ozone pretreatment process for the MF treatment system, and the upgrade to the support facilities that manage the waste-handling processes and various ancillary process capacities.

Groundwater represents a small portion of TMW’s overall water supply (approximately 5 percent) due to the City’s inactive well water quality issues and lack of well capacity. Thus, imported water has accounted for approximately 84 percent of the TMW’s total potable water supply (City of Torrance 2015). TMW has begun a process to decrease its dependence on imported water by upgrading its groundwater supply facilities to include the addition of at least two new wells in the North Torrance Well Field in the northern portion of the City.

TMW maintains four water storage reservoirs ranging in capacity from 0.9 million gallons (MG) to 18.7 MG with a total capacity of 30.6 MG. Two of the reservoirs (Walteria and Ben Haggot Reservoirs) are large underground reservoirs and two (North Torrance and Border Avenue Reservoirs) are standard above-ground tanks. The reservoirs have the following total capacities: Walteria Reservoir has a capacity of 18.7 MG, Ben Haggot Reservoir has a capacity for 10 MG, North Torrance Reservoir has a capacity of 1.0 MG, and the Border Avenue Reservoir has a capacity of 0.9 MG. The TMW has a total capacity of 30.6 MG of water storage.

The TMW maintains four, two-way emergency inter-connections to adjacent water purveyor systems. These connections have the ability to transfer approximately 9,900 gallons per minute (gpm) into TMW’s distribution system. There are two 8-inch connections to the City of Lomita,
one 8-inch connection to the California Water Service Company (CWSC), and one 12-inch connection to the CWSC system. Each has a two way interconnection, allowing water transfers to and from TMW, depending on the emergency situation.

Table 3.14-3 shows TMW’s projected water supply in a normal year, compared with the projected water demand. As shown below, the difference between the 2020 and 2040 water demand is AFY. This table is based upon a population growth rates for the City of Torrance Water Department Service area of 0.55 percent annually, and conservatively assumed a 142 gpcd, despite trends toward reduced per capita water consumption (UWMP 2015).

<table>
<thead>
<tr>
<th>Water Sources</th>
<th>2015</th>
<th>2020</th>
<th>2025</th>
<th>2030</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Available Supply (AF)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Imported Water</td>
<td>19,204</td>
<td>19,204</td>
<td>19,204</td>
<td>19,204</td>
<td>19,204</td>
</tr>
<tr>
<td>Desalted Water</td>
<td>4,800</td>
<td>4,800</td>
<td>4,800</td>
<td>4,800</td>
<td>4,800</td>
</tr>
<tr>
<td>Groundwater</td>
<td>5,640</td>
<td>5,640</td>
<td>5,640</td>
<td>5,640</td>
<td>5,640</td>
</tr>
<tr>
<td>Recycled</td>
<td>7,150</td>
<td>7,150</td>
<td>7,150</td>
<td>7,150</td>
<td>7,150</td>
</tr>
<tr>
<td>Total Supply</td>
<td>36,794</td>
<td>36,794</td>
<td>36,794</td>
<td>36,794</td>
<td>36,794</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Demand (AF)</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Normal Demand</td>
<td>24,893</td>
<td>25,415</td>
<td>25,951</td>
<td>26,500</td>
<td>27,063</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Supply/Demand Comparison</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Supply/Demand Difference</td>
<td>11,901</td>
<td>11,379</td>
<td>10,843</td>
<td>10,294</td>
<td>9,731</td>
</tr>
<tr>
<td>Supply/Demand (%)</td>
<td>147.8%</td>
<td>144.8%</td>
<td>141.8%</td>
<td>138.8%</td>
<td>136.0%</td>
</tr>
</tbody>
</table>

**Table 3.14-3**

**NORMAL YEAR SUPPLY AND DEMAND COMPARISON**

**Project Site**

The existing site is currently served by a looped system that has connections in the 177th Street drive and Hawthorne Boulevard. The main lines of the loop are 12 inches on the west and a combination of 12-, 10- and 8-inch lines on the east side. The WSA prepared for the proposed project is located in Appendix J. **Table 3.14-4** shows the historical water use on the project site from 2005 to 2015 based on metered water usage provided by South Bay Galleria and the City of Torrance. As shown below, the historical water use ranged from 63 AFY in 2015 to 85 AFY in 2006, and averaged 73 AFY (which has been used as the baseline for this analysis).
### Table 3.14-4

**HISTORICAL WATER USE (AF) SOUTH BAY GALLERIA**

<table>
<thead>
<tr>
<th>Year</th>
<th>Metered(^1)</th>
<th>Department Stores(^2)</th>
<th>Landscaping(^3)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>56</td>
<td>17</td>
<td>5</td>
<td>79</td>
</tr>
<tr>
<td>2006</td>
<td>61</td>
<td>17</td>
<td>6</td>
<td>85</td>
</tr>
<tr>
<td>2007</td>
<td>54</td>
<td>19</td>
<td>7</td>
<td>80</td>
</tr>
<tr>
<td>2008</td>
<td>54</td>
<td>17</td>
<td>8</td>
<td>79</td>
</tr>
<tr>
<td>2009</td>
<td>43</td>
<td>16</td>
<td>5</td>
<td>64</td>
</tr>
<tr>
<td>2010</td>
<td>42</td>
<td>18</td>
<td>7</td>
<td>66</td>
</tr>
<tr>
<td>2011</td>
<td>47</td>
<td>17</td>
<td>7</td>
<td>71</td>
</tr>
<tr>
<td>2012</td>
<td>44</td>
<td>18</td>
<td>9</td>
<td>72</td>
</tr>
<tr>
<td>2013</td>
<td>45</td>
<td>18</td>
<td>11</td>
<td>75</td>
</tr>
<tr>
<td>2014</td>
<td>42</td>
<td>18</td>
<td>7</td>
<td>67</td>
</tr>
<tr>
<td>2015(^4)</td>
<td>42</td>
<td>15</td>
<td>6</td>
<td>63</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>531</strong></td>
<td><strong>191</strong></td>
<td><strong>80</strong></td>
<td><strong>802</strong></td>
</tr>
<tr>
<td><strong>Annual Average</strong></td>
<td><strong>48</strong></td>
<td><strong>17</strong></td>
<td><strong>7</strong></td>
<td><strong>73</strong></td>
</tr>
</tbody>
</table>

\(^1\) Based on metered water use data provided by South Bay Galleria. Metered data does not include water used by the department stores or water used for landscaping.

\(^2\) Department stores include Kohl’s, Macy’s, and Nordstrom. Water use estimated based on store size and water use factor for retail (0.164 gallon per day per square foot) from City of Redondo Water Front Project Water Supply Assessment (Yarne & Associates, Inc., 2015).

\(^3\) Landscaping water use based on landscaped area of 0.028 acre (1,200 square feet), estimated from Figure 2 and an aerial photograph, and an irrigation water use estimate of 2.5 AFY per acre (0.05 gpd/sf) from the City of Redondo Beach Water Front Project Water Supply Assessment (Yarne & Associates, Inc., 2015).

\(^4\) December 2015 water use for Nordstrom included in metered data provided by South Bay Galleria. Department Store Nordstrom water use estimated prorated for 11 months.


### Stormwater Drainage

The site is currently served by two major storm drain lines. The first storm drain begins in the parking lot west of the Kohl’s building. It runs northwest as a 39-inch pipe and transitioning to a 48-inch pipe as it turns east along the northerly edge of the project. The pipe exits to the east and sweeps north into the intersection of Artesia Boulevard and Hawthorne Boulevard becoming part of a Los Angeles County storm drain system. The second line begins in the parking lot east of the Kohl’s building and heading northeast as a 15-inch pipe. The pipe increases up to a 24-inch pipe while heading north along the easterly property edge. The line then exits the site to the east before the existing tunnel entrance and joins the Los Angeles County storm drain system pipe in Hawthorne Boulevard. Both of these on-site storm drain lines have additional lateral lines connecting catch basins and other drains to the main system.

### Solid Waste

The City of Redondo Beach is responsible for compliance with the Integrated Waste Management Act of 1989 (AB 939), which mandates the City reduce its waste by 50 percent from the 1990 generation level. Once the reduction is achieved, it must be maintained. The City of Redondo Beach currently generates approximately 83,100 tons of solid waste per year (approximately 228
3. Environmental Analysis

3.14 Utility Services

South Bay Galleria Draft EIR

July 2017

File No. 2015-09-EIR-001

SCH# 2015101009

tons per day) (City of Redondo Beach 2016). Solid waste collection and transportation in the City is currently provided by a private refuse collector, managed and overseen by the City of Redondo Beach Public Works Department. The City has enacted numerous programs to meet and exceed the mandated waste diversion and recycling requirements, including curbside recycling, multi-family centralized recycling and commercial recycling as well as school recycling programs, backyard and worm composting.

The City adopted a recycling program for construction and demolition waste in 2004 to encourage recycling and reuse of specific materials and to comply with State diversion requirements. The program requires an approval of a Waste Management Plan (WMP) prior to an issuance of a demolition permit. The WMP must show how a minimum of 50 percent of the construction wastes generated by a project will be diverted (recycled or reused) from landfills.

Athens Services is the solid waste collector under contract with the City of Redondo Beach, and is the largest recycler in Los Angeles County. Athens Services is committed to helping the City divert 75 percent of its waste from the landfill through expanded recycling programs and the Residential Curbside Compost Collection Program (City of Redondo Beach 2016). The City of Redondo Beach Solid Waste Division is responsible for managing and ensuring that Athens Services complies with the Solid Waste Recycling Services Agreement. The Agreement requires Athens Services to collect the refuse, recyclables, and the organics recycling systems.

According to the 2010 Agreement between Athens Services and the City of Redondo Beach, Athens Services has approval from the City regarding waste disposal services at the following designated disposal sites/facilities: Sunshine Canyon City/County Landfill, Chiquita Canyon Landfill, El Sobrante Landfill, Puente Hills, Athens Services Transfer Station and Materials Recovery Facility (MRF), or the Commerce Refuse-to-Energy Facility, and the San Bernardino County landfills, including Mid-Valley Landfill, San Timoteo Landfill, Victorville Landfill, Barstow Landfill, or Landers Landfill (City of Redondo Beach 2010). The remaining capacity of the designated disposal sites can be found in Table 3.14-5, below. As shown, landfills that may serve Redondo Beach have over 129 million tons of remaining daily capacity.

Construction and demolition (C&D) debris is generated when new structures are built and existing structures and hardscape (asphalt and concrete) are renovated or demolished, and results in the generation of solid waste. C&D can be composed of various materials, including concrete, asphalt, brick, glass, wood, metals, gypsum wallboard and roofing. Materials that comprise demolition debris may also include land clearing debris, trees, stumps, soil, and rock from clearing on construction sites. Construction waste typically consists of trim scraps of construction materials associated with the construction of new buildings and roadways such as wood sheetrock, masonry and roofing materials.
3. Environmental Analysis

3.14 Utility Services

TABLE 3.14-5
SOLID WASTE LANDFILL CAPACITY

<table>
<thead>
<tr>
<th>Facility/Landfill</th>
<th>Owner/Operator</th>
<th>Permitted Daily Throughput (tpd)</th>
<th>Average Daily Tonnage (tpd)</th>
<th>Estimated Remaining Capacity</th>
<th>Approx. Closure Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sunshine Canyon Landfill</td>
<td>Sanitation Districts of Los Angeles County</td>
<td>12,100</td>
<td>7,221</td>
<td>96,800,000 cubic yards</td>
<td>2037</td>
</tr>
<tr>
<td>Chiquita Canyon Landfill</td>
<td>Sanitation Districts of Los Angeles County</td>
<td>6,000</td>
<td>2,970</td>
<td>606,830 cubic yards</td>
<td>2019</td>
</tr>
<tr>
<td>El Sobrante Landfill</td>
<td>Sanitation Districts of Los Angeles County</td>
<td>16,054</td>
<td>6,179</td>
<td>145,530,000 cubic yards</td>
<td>2045</td>
</tr>
<tr>
<td>Athens Services Transfer Station</td>
<td>Sanitation Districts of Los Angeles County</td>
<td>5,000</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Commerce Refuse-to-Energy Facility</td>
<td>Sanitation Districts of Los Angeles County</td>
<td>1,000</td>
<td>363</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Mid-Valley Landfill</td>
<td>County of San Bernardino</td>
<td>7,500</td>
<td>3,592</td>
<td>67,520,000 cubic yards</td>
<td>2033</td>
</tr>
<tr>
<td>San Timoteo Landfill</td>
<td>County of San Bernardino</td>
<td>2,000</td>
<td>833</td>
<td>13,605,488 cubic yards</td>
<td>2043</td>
</tr>
<tr>
<td>Victorville Landfill</td>
<td>County of San Bernardino</td>
<td>3,000</td>
<td>828</td>
<td>81,510,000 cubic yards</td>
<td>2047</td>
</tr>
<tr>
<td>Barstow Landfill</td>
<td>County of San Bernardino</td>
<td>1,500</td>
<td>222</td>
<td>71,481,660 cubic yards</td>
<td>2071</td>
</tr>
<tr>
<td>Landers Landfill</td>
<td>County of San Bernardino</td>
<td>1,200</td>
<td>151</td>
<td>765,098</td>
<td>2018</td>
</tr>
</tbody>
</table>


C&D debris is typically disposed of at inert landfills instead of sanitary landfills, due to lower disposal costs or tipping fees. There is one permitted Inert Waste Landfill in Los Angeles County that has a full solid waste permit, the Azusa Land Reclamation Facility. The remaining capacity of this landfill is 51,512,201 cubic yards as of September 30, 2012 (CalRecycle 2016). Given the permitted remaining capacity rate of 8,000 tons per day (tpd) in 2012, it is estimated that this capacity would be exhausted in 2045 (CalRecycle 2016).

In addition to the waste diversion requirement set by AB 939, each county is required to prepare and administer a Countywide Integrated Waste Management Plan (CIWMP). A CIWMP contains several required elements, and must include goals and objectives, a summary of waste management issues and problems in the respective county, a summary of waste management programs and infrastructure, a summary of existing and proposed solid waste facilities, and an overview of the actions that will be taken to meet waste disposal and diversion requirements. The County’s CIWMP includes the solid waste reduction planning documents, an Integrated Waste Management Summary Plan (Summary Plan), and a Countywide Siting Element (CSE). For Los Angeles County, the County’s Department of Public Works is responsible for preparing and administering the CIWMP.

The CIWMP elements were approved by the County, a majority of the cities within the County, the County Board of Supervisors, and CalRecycle. The Summary Plan was approved by CalRecycle on June 23, 1999, and describes the steps to be taken by local agencies, acting
independently and together, to achieve the mandated state diversion goal by integrating strategies aimed toward reducing, reusing, recycling, diverting and marketing solid waste generated within the County.

The CSE was approved by CalRecycle on June 24, 1998, and identifies how, for a 15-year planning period, the County and the cities within would address their long-term disposal capacity demand to safely handle solid waste generated in the County that cannot be reduced, recycled, or composted (LADPW 2016.) The County is currently in the process of updating the CSE. The revised CSE will cover the 15-year potential sites for development of solid waste management and disposal facilities and goals and policies to encourage the development of alternatives to landfill disposal to ensure that solid waste disposal needs can be met.

CIWMPs are required to be updated every 5 years, if necessary. However, the County prepares an update to the CIWMP annually to summarize the changes that have taken place since the approval of the Summary Plan and the CSE. The Los Angeles County 2014 CIWMP Annual Report showed a short fall in permitted solid waste disposal capacity is not anticipated to occur within the next 15 years under current conditions (LADPW 2015).

The City is a member of the Los Angeles Regional Agency (LARA), which was established by CalRecycle to assist member cities in meeting AB 939 requirement goals (LARA 2016). LARA members have achieved an official diversion rate of 57 percent in 2003 and 61 percent in 2004. As a regional agency, LARA submits its AB 939 Annual Report together as one entity, rather than by individual cities or jurisdictions. This saves the jurisdictions time and money, which can then be used for implementing or improving their division programs (LARA 2016).

Solid waste currently generated at the project site includes primarily waste associated with the existing South Bay Galleria enclosed mall, including commercial-retail and restaurant uses, such as food and beverage containers, paper products, and other miscellaneous trash. According to the Appendix G existing conditions summary prepared for the proposed project, the project site currently generates approximately 1,732 tons of solid waste per year. Based on the City’s current diversion rate of 70 percent, approximately 1,213 tons of solid waste generated at the project site per year is diverted away from landfills, and approximately 519 tons of solid waste per year is sent to landfills.

**Energy**

Southern California Edison (SCE) provides electricity to the project site and the region. SCE operates four neighborhood high-voltage substations in the City. Victoria Substation and Ditmar Substation, serve north Redondo Beach. Redondo Substation and Topaz Substation serve south Redondo Beach. The estimated annual electricity use associated with the existing on-site uses is 19,593,150 kilowatt hours (KWhr), which is a unit of energy equivalent to one kilowatt (1 kW) of power expended for 1 hour (Appendix G). Baseline energy consumption for the 1,008 residents currently living off-site is 2,937,320 kWh/year (Appendix G). The estimated demand factors for the proposed project’s existing electricity use incorporates 2001 energy efficiency assumptions; however, given the buildings located on the project site were constructed prior to 2001, they are
less energy efficient and thus the actual electricity demand is likely to be greater under existing conditions, which yields a conservative analysis.

The Southern California Gas Company (SoCal Gas) provides natural gas to the project site and region. For operation, maintenance, and planning purposes, Redondo Beach is classified within the South Coastal Division. The South Coastal Division includes all communities west of the Harbor Freeway (Interstate 110) from San Pedro north to the Ventura County line. The estimated annual natural gas use associated with existing on-site uses is 3,366,630 British thermal units (kBTU/year) (Appendix G). Baseline energy consumption for the 1,008 residents currently living off-site is 8,890,930 kBTU/year (Appendix G). SoCal Gas would supply the entire project site from its existing system in accordance with the rules and regulations on file with and approved by the California Public Utilities Commission (CPUC).

3.14.3 Regulatory Framework

California Plumbing Code

The California Plumbing Code is codified in Title 24, California Code of Regulations, Part 5 and was adopted by the City (Redondo Beach Municipal Code [RBMC] Section 9-5.01). The Plumbing Code contains regulations including, but not limited to, plumbing materials, fixtures, water heaters, water supply and distribution, ventilation, and drainage. More specifically, Part 5, Chapter 4, contains provisions requiring the installation of low flow fixtures and toilets. Existing development will also be required to reduce its wastewater generation by retrofitting existing structures with water efficient fixtures. (Senate Bill 407 [2009] Civil Code Sections 1101.1 et seq.).

California Solid Waste Reuse and Recycling Access Act

The California Solid Waste Reuse and Recycling Access Act of 1991 (AB 1327 [Public Resources Code Chapter 18, Section 42900]) requires each jurisdiction to adopt an ordinance by September 1, 1994, requiring any “development” project for which an application for a building permit is submitted to provide an adequate storage area for collection and removal of recyclable materials. These regulations govern the transfer, receipt, storage, and loading of recyclable materials at the project site.

Assembly Bill 939: California Integrated Waste Management Act

The California Integrated Waste Management Act of 1989 (AB 939) requires the implementation of solid waste management programs. This legislation required each City or County to direct solid waste from landfill disposal through source reduction, recycling, and composting, and achieve a 50 percent diversion rate by 2000. The 50 percent diversion rate is to be maintained past 2000.

AB 939 requires every County and City in the State to prepare a Source Reduction and Recycling Element (SRRE), which identifies programs that the County or City will implement to achieve the required solid waste disposal reduction goal. AB 939 also requires each City and County to prepare a Household Hazardous Waste Element (HHWE) and Nondisposal Facility Element
(NDFE), and each county to prepare a Countywide Siting Element and Summary Plan. The SRRE, HHWEs, Nondisposal Facility Elements (NDFEs), the CSE, and Summary Plan constitute the CIWMP.

**Assembly Bill 341: Mandatory Commercial Recycling**

AB 341, which became effective July 2011, requires that all businesses and public entities that generate four cubic yards or more of solid waste per week have a recycling program. AB 341 also set a statewide goal for 75 percent reduction of solid waste disposal by 2020.

**Title 8 of the California Code of Regulations**

California Occupational Safety and Health Administration (Cal/OSHA) has established requirements to limit occupational exposure to lead. Construction, alteration and repair work, including demolition, is subject to Title 8, California Code of Regulations (CCR), Section 1532.1 for lead, which outlines permissible exposure limits, exposure assessment requirements, methods of compliance, and necessary respiratory protection and protection clothing.

**California Code of Regulations Title 24, Part 6**

Energy consumption associated with new buildings in California is regulated by the State Building Energy Efficiency (CCR Title 24 Part 6). The efficiency standards apply to new construction of residential and nonresidential buildings, and regulate energy consumed for heating, cooling, ventilation, water heating and lighting. The building efficiency standards are enforced through the local building permit process. Local government agencies may adopt and enforce energy standards for new buildings provided these standards meet or exceed those provided in Title 24 guidelines. The City has adopted Title 24, Part 6 (RBMC Section 9-23.01).

**CalGreen**

CalGreen is a statewide mandatory green building code required for all cities in California to adopt by January 1, 2011. CalGreen requires new standards in materials reuse, locally sourced materials, water/energy efficiency, and indoor air quality. As required, the City has adopted CalGreen (RBMC Section 9-1.00). The proposed project would be required to install photosensors and install energy efficient lighting fixtures consistent with the requirements of the 42 U.S. Code Section 17001 et seq.

**South Coast Air Quality Management District Rule 1403**

South Coast Air Quality Management District (SCAQMD) Rule 1403 for Asbestos Emissions from Demolition/Renovation Activities sets requirements for demolition and renovation activities for buildings containing asbestos-containing materials (ACM). Requirements include asbestos surveying, notification, ACM removal procedures and time schedules, ACM handling and clean-up procedures and storage, disposal, and landfilling requirements for asbestos-containing waste materials (ACWM).
Redondo Beach Municipal Code – Wastewater Sewer User Fee

The RBMC includes regulations for the construction, maintenance, and financing of wastewater and water systems. Ordinance 5-4.504 (wastewater sewer user fees) establishes a flat monthly rate for residential and non-residential use within the City. The fee for non-residential use is calculated by multiplying the total annual water use by the established rate. Fees are recalculated annually based on the latest available annual water usage record. The current fee for nonresidential uses is $1.39 per hundred cubic feet.

Redondo Beach Municipal Code – Waste Management Plan

Section 5-2.704 of the RBMC requires an applicant for a demolition permit to submit and obtain City approval for a Waste Management Plan (WMP). The WMP must show that at least 50 percent of all construction and demolition material generated by the project will be diverted or that an exemption has been approved. Of the 50 percent diversion rate, no more than 25 percent can be achieved through the recycling or reuse of inert materials unless the applicant can demonstrate that there are not sufficient structural materials for recycling or that a 25 percent diversion of total waste through non-inert materials is not feasible.

California Energy Commission/California Public Utilities Commission Planning

The existing regulatory requirements and planning requirements set by the CPUC and the California Energy Commission (CEC) are constantly assessing population growth, electricity demand, and reliability. As discussed on the CEC’s website, the CEC is tasked with conducting assessments and forecasts of all aspects of energy and industry supply, production, transportation, delivery and distribution, demand and prices. The CEC uses these assessments and forecasts to develop energy policies, that conserve resources, protect the environment, ensure energy reliability, enhance the state’s economy, and protect public health and safety (PRC Section 25301(a)).

California Renewable Portfolio Standard

California implements the Renewable Portfolio Standard (Public Utilities Code Section 399.11 et seq.). The California Renewable Portfolio requirement was established in 2002 under SB 1078, and accelerated by SB 107 [2006] and SB 2 [2011], California’s Renewable Portfolio Standard obligates investor-owned utilities, energy service providers, and community choice aggregators to procure 33 percent of their electricity from renewable energy sources by 2020. The state legislature recently updated this requirement to 50 percent renewables by the year 2030. The CPUC and the California Energy Commission are jointly responsible for implementing the program. In 2013, SCE, electricity provider for Redondo Beach, produced 21.6 percent of its electricity from renewable sources (CPUC 2016). In 2015, SCE produced approximately 24.3 percent of its electricity from renewable sources (SCE 2016). SCE is on track to meeting these obligations, and currently has contracts to generate 41.4 percent of its electricity from renewable resources by the year 2020 (CPUC 2016).
Los Angeles Regional Water Quality Control Board

Pursuant to the federal Clean Water Act and California’s Porter Cologne Water Quality Control Act, the Regional Water Quality Control Board (RWQCB) regulates wastewater discharges to surface waters through the National Pollutant Discharge Elimination System (NPDES) program. The NPDES Permit Program controls water pollution by regulating point sources that discharge pollutants into waters of the United States. An NPDES permit is a license required for a facility to discharge a specified amount of a pollutant into receiving waters under certain conditions. Permits may also authorize facilities to process, incinerate, landfill, or beneficially use sewage sludge.

There are two basic types of NPDES permits issued: individual permits and general permits, which are described as follows:

- An individual permit is a permit specifically tailored to an individual facility. Once a facility submits the appropriate application(s), the permitting authority develops a permit for that particular facility based on the information contained in the permit application (e.g., type of activity, nature of discharge, receiving water quality). The authority issues the permit to the facility for a specific period (not to exceed 5 years) with a requirement that the facility reapply prior to the expiration date.

- A general permit covers a group of dischargers with similar qualities within a given geographical location. General permits may offer a cost-effective option for permitting agencies because of the large number of facilities that can be covered under a single permit.

**MS4 Permit Requirements**

The MS4 Permit requires permittees to implement a Planning and Land Development Program for all new development and redevelopment. The proposed project involves redevelopment of more than 50 percent of an existing development and thus meets the criteria specified in the MS4 Permit for applicability of the Planning and Land Development Program. Applicable new development/redevelopment project performance criteria include:

- Controlling pollutants from the project site by minimizing impervious surface area and controlling runoff from impervious surfaces through infiltration, bioretention, and/or rainfall harvest and use.

- Retain 0.75 inch, 24-hour rain event on site or the 85th percentile, 24-hour rain event on site, whichever is greater.

- Bioretention and biofiltration systems must meet MS4 permit requirements, such as sizing specifications, geometry, planting and storage media, flow requirements, and the possible need for an overflow device and underdrain.

- Evaluation of on-site retention, permittee must consider maximum potential for evapotranspiration from green roofs and rainfall harvest and use.
State Water Resources Control Board Stormwater Permits

The State Water Resources Control Board (SWRCB) has issued and periodically renews the statewide NPDES general permit for stormwater discharges associated with construction and land disturbance activities. The permit is known as the General Permit for Construction Activities. In 2009, the General Permit for Construction Activities was updated and revised with an effective date of July 1, 2010. This permit requires monitoring for sediment and nonvisible pollutants under specified circumstances. Any project that disturbs an area more than 1 acre requires a Notice of Intent (NOI) to discharge under the General Permit for Construction Activities filed with the Los Angeles Regional Water Quality Control Board (LARWQCB) and preparation of a stormwater pollution prevention program (SWPPP). The SWPPP includes measures to eliminate or reduce pollutant discharges and describes the implementation and maintenance of best management practices (BMPs) to control stormwater and other runoff during and after construction. The SWPPP is required to include a menu of BMPs to be selected and implemented based on the phase of construction and the weather conditions to effectively control erosion, sediment, and other construction related pollutants to meet the Best Available Technology Economically Achievable and Best Conventional Pollutant Control Technology standards.

Erosion control BMPs are designed to prevent erosion, whereas sediment controls are designed to trap sediment once it has been mobilized. The following types of BMPs, as applicable, would be implemented during construction:

**Erosion Control**

- Physical stabilization through hydraulic mulch, soil binders, straw mulch, bonded fiber matrices, and/or erosion control blankets (i.e., rolled erosion control products).

- Soil roughening of graded areas (through track walking, scarifying, sheepsfoot rolling, or imprinting) to slow runoff, enhance infiltration, and reduce erosion.

- Wind erosion (dust) control through the application of water or other dust palliatives as necessary to prevent and alleviate dust nuisance.

**Sediment Control**

- Perimeter protection through silt fences, fiber rolls, gravel bag berms, sand bag barriers, and straw bale barriers.

- Storm drain inlet protection. Sediment capture through sediment traps, storm drain inlet protection, and sediment basins.

- Velocity reduction through check dams, sediment basins, and/or outlet protection/velocity dissipation devices.

- Reduction in off-site sediment tracking through stabilized construction entrance/exit, construction road stabilization, and/or entrance/exit tire wash.

The General Permit for Construction Activities contains receiving water limitations that require stormwater discharges to not cause or contribute to a violation of any applicable water quality standard. Inspections of all BMPs are required throughout construction. Construction would be covered under the statewide NPDES General Permit for Construction Activities.
The LARWQCB also regulates discharges of groundwater from construction activities in the coastal watershed of Los Angeles County under Order No. R4-2013-0095 (NPDES Permit No. CAG994004). Discharges covered by this permit include, but are not limited to, treated or untreated groundwater generated from permanent or temporary dewatering operations. The order requires that discharges do not cause or contribute to a violation of any applicable water quality object or criteria and establishes monitoring and reporting requirements.

**City of Redondo Beach – Stormwater and Urban Runoff Pollution Control Regulations**

The City through its Municipal Code requires all construction sites to comply with minimum BMPs during construction as specified in the MS4 permit. Construction sites greater than 1 acre must also comply with the General Permit of Construction Activities previously discussed. All priority projects are required to prepare a local stormwater pollution prevention plan (LSWPPP). LSWPPPs must meet all SWPPP requirements as specified in the General Permit for Construction Activities. If a construction site for a priority project is disturbed during the rainy season, October 15 through April 15, then a Wet Weather Erosion Control Plan (WWECP) is required. The LSWPPPs and WWECPs must identify BMPs to be implemented to mitigate impacts to stormwater quality from erosion and sediments. The City provides pamphlets containing a list of acceptable BMPs appropriate for construction activities to reduce stormwater impacts related to sediments, erosion, general site management, and materials and waste management. Prior to construction, an authorized representative of the contractor must acknowledge receipt of the pamphlets.

The following types of BMPs, as applicable, would be implemented during construction:

**Erosion Control**
- Physical stabilization through hydraulic mulch, soil binders, straw mulch, bonded fiber matrices, and/or erosion control blankets (i.e., rolled erosion control products).
- Soil roughening of graded areas (through track walking, scarifying, sheepsfoot rolling, or imprinting) to slow runoff, enhance infiltration, and reduce erosion.
- Wind erosion (dust) control through the application of water or other dust palliatives as necessary to prevent and alleviate dust nuisance.

**Sediment Control**
- Perimeter protection through silt fences, fiber rolls, gravel bag berms, sand bag barriers, and straw bale barriers.
- Storm drain inlet protection.
- Sediment capture through sediment traps, storm drain inlet protection, and sediment basins.
- Velocity reduction through check dams, sediment basins, and/or outlet protection/velocity dissipation devices.

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3. Environmental Analysis

3.14 Utility Services

- Reduction in off-site sediment tracking through stabilized construction entrance/exit, construction road stabilization, and/or entrance/exit tire wash.

In May 2015, the Redondo Beach City Council adopted Ordinance No. 3129-15 to amend the Redondo Beach Municipal Code regarding stormwater and urban runoff pollution control regulations, thereby bringing the City in compliance with recently updated federal, state and local municipal separate storm sewer system (MS4) permit requirements. The ordinance identified LID practices for new development and redevelopment projects, placing an emphasis on managing stormwater as close to its source as possible. LID includes elements such as bio-retention facilities, rain gardens, vegetated rooftops, rain barrels, and permeable pavements that minimize effective imperviousness. The LID practices identified in the ordinance reflect those set forth in the Los Angeles County LID Standards Manual.

All projects that incorporate street or road construction of 10,000 square feet or more of impervious surfaces (including the proposed project) must also follow the City’s Green Street Policy 7 and comply with the Los Angeles County LID Standards Manual8. The Green Street Policy was adopted by the City Council in May 2015, and is designed to demonstrate compliance with the NPDES MS4 Permit for the Los Angeles Region (Order No. R4-201201759) and required new development and/or redevelopment streets and roadway projects to incorporate green street BMPs that comply with LID requirements.

Additional elements of the City’s stormwater program include a Fats, Oils, and Grease (FOG) control and inspection program for businesses that have the potential to discharge large amounts of FOG into the sewer system, which is a major cause of wastewater overflows. These facilities are inspected twice a year to ensure the FOG removal systems are being properly maintained. The City participated in the Clean Bay Restaurant Certification program to help educate restaurant operators on BMPs that reduce impacts on water quality in the Santa Monica Bay, establishes an incentive for restaurants and other food service establishments to exceed City regulations, and informs the public about restaurants meeting the higher standards.

3.14.4 Impacts and Mitigation Measures

Methodology

The utilities analysis evaluates whether the existing facilities that would be expected to provide services to and from the proposed project would have sufficient resources and/or capacity to accommodate project-related demands. If additional facilities are required, the thresholds below address whether there would be any additional physical impacts on the environment that have not already been addressed as part of the proposed project.

For each utility type (i.e., wastewater, potable water, and solid waste), project-related impacts are identified using baseline information and demand associated with the proposed project. The resulting demand associated with the proposed project are compared to anticipated future capacities of project-serving infrastructure facilities to determine if the proposed project can be accommodated and whether new facilities are needed which would result in significant environmental effects.
With regard to wastewater, the analysis evaluates the capacity of local wastewater infrastructure to accommodate potential increases in wastewater requirements associated with the proposed project. In order to determine if sufficient potable water supply would be available to serve the proposed project, a WSA, described above was developed to determine if the increase in water demand can be supported at the project site and if sufficient supplies are available from existing entitlements and resources. For solid waste, the amount of solid waste anticipated to require disposal as a result of construction and operations is estimated and compared to anticipated future permitted capacity of landfills serving the site.

**Thresholds of Significance**

The project would result in significant impacts to utility services if it would:

- Conflict with wastewater treatment requirements of the applicable Regional Water Quality Control Board. (See Impact UTL-1.)
- Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects that have not already been addressed as part of the project. (See Impact UTL-2.)
- Require or result in the construction of new storm water drainage facilities, or expansion of existing facilities, the construction of which could cause significant environmental effects that have not already been addressed as part of the project. (See Impact UTL-3.)
- Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed. (See Impact UTL-4.)
- Result in a determination by the wastewater treatment provider that would serve the project that it has adequate capacity to serve the project’s projected demand in addition to the provider’s existing commitments. (See Impact UTL-5.)
- Be served by a landfill with sufficient permitted capacity to accommodate the project’s solid waste disposal needs. (See Impact UTL-6.)
- Exceed the capacity of electrical and natural gas transmission facilities and result in the construction of new infrastructure that could cause significant environmental impacts not already addressed as part of the proposed project. (See Impact UTL-7.)

The proposed project would have a less than significant impact related to compliance with federal, state, and local statutes and regulations related to solid waste disposal and does not require any further analysis in this Draft EIR. Section 5.1, *Effects Found Not to Be Significant*, summarizes that environmental impacts that were determined in the Initial Study/Notice of Preparation and public review process not to pose potentially significant impacts.
Impacts and Mitigation

Impact UTL-1: The project would not conflict with the wastewater treatment requirements of the applicable Regional Water Quality Control Board.

The proposed project would increase the density and intensity of the land uses on the project site, as it would introduce residential and hotel uses, as well as increase the amount of commercial retail uses on site, which would result in increased generation of wastewater from the project site. Currently, there are 971,101 sf of commercial uses on site. The proposed project would consist of 1,300,565 sf of commercial uses, including the hotel, and 650,000 sf of residential uses, for a total of 1,950,565 sf of commercial and residential uses on site at build out. It is estimated within the TMW service area that customers generate wastewater based on 80 percent of potable water demand (City of Torrance 2015). The proposed project water demand is estimated approximately 537 AFY, and would have a net increase of 464 AFY (Todd Groundwater 2017). Thus, it is anticipated the proposed project would generate a net increase of approximately 371.2 AFY of wastewater. Wastewater generated by the proposed project would be conveyed by LACSD sewer lines and treated at the JWPCD, in the City of Carson. The JWPCD was issued a National Pollutant Discharge Elimination System (NPDES) permit from the LARWQCB to discharge treated wastewater into an outfall into the Pacific Ocean, located 2 miles offshore from White Point on the Palos Verde Peninsula (LARWQCB 2011). The waste discharge requirements for the JWPCP are based on all applicable state and federal regulations, policies, and guidance, and include limitations on effluent discharge and receiving water, turbidity, and toxicity.

The proposed residential and commercial land uses within the project site are uses that do not typically discharge wastewater that contain harmful levels of toxins. All effluent would comply with the wastewater treatment standards of the Los Angeles RWQCB. Furthermore, the proposed project would be required to comply with the City’s Fats, Oils, and Grease (FOG) control and inspection program to ensure the FOG removal systems are being properly maintained, thereby reducing the potential for accumulation of fats, oils, and grease in the sewer system. In addition, as discussed in Impact UTL-2 below, wastewater generated by the proposed project would not exceed the existing capacity of the JWPCP. Therefore, the proposed project would result in less than significant impacts related to the wastewater treatment requirements.

Mitigation Measures

No mitigation measures are required.

Residual Impacts

Impacts would be less than significant.
Impact UTL-2: The project would not require or result in the construction of new water or wastewater conveyance systems, treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects that have not already been addressed as part of the project.

The proposed project would not require the construction of new water and wastewater treatment facilities to serve the proposed residential and commercial uses, the construction of which could cause significant environmental effects.

The proposed project includes some local infrastructure improvements, including for domestic, irrigation and fire services. The existing site is currently served by a looped system that has connections in the 177th Street drive and Hawthorne Boulevard. The main lines of the loop are a 12-inch main on the west and a combination of 12-inch, 10-inch, and 8-inch mains on the east side. The proposed project will require relocations of several of these mains to accommodate the new building footprints. During these relocations it is likely that the main line on the east would be made uniform at 12 inches in size. Relocations may require moving the water line into Hawthorne Boulevard, Artesia Boulevard and/or Kingsdale Avenue, depending on final building alignments and required space for public utilities and easements. In addition to new routing of water lines and services, some existing water lines may be increased in size to accommodate the new demands from the proposed project. These activities have been assumed as part of the project description and analyzed as part of the project and are not anticipated to result in any significant environmental impacts. Nevertheless, these required improvements are included as standard Conditions of Approval as required by the City. See COA UTL-1, below.

The proposed project would continue to be served by existing sewer systems located within the public streets and right-of-way (ROW). The project would require additional on-site sewer piping and laterals for the proposed additional buildings and uses. The on-site sewers would be connected to off-site sewers in Hawthorne Boulevard and Kingsdale Avenue. The project would increase the existing sewer load, thus upsizing of off-site sewer lines would be required. The off-site sewer lines in Kingsdale Avenue and Hawthorne Boulevard run south to 182nd Street where they connect to the El Nido trunk sewer. The Kingsdale Avenue and Hawthorne Boulevard sewer lines would be upsized from the existing 8-inch line in Hawthorne Boulevard to a 10-inch or 12-inch line and from a 10-inch line in Kingsdale Avenue to a 12-inch or 15-inch line. Actual size increase will depend on future sewer monitoring in concurrence with the City’s Public Works Department. These activities have been assumed as part of the project description and analyzed as part of the project. Nevertheless, these required improvements are included as standard Conditions of Approval as required by the City. See COA UTL-2, below.

No new treatment facilities would be required as a result of the proposed project as outlined in greater detail in the subsequent paragraphs. It is estimated within the TMW service area that customers generate wastewater based on 80 percent of potable water demand (City of Torrance 2015). The proposed project is estimated to generate a new water use increase of 464 AFY (Todd Groundwater 2017). Thus, it is anticipated the proposed project would generate approximately 371.2 AFY of wastewater.
The JWPCP currently processes 280 mgd per day, and is permitted to process approximately 400 mgd. The proposed project would generate 371.2 AFY of wastewater, which represents approximately 0.33 mgd of wastewater. While the proposed project would increase wastewater generation on the project site, it would also replace older existing inefficient fixtures with modern more water efficient fixtures (e.g., low flow toilets) as required for new development under the California Plumbing Code (Title 24, Cal. Code Regs., Part 5, Chapter 4). Similarly, existing and future cumulative projects will also be required to reduce their wastewater generation pursuant to Senate Bill 407 [2009] (Civil Code Section 1101.1 et seq.). All wastewater generated by the interior plumbing system of the proposed project would be discharged into the local sewer main and conveyed for treatment at the Los Angeles County Sanitation Districts’ Joint Water Pollution Control Plant (JWPCP), located in the City of Carson. The JWPCP has a capacity of treating 400 million gallons per day (mgd) and currently processes an average flow of 280 million gallons of wastewater per day (Sanitation Districts of Los Angeles County 2014). The JWPCP is part of the Joint Outfall System, a regional interconnected system that provides wastewater conveyance and treatment, water reuse, and effluent disposal for residential, commercial, and industrial users within Los Angeles County. The Sanitation Districts conduct facilities planning efforts to ensure the ability to meet wastewater management needs associated with growing populations, changing regulatory requirements, and aging infrastructure. In November 2012, the Sanitation Districts prepared a Master Facilities Plan (MFP) that identifies near-term and long-term actions to ensure for the continuation of a wastewater collection, treatment, and management services throughout Los Angeles County through the year 2050 (Sanitation Districts of Los Angeles County 2014). As described in Section 4.7.2 of the MFP, wastewater flows to the JWPCP have decreased slightly over approximately the last 15 years. Given that there is existing capacity at JWPCP and planning efforts underway to ensure future capacity, it is anticipated that sufficient capacity exists at the JWPCP to process wastewater associated with the proposed project. Therefore, the proposed project would not result in the construction of new treatment facilities under existing and cumulative conditions and impacts would be less than significant.

**Mitigation Measures**

No mitigation measures are required.

**Conditions of Approval**

**ULT-1:** Prior to the issuance of the Building Permit, the City’s Public Works Department will confirm the proposed project applicant’s on-site water system has been developed to accommodate the land uses proposed at the project site.

**ULT-2:** Prior to the issuance of the Building Permit, the City’s Public Works Department, in concurrence with the LACSD, will confirm the proposed project applicant’s on-site and off-site wastewater conveyance system has been developed to accommodate the land uses proposed at the project site.

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2 The Los Angeles County Master Facilities Plan is available online at: http://www.clearwaterprogram.org/civica/filebank/blobdownload.asp?BlobID=7730
Residual Impacts

Impacts would be less than significant.

Impact UTL-3: The project would not require or result in the construction of new storm water drainage facilities, or expansion of existing facilities, the construction of which could cause significant environmental effects that have not already been addressed as part of the project.

The project site is currently developed and consists of approximately 1,250,575 sf of impervious surface area. The proposed project would reduce the amount of impervious surfaces to 880,329 sf, a decrease of approximately 30 percent upon completion (Tait & Associates 2016). Currently, storm water runoff on the project site is conveyed to an existing stormwater drainage system on site that connects with an off-site storm drain. The site is currently served by two major storm drain lines. The first storm drain begins in the parking lot west of the Kohl’s building. It runs northwest as a 39-inch pipe and transitioning to a 48-inch pipe as it turns east along the northerly edge of the project. The pipe exits to the east and sweeps north into the intersection of Artesia Boulevard and Hawthorne Boulevard becoming part of a Los Angeles County storm drain system. The second line begins in the parking lot east of the Kohl’s building and heading northeast as a 15-inch pipe. The pipe increases up to a 24-inch pipe while heading north along the easterly property edge. The line then exits the site to the east before the existing tunnel entrance and joins the Los Angeles County storm drain system pipe in Hawthorne Boulevard. Both of these on-site storm drain lines have additional lateral lines connecting catch basins and other drains to the main system.

The project would require new storm drain to serve the proposed parking areas and outdoor shopping areas as well as roof drainage. The proposed project would direct the required treatment volumes based on the LID report to proposed dry-well locations for infiltration. Storm water runoff volumes above the required treatment volume will be directed to the off-site storm drain systems. The project would relocate several of the existing storm drain lines to accommodate the proposed project design. The existing storm drain on the west of the project site would have portions relocated to the 177th Street and Kingsdale Avenue – and would head north. The storm drain line along the northern boundary would be relocated into Artesia Boulevard or the line would be redesigned to remain under the building expansion at the northern boundary of the project site. There is a potential that this main line would need to be upsized to account for insufficient storm drain line capacities or require additional on-site detention or infiltration. The storm drain line on the western boundary would have portions relocated and also an extension would be constructed in Hawthorne Boulevard to accommodate the proposed buildings along the street frontage. This may require upsizing to a 30-inch storm drain line or require additional on-site detention or infiltration. Development of the proposed storm system would not increase flows from the proposed project site into the existing storm system (Appendix I, at pg. 17).

Additionally, these activities have been assumed as part of the project description and analyzed as part of the project. Nevertheless, these required improvements are included as standard Conditions of Approval as required by the City. See COA UTL-3, below.

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3 Not including open space plaza, because the final plaza design and materials have not been determined to date.
Excavation and demolition activities and equipment laydown areas on site during construction would change the ground surface and temporarily alter drainage patterns on site, which would decrease the amount of impervious surfaces. In conformance with the Construction General Permit (CGP) requirements developed by the project, a SWPPP would be implemented during construction that would include erosion control and sediment control BMPs designed to prevent erosion and sedimentation from occurring on site (See Section 3.14.3 above). Thus, with implementation of these BMPs required by a CGP, the proposed project would not increase off-site stormwater flows and would not require the construction of new storm water drainage facilities during construction activities. The proposed project would be required to comply with the recommendations of the Low Impact Development (LID) Plan, developed by Tait and Associates (Appendix I) prepared in accordance with Municipal Separate Storm Sewer System (MS4) permit requirements. According to the LID, the proposed project would maintain existing topography and existing drainage divides on site to encourage dispersed flows. Runoff would be directed to the storm drain system on site through non-erosive devices, and special drainage provisions and sump pumps would be installed to provide on-site infiltration-based stormwater features within parking lot islands and landscaped areas, which would increase infiltration on site and reduce runoff flow volumes (Appendix I) The proposed project would also plant additional clustered vegetation on site. Therefore, soils present on site in unpaved areas would be covered and secured by landscape vegetation and would not include erosive devices, thereby reducing erosion and siltation potential on site. Drainage flows would be effectively infiltrated and slowed by site design in accordance with the LID, developed in accordance with MS4 permit requirements, thereby preventing flooding from occurring on and off site. Therefore, operation of the proposed project would not require the construction of new undisclosed storm drain facilities or expansion of existing facilities that would result in significant impacts.

Impacts would be less than significant.

**Mitigation Measures**

No mitigation is required.

**Conditions of Approval**

**UTL-3:** Prior to the issuance of the Building Permit, the City’s Public Works Department will confirm the proposed project applicant’s on-site stormwater conveyance system has been designed to accommodate the land uses proposed at the project site and development of the proposed project would not increase existing flows from the project site into the stormwater system.

**Residual Impacts**

Impacts would be less than significant.
Impact UTL-4: The project would have sufficient water supplies available to serve the project from existing entitlements and resources, and no new or expanded entitlements are needed.

A Water Supply Assessment (WSA) (see Appendix J) was prepared for the proposed project. The purpose of the WSA is to document the City of Torrance’s existing and future water supplies for its service area and compare them to the area’s future water demand including that of the proposed project. It assesses the adequacy of the water supply to meet the estimated demands of the proposed project over the next 25 years and those of the TMW’s existing customers and projected new users under normal, single dry year, and multiple dry year conditions.

The proposed project would replace buildings constructed in the late 1950s to 1990s with buildings that would fully comply with the current City codes including the California Plumbing Code and California Green Building Code, which mandate installation of water conserving plumbing fixtures and fittings (e.g., water efficient toilets and dishwashing machines). **Table 3.14-6** presents the estimated water use for each proposed land use.

Onsite water improvements will also be required to provide service to the proposed buildings and uses for domestic, irrigation and fire services. The existing site is currently served by a looped system that has connections in the 177th Street and Hawthorne Boulevard. The main lines of the system are 12 inches on the western boundary of the project site and a combination of 12-, 10-, and 8-inch mains on the eastern boundary of the project site. The proposed project would be required to relocate several of the water main lines to accommodate the proposed new buildings. The main line on the eastern boundary would likely be made uniform to 12 inches. Relocations may also require moving a water line into Hawthorne Boulevard, Artesia Boulevard, and/or Kingsdale Avenue. This activity is dependent on final building alignments and required space for public utilities and easements. In additional to new routing of water lines and services, some existing water lines may require increase in size to accommodate the new demands from development of the proposed project. The determination of the size increase cannot be determined until the fire systems for the proposed new buildings are designed, as some of the buildings may require pump systems based on their height and building type. Additionally, these activities have been assumed as part of the project description and analyzed as part of the project and are not anticipated to result in any significant environmental impacts. Nevertheless, these required improvements are included as standard Conditions of Approval as required by the City. See COA UTL-4, below.

<table>
<thead>
<tr>
<th>TABLE 3.14-6</th>
<th>EXISTING AND PROPOSED WATER DEMAND</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Retail</td>
</tr>
<tr>
<td>Average Metered Water Use</td>
<td>-</td>
</tr>
<tr>
<td>Water Demand Factors</td>
<td>0.164</td>
</tr>
<tr>
<td>Existing Land Use</td>
<td></td>
</tr>
<tr>
<td>Area (SF)</td>
<td>893,095</td>
</tr>
<tr>
<td>Daily Demand (gpd)</td>
<td>146,468</td>
</tr>
<tr>
<td>Demand (AFY)</td>
<td>164</td>
</tr>
</tbody>
</table>
As shown in Table 3.14-6, the proposed project would result in an estimated average daily water demand of approximately 537 AFY. Factoring in the existing water use at the project site based on the average metered water use from 2005 to 2015 (73 AFY), the net increase in average daily water use under the proposed project would be approximately 464 AFY.

The projected water demand of the proposed project is shown in Table 3.14-7. With implementation of the proposed project, the estimated projected water demand for the TMW would increase between 2015 and 2040 to a combined total of 2,171 AFY. Although it could be reasonably assumed the projected increase in the TMW water demand included the proposed project, the projected water demand associated with the proposed project is considered as additional demand.

The increase in water demand due to the proposed project would not negatively impact future water supply as the TMW would continue to effectively manage its water demand and expand its water conservation programs that focus on reducing urban water use. The WSA (Appendix J) confirmed that adequate supplies exist to serve the proposed project and the increased demand from the proposed project would be accommodated by the existing infrastructure. Therefore, TMW concluded for the next 25 years (2015–2040), the district would have adequate water supplies to meet projected demands associated with the proposed project and those of all existing customers and other anticipated future customers for normal, single dry year and multiple dry year conditions under existing and cumulative conditions. As such, the proposed project would not exceed existing potable water supplies, entitlements, and resources, or require and result in new and expanded entitlements. Impacts would be less than significant.

<table>
<thead>
<tr>
<th>Proposed Land Use</th>
<th>Retail</th>
<th>Restaurant</th>
<th>Residential</th>
<th>Hotel</th>
<th>Theater</th>
<th>Landscaping</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area (SF)</td>
<td>1,071,555</td>
<td>60,000</td>
<td>1,008 people</td>
<td>105,000</td>
<td>64,010</td>
<td>128,027</td>
<td></td>
</tr>
<tr>
<td>Daily Demand (gpd)</td>
<td>175,735</td>
<td>66,000</td>
<td>143,136</td>
<td>52,500</td>
<td>35,206</td>
<td>6,401</td>
<td>478,978</td>
</tr>
<tr>
<td>Demand (AFY)</td>
<td>197</td>
<td>74</td>
<td>160</td>
<td>59</td>
<td>39</td>
<td>7.18</td>
<td>537</td>
</tr>
<tr>
<td>Estimated Increase (AFY)</td>
<td>464</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

SOURCE: Todd Groundwater 2017.1. Estimated increase in water demand is the proposed land use water demand estimate minus the historical average metered water use from Table 3.14-4 (73 AFY).

<table>
<thead>
<tr>
<th>TABLE 3.14-7</th>
<th>COMBINED WATER DEMAND OF TMW SYSTEM AND PROPOSED PROJECT</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2015</td>
</tr>
<tr>
<td>Torrance Municipal Water</td>
<td>24,893</td>
</tr>
<tr>
<td>Proposed Project</td>
<td>464</td>
</tr>
<tr>
<td>Total</td>
<td>24,429</td>
</tr>
</tbody>
</table>

Mitigation Measures

No mitigation measures are required.

Conditions of Approval

UTL-4: Prior to the issuance of the Building Permit, the City’s Public Works Department will confirm the proposed project applicant’s water conveyance system has been designed to accommodate the land uses proposed at the project site.

Residual Impacts

Impacts would be less than significant.

Impact UTL-5: The project would result in a determination by the wastewater treatment provider that would serve the project that it has adequate capacity to serve the project’s projected demand in addition to the provider’s existing commitments.

The project site is located within the JWPCP service area, which is operated by the LACSD. Currently, the JWPCP provides primary and secondary treatment for approximately 280 mgd of wastewater. The capacity of the JWPCP is 400 mgd and the remaining capacity is approximately 120 mgd. The project will require additional on-site sewer piping and laterals for the proposed additional buildings and uses. The on-site sewers will be connected to off-site sewers in Hawthorne and Kingsdale. The project will increase the existing sewer load and therefore upsizing of off-site sewers will be required. The off-site sewers in Kingsdale Avenue and Hawthorne Boulevard run south to 182nd street where they connect to the El Nido trunk sewer. The Kingsdale Avenue and Hawthorne Boulevard sewers will need to be upsized from the existing 8 inches in Hawthorne Boulevard to a 10- or 12-inch line, and from a 10-inch line in Kingsdale Avenue to a 12- or 15-inch line. Actual size increase will depend on future sewer monitoring. As discussed in Impact UTL-1, the proposed project would generate approximately 371.2 AFY of wastewater, or approximately 331,386 gpd, which represents about 0.33 mgd. As discussed under Impact UTL-2, there would be adequate capacity at the JWPCP to service the project in combination with existing and cumulative development. Therefore, the JWPCP has adequate remaining capacity to serve the anticipated wastewater generated by the proposed project.

Mitigation Measures

No mitigation measures are required.

Residual Impacts

Impacts would be less than significant.

Impact UTL-6: The project would be served by a landfill with sufficient permitted capacity to accommodate the project’s solid waste disposal needs.

Construction of the proposed project would generate solid waste, including demolished building materials (e.g., wood, glass, metal, plastic, bricks/block, etc.), demolished hardscape materials (e.g., concrete, asphalt, pavers, etc.), and other construction debris. Construction and demolition
wastes that cannot be recycled would be disposed of at landfills and other waste disposal facilities, resulting in an incremental usage of such facilities.

Solid waste generated during construction activities would be disposed of by Athens Services at any of the following permitted landfills: Sunshine Canyon City/County Landfill, Chiquita Canyon Landfill, El Sobrante Landfill, Puente Hills, Athens Services Transfer Station and MRF, or the Commerce Refuse-to-Energy Facility, and the San Bernardino County landfills, including Mid-Valley Landfill, San Timoteo Landfill, Victorville Landfill, Barstow Landfill, or Landers Landfill (City of Redondo Beach 2010).

Further, approximately 156,571 cubic feet of asphalt paving on site would be removed during construction. The weight of asphalt is approximately 140 to 145 pounds per cubic foot (Tait 2016). Therefore, approximately 22,702,795 pounds of asphalt would be removed from the site and taken to a recycling facility. However, if the quality of the asphalt is determined to be unsuitable for recycling or reuse, the material would be deposited in an inert landfill.

It is assumed that the construction would comply with a minimum 50 percent diversion rate, which is the minimum diversion required under Assembly Bill (AB) 939. Although, as described above, the City’s average diversion rate is 70 percent, reaching that diversion rate for the project may not be feasible depending on the make-up of the demolition debris and what materials are suitable for recycling/reuse. Nevertheless, with a minimum 50 percent diversion rate, this would result in approximately 78,285 cubic yards or 32,000 total pounds daily of the demolition waste disposed of in landfills during the demolition phase. As described in Table 3.14-5, there are various landfills that would be used for disposal of the proposed project’s debris. The total remaining capacity for all permitted landfills is approximately 477,819,076 cubic yards. Further, all the permitted landfills are not currently operating at maximum daily permitted capacity, and thus, it would easily accommodate the 78,285 cubic yards or 32,000 tpd of construction wastes throughout the anticipated five-month demolition phase.

It is anticipated that excavated soils would be re-compacted and reused on site as engineered fill and thus would not require off-site disposal. Green waste would be separated and diverted from landfills through recycling, reuse, and composting.

Operational activities associated with the proposed project would result in increased generation of solid waste. Based on the construction of 650 residential units and construction of an additional 1,482,600 sf of commercial retail uses which would result in the net increase of 925 employees, the proposed project is expected to generate approximately 1,291 tons of solid waste per year (or 4,782 cubic yards per year), according to the CalEEMod calculations prepared for the proposed project (Appendix G). It is important to note the generation factor does not account for recycling or other waste diversion programs. As discussed above, solid waste would be taken to various landfills throughout Los Angeles and San Bernardino Counties, which have a collective remaining capacity of 477,819,076 cubic yards. The annual solid waste generated by the proposed project would represent 0.001 percent of the remaining capacity. As shown in Table 3.14-5, there is over a 20 year period, the proposed project would generate approximately 25,820 tons of solid waste (approximately 95,629 cubic yards per year). As discussed above in Section 3.14.2, the
Los Angeles County 2013 CIWMP Annual Report determined that with a comprehensive and sustainable solid waste management strategy, long-term disposal capacity would continue to be available. Additionally, the current collective capacity of the Los Angeles waste disposal facilities exceeds 15 years (LACDPW 2015), so anticipated increases in solid waste generation resulting from the implementation of the proposed project are not anticipated to exceed the current capacity. Thus, the proposed project would not create a need for additional solid waste disposal facilities to adequately handle solid waste generated during construction or operations. Based on the above discussion, no significant impact on the landfills within the region is anticipated as a result of the proposed project.

Waste diversion is anticipated to be achieved from the existing waste diversion programs of the City, County, and Athens Services (the City’s current contract provider for solid waste disposal). As described above, the City has programs for meeting and exceeding the AB 939 landfill waste diversion requirement of 50 percent, as well as working towards the statewide goal of 75 percent landfill waste diversion by 2020. During operations, the City's contractual agreement with Athens Services obligates Athens Services to guarantee that the City will exceed the diversion requirements set forth in AB 939. Therefore, the proposed project would comply with the established diversion requirements.

Therefore, the proposed project would not conflict with solid waste policies and objectives intended to help achieve federal, state, or local waste statutes and regulations. Impacts relative to adopted solid waste would be less than significant.

**Mitigation Measures**

No mitigation measures are required

**Residual Impacts**

Impacts would be less than significant.

**Impact UTL-7: The project would not exceed the capacity of electrical and natural gas transmission facilities and result in the construction of new infrastructure that could cause significant environmental impacts not already addressed as part of the proposed project.**

Baseline electricity consumption at the project site is 19,593,150 kWh/year, and baseline energy consumption for the 1,008 residents currently living off-site is 2,937,320 kWh/year. Implementation of the proposed project would result in an increased electricity demand at the project site. According to the CalEEMod generation factors (Appendix G), annual electricity demand for the proposed project is estimated at 28,454,074 kWh/year. The demand factors reflect 2016 energy standards, and would increase the electricity demand at the project site by 5,923,604 kWh/year above baseline conditions. Given that the proposed buildings would not be constructed at the time of release of the Draft EIR, the project may be subject to more stringent requirements at the time permits are issued; therefore actual electricity demand may be further reduced. According to the Impact Analysis on California’s 2013 Building Energy Efficiency Standards report prepared by the California Energy Commission, compliance with 2013 standards reduces electricity use in non-residential newly constructed building by 22 percent compared to 2008 standards (CEC, 2013).
would supply the project site from its existing system in accordance with all applicable tariff schedules, which are the effective rates and rules on file with and approved by the CPUC, State of California, and subject to the receipts of such permits or other authorizations from public agencies as may be required for such installation.

The proposed project would require modification of existing electrical transmission and distribution systems on site to continue to serve the project site. This service would be provided in accordance with the rules and regulations of SCE on file with and approved by the CPUC.

The construction of electrical lines on site has been evaluated in context with other physical effects on the environment in applicable sections of this Draft EIR (Sections 3.1 through 3.13 and Chapter 5, Other CEQA Considerations). Any rules and regulations, Conditions of Approval, and/or mitigation measures, if applicable, identified in those sections would also apply to the construction of utilities on site (in particular see Section 3.1, Air Quality; Section 3.9, Noise; and Section 3.13, Traffic and Transportation).

Therefore, the increased energy demand generated by the proposed project would not exceed the capacity of the electricity transmission facilities and would not result in the construction of new off-site infrastructure that could cause significant environmental impacts not already addressed as part of the proposed project.

Baseline natural gas consumption at the project site is 3,366,630 kBTUh/year, and baseline natural gas consumption for the 1,008 residents currently living off-site is 8,890,930 kBTU/year. Implementation of the proposed project would result in an increased natural gas demand on the project site. According to the CalEEMod generation factors (Appendix G), annual natural gas demand at the proposed project site is estimated at 31,192,960 kBTU/year, an increase of 18,935,400 kBTU/year over the existing conditions. The demand factors reflect 2016 energy standards and all of the proposed buildings would be subject to the CalGreen and State Energy Conservation Standards contained in Title 24, which, according to the Impact Analysis on California’s 2013 Building Energy Efficiency Standards report prepared by the California Energy Commission, would reduce natural gas use in non-residential newly construction buildings by 17 percent compared to 2008 standards (CEC 2013).

Southern California Gas would supply the entire project site from its existing system in accordance with the rules and regulations on file with and approved by the CPUC. The construction of gas lines on site that would connect to existing gas mains have been evaluated in context with other physical effects on the environment in applicable sections of this Draft EIR (Sections 3.1 through 3.14 and Chapter 5.0, Other CEQA Considerations). Any rules and regulations, Conditions of Approval, and/or mitigation measures, if applicable, identified in those sections would also apply to the construction of utilities on site (in particular see Sections 3.1, Air Quality; Section 3.9, Noise; and Section 3.13, Traffic and Transportation).

Therefore, the increased natural gas demand generated by the proposed project would not exceed the capacity of natural gas transmission facilities and would not result in the construction of new off-site infrastructure, which could cause significant environmental impacts not already addressed as part of the proposed project.
3. Environmental Analysis

3.14 Utility Services

**Mitigation Measures**

No mitigation measures required.

**Residual Impacts**

Impacts would be less than significant.

3.14.5 Cumulative Impacts

The context for assessing cumulative environmental impacts associated with utilities is primarily the service area associated with each of the water (Torrance Municipal Water), wastewater (Los Angeles County Sanitation Districts), solid waste disposal (Los Angeles County Sanitation Districts), electricity (SCE service area with Los Angeles County), and natural gas agencies/companies (SoCal Gas service area within Los Angeles County) that serve the project site. The cumulative impacts analysis evaluates whether the provision of utility services for the growth projected to occur in the future, along with the currently proposed project, would exceed the capacity of existing or planned utility infrastructure, requiring the construction of new infrastructure that could cause significant environmental impacts not already addressed as part of the proposed project or otherwise anticipated in conjunction with each agency’s growth plans.

**Wastewater**

The context for assessing cumulative environmental impacts associated with wastewater is the LACSD service area. As described in the analysis above, wastewater generated at the project site would be sent to the JWPCP in the City of Carson. The JWPCP has the design capacity to process 400 mgd and it currently operating well below their design capacity (120 mgd remaining capacity). The design capacities of the LACSD’s wastewater treatment facilities are based on the regional growth forecast adopted by the Southern California Association of Governments (SCAG). All expansions of District’s facilities must be sized and service phased in a manner that will be consistent with the SCAG regional growth forecast for the counties of Los Angeles, Orange, San Bernardino, Riverside, Ventura, and Imperial. The available capacity of the District’s treatment facilities will, therefore, be limited to levels associated with the approved growth identified by SCAG. As discussed in UTIL-1, the proposed project would comply with the wastewater treatment requirements of the applicable RWQCB. Furthermore, all other cumulative projects would be required to comply with the existing regulations of the Regional Water Quality Control Board wastewater treatment requirements.

The LACSD prepared the Clearwater Program Final Master Facilities Plan (Plan) in November 2012, in which SCAG provided the LACSD with population forecasts through the year 2050, which served as the basis for flow projections. As outlined in greater detail above under UTIL-2, no significant cumulative impact related to wastewater is anticipated to occur because the adopted growth projections and proposed project together would not exceed the capacity of wastewater infrastructure and result in the construction of new infrastructure that could cause significant environmental impacts.
Potable Water

The context for assessing cumulative environmental impacts associated with potable water is the service area of the TMW, which encompasses the City of Torrance and portions of the City of Redondo Beach. The planning of future potable water supplies for the subject service area is documented in the 2015 UWMP for the Torrance Municipal Water (TMW) district, which was adopted by the City of Torrance in 2016, and the Water Supply Assessment included as Appendix J to this EIR. The 2015 UWMP utilizes a population growth rate of 0.55 percent. (2015 UWMP, Section 4.2.) Cumulative growth in potable water demand is provided in Table 3.14-2 above. Thus, the future potable water supply planning reflected in the adopted 2015 UWMP and WSA is considered to address the future demands associated with the current adopted growth projections.

Further, as discussed above, California was recently undergoing a severe drought. Governor Brown issued an executive order on April 1, 2015 mandating urban water users achieve a 25 percent reduction in demand over at least the next year. A supply reduction of 15 percent was announced on April 10, 2015 by MWD. With cutbacks in MWD supply of 15 percent for one more year, the TMW system supplies would be adequate to meet a projected demand reduced by 15 percent. However, the Governor of California ended the official drought declaration for the Redondo Beach area on April 7, 2017 (Executive order B-40-17).

Therefore, TMW would have adequate reliable supplies for the projected next 23 years (2040), which would be sufficient to meet project demands, those of all existing customers, and other anticipated future customers for normal, single dry year and multiple dry year conditions. No significant cumulative impacts related to potable water are anticipated to occur as the adopted growth projections and project proposed together would not exceed existing water supplies, entitlements and resources, or require and result in new and expanded entitlements.

Solid Waste

The context for assessing cumulative environmental impacts associated with solid waste is Los Angeles County. Solid waste management planning within Los Angeles County is administered through the Los Angeles County CIWMP. The County’s Department of Public Works is responsible for the preparation, administration and reporting of the CIWMP, which includes the solid waste reduction planning documents, such as the Summary Plan and CSE. The 2012 Annual Report for the Summary Plan and Siting Element of the Los Angeles CIWMP includes an evaluation of how, for a 15-year planning period, the county and cities within the county would meet their long-term disposal capacity needs to safely handle solid waste generated in the county that cannot be reduced, recycled, or composed (LACDWP 2016). The 2014 CIWMP stated that the Department of Public Works is currently revising the CSE, which will describe the County’s strategy to meet the future disposal demand. Further, the County is not expecting a shortfall in the permitted solid waste disposal capacity within the next 15 years. On October 12, 2014, the Board of Supervisors adopted the Roadmap to a Sustainable Waste Management Future, establishing a goal to divert 80 percent of solid waste generated in the unincorporated County areas from landfills by 2025, 90 percent by 2035 and 95 percent or more by 2045.
Projections of solid waste generation during the planning period were made using the “Adjustment Methodology” developed by CalRecycle, which requires knowledge of how the generated waste is distributed into the residential and non-residential sectors as well as uses future population, employment, and real taxable sales. The CIWMP uses the UCLA Long-Term forecast, which includes population, employment, and real taxable sales data from 2014 to 2029 to generate the total waste generation tons per year. The UCLA Long-Term Forecast is generally consistent with the rate of growth reflected in the adopted SCAG growth projections. The adopted SCAG growth forecast indicates a countywide population growth from 9,778,000 people in 2008 to 11,353,000 people in 2035, which equates to an annual population growth rate of 0.0055 percent. Based on this growth rate, the countywide population would be 10,971,691 in 2029\(^5\), which within approximately 2 percent of the UCLA Anderson Long-Term Forecast population project of 11,115,000 people in 2029. Relative to employment, the adopted SCAG growth forecast indicates a countywide employment growth from 4,340,000 people in 2008 to 4,827,000 people in 2035, which equates to an annual growth rate of approximately 0.003 percent for the entire county. Based on that growth rate, the countywide employment would be 4,621,780 people in 2029, which is within approximately five percent of the UCLA Long-Term Forecast employment projection of 4,827,100 people in 2029. Thus, the future population projections developed by SCAG and the UCLA Long-Term Forecast are generally consistent, thus proposed project and cumulative projects were considered in developing for capacity projections by the CIWMP. Therefore, no significant cumulative impact related to solid waste disposal is anticipated to occur because the adopted growth projections and proposed project together would not result in a net increase in solid waste generation that could not be accommodated by existing or permitted regional landfills or other disposal facilities, or conflict with solid waste policies and objectives intended to help achieve federal, state or local waste statutes and regulations.

**Electricity and Natural Gas Transmission Facilities**

The context for assessing cumulative environmental impacts associated with electricity and natural gas are the SCE and SoCal Gas service areas within Los Angeles County, respectively. These companies, as well as the City of Los Angeles Department of Water and Power (LADWP), would also serve other areas that are included in the Los Angeles region covered by the adopted SCAG growth projections. All of those companies are subject to the requirements set forth and/or enforced by the CPUC. As discussed above, any necessary electrical system infrastructure improvements would occur in accordance with the rules and regulations of SCE on file with and approved by the CPUC. Similarly, any necessary infrastructure improvements to natural gas service by SoCal Gas for other growth and development within Los Angeles County would occur in compliance with the rules and regulations of SoCal Gas on file with and approved by the CPUC. Further, all new building development would be subject to the CalGreen and State Energy Conservation Standards contained in Title 24, which would reduce cumulative energy demand where they replace existing structures. Therefore, because the proposed project and cumulative development in the City of Redondo Beach and project area are consistent with regional growth projections for the project area, no significant cumulative impacts related to energy consumption or supply are anticipated to occur because the adopted growth projections and the proposed

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\(^5\) \((9,778,000)(1 + 0.0055)^{21}=10,971,691\)
project together would not exceed the capacity of energy transmission facilities and result in the construction of new infrastructure that could cause significant environmental impacts.

### 3.14.6 Significant Unavoidable Impacts

There would be no significant and unavoidable impacts with regard to utilities and service systems associated with the proposed project.

### 3.14.7 References


LARWQCB, Resolution No. R16-XXX Joint Outfall System Approval of Proposed Special Studies for the Joint Water Pollution Control Plan, February 12, 2016.

