

SECTION SUMMARY

This section addresses potential impacts associated with utilities (wastewater, potable water, solid waste, electricity, and natural gas) that could result from construction and operation of the proposed project. An analysis of potential impacts on utilities associated with the alternatives is detailed in Chapter 4 Analysis of Alternatives.

Section 3.14 Utilities provides the following:

- A description of existing utilities serving the project site;
- A discussion on the methodology and thresholds used to determine whether the proposed project results in a significant impact associated with utilities;
- An impact analysis of the proposed project associated with utilities;
- A description of any Conditions of Approval that the City would impose, or mitigation measures proposed to reduce any potential impacts and residual impacts (i.e., impacts remaining after mitigation), if applicable;
- An analysis of potential cumulative impacts associated with utilities;
- A summary of utility impact determinations associated with the proposed project, cumulative growth, and mitigation measures; and
- A description of significant unavoidable impacts associated with utilities, if any.

Key Points of Section 3.14:

Construction of the proposed project would result in less than significant impacts associated with utilities. The proposed project would generate increased demand for potable water, energy (electricity and natural gas), and would increase the generation of wastewater and solid waste. Modifications and upgrades to the existing on-site utility systems and the lift station located immediately adjacent to the project site on Portofino Way northeast of Seaside Lagoon would occur as part of project construction to better serve the proposed uses. The on-site improvements would connect with existing systems without the need for the construction of new off-site infrastructure that could cause significant environmental impacts not already addressed as part of the proposed project. Implementation of the proposed project would not exceed the capacity of local wastewater infrastructure or water supplies, entitlements and resources, which would result in the need to construct new infrastructure or expand or secure new entitlements that could cause significant environmental impacts not already addressed as part of the proposed project. In addition, project-related solid waste generation could be accommodated by existing regional landfills or other disposal facilities, and would not conflict with solid waste policies and objectives intended to help achieve federal, state or local waste statutes and regulations.

The proposed project would not exceed the capacity of electricity or natural gas transmission facilities nor result in the construction of new infrastructure that could cause significant environmental impacts not already addressed as part of the proposed project. Therefore, the implementation of the proposed project would have a less than significant impact on utilities.

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. Additional discussion of energy demand and energy conservation is addressed in Chapter 5 Other CEQA Considerations.

3.14.2 Environmental Setting

3.14.2.1 Wastewater

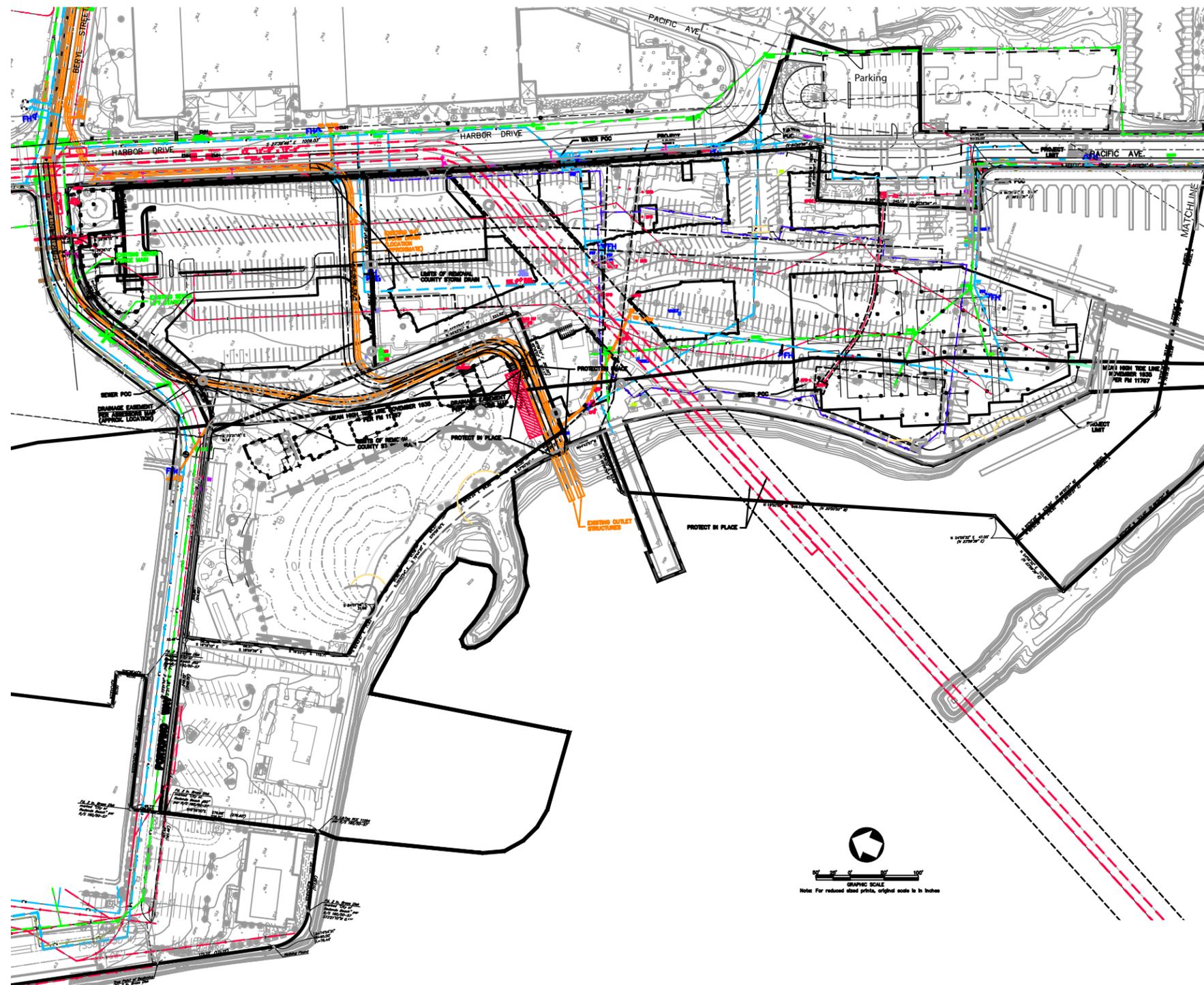
The proposed project is located within the jurisdictional boundaries of the South Bay Cities Sanitation District, one of the 24 independent districts making up the Los Angeles County Sanitation Districts (LACSD). In total, the LACSD includes approximately 1,400 miles of sewers, 49 pumping plants and 11 treatment plants throughout Los Angeles County.

The local wastewater (sewer) collection system is owned by the City of Redondo Beach and is managed, operated, and maintained by the City's Public Works Department. The City maintains approximately 113 miles of sewer line and 15 pump stations throughout the City. The City's sewer collection system connects all buildings throughout the City with the LACSD interceptors that carry the sewage for disposal and treatment to the Joint Water Pollution Control Plant, which is regional treatment facility located in the City of Carson (City of Redondo Beach, 2015).

The existing sewer lines throughout the project site that connect the site to the City-wide and regional system as shown on Figure 3.14-1 and Figure 3.14-2. Figure 3.14-1 and Figure 3.14-2 also show the location of the two sewage lift stations (i.e., pump stations) that serve the project site. The northern portion of the project site is served by a lift station located immediately adjacent to the project site on Portofino Way northeast of Seaside Lagoon. The southern portion of the project site is served by a lift station located in the northeastern corner of the Pier Parking Structure.

Wastewater generated on-site is conveyed via the local lines and sewage lift stations to the LACSD Herondo Trunk Sewer Section 1. The Herondo Trunk sewer is an approximate 14-inch diameter lined trunk sewer with a design capacity of 2.1 million gallons per day (mgd). When last measured in 2011 it conveyed a peak flow of 0.9 mgd (LACSD, 2015a). The wastewater from the Herondo Trunk sewer is then ultimately conveyed to the Joint Water Pollution Control Plant (JWPCP) in the City of Carson, which has a design capacity of 400 mgd and currently processes an average flow of 263.4 mgd (LACSD, 2015a).

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UTILITY LEGEND:

-  STORM DRAIN LINE
-  WATER LINE
-  SANITARY SEWER LINE
-  DRY UTILITIES (GAS, ELEC, CABLE)
-  FIRE WATER LINE
-  IRRIGATION LINE
-  TELEPHONE LINE
-  ELECTRICAL LINE
-  POWER PLANT COOLING WATER CONDUIT
-  OIL LINE
-  GAS LINE
-  BOUNDARY LINE
-  CENTERLINE
-  EASEMENT
-  PROJECT LIMITS

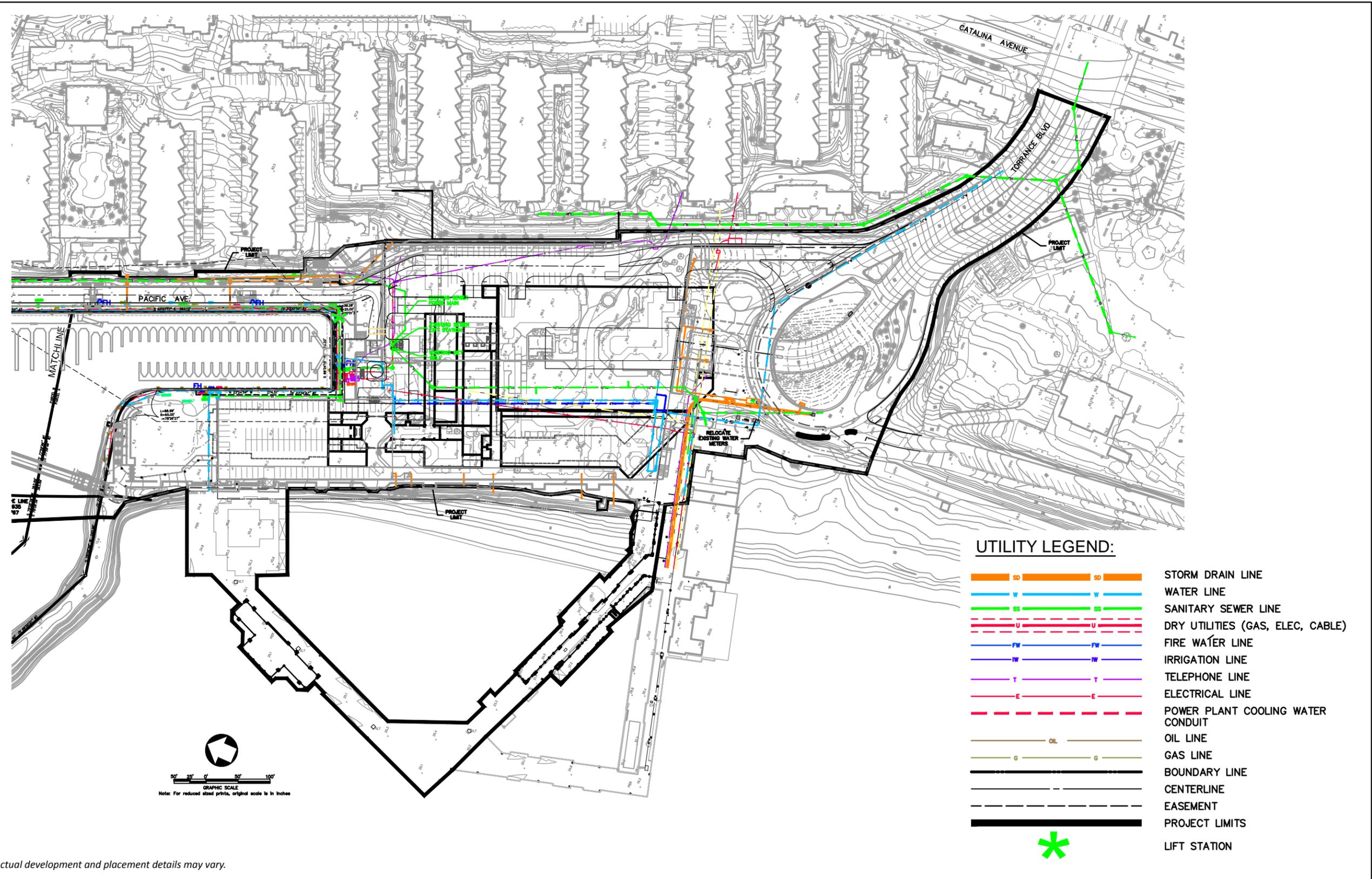
Note: For discussion purposes only. Actual development and placement details may vary.

Source: Psomas, 2015



Figure 3.14-1
Existing Utilities - Northern Portion of Project Site

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Note: For discussion purposes only. Actual development and placement details may vary.

Source: Psomas, 2015



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The total existing average sewage generated within the City was estimated at 5.99 mgd in 2010 (City of Redondo Beach, 2010). A System Evaluation and Capacity Assurance Plan (SECAP) and Rehabilitation and Replacement Program (RRP)¹ was prepared for the City in 2010 to evaluate the City's sewer collection system and provide a framework for undertaking the construction of new and replacement facilities. The SECAP-RRP analysis found that less than one percent of the entire system has existing deficiencies (5,268 feet out of the total 566,852 feet) and just over one percent of the entire system (5,918 feet out of the total 566,852 feet) has projected future deficiencies based on 2030 growth projections used in the SECAP-RRP, which are based on the City's Community Growth Projections Analysis completed in February 2009. No existing or future deficiencies were identified within the project site or the immediate vicinity. However, City personnel indicate the existing sanitary system on-site is aging and deteriorating, and thereby becoming subject to risk of overflow events.

Based on LACSD wastewater generation rates (LACSD, 2015) as shown in Table 3.14-1, the estimated existing wastewater generated at the project site is approximately 123,765 gallons per day (gpd).

Table 3.14-1: Estimated Wastewater Generation^a Associated with Existing Retail, Restaurant, and Office Uses ^a

Land Use	Size (sq. ft) ^b	Demand Factor (gpd per sq.ft.)	Estimated Existing Wastewater Generation (gpd)
Retail	41,364	150/1000 sq.ft.	6,205
Restaurant	102,321	1000/1000 sq.ft.	102,321
Office	76,196	200/1000 sq.ft.	15,239
Total			123,765

Demand factor source: LACSD, 2015

Notes:

a. Solid waste generation associated with recreational and boating uses at the project site is not expected to materially change with implementation of the proposed project and thus is considered part of the background conditions and is not quantified for purposes of this analysis.

Abbreviations

gpd – gallons per day

sq.ft. – square foot

¹ The SECAP-RRP is incorporated by reference and is available for review at the City of Redondo Beach City Hall, located at 415 Diamond Street in Redondo Beach and online at:

<http://www.redondo.org/civica/filebank/blobdload.asp?BlobID=23091> (Part 1);
<http://www.redondo.org/civica/filebank/blobdload.asp?BlobID=23092> (Part 2);
<http://www.redondo.org/civica/filebank/blobdload.asp?BlobID=23093> (Part 3);
<http://www.redondo.org/civica/filebank/blobdload.asp?BlobID=23094> (Part 4);
<http://www.redondo.org/civica/filebank/blobdload.asp?BlobID=23095> (Part 5);

3.14.2.2 Potable Water

Under certain circumstances, a Water Supply Assessment (WSA) containing specific information from the water service provider is required in conjunction with a development project (California Water Code Sections 10910-10915). Under Senate Bill (SB) 610 (Water Code Sections 10910 and 10912), it is the responsibility of the water service provider (i.e., CalWater) to prepare a WSA for every new development "project" within its service area that is subject to CEQA. If the provider determines that potable water supplies are, or will be, insufficient, plans must be submitted for acquiring additional potable water supplies.

Additionally, SB 610 requires the Lead Agency to include the WSA and other pertinent information in the environmental document prepared (i.e., EIR) for any project pursuant to the act. In accordance with SB 610, a WSA was prepared for the proposed project in July 2015 by the Hermosa-Redondo District of the California Water Service Company (CalWater). The WSA is provided in Appendix M1 of this Draft EIR.

The potable water supply for the City of Redondo Beach, wherein the project site is located, is distributed by the Hermosa-Redondo District of CalWater. The service area of the Hermosa-Redondo District includes the cities of Hermosa Beach, Redondo Beach, and approximately five percent of Torrance. Water supply sources to the Hermosa-Redondo District include: imported surface water purchased from Metropolitan Water District of Southern California through the West Basin Municipal Water District (WBMWD); groundwater pumped from the adjudicated West Coast Groundwater Basin's Silverado aquifer; and recycled wastewater produced by the WBMWD in their West Basin Water Recycling Plant located in El Segundo.

According to CalWater's Urban Water Management Plan (UWMP)², water demand in the Hermosa-Redondo District is anticipated to increase from 12,382 acre feet per year (AFY) in 2010 to 14,778 AFY in 2040. Table 3.14-2 shows the actual and projected water demand through 2040, which takes into account the water losses in the Hermosa-Redondo District's distribution system. The water supply available was 12,516 AFY in 2010 and is projected to be 14,967 AFY in 2040. The largest users of water are single-family and multifamily residences at 53.3 percent and 20.6 percent, respectively, of the total demand. Commercial properties are the third largest user at 12.7 percent of the total demand.

² The 2010 Urban Water Management Plan is incorporated by reference and available at: http://www.water.ca.gov/urbanwatermanagement/2010uwmps/CA%20Water%20Service%20Co%20-%20Hermosa%20Redondo%20District/_HR_UWMP_2010.pdf. The proposed project is located within the geographic boundaries of the UWMP, which provides Water Supply System Description, Water Supply System Demands, Water Supply System Supplies, Water Supply Reliability and Water Shortage Contingency Plan (i.e. planning for drought conditions), Demand Management Measures, and a discussion of Climate Change related to water supply. The Appendices to the UWMP are available at: <http://www.water.ca.gov/urbanwatermanagement/2010uwmps/CA%20Water%20Service%20Co%20-%20Hermosa%20Redondo%20District/>. A hard copy of the UWMP is available for public review at: City of Redondo Beach, 415 Diamond Street, Redondo Beach, CA 90277.

Table 3.14-2: Actual and Projected Water Demand in the Hermosa-Redondo District

	2005 (actual)	2010 (actual)	2015	2020	2025	2030	2035	2040
Water Usage	14,458	12,382	13,417	13,676	13,942	14,214	14,493	14,778

Since California is in the fourth year of 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 as compared to usage during the same period in 2013. The mandate for a 25 percent reduction has been achieved and exceeded for the first two months it has been in effect, with a 27.3 percent reduction in water use in June 2015, and a 31.3 percent reduction in July 2015 (State of California, 2015a and 2015b). As part of the mandate, each water district was given a reduction target, the CalWater Hermosa-Redondo District was given a reduction target of 20.0 percent. Based on daily per capita residential water use rates, as calculated by the State Water Resources Control Board, this target was exceeded in July 2015, with the district achieving a 20.66 percent reduction in water use in July 2015 as compared to July 2013 (89.3KPCC Southern California Public Radio, 2015).

A supply reduction of 15 percent was announced on April 10, 2015, by Metropolitan Water District of Southern California (MWDSC) to be implemented on July 1, 2015. With cutbacks in MWDSC supply of 15 percent for two more years, the Hermosa-Redondo system supplies would be adequate to meet a projected demand reduced by 15 percent. In fact, if needed, CalWater could set and pursue lower demand targets. In 2015, supply surplus is estimated to be 1,239 AFY. In 2016, supply surplus is estimated to be 464 AFY and in 2017, it is estimated to be 466 AFY. Because of existing severe drought conditions, Cal Water will be implementing more aggressive water conservation program measures during the period from 2015 to 2017 and possibly beyond. Therefore, it is reasonable to project an additional 10 percent reduction in demand resulting in a total reduction of the 2015 estimated baseline demand by 25 percent or from 13,417 AFY to 10,062 AFY.

As shown in Table 3.14-3, the water demand associated with the existing uses within the project site is approximately 122,386 gpd or 137 AFY. Existing water use in the project site is based on higher historic water use rate data.

Table 3.14-3: Existing Average Daily Water Use Associated with Existing Retail, Restaurant and Office Uses

Commercial Category	Square Footage^a	Demand Factor (gpd/ft²)	Estimated Water Use (gpd)
Retail	41,364	0.164	6,784
Restaurant	102,321	1.1	112,554
Office	76,196	0.04	3,048
Total			122,386

Source: CalWater, 2015 (Appendix M1)

3.14.2.3 Solid Waste

The City's Solid Waste Division is responsible for complying with the Integrated Waste Management Act of 1989 (Assembly Bill [AB] 939), which requires every city in California to divert at least 50 percent of its annual waste by the year 2000. 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 contract provider for solid waste disposal for the City under a Solid Waste Handling Services Agreement. Under the agreement, Athens Services is required to collect refuse, recyclables, and organics throughout the City through expanded recycling programs and curbside compost collection. Athens is also required to divert a minimum of 59 percent of all solid waste it collects from landfills (City of Redondo Beach Contract with Athens Services, 2011). Solid waste from Redondo Beach is initially collected by Athens Services and taken to their Materials Recovery Facilities (MRF) (recycling facilities) in the City of Industry and Sun Valley (Athens Services, 2015). Food waste is processed and delivered to their compost facility, American Organics, in Victorville. The compost material is approved to be used in agricultural operations that are certified organic under the USDA National Organic Program (Athens Services, 2015). Waste that cannot be recycled is disposed at a landfill.

The original 2011 Solid Waste Handling Services Agreement between the City and Athens Services regarding waste disposal services approved the following designated disposal sites/facilities: the Sunshine Canyon Landfill, Chiquita Canyon Landfill, El Sobrante Landfill, Puente Hills Landfill, Commerce Refuse-to Energy Facility, American Waste Transfer Station, Allan Company, and California Waste Systems (City of Redondo Beach Contract with Athens Services, 2011). In 2013, the Puente Hills landfill in the City of Industry, closed after 55 years of operation. Following the closure of the Puente Hills landfill, Athens Services received approval from the City to also transport solid waste to the San Bernardino County landfill system. Thus, solid waste from Redondo Beach may be delivered to the following landfills: Sunshine Canyon City/County Landfill, Chiquita Canyon Landfill, El Sobrante Landfill, or the Commerce Refuse-to Energy Facility, and also San Bernardino County landfills, including Mid-Valley Landfill, San Timoteo Landfill, Victorville Landfill, Barstow Landfill, or Landers Landfill. Table 3.14-4 summarizes the permitted daily throughput, estimated average waste quantities disposed, remaining capacity for these facilities, and closure date. As shown, landfills that may serve Redondo Beach have over 27,980 tons of remaining daily capacity.

Table 3.14-4: Solid Waste Disposal Facilities Potentially Serving the Proposed Project

Facility/Landfill	Owner/operator	Permitted Daily Throughput (tpd)	Average Daily Tonnage (tpd)	Estimated Remaining Daily Capacity	Approx. Closure Date
Sunshine Canyon Landfill	Sanitation Districts of Los Angeles County	12,100	7,221	4,879	2037
Chiquita Canyon Landfill	Sanitation Districts of Los Angeles County	6,000	2,970	3,030	2019
El Sobrante Landfill	Sanitation Districts of Los Angeles County	16,054	6,179	9,875	2045
Commerce Refuse-to Energy Facility	Sanitation Districts of Los Angeles County	1,000	363	637	NA
Mid-Valley Landfill	County of San Bernardino	7,500	3,592	4,524	2033
San Timoteo Landfill	County of San Bernardino	2,000	833	955	2043
Victorville Landfill	County of San Bernardino	3,000	828	2,043	2047
Barstow Landfill	County of San Bernardino	1,200	222	994	2071
Landers Landfill	County of San Bernardino	1,200	151	1,043	2018

Sources: Athens Services, 2015; CalRecycle, 2015; Domingo, 2015; and LACSD, 2012
tpd = tons per day

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. Removal of landscaping, soil excavation, and dredging would also generate solid waste. The composition of C&D is highly variable but components of C&D debris typically include concrete, asphalt, brick, glass, wood, metals, gypsum wallboard, and roofing. Demolition debris may also include land clearing debris, trees, stumps, soil and rock from clearing on construction sites. In general, construction waste typically consists of trim scraps of construction materials related to construction of new buildings and roadways such as wood sheetrock, masonry and roofing materials.

Due to lower disposal costs or tipping fees, C&D debris is typically disposed of at inert landfills instead of sanitary landfills. There is one permitted Inert Waste Landfill in Los Angeles County that has a full solid waste facility permit, the Azusa Land Reclamation Facility (County of Los Angeles Department of Public Works [LACDPW], 2014). The remaining capacity of this landfill is estimated at 62.3 million tons or 50 million cubic yards as of December 31, 2013. Given the remaining permitted capacity and at the average disposal rate of 2,000 tons per day (tpd) in 2012, it is estimated that this capacity would be exhausted in 2045 (LACDPW, 2014).

In addition to diversion requirements, AB 939 also requires each county 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 (formerly the California Integrated Waste Management Board). The Summary Plan, approved by CalRecycle on June 23, 1999, describes the steps to be taken by local agencies, acting independently and in concert, 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, approved by CalRecycle on June 24, 1998, 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 (County of Los Angeles Department of Public Works, 1997). The County is currently in the process of updating the CSE. The revised CSE will cover the 15-year planning period from 2010 through 2025, and will include strategies to aid in evaluating 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.

Although CIWMPs are required to be updated every five years, if necessary, 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 2013 CIWMP Annual Report, determined that additional waste reduction and diversion efforts, use of alternative technologies such as conversion technology facilities, use of out-of-County landfills, and the expansion of solid waste processing facilities in areas where processing capacity is inadequate, is needed to meet the County's long-term disposal needs. The 2013 CIWMP Annual Report also determined that with a comprehensive and sustainable solid waste management strategy, long-term disposal capacity will continue to be available in Los Angeles County (LACDPW, 2014).

The City is a member city of the Los Angeles Regional Agency (LARA), which was established by CalRecycle to assist member cities in meeting AB 939 requirements goals. LARA members have achieved an over 50 percent diversion rate since 2003. As of 2010, LARA's diversion rate was 70 percent (City of Los Angeles, 2012). Since 2005, solid waste disposal rates have been decreasing in Los Angeles County, even as population increases. The decrease is a result of waste diversion programs and economic recession (LACDPW, 2014).

Solid waste currently generated at the project site includes primarily waste associated with the existing retail and restaurant uses such as food and beverage containers, paper products, and other miscellaneous trash. Based on estimated solid waste generation rates provided on the CalRecycle website, the solid waste generated on-site associated with the retail, restaurant and office use is approximately 00.53 tpd as shown in Table 3.14-5). The waste generation rates

used are from the 1990s and do not account for current waste stream diversion requirements. Based on the City's current diversion rate of approximately 70 percent, it is estimated that 0.17 tons of the solid waste generated each day is being deposited in landfills.

Table 3.14-5: Estimated Existing Solid Waste Generation Associated with Existing Retail, Restaurant, and Office Uses ^a

Land Use	Size (sq. ft) ^b	Generation Rate	Pounds Per Day	Tons Per Day	Tons Per Day with 70 Percent Diversion
Retail	41,364	2.5 lbs/1000 sq. ft./day	103.41	0.05	0.02
Restaurant (high quality)	102,321	0.005 lbs/sq. ft./ day	511.61	0.25	0.08
Office	76,196	.006 lbs/sq. ft./ day	457.18	0.23	0.07
Total			1072.20	0.53	0.17

Generation factors source: CalRecycle website, 2015.

Notes:

a. Solid waste generation associated with recreational and boating uses at the project site is not expected to materially change with implementation of the proposed project and thus is considered part of the background conditions and is not quantified for purposes of this analysis.

Abbreviations

sq.ft. – square foot

lbs – pounds

3.14.2.4 Energy

Southern California Edison (SCE) provides electricity to the project site and 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.

Figures 3.14-1 and 3.14-2 show the location of existing electric lines within the project site and immediate vicinity.

As shown in Table 3.14-6 below, the estimated annual electricity use associated with the existing on-site uses is 5,956,208 kilowatt hours (KWhr), which is a unit of energy equivalent to one kilowatt (1 kW) of power expended for one hour. The estimated demand factors incorporate 2008 energy efficiency requirements; however, given the buildings located on the project site were constructed prior to 2008, they are less energy efficient and thus the actual electricity demand is likely to be greater under existing conditions.

Table 3.14-6: Estimated Electricity Demand Associated with Existing Retail, Restaurant, and Office Uses^a

Land Use	Size (sq. ft)	Demand Factor (kWhr per sq.ft.) ^b			Estimated Total Annual Demand ^c
		Title 24 Sources	Non-Title 24 Sources	Non-Title 24 Lighting Sources	
Retail	41,364	3.79	2.8	6.85	555,932
Restaurant	102,321	11.27	20.11	9.2	4,152,186
Office	76,196	6.17	4.94	5.27	1,248,090
Total					5,956,208

Demand Factors source: CalEEMod

Notes:

a. Electricity demand associated with recreational and boating uses at the project site is not expected to materially change with implementation of the proposed project and thus is considered part of the background conditions and is not quantified for purposes of this analysis.

b. Different factors are used for the following:

1. The Title 24 demand factor accounts for energy use from systems covered by California Code of Regulations Title 24, Part 6, including heating, ventilating, and air conditioning (HVAC) system, water heating system, and some types of fixed lighting systems.
2. The Non-Title 24 demand factors account for sources not covered by Title 24, such as office equipment, appliances, and plug-ins.
3. The Lighting demand factors account for lighting not covered under Title 24.

c. Estimated total demand includes demand generated by title 24, non-title 24, and non-title 24 lighting sources.

Abbreviations:

sq.ft.– square feet

kWhr – kilowatt hour

The Southern California Gas Company (SCG) provides natural gas to the project site and region. For operational, maintenance, and planning purposes, Redondo Beach is classified within the South Coastal Division. This Division includes all communities west of the Harbor Freeway (Interstate 110) from San Pedro north to the Ventura County line.

Figures 3.14-1 and 3.14-2 show the location of existing gas lines within the project site and immediate vicinity.

As shown in Table 3.14-7 below, the estimated annual natural gas use associated with the existing on-site uses is 27,972,293 British thermal units (kBtu). The estimated demand factors incorporate 2008 energy efficiency requirements; however, given the buildings located on the project site were constructed prior to 2008, they are less energy efficient and thus the actual natural gas demand of existing uses is likely to be greater than estimated for existing conditions.

Table 3.14-7: Estimated Natural Gas Demand Associated with Existing Retail, Restaurant, and Office Uses^a

Land Use	Size (sq. ft)	Demand Factors (kBtu per sq.ft.) ^b		Estimated Annual Demand (Title 24 and Non-Title 24 Sources)
		Title 24 Systems	Non-Title 24 Sources	
Retail	41,364	1.06	1.05	87,278
Restaurant	102,321	83.7	180.76	27,059,812
Office	76,196	10.28	0.55	825,203
Total				27,972,293

Demand Factors source: CalEEMod

Notes:

a. Natural gas demand associated with recreational and boating uses is not expected to materially change with implementation of the proposed project and thus is considered part of the background conditions and is not quantified for purposes of this analysis.

b. Different demand factors are assumed for the following different uses, as follows:

1. The Title 24 demand factor accounts for energy use from systems covered by California Code of Regulations Title 24, Part 6, including heating, ventilating, and air conditioning (HVAC) system, water heating system, and some types of fixed lighting systems.

2. The Non-Title 24 demand factors account for sources not covered by Title 24, such as office equipment, appliances, and plug-ins.

Abbreviations:

sq.ft.– square feet

kBtu - thousand British thermal units

3.14.3 Regulatory Framework

3.14.3.1 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, the 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).

3.14.3.2 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]) required 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.

3.14.3.3 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 SRREs, HHWEs, NDFEs, the Siting Element, and Summary Plan constitute the CIWMP.

3.14.3.4 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.

3.14.3.5 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 protective clothing.

3.14.3.6 California Code of Regulations Title 24, Part 6

Energy consumption associated with new buildings in California is regulated by the State Building Energy Efficiency Standards (CCR Title 24 Part 6). The efficiency standards apply to new construction of residential and non-residential 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 (RBM Section 9-23.01).

3.14.3.7 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 (RBM 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.C. Section 17001 et seq.

3.14.3.8 South Coast Air Quality Management District (SCAQMD) Rule 1403

SCAQMD Rule 1403 for Asbestos Emissions from Demolition/Renovation Activities sets requirements for demolition and renovation activities of buildings containing asbestos-containing material (ACM). Requirements include asbestos surveying, notification, ACM removal procedures and time schedules, ACM handling and clean-up procedures, and storage, disposal, and landfiling requirements for asbestos-containing waste materials (ACWM).

3.14.3.9 Redondo Beach Municipal Code – Wastewater Sewer User Fee

The City's municipal code 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.

3.14.3.10 Redondo Beach Municipal Code – Waste Management Plan (WMP)

Section 5-2.704 of the RBMC requires an applicant for a demolition permit to submit and obtain City approval for a 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 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.

3.14.3.11 California Energy Commission/California Public Utilities Commission Planning

The existing regulatory requirements and planning requirements set by the California Public Utilities Commission (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 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)). CEC 2015 Integrated Energy Policy Report is available online at: http://www.energy.ca.gov/2015_energypolicy/index.html (CEC, 2015).

3.14.3.12 California Renewable Portfolio Standard

California implements the Renewable Portfolio Standard (Public Utilities Code Section 399.11 et seq.). As a result of this requirement, the electricity provider for the project, SCE, currently procures 22.7 percent of its electricity from renewable sources (CPUC, 2015). Pursuant to SB X1 [2011] SCE will be required to provide 33 percent of their electricity with renewable sources by the year 2020.

3.14.4 Impacts and Mitigation Measures

3.14.4.1 Methodology

The utilities analysis evaluates whether facilities that would provide services from the proposed project would have sufficient resources and/or capacity to accommodate project-related demands. The analysis assumes that new infrastructure on-site would be required to serve the proposed project, and the lift station located immediately adjacent to the project site on Portofino Way northeast of Seaside Lagoon would be upgraded. If there are additional inadequate off-site infrastructure or utilities services, 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, solid waste, and energy), project-related impacts are identified using baseline information and applying a factor to the proposed land uses. The resulting proposed quantities are compared to anticipated future capacities of related infrastructure facilities to determine project-related needs, which are evaluated against the capacity of the service providers to determine if the proposed project can be accommodated.

Specifically, in the case of wastewater and energy, the analysis evaluates the capacity of local wastewater and energy infrastructure to accommodate potential increases in wastewater and energy requirements. In order to determine if sufficient potable water supply would be available to serve the proposed project, a WSA has been performed by CalWater to determine the level of increase in water demand and if sufficient supplies are available from existing entitlements and resources. Regarding 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.

The utilities analysis is based on the proposed increase in utility demand associated with the new commercial (retail, restaurant, cinema, and hotel) and office uses. While recreational and boating uses on-site also have a utility demand (though generally to a lesser degree), the demand with such uses are not expected to measurably change from baseline conditions with implementation of the proposed project.

3.14.4.2 Thresholds of Significance

The proposed project would result in significant impact on utilities and service systems if it would:

- UTL-1** Exceed the capacity of local wastewater infrastructure and result in the construction of new infrastructure that could cause significant environmental impacts not already addressed as part of the proposed project.
- UTL-2** Exceed existing potable water supplies, entitlements and resources, or require and result in new and expanded entitlements; or
- UTL-3** Result in a net increase in project-related 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.

UTL-4 Exceed the capacity of electricity or 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.

3.14.4.3 Impacts and Mitigation

3.14.4.3.1 Proposed Project

The main components of the proposed project include the proposed demolition of approximately 207,402 square feet of existing structures, demolition/renovation of the existing Pier Parking Structure, and construction of up to approximately 511,460 square feet to include retail, restaurant, creative office, specialty cinema, a public market hall, and a boutique hotel and retention of approximately 12,479 square feet of existing structures, resulting in 523,939 square feet, which includes 304,058 square feet of net new development. As part of the proposed project, the existing utilities, including water pipelines, wastewater conveyance pipelines, lift stations, and electric and natural gas lines would be upgraded/replaced to ensure adequate capacity is available to serve the project site.

The proposed project also includes proposed enhancements to public recreation and open space, including a new small craft boat launch ramp, the opening of Seaside Lagoon to King Harbor as a protected beach and hand launch area (currently the lagoon is not directly connected to the ocean), new and expanded pedestrian and bicycle pathways, as well as new public open spaces. Site connectivity and coastal access would be increased by the establishment of a new pedestrian bridge across the Redondo Beach Marina/Basin 3 entrance, a new pedestrian boardwalk along the water's edge from the base of the Horseshoe Pier to Seaside Lagoon, and the Pacific Avenue Reconnection. Project elements also include water quality benefits and replacement or upgrades to aging infrastructure.

3.14.4.3.2 Impact Determination

Impact UTL-1: The proposed project would not exceed the capacity of local wastewater infrastructure and would not result in the construction of new infrastructure that could cause significant environmental impacts not already addressed as part of the proposed project.

In response to a will serve letter request for the proposed project, the LACSD provided an estimate that the proposed project would generate 178,750 gpd of wastewater (Appendix M2). This is an increase of 54,985 gpd increase over the 123,765 gpd currently generated on-site as estimated in Section 3.14.2.1. As shown in Table 3.14-8 below, using LACSD generation factors based on a more detailed breakdown of proposed uses, the estimated amount of wastewater generation associated with the proposed project is 235,637 gpd. This is an increase of approximately 111,827 gpd over existing conditions. It should be noted that this generation rate was developed approximately 30 years ago and does not incorporate CalGreen requirements or other efficiency standards with which the proposed project would be required to comply (Raza, pers.comm., 2015). As discussed under Impact UTL-2 below, CalWater assessed a 20 percent reduction of water demand to account for compliance with water conservation requirements, such as CalGreen and California Plumbing Code, which mandate installation of water conserving plumbing fixtures and fittings (e.g., low flow water fixtures and high high-efficiency toilets and urinals). Consistent with the WSA, the 20 percent reduction has also been applied to the wastewater generation estimate presented in Table 3.14-8. When applying the 20 percent reduction, given that the proposed project would replace

older outdated plumbing fixtures and fittings with new efficient plumbing, the estimated amount of wastewater generation associated with the proposed project would result in an increase of 64,744 gpd.

Table 3.14-8: Proposed Project Wastewater Generation

Land Use	Proposed Project Size	Demand Factor (gpd per sq.ft./room)	Estimated Wastewater Generation (gpd)	Estimated Wastewater Generation with a 20 Percent Reduction (gpd)
Retail	103,719 sq.ft.	150/1000 sq.ft.	15,558	12,446
Restaurant	184,983 sq.ft.	1000/1000 sq.ft.	184,983	147,986
Cinema	48,117 sq.ft.	125/1000 sq.ft.	6,015	4,812
Office	64,156 sq.ft.	200/1000 sq.ft.	12,831	10,265
Hotel	130 rooms	125/room	16,250	13,000
Total			235,637	188,509

Generation factors source: LACSD

Notes:

The actual breakdown of retail, restaurant and office uses may vary and may change over time. For this analysis, a high percentage of restaurant square footage was assumed, as it has a higher wastewater generation factor than retail and office and therefore presents a more conservative (worst-case) analysis.

Abbreviations

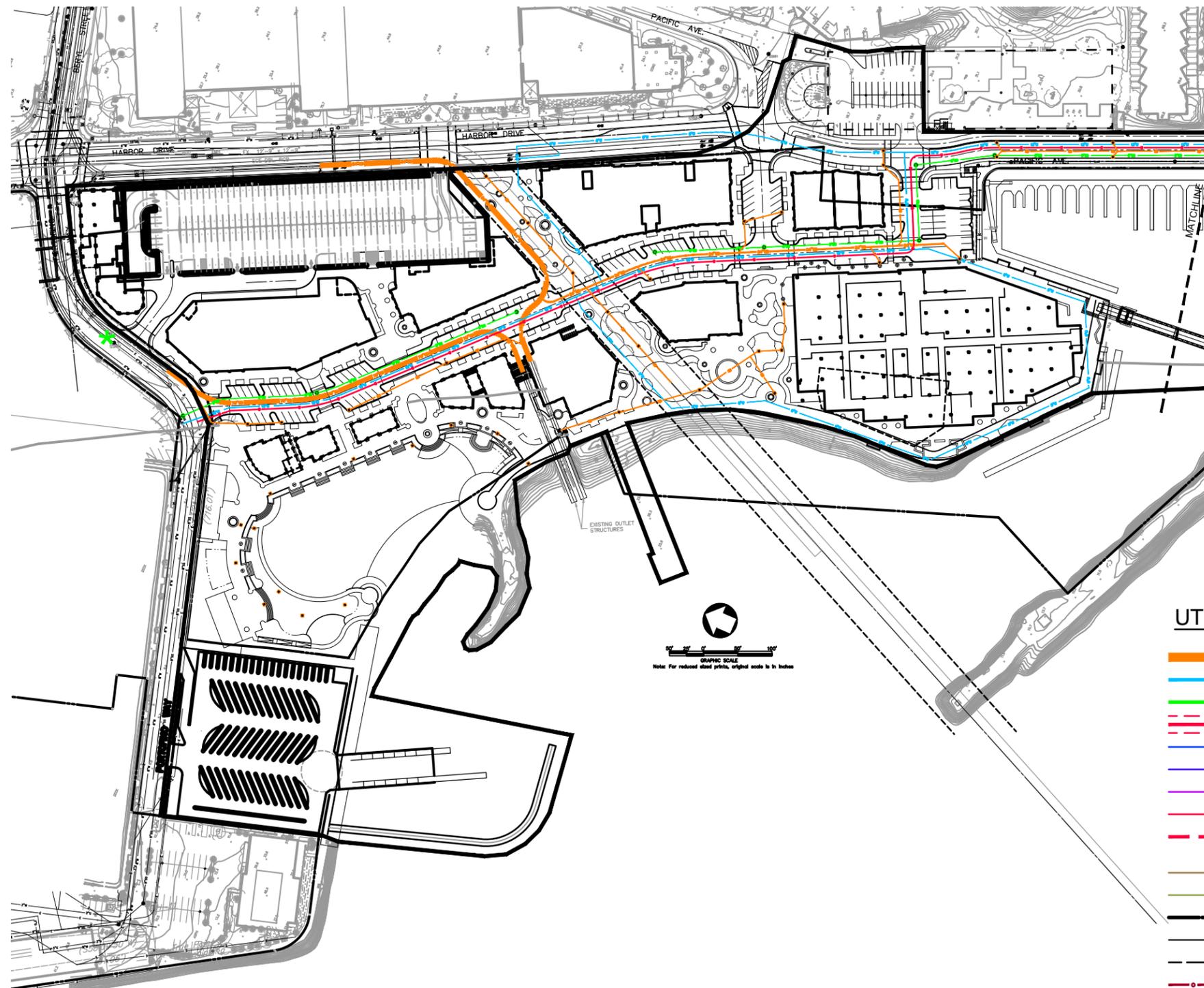
sq.ft.– square feet

gpd – gallons per day

As shown in Figure 3.14-3 (northern portion of the project site) and Figure 3.14-4 (southern portion of the project site), construction of the proposed project would include the installation of a new 8-inch trunk sewer line traversing the project site, which would have tie-ins to the new and remaining facilities throughout the project site (not illustrated on the figures). The new 8-inch sewer line would connect to the existing line in Portofino Way, extend along the new main street (in the northern portion of the site) and Pacific Avenue Reconnection to the new lift station in the southern portion of the site (described below). The new system would be designed to provide adequate capacity to handle the expected wastewater increase and designed to maintain the same flow conditions as currently exist at the site.

The existing pump station on Portofino Way, approximately 200 feet west of Harbor Drive would be upgraded to a peak capacity of 150 gallons per minute (gpm) to handle additional flow from the northern portion of proposed project. The Pier Lift Station would be relocated to the roadway near the southeast corner of Basin 3 and would be designed with a peak capacity of 400 gpm.

With upgrades to the existing sewer system within the project site and the upgrade/replacement of the two lift stations, there would be adequate local capacity to handle the projected increase in wastewater flow from the proposed project. Additionally, with the replacement of the aging existing on-site sewer system, the risk of overflow events associated with deterioration of the existing system is eliminated. Further, as previously described, the SECAP-RRP prepared for the City did not identify future deficiencies in the project vicinity based on the City's 2030 growth projections.



UTILITY LEGEND:

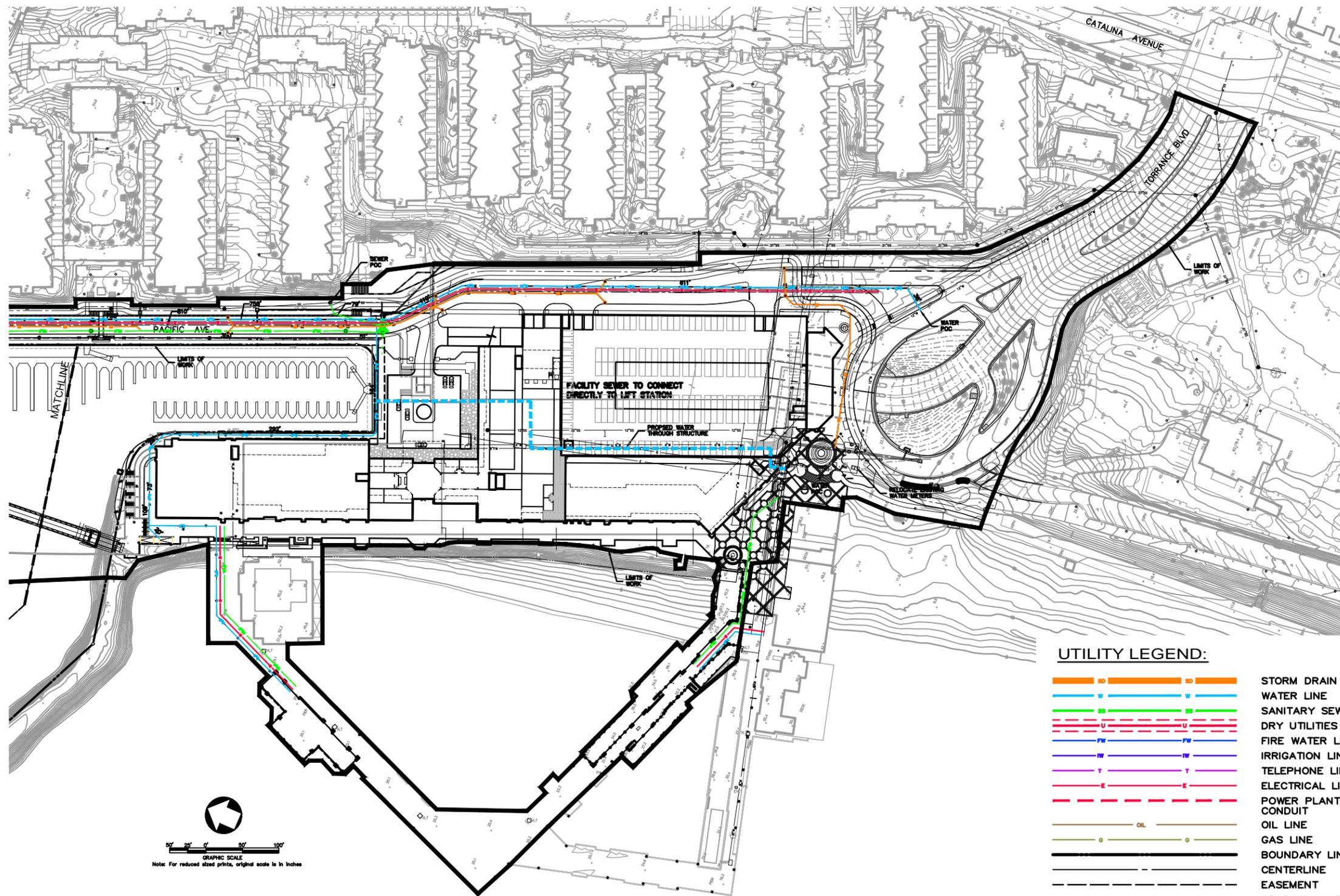
	SD		SD	STORM DRAIN LINE
	W		W	WATER LINE
	SS		SS	SANITARY SEWER LINE
	U		U	DRY UTILITIES (GAS, ELEC, CABLE)
	FW		FW	FIRE WATER LINE
	IW		IW	IRRIGATION LINE
	T		T	TELEPHONE LINE
	E		E	ELECTRICAL LINE
				POWER PLANT COOLING WATER CONDUIT
	OIL		OIL	OIL LINE
	G		G	GAS LINE
				BOUNDARY LINE
				CENTERLINE
				EASEMENT
				GRADING LIMITS
				PROJECT LIMITS

Note: For discussion purposes only. Actual development and placement details may vary.

Source: Psomas, 2015



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UTILITY LEGEND:

	STORM DRAIN LINE
	WATER LINE
	SANITARY SEWER LINE
	DRY UTILITIES (GAS, ELEC, CABLE)
	FIRE WATER LINE
	IRRIGATION LINE
	TELEPHONE LINE
	ELECTRICAL LINE
	POWER PLANT COOLING WATER CONDUIT
	OIL LINE
	GAS LINE
	BOUNDARY LINE
	CENTERLINE
	EASEMENT
	GRADING LIMITS
	PROJECT LIMITS
	LIFT STATION

Note: For discussion purposes only. Actual development and placement details may vary.

Source: Psomas, 2015



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The on-site sewer lines would connect with the LACSD Herondo Trunk Sewer Section 1 which has a design capacity of 2.1 mgd and conveyed a peak flow of 0.9 mgd when last measured in 2011 (LACSD, 2015a). As described above, the proposed project would contribute an additional 64,744 gpd to the Herondo Trunk Sewer Section 1, over the 123,765 gpd currently generated on-site, for a total wastewater flow of 188,509 gpd (0.2 mgd), which would be well within the 1.2 mgd of remaining available capacity. Therefore, the increased wastewater generated by the proposed project would not exceed the capacity of the trunk sewer lines that serve the project vicinity 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.

The construction and operation of on-site wastewater infrastructure and the relocation of the lift stations has been evaluated as part of the proposed project in context with other physical effects on the environment in applicable sections of this Draft EIR (in particular, see Sections 3.2 Air Quality, 3.5 Geology and Soils, 3.8 Hydrology and Water Quality, 3.10 Noise, 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 Sections 3.2 Air Quality, 3.10 Noise, and 3.13 Traffic and Transportation). The proposed project would not result in the construction of new local infrastructure that could cause significant environmental impacts not already addressed as part of the proposed project.

The JWPCP has a capacity of treating 400 mgd of wastewater and currently processes an average flow of 264.1 mgd of wastewater (LACSD, 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 (LACSD, 2012). 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. Further, in response to a request for a will serve letter, LACSD provided a response stating that LACSD intends to provide wastewater service up to the levels that are legally permitted (Appendix M2).

Therefore, the proposed project would not result in the construction of new treatment facilities and impacts would be less than significant.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact UTL-2: The proposed project would not exceed existing potable water supplies, entitlements and resources, or require and result in new and expanded entitlements.

The WSA prepared for the proposed project is included in Appendix M1. This WSA assesses the adequacy of the water supply to meet the estimated demands of the proposed project over the next 20 years and those of CalWater's Herondo-Redondo District customers and projected new users under normal, single dry year and multiple dry year conditions.

The proposed project would replace buildings constructed from the late 1950s to 1990s with buildings that would fully comply with current city codes including the California Plumbing Code and the California Green Building Code, which mandate installation of water conserving plumbing fixtures and fittings (e.g., water efficient toilets and dishwashing machines). Therefore, it is expected that, at a minimum, the new facilities associated with the proposed project would achieve a reduction in water use rates of 20 percent as compared to the existing water use rates (Appendix M1 of this Draft EIR). Table 3.14-9 presents the estimated water use for each proposed land use with the incorporation of the 20 percent reduction as assumed by CalWater to account for the increased efficiency.

As shown in Table 3.14-9, with the 20 percent reduction for increased efficiency, the proposed project would result in an estimated average daily water demand of approximately 250,588 gpd (291.45 AFY). Factoring the existing water use at the project site (122,386 gpd), the net increase in average daily water use under the proposed project would be approximately 128,203 gpd (143.6 AFY).

Table 3.14-9: Proposed Project Water Demand Forecast

Commercial Category	Proposed Project Square Footage	Demand Factor (gpd/ft ²)	Estimated Water Use (gpd)	Estimated Water Use with 20 percent reduction (gpd)
Retail	103,719	0.164	17010	13,608
Restaurant	184,983	1.1	203,481	162,785
Theater	48,117	0.55	26,464	21,172
Hotel	122,965	0.5	61,483	49,186
Office	64,156	0.04	2,566	2,053
Subtotal			311,004	248,804
Landscape irrigation use			1,783	1,783
Total			312,787	250,588

Source: CalWater, 2015 (Appendix M1)

The projected water demand of the proposed project and the Hermosa-Redondo District is shown in Table 3.14-10. With implementation of the proposed project, the estimated projected water demand for the Hermosa-Redondo District would increase between 2015 and 2035 to a combined total of approximately 1,076 AFY. Taken as a percentage of this increase, the proposed project represents a 14.4 percent increase. Although it could be reasonably assumed that the projected increase in the Hermosa-Redondo District water demand included the

proposed project, the projected water demand associated with the proposed project is considered as additional demand in Table 3.14-10.

Table 3.14-10: Combined Water Demand of Hermosa-Redondo System and Proposed Project

	2015	2020	2025	2030	2035	2040
Hermosa-Redondo District	13,417	13,676	13,942	14,214	14,493	14,778
Proposed Project	0	144	144	144	144	144
Total	13,417	13,820	14,086	14,358	14,637	14,922

Source: CalWater, 2015 (Appendix M1)

The increase in water demand due to the proposed project would not negatively impact future water supply because CalWater would continue to effectively manage its water demand and significantly expand its water conservation programs that focus on reducing urban water use. For over 85 years, CalWater has continuously provided an adequate supply to meet demands during normal, single and multiple dry years in the service area of the Hermosa-Redondo District. The WSA (included in Appendix M1) confirmed that adequate supplies exist to serve the proposed project and the increased demand from the proposed project would be accommodated by existing infrastructure. Further, in response to a request for a will serve letter, CalWater provided a response stating that CalWater agrees to operate the water system and provide service in accordance with the rules and regulations of CPUC and CalWater's approved tariffs on file with the CPUC (Appendix M2).

Therefore, CalWater concludes that for the next 20 years (2015–2035), the Hermosa-Redondo 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. As such, the proposed project would not exceed existing potable water supplies, entitlements and resources, or require and result in new and expanded entitlements, and impacts would be less than significant.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact UTL-3: The proposed project would not result in a net increase in project-related 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.

The proposed project would result in an increase in solid waste generation during construction and operation beyond existing conditions, thus increasing the amount of waste requiring landfill disposal as described below.

Solid waste generated from construction and renovation would contain bulky, heavy materials, such as concrete, wood, metals, glass, and salvaged building components. The greatest amount of solid waste associated with project construction would be generated during the demolition process. Approximately 207,402 square feet of existing structures, the Pier Parking Structure, and asphalt/hardscape would require demolition and 511,460 square feet would be constructed, and 12,479 square feet would be renovated. Greenwaste and excavated soil and dredge material would also be generated. Some of the C&D materials would be re-used on-site and the remaining materials would be hauled off-site for recycling or disposal in a landfill.

Concrete would be crushed on-site and incorporated into new backfill. It is estimated that the Pier Parking Structure would generate approximately 40,000 cubic yards of concrete, which would be crushed and reused on-site for backfill. Little, if any, off-site recycling or disposal of concrete is anticipated to occur.

There is approximately 86,400 cubic feet of asphalt paving on site to be removed. The weight of asphalt is approximately 45 pounds per cubic foot (CalRecycle, 2015). Therefore, approximately 3,888,000 pounds of asphalt (1,944 tons) would be removed. All asphalt would be 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.

Rebar would be separated on-site to the extent feasible and hauled off for recycling. Wood frame and other small structures would be demolished and delivered to off-site trash sorting facility and it is anticipated that the project would result in a 100 percent landfill diversion of these materials.

The U.S. Environmental Protection Agency's (USEPA) report *Characterization of Building-Related Construction and Demolition Debris in the United States*, found an average rate of 155 pounds of demolition debris generated per square feet of non-residential building area (USEPA, 1998). The total building square footage to be demolished is 207,402 square feet. At a generation rate of 155 pounds of demolition debris per square foot, demolition of the buildings alone would generate a total of 32,147,310 pounds (16,080 tons) of debris over the 4-month demolition phase. At 22 workdays per month, this is an average generation of 182.73 tons of demolition waste per day over a 4-month period.

It is assumed that the construction would comply with a minimum 50 percent diversion rate, which is the minimum diversion required under AB 939 (while efforts would be made to comply with the City's average 70 percent diversion rate, it may not be feasible depending on the make-up of the demolition debris and what materials are suitable for recycling/reuse. With a minimum 50 percent diversion, this would result in approximately 91.37 tpd of the demolition waste disposed of in landfills during the demolition phase. As described in Section 3.14.2.3, the unclassified landfill within Los Angeles County has a remaining capacity of 62.3 million tons or 50 million cubic yards, it can easily accommodate 91.37 tpd of construction wastes throughout the 4-month demolition phase.

The existing buildings may contain asbestos and lead-based paint.³ SCAQMD and Department of Toxic Substances Control require the abatement of asbestos-containing materials (SCAQMD Rule 1403) and removal or stabilization of lead-based paint prior to demolition or renovation. ACM would be handled, transported and disposed of in accordance with applicable laws and regulations by a certified hazardous materials handler. Compliance with Cal/OSHA's Lead in Construction Standard (8 CCR 1532.1) is also required for disturbances to paints with any measurable lead.

As discussed in Section 3.7 Hazards and Hazardous Materials, in the unlikely event that contaminated soils are encountered the soils would be excavated, transported, and treated (or disposed of) in accordance with applicable regulatory agencies, which could include RBF, LACFD, LARWQCB, and/or DTSC.

The proposed project would generate approximately 6,300 cubic yards of sediment during dredging of Seaside Lagoon. If the material is found to be suitable, all or a portion of the dredged material would be used as new beach fill. It is anticipated that should there be remaining dredge material it could be used to level the harbor bottom; therefore, disposal of the dredge material is assumed to be beneficially reused and/or disposed of completely within the harbor.

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

Some waste would be associated with new construction, such as trim scraps and greenwaste associated with installation of the landscaping; however, the amount of construction debris would be substantially less than would be generated during the demolition phase. Additionally, much of construction debris that is generated, such as wood trimmings and green waste could be diverted from landfills through recycling, reuse, and composting. Therefore, it is anticipated that any construction debris would easily be accommodated in the unclassified landfill and recycling facilities throughout the County.

Wastes generated during demolition and construction would result in an incremental and temporary increase in solid waste disposal at landfills and other waste disposal facilities. Debris that is not reused on-site would be trucked from the site for disposal at any of the area landfills that accept and/or recycles construction/demolition materials. The inert landfill which takes in most of the construction and demolition debris has sufficient capacity. Therefore, the construction of the proposed project would not create a need for additional solid waste disposal facilities.

³ The NOP/IS (Appendix A of the Draft EIR), determined that impacts associated with the routine transport, use, and disposal of hazardous materials (including asbestos and lead based paint) would be less than significant. While the construction of the proposed project would involve demolition and renovation of the existing on-site structures, which, due to their age, may contain asbestos and lead-based paints and materials, the removal of any asbestos-containing and/or lead-based paint materials would be required to comply with all applicable existing rules and regulations, including South Coast Air Quality Management District (SCAQMD) Rule 1403 (Asbestos Demolition and Renovation Activities), State of California Division of Occupational Safety and Health regulations and California Code of Regulations Title 14, Section 1532.1; therefore, asbestos and lead-based paint will not be addressed further in the EIR consistent with CEQA Guidelines Section 15063(c)(3) and 15128. Additional details about these requirements are included in Appendix A.

Operation of the proposed project is expected to generate the typical range of recyclable and non-recyclable waste that other similar uses create, and that is currently generated on-site, however in less amounts. This includes trash generated by general public and employees such as cardboard, paper, glass, plastic, aluminum cans, diapers, and food waste, and greenwaste (i.e., lawn and tree trimmings) associated with landscape maintenance activities. Enclosed storage and separation facilities would be provided on site, with more space than currently exists to handle newer bins.

As shown in Table 3.14-11, using CalEEMod solid waste generation factors, the proposed project would generate approximately 1.60 tpd of solid waste. The generation factor does not account for recycling or other waste diversion programs. Therefore, based on the City's demonstrated success in achieving a 70 percent diversion rate, the amount of waste estimated to be deposited in landfills is 0.49 tpd. This is a 1.06-tpd increase from in the amount of solid waste estimated to be currently generated on-site without considering the diversion rate, and a 0.32 tpd increase when accounting for a 70 percent diversion rate. As shown on Table 3.14-4, there is a remaining daily capacity of 26,986 tpd in landfills that may serve the project site. Thus the 0.32-tpd increase in solid waste generation (factoring in waste diversion) would not result in a substantial increase in solid waste disposal occurring at the available landfills and could be accommodated without creating a need for additional solid waste disposal facilities.

Table 3.14-11: Proposed Project Solid Waste Generation

Land Use ^a	Proposed Project Size	Generation Rate	Pounds Per Day	Tons Per Day	Tons Per Day with 70 Percent Diversion
Retail	103,719 sq.ft.	2.5 lbs/1000 sq. ft./day	259.30	0.13	0.04
Restaurant	184,983 sq.ft.	0.005 lbs/sq. ft./ day	924.915	0.46	0.14
Cinema	48,117 sq.ft.	3.12 lbs/100 sq. ft./ day	1501.25	0.75	0.23
Office	64,156 sq.ft.	.006 lbs/sq. ft./ day	240.59	0.13	0.04
Hotel	130 rooms	2 lbs/room perday	260.00	0.13	0.04
Total			3,166.06	1.60	0.49

Generation factors source: CalRecycle website, 2015

Notes:

a. The actual breakdown of retail, restaurant and office uses may vary and may change over time. For this analysis, a high percentage of restaurant square footage was assumed, as it has a higher solid waste generation factor than retail and office and therefore presents a more conservative (worst-case) analysis.

Abbreviations

sq.ft. – square foot

As previously described, 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, 2012), 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 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 diversion programs and policies would be less than significant.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact UTL-4: The proposed 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.

Implementation of the proposed project would result in an increased electricity demand at the project site. As shown in Table 3.14-12 below, using CalEEMod generation factors, the annual electricity demand at the project site is estimated at 11,717,996 kWhr. The demand factors reflect 2008 energy standards, and given that the proposed buildings would be subject to the latest CalGreen and State Energy Conservation Standards contained in Title 24, which are more stringent than the 2008 requirements, the actual electricity demand would be less. 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). Therefore, the estimated demand shown in Table 3.14-12 was reduced by 22 percent to 9,140,038 kWhr. This is an increase of 3,183,829 kWhr over existing conditions (see Table 3.14-7 in Section 3.14.2.4). Further, the existing buildings would likely generate a greater electricity use than estimated given that they were constructed prior to 2008 and are less energy efficient so the actual increase of existing conditions may be less.

Table 3.14-12: Proposed Project Electricity Demand

Land Use	Proposed Project Size (sq.ft.) ^a	Demand Factor (KWhr per sq.ft.) ^b			Estimated Total Demand (KWhr/year) ^c	Estimated Demand with 22 percent Efficiency reduction (KWhr/year)
		Title 24 Sources	Non-Title 24 Sources	Non-Title 24 Lighting Sources		
Retail	103,719	3.79	2.8	6.85	1,393,983	1,087,307
Restaurant	184,983	11.27	20.11	9.2	7,506,610	5,855,156
Cinema	48,117	2.12	3.83	3.7	464,329	362,177
Office	64,156	6.17	4.94	5.27	1,050,875	819,683
Hotel	122,965	3.64	3.24	3.71	1,302,199	1,015,715
Total					11,717,996	9,140,038

Demand Factors source: CalEEMod

Notes:

a. The actual breakdown of retail, restaurant and office uses may vary and may change over time. For this analysis, a high percentage of restaurant square footage was assumed, as it has a higher electricity generation factor than retail and office and therefore presents a more conservative (worst-case) analysis.

b. Different demand factors are used for the following:

1. The Title 24 demand factor accounts for energy use from systems covered by California Code of Regulations Title 24, Part 6, including heating, ventilating, and air conditioning (HVAC) system, water heating system, and some types of fixed lighting systems.
2. The Non-Title 24 demand factors account for sources not covered by Title 24, such as office equipment, appliances, and plug-ins.
3. The Lighting demand factors account for lighting not covered under Title 24.

c. Estimated total demand includes demand generated by title 24, non-title 24, and non-title 24 lighting sources.

Abbreviations

sq.ft.– square feet

KWhr – kilowatt hour

SCE 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 receipt of such permits or other authorizations from public agencies as may be required for such installation. In response to a request for service for the proposed project, SCE provided a letter stating that SCE would serve the proposed project's electrical requirements per the CPUC and Federal Energy Regulatory tariffs (SCE, 2015).

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 have 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 Sections 3.2 Air Quality, 3.10 Noise, and 3.13 Traffic and Transportation).

Therefore, the increased electricity demand generated by the proposed project would not exceed the capacity of 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.

Implementation of the proposed project would result an increased natural gas demand at the project site. As shown in Table 3.14-13 below, using CalEEMod generation factors, the annual natural gas demand at the project site is estimated at 55,353,898 kBtu. The demand factors reflect 2008 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 constructed building by 17 percent compared to 2008 standards (CEC, 2013). Therefore, the estimated demand shown in Table 3.14-13 was reduced by 17 percent to 45,943,735. This is an increase of 17,971,443 kBtu over existing conditions (see Table 3.14-7 in Section 3.14.2.4). Further, the existing buildings would likely generate a greater natural gas demand use than estimated given that they were constructed prior to 2008 and are less energy efficient.

Table 3.14-13: Proposed Project Natural Gas Demand

Land Use	Proposed Project Size (sq.ft.) ^a	Demand Factor (kBtu per sq.ft.) ^b		Estimated Total Demand (kBtu/year) ^c	Estimated Total Demand with 17 Percent Efficiency Reduction (kBtu/year)
		Title 24 Sources	Non-Title 24 Sources		
Retail	103,719	1.06	1.05	218,847	181,643
Restaurant	184,983	83.7	180.76	48,920,604	40,604,101
Cinema	48,117	15.24	6.86	1,063,386	882,610
Office	64,156	10.28	0.55	694,809	576,692
Hotel	122,965	31.09	5.15	4,456,252	3,698,689
Total				55,353,898	45,943,735

Demand Factors source: CalEEMod

Notes:

a. The actual breakdown of retail, restaurant and office uses may vary and may change over time. For this analysis, a high percentage of restaurant square footage was assumed, as it has a higher natural gas generation factor than retail and office and therefore presents a more conservative (worst-case) analysis.

b. Different demand factors are used for the following:

1. The Title 24 demand factor accounts for energy use from systems covered by California Code of Regulations Title 24, Part 6, including heating, ventilating, and air conditioning (HVAC) system, water heating system, and some types of fixed lighting systems.
2. The Non-Title 24 demand factors account for sources not covered by Title 24, such as office equipment, appliances, and plug-ins.
3. The Lighting demand factors account for lighting not covered under Title 24.

c. Estimated total demand includes demand generated by title 24, non-title 24, and non-title 24 lighting sources.

Abbreviations: sq.ft.– square feet; kBtu – British thermal unit

SCG 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 3.13 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 Sections 3.2 Air Quality, 3.10 Noise, and 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.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

3.14.4.4 Cumulative Impacts

The context for assessing cumulative environmental impacts associated with utilities is primarily the service area associated each of the water (Hermosa-Redondo District of CalWater service area), wastewater (South Bay Cities Sanitation District service area), solid waste disposal (Los Angeles County), electricity (SCE service area within Los Angeles County), and natural gas agencies/companies (SGC 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.

3.14.4.4.1 Wastewater

The context for assessing cumulative environmental impacts associated with wastewater is the South Bay Cities Sanitation District service area. As described in Section 3.14.2.1, the project site is located within the jurisdictional boundaries of the South Bay Cities Sanitation District, one of the 24 independent districts making up the LACSD. The local sewer collection system is owned and operated by the City of Redondo Beach, and connects to LACSD interceptors. The LACSD indicated in their comment letter dated July 16, 2014 on the NOP/IS for the proposed project that the design capacities of the Districts' wastewater treatment facilities are based on the regional growth forecast adopted by SCAG as described in Chapter 3.0 Environmental Analysis (LACSD, 2014). Additionally, as described in Section 3.14.1.2, the main wastewater conveyance and treatment facilities serving the project site (i.e., Herondo Trunk Sewer and JWPCP) currently operate well below their design capacity (i.e., currently operate at 48 percent and 66 percent, respectively, of design capacity). On a more local level, the City of Redondo Beach SECAP-RRP indicates that there are no existing or future, based

on 2030 growth projections, deficiencies in the City's sewer collection system relative to the project site and immediate vicinity.

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, 2012). As described in Section 4.7.2 of the MFP, wastewater flows to the JWPCP have decreased slightly over approximately the last 15 years 2050 (Sanitation Districts of Los Angeles County, 2012). 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. Furthermore, as noted above existing cumulative 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.)

Based on the above, 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 local wastewater infrastructure and result in the construction of new infrastructure that could cause significant environmental impacts (Impact UTL-1).

3.14.4.4.2 Potable Water

The context for assessing cumulative environmental impacts associated with potable water is the service area of the Hermosa-Redondo District of CalWater, which encompasses the cities of Hermosa Beach and Redondo Beach, and a small portion (approximately 5 percent) of Torrance. The planning of future potable water supplies for the subject service area is documented in the 2010 UWMP for the Hermosa-Redondo District, adopted by CalWater in June 2011. The UWMP takes into consideration SCAG growth projections and local General Plan land use data. Although SCAG growth projection data available for the UWMP were likely from the 2008 Regional Transportation Plan (RTP), whereas the currently adopted growth project data is from the 2012 RTP/Sustainable Communities Strategy (SCS), as described in Chapter 3 of this Draft EIR, the overall level regional growth in the 2012 RTP/SCS is projected to be less than that projected in the 2008 RTP. As such, the future potable water supply planning reflected in the adopted 2010 UWMP is considered to address the future demands associated with the current adopted growth projections.

As described in Section 3.14.2.2, although it could be reasonably assumed that the projected increase in the Hermosa-Redondo District water demand includes the proposed project, when the projected water demand associated with the proposed project is considered as additional demand (see Table 3.14-9 in Section 3.14.2.2), the increase in water demand due to the proposed project would not negatively impact future water supply, because CalWater would continue to effectively manage its water demand and significantly expand its water conservation programs that focus on reducing urban water use.

As previously discussed, since California is in the fourth year of 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 MWDSC. With cutbacks in MWDSC supply of 15 percent for two more years, the Hermosa-Redondo system supplies would be adequate to meet a projected demand reduced by 15 percent. In fact, if needed, CalWater could set and pursue lower demand targets. Because of the existing severe drought conditions, CalWater will be

implementing more aggressive water conservation program measures during the period from 2015 to 2017 and possibly beyond.

As presented in Appendix M1, CalWater concludes that for the next 20 years (2015–2035), the Hermosa-Redondo District will 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. As such, the proposed project would not exceed existing potable water supplies, entitlements and resources, or require and result in new and expanded entitlements, and cumulative impacts would be less than significant.

No significant cumulative impact related to potable water is anticipated to occur because the adopted growth projections and proposed project together would not exceed existing water supplies, entitlements and resources, or require and result in new and expanded entitlements (Impact UTL-2).

3.14.4.4.3 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 addressed through the Los Angeles County CIWMP. As described in Section 3.14.2.3, the County's Department of Public Works is responsible for preparing, administering, and reporting on the CIWMP, which includes the solid waste reduction planning documents, such as a Summary Plan and CSE. The 2012 Annual Report for the Summary Plan and Siting Element of the Los Angeles County 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 composted (LACDWP, 2014). The County's Department of Public Works is currently updating the CSE to cover that 15-year planning period, which will include strategies to aid in evaluating 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. The Los Angeles County 2013 CIWMP Annual Report, determined that additional waste reduction and diversion efforts, use of alternative technologies such as conversion technology facilities, use of out-of-County landfills, and the expansion of solid waste processing facilities in areas where processing capacity is inadequate under existing conditions, is needed to meet the County's long-term disposal needs (LACDWP, 2014). The 2013 CIWMP Annual Report also determined that with a comprehensive and sustainable solid waste management strategy, long-term disposal capacity would continue to be available in Los Angeles County. The forecast assumed a 60 percent diversion rate, which is lower than the diversion rate achieved by the City and other cities in the region and thus presents a conservative forecast. The growth projections reflected in the 2013 CIWMP Annual Report were developed by the University of California, Los Angeles - Anderson School of Management specific to a 15-year planning period used for assessing the adequacy of, and needs for, solid waste disposal facilities serving Los Angeles County, as required by state law. Those growth projections, presented as the "UCLA Anderson Long Term Forecast" in Appendix E-2 Table 4 of the 2013 CIWMP Annual Report, cover the period between 2012 and 2027. The countywide population and employment growth levels projected for 2027 in the University of California Los Angeles (UCLA) Anderson Long Term Forecast are 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 approximately 0.62 percent. Based on that growth rate, the countywide population would be 10,860,000 people in 2027, which is within approximately two percent of the UCLA Anderson Long Term Forecast population projection of 11,080,000 people in 2027. 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 0.43 percent for the entire county (annual growth rate for Redondo Beach is lower at 0.36 percent). Based on that growth rate, the countywide employment would be 4,675,900 people in 2027, which is within approximately five percent of the UCLA Anderson Long Term Forecast employment projection of 4,468,800 people in 2027. Based on the above, 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 (Impact UTL-3).

3.14.4.4.4 Electricity and Natural Gas Transmission Facilities

The context for assessing cumulative environmental impacts associated with electricity and natural gas is the SCE and SCG service areas within Los Angeles County. As indicated in Section 3.14.2.4, electrical service and natural gas service are provided to the project site by SCE and SCG, respectively. Those companies, along with 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 described above in Section 3.14.4.3.2, 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 SCG for other growth and development within Los Angeles County would occur in compliance with the rules and regulations of SCG on file with and approved by the CPUC.

As also noted in Section 3.14.4.1.5, 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.

Based on the above, no significant cumulative impact related to energy is anticipated to occur because the adopted growth projections and proposed 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 (UTL-4).

Cumulative Mitigation Measures

No mitigation is required.

Cumulative Residual Impacts

Impacts would be less than significant.

3.14.4.5 Summary of Impact Determinations

The following Table 3.14-14 summarizes the impact determinations of the proposed project and the proposed project in addition to adopted growth projections (i.e., potential cumulative impacts) related to utilities, as described in the detailed discussion above.

Table 3.14-14: Summary Matrix of Potential Impacts and Mitigation Measures for Utilities Associated with the Proposed Project and Cumulative Growth

Environmental Impacts	Impact Determination	Mitigation Measures	Impacts after Mitigation
UTL-1: The proposed project would not exceed the capacity of local wastewater infrastructure and result in the construction of new infrastructure that could cause significant environmental impacts not already addressed as part of the proposed project.	Proposed Project: Less than significant	Proposed Project: No mitigation is required	Proposed Project: Less than significant
	Cumulative: Less than significant (no cumulatively considerable contribution)	Cumulative: No mitigation is required	Cumulative: Less than significant (not cumulatively considerable)
UTL-2: The proposed project would not exceed existing potable water supplies, entitlements and resources, or require and result in new and expanded entitlements.	Proposed Project: Less than significant	Proposed Project: No mitigation is required	Proposed Project: Less than significant
	Cumulative: Less than significant (no cumulatively considerable contribution)	Cumulative: No mitigation is required	Cumulative: Less than significant (not cumulatively considerable)
UTL-3: The proposed project would not result in a net increase in project-related 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.	Proposed Project: Less than significant	Proposed Project: No mitigation is required	Proposed Project: Less than significant
	Cumulative: Less than significant (no cumulatively considerable contribution)	Cumulative: No mitigation is required	Cumulative: Less than significant (not cumulatively considerable)
UTL-4: The proposed project would not exceed the capacity of electricity or natural gas transmission facilities and result in the construction	Proposed Project: Less than significant	Proposed Project: No mitigation is required	Proposed Project: Less than significant

of new infrastructure that could cause significant environmental impacts not already addressed as part of the proposed project	Cumulative: Less than significant (no cumulatively considerable contribution)	Cumulative: No mitigation is required	Cumulative: Less than significant (not cumulatively considerable)
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3.14.4.6 Summary of Mitigation Measures

In the absence of significant impacts, mitigation measures are not required.

3.14.5 Significant Unavoidable Impacts

No significant unavoidable impacts to Utilities would occur as a result of construction or operation of the proposed project.

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