IV. Environmental Impact Analysis

L.3 Utilities and Service Systems—Solid Waste

1. Introduction

This section of the Draft EIR provides an analysis of the Project's potential impacts on solid waste facilities. The analysis describes existing solid waste facilities and their associated capacities, estimates the amount of solid waste that would be generated during construction and operation of the Project, and evaluates whether existing and planned solid waste facilities could accommodate the estimated Project-generated waste. An assessment of the Project's consistency with applicable solid waste regulations is also included. This analysis is based in part on the *County of Los Angeles Countywide Integrated Waste Management Plan: 2016 Annual Report* prepared by the County of Los Angeles Department of Public Works, released in September 2017.

2. Environmental Setting

a. Regulatory Setting

The following describes the primary regulatory requirements regarding solid waste disposal. For a discussion of the regulatory requirements regarding the use, storage, and disposal of hazardous wastes, refer to Section IV.E, Hazards and Hazardous Materials, of this Draft EIR.

(1) Federal

No federal regulations are relevant to the thresholds discussed below.

(2) State

(a) Assembly Bill 939—California Integrated Waste Management Act of 1989

The California Integrated Waste Management Act of 1989 (AB 939), as amended, was enacted to reduce, recycle, and reuse solid waste generated in the state. AB 939 requires city and county jurisdictions to divert 50 percent of the total waste stream from landfill disposal. AB 939 also requires each city and county to promote source reduction,

recycling, and safe disposal or transformation. AB 939 further requires each city and county to conduct a Solid Waste Generation Study and to prepare a Source Reduction and Recycling Element to describe how it would reach these goals. The Source Reduction and Recycling Element contains programs and policies for fulfillment of the goals of AB 939, including the above-noted diversion goals, and must be updated annually to account for changing market and infrastructure conditions. As projects and programs are implemented, the characteristics of the waste stream, the capacities of the current solid waste disposal facilities, and the operational status of those facilities are upgraded, as appropriate. California cities and counties are required to submit annual reports to CalRecycle to update their progress toward the AB 939 goals.[1,2]

(b) Assembly Bill 1327—California Solid Waste Reuse and the Recycling Access Act of 1991

The California Solid Waste Reuse and the Recycling Access Act of 1991 (AB 1327) is codified in Public Resources Code Sections 42900-42911. As amended, AB 1327 requires each local jurisdiction to adopt an ordinance requiring commercial, industrial, or institutional building, marina, or residential buildings having five or more living units to provide an adequate storage area for the collection and removal of recyclable materials. The size of these storage areas is to be determined by the appropriate jurisdiction's ordinance. Pursuant to AB 1327, the City of Los Angeles adopted the Space Allocation Ordinance (Ordinance No. 171,687), discussed below.

(c) Senate Bill 1374—Construction and Demolition Waste Materials Diversion Requirements

Signed in 2002, the Construction and Demolition Waste Materials Diversion Requirements (SB 1374) were codified in Public Resources Code Section 42919. SB 1374 requires that jurisdictions include in their annual AB 939 report a summary of the progress made in diverting construction and demolition waste. The legislation also required that CalRecycle adopt a model ordinance for diverting 50 to 75 percent of all construction and demolition waste from landfills.

(d) Assembly Bill 1826

AB 1826 requires jurisdictions to implement an organic waste recycling program for businesses, including outreach, education, and monitoring of affected businesses.

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[1] *CalRecycle is shorthand for the California Department of Resources Recycling and Recovery, a new department within the California Natural Resources Agency that administers programs formerly managed by the State's Integrated Waste Management Board and Division of Recycling.*

[2] *California Public Resources Code, Section 41821.*

Additionally, each jurisdiction is to identify a multitude of information, including barriers to siting organic waste recycling facilities as well as closed or abandoned sites that might be available for new organic waste recycling facilities. AB 1826 defines "organic waste" as food waste, green waste, landscape and pruning waste, nonhazardous wood waste, and food-soiled paper waste that is mixed in with food waste. It also defines a "business" as a commercial or public entity, including, but not limited to, a firm, partnership, proprietorship, joint stock company, corporation, or association that is organized as a for-profit or nonprofit entity, or a multifamily residential dwelling consisting of five or more units.

(e) Zero Waste California

Zero Waste California is a state program launched by CalRecycle in 2002 to promote a new vision for the management of solid waste by maximizing existing recycling and reuse efforts, while ensuring that products are designed for the environment and have the potential to be repaired, reused, or recycled. The Zero Waste California program promotes the goals of market development, recycled product procurement, and research and development of new and sustainable technologies.

(f) California Green Building Standards

The 2016 California Green Building Standards Code, referred to as the CALGreen Code,[3] sets standards for new structures to minimize the state's carbon output. California requires that new buildings reduce water consumption, increase building system efficiencies, divert construction waste from landfills, and install low pollutant-emitting finish materials. Each local jurisdiction still retains the administrative authority to exceed the new CALGreen standards. The 2016 CALGreen Code went into effect January 1, 2017.

(g) Assembly Bill 341—California's 75-Percent "Recycling" Goal

AB 341, signed on February 10, 2011, directed that no less than 75 percent of solid waste generated in California be source reduced,[4] recycled, or composted by 2020, and required CalRecycle to provide a report to the Legislature that recommends strategies to achieve the policy goal by January 1, 2014. AB 341 also mandated local jurisdictions to implement commercial recycling by July 1, 2012.

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[3] *Building Standards Commission, CALGreen, www.bsc.ca.gov/Home/CALGreen.aspx, accessed February 14, 2017.*

[4] *Source reduction refers to activities designed to reduce the volume, mass, or toxicity of products throughout their life cycle. It includes the design and manufacture, use, and disposal of products with minimum toxic content, minimum volume of material, and/or a longer useful life.*

(3) Regional

The Los Angeles County Integrated Waste Management Plan, approved by the County Integrated Waste Management Board on June 23, 1999, is a set of planning documents that provides a regional approach for the management of solid waste through source reduction, recycling and composting, and environmentally safe transformation and disposal. The County Integrated Waste Management Plan recognizes that landfills will remain an integral part of Los Angeles County's solid waste management system in the foreseeable future and assures that the waste management practices of cities and other jurisdictions in the County are consistent with the solid waste diversion goals of AB 939.

The County Integrated Waste Management Plan includes the Countywide Integrated Waste Management Summary Plan (Summary Plan), which was also approved by the County Integrated Waste Management Board on June 23, 1999. Pursuant to AB 939, the Summary Plan describes the actions to be taken to achieve the mandated waste diversion goals of AB 939. The Summary Plan establishes countywide goals and objectives for integrated waste management; establishes an administrative structure for preparing and managing the Summary Plan; describes the countywide system of governmental solid waste management infrastructure; describes the current system of solid waste management in the County and associated cities; summarizes the types of solid waste programs; describes programs that could be consolidated or coordinated countywide; and analyzes how these countywide programs are to be financed.

In accordance with AB 939, Los Angeles County has included a Countywide Siting Element in the County Integrated Waste Management Plan. The Countywide Siting Element identifies goals, policies, and strategies that provide for the proper planning and siting of solid waste disposal and transformation facilities for the next 15 years. The Countywide Siting Element was approved by the County Integrated Waste Management Board on June 24, 1998, and provides strategies and establishes siting criteria for evaluating the development of needed disposal and transformation facilities. The County is currently in the process of updating the Countywide Siting Element to reflect the most recent information regarding remaining landfill disposal capacity and the County's current strategy for maintaining adequate disposal capacity.

To provide an annual update of the Summary Plan and Countywide Siting Element, the County Department of Public Works prepares the County Integrated Waste Management Plan Annual Reports. The Annual Reports summarize the changes in solid waste management that have taken place since approval of the Summary Plan and Countywide Siting Element, including updated strategies to meet the long-term needs and maintain adequate disposal capacity. In particular, the 2016 Annual Report provides an overview of the status of the County's solid waste disposal facilities and sets forth strategies for maintaining adequate disposal capacity for a 15-year planning period.

As set forth in the 2016 Annual Report, the cumulative need for Class III landfill disposal capacity through the year 2031 will exceed the 2016 remaining permitted Class III landfill capacity of 103 million tons. Wasteshed boundaries, geographic barriers, weather, and natural disasters could place further constraints on accessibility of Class III landfill capacity. The 2016 Annual Report evaluated seven scenarios to increase capacity. The seven scenarios that were evaluated in the 2016 Annual Report include the following:

- Scenario I—Utilization of Permitted In-County Disposal Capacity Only
- Scenario II—Status Quo (Use of existing permitted in-County Class II landfills and transformation facilities, and use of exports to out of county landfills)
- Scenario III—Meeting CalRecycle's Statewide Disposal Target of 2.7 pounds per day
- Scenario IV—Proposed In-County Class III Landfill Expansions
- Scenario V—Utilization of Additional Alternative Technology Capacity
- Scenario VI—Increase in Exports to Out-of-County Landfills
- Scenario VII—All Solid Waste Management Options Considered Become Available

The 2016 Annual Report determined that the County would be able to meet the disposal needs of all jurisdictions through the 15-year planning period with six of the seven scenarios. Only the scenario involving utilization of permitted in-county disposal capacity only (Scenario I) would result in a shortfall. The 2016 Annual Report concluded that in order to maintain adequate disposal capacity, individual jurisdictions must continue to pursue strategies to maximize waste reduction and recycling, expand existing landfills, promote and develop alternative technologies, expand transfer and processing infrastructure, and use out of county disposal, including waste by rail. Implementation of the strategies set forth in Scenarios II through VII will ensure that there will be adequate solid waste disposal capacity through the 15-year planning period.

(4) Local

A number of City plans and regulations govern solid waste management throughout the City. These plans and regulations include the City of Los Angeles Solid Waste Management Policy Plan, the City of Los Angeles Source Reduction Recycling Element, the City of Los Angeles Solid Waste Integrated Resource Plan, the City of Los Angeles General Plan Framework Element, the City of Los Angeles Solid Resources Infrastructure Strategy Facilities Plan, the RENEW LA Plan, the Green LA Plan, and the Los Angeles

Municipal Code (LAMC) which includes the Los Angeles Green Building Code. These plans and regulations are described below.

(a) City of Los Angeles Solid Waste Management Policy Plan and Source Reduction and Recycling Element

In 1993, the City of Los Angeles adopted the City of Los Angeles Solid Waste Management Policy Plan that provides long-range policy direction for solid waste management and served as an umbrella document for the City of Los Angeles Source Reduction and Recycling Element (SRRE). The SRRE describes the Source Reduction and Recycling Program for waste collected by the City of Los Angeles Department of Public Works, LASAN (formerly known as Bureau of Sanitation), in conformance with the requirements of AB 939.[5] Specifically, Volume IV of the SRRE presents strategies for targeted waste generators such as hotels, restaurants, and hospitals; targeted materials such as construction and demolition debris, green waste, and direct mail; and government departments. Pursuant to AB 939, the objective of the City of Los Angeles Solid Waste Management Policy Plan and the SRRE is to promote source reduction or recycling to achieve a minimum diversion of 50 percent of the City's waste by 2000 through the disposal of the remaining waste in local and possibly remote landfills. The City surpassed the State-mandated 50-percent diversion rate for the year 2000.[6] In addition, in 1999, Mayor Richard Riordan directed City departments to develop strategies to achieve the citywide recycling goal of 70 percent by 2020. This goal has been surpassed by the City. The responsibility for documenting waste diversion efforts for the City of Los Angeles lies with LASAN. As set forth below, more recent plans have been adopted by the City to further its waste reduction and recycling goals.

(b) City of Los Angeles General Plan Framework Element

The City's General Plan Framework Element (adopted in August 2001) includes general guidance regarding land use issues that include direction on infrastructure and public services. The General Plan Framework Element includes an Infrastructure and Public Services Chapter, which responds to federal and state mandates to plan for adequate infrastructure in the future. The General Plan Framework Element supports AB 939 and its goals by encouraging "an integrated solid waste management system that maximizes source reduction and materials recovery and minimizes the amount of waste

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[5] *City of Los Angeles, Department of Public Works, Bureau of Sanitation, City of Los Angeles Solid Waste Planning Background Studies Summary Report, January 2006.*

[6] *State of California, Integrated Waste Management Board, Countywide, Regionwide, and Statewide Jurisdiction Diversion Progress Report: County: Los Angeles, Report Year: 2000, www.calrecycle.ca.gov/lgcentral/Reports/jurisdiction/diversiondisposal.aspx, accessed February 14, 2017.*

requiring disposal."[7] The General Plan Framework Element addresses many of the programs the City has implemented to divert waste from disposal facilities such as source reduction programs and recycling programs (e.g., Curbside Recycling Program and composting). Furthermore, the General Plan Framework Element states that for these programs to succeed, the City should locate businesses where recyclables can be handled, processed, and/or manufactured to allow a full circle recycling system to develop. The General Plan Framework Element indicates that more transfer facilities will be needed to dispose of waste at remote landfill facilities due to the continuing need for solid waste transfer and disposal facilities, as well as the limited disposal capacity of the landfills in Los Angeles. Several landfill disposal facilities accessible by truck and waste-by-rail landfill disposal facilities that could be used by the City are identified to meet its disposal needs.[8]

(c) City of Los Angeles Solid Resources Infrastructure Strategy Facilities Plan

The City's Solid Resources Infrastructure Strategy Facilities Plan (Facilities Plan) was prepared in 2000 by the LASAN to address the goals of AB 939 and the policies of the General Plan Framework Element. The following are among the objectives:

- Develop a transfer facility and/or recycling center in the Central Los Angeles Area;
- Continue to research and develop the use of material recovery facilities to preprocess all residual waste prior to delivery to a disposal site; and
- Develop a comprehensive and continual public education and community outreach program designed to educate and inform the public about the City's solid resources programs and strategies.[9]

The Facilities Plan also documents LASAN's operations, which include collection, recycling, and disposal of solid waste, green waste, bulky items, and other special solid waste materials for single-family residences and multiple-family residences citywide, and management of contracted recycling programs for apartments and commercial and industrial businesses.

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[7] *City of Los Angeles Department of City Planning, Citywide General Plan Framework, August 2001, p. 9-11.*

[8] *City of Los Angeles Department of City Planning, Citywide General Plan Framework, Chapter 9.*

[9] *City of Los Angeles Department of Public Works, Solid Resources Infrastructure Strategy Facilities Plan, November 2000.*

(d) City of Los Angeles Solid Waste Integrated Resources Plan

The City of Los Angeles, LASAN started the Solid Waste Integrated Resources Plan also known as the "Zero Waste Plan," a 20-year master plan to reduce solid waste, increase recycling, and manage trash in the City through the year 2030.[10] This plan was envisioned as a master plan that would encompass all of the on-going solutions and programs (i.e., blue and green bin recycling, multi-family recycling, restaurant food scrap diversion, alternative technologies, hazardous waste recycling, Los Angeles Unified School District recycling program, etc.) and those that would emerge during its planning process. In addition, the Solid Waste Integrated Resources Plan is the result of a mayoral directive that is in line with the Green LA program and the City Council's RENEW LA Plan, discussed further below.[11] The Solid Waste Integrated Resources Plan is intended to provide a long-term outline of the policies, programs, infrastructure, regulations, incentives, new green jobs,[12] technology, and financial strategies necessary to achieve 90-percent diversion of solid waste by 2025.[13] The term "zero waste" refers to maximizing recycling, minimizing waste, reducing consumption, and encouraging the use of products with recycled/reused materials. As noted by the City, "zero waste" is a goal and not a categorical imperative; the City is simply seeking to come as close to "zero waste" as possible.

(e) RENEW LA Plan

The City's RENEW LA Plan was adopted by the City Council in March 2006 for the purpose of facilitating a shift from solid waste disposal to resource recovery.[14] This shift is predicted to result in "zero waste" and an overall diversion level of 90 percent by 2025.[15] The plan focuses on combining key elements of existing reduction and recycling programs

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[10] *LASanitation, Zero Waste Plan, Solid Waste Integrated Resources Plan, www.lacitysan.org/san/faces/home/portal/s-lsh-wwd/s-lsh-wwd-s/s-lsh-wwd-s-zwswirp?_adf.ctrl-state=7kzzajzjq_623&_afrLoop=18693410033087746#!, accessed February 14, 2017.*

[11] *LA Sanitation, Solid Waste Integrated Resources Plan (SWIRP) A Zero Waste Master Plan, Frequently Asked Questions (FAQs).*

[12] *"Green jobs" is the term for work force opportunities created by companies and organizations whose mission is to improve environmental quality.*

[13] *LA Sanitation, Zero Waste Plan, Solid Waste Integrated Resources Plan (SWIRP), www.lacitysan.org/san/faces/home/portal/s-lsh-wwd/s-lsh-wwd-s/s-lsh-wwd-s-zwswirp?_adf.ctrl-state=7kzzajzjq_623&_afrLoop=1869341003308774 6#!, accessed February 14, 2017.*

[14] *Resource recovery is the selective extraction of disposed materials for a specific next use, such as recycling, composting or energy generation in order to extract the maximum benefits from products, delay the consumption of virgin resources, and reduce the amount of waste generated. Resource recovery differs from the management of waste by using life-cycle analysis (LCA) to offer alternatives to landfill disposal of discarded materials.*

[15] *Councilman Greg Smith, RenewLA PowerPoint presentation, 2007.*

and infrastructure with new systems and conversion technologies to achieve resource recovery (without combustion) in the form of traditional recyclables, soil amendments, and renewable fuels, chemicals, and energy. The RENEW LA Plan also calls for reductions in the quantity of residual materials disposed in landfills and their associated environmental impacts.

(f) Green LA Plan

In May 2007, Mayor Antonio Villaraigosa presented the City Council with the *Green LA Plan*, an action plan to lead the nation in addressing global warming. The overall goal of the *Green LA Plan* is to reduce greenhouse gas emissions to 35 percent below 1990 levels by 2030. To achieve this target, a number of goals and objectives have been established in various focus areas. One such focus area is solid waste, as landfills are a source of methane, a greenhouse gas produced by decomposing trash. The goals of the Green LA Plan are to shift from solid waste disposal to resource recovery and to recycle 70 percent of solid waste generated within the City by 2020. In 2008, Mayor Villaraigosa accelerated that goal to 75-percent diversion by 2013.[16] To support this effort, LASAN has initiated several programs (further discussed below), including multi-family recycling available to all buildings, construction and demolition recycling requirements, and a restaurant food waste recycling program. Based on the 2013 Zero Waste Progress Report and using the calculation methodology adopted by the State of California, the City achieved a landfill diversion rate of approximately 76 percent in 2012, exceeding Mayor Villaraigosa's goal.[17]

(g) City of Los Angeles Space Allocation Ordinance

Pursuant to the California Solid Waste Reuse and the Recycling Access Act of 1991 (AB 1327), the City enacted the Space Allocation Ordinance (Ordinance No. 171,687) on August 13, 1997, which is incorporated in various sections of the LAMC. The Space Allocation Ordinance requires the provision of an adequate recycling area or room for collecting and loading recyclable materials for all new construction projects, all existing multi-family residential projects of four or more units where the addition of floor area is 25 percent or more, and all other existing development projects where the addition of floor area is 30 percent or more.

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[16] *Councilman Greg Smith, RenewLA PowerPoint presentation, 2007.*

[17] *LA Sanitation, Recycling, www.lacitysan.org/san/faces/home/portal/s-lsh-wwd/s-lsh-wwd-s/s-lsh-wwd-s-r?_adf.ctrl-state=q1ll3zde1_70&_afrLoop=13795042049109532#!, accessed February 14, 2017.*

(h) Citywide Construction and Demolition Debris Recycling Ordinance

On March 5, 2010, the City Council approved Council File 09-3029 pertaining to a Citywide Construction and Demolition Debris Recycling Ordinance (Ordinance No. 181,519) that requires LASAN to ensure that all mixed construction and demolition waste generated within City limits be taken to a City certified construction and demolition waste processor. The policy became effective in January 2011.[18]

(i) City-Wide Exclusive Franchise System for Municipal Solid Waste Collection and Handling and Upcoming Zero Waste-LA Franchise System

Solid waste collection, management, and disposal in the City are handled both by LASAN crews and by various permitted private solid waste haulers. The City provides solid waste collection, recycling, and green waste collection services primarily to single-family uses and multi-family uses with four units or less. Private solid waste haulers collect from most multi-family residential uses with more than four units and commercial uses based on an open permit system. Permitted waste haulers must obtain an annual permit, submit an annual report, and pay quarterly fees. However, unlike LASAN, private waste haulers are not required to provide recycling services, operate clean fuel vehicles, offer similar costs for similar services, or reduce vehicle miles traveled. Thus, the existing open permit system limits the ability of the City to address compliance with state environmental mandates and the City's waste diversion goals. Although the City has obtained a 76-percent solid waste diversion rate as identified in the 2013 Zero Waste Progress Report, nearly 3 million tons of solid waste from the City are still disposed in landfills annually, nearly 70 percent of which is comprised of waste collected by private waste haulers from multi-family residential and commercial customers.[19]

To respond to these challenges, and in response to City Council directive, LASAN established Zero Waste LA, a new public private partnership designed to address the 3 million tons of waste disposed annually by businesses, consumers and residents.[20] This innovative franchise system establishes a waste and recycling collection program for all commercial, industrial, and large multifamily customers in the City of Los Angeles. In April 2014, the Mayor and City Council approved the ordinance that allows the City to establish

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[18] *LA Sanitation, Construction and Demolition Recycling, www.lacitysan.org/san/faces/wcnav_externalId/s-lsh-wwd-s-r-cdr?_adf.ctrl-state=s2ljriqzq_70&_afrLoop=18847361971932160#!, accessed February 14, 2017.*

[19] *City of Los Angeles, Final Implementation Plan for Exclusive Commercial and Multifamily Franchise Hauling System, April 2013.*

[20] *LA Sanitation, Construction and Demolition Recycling, www.lacitysan.org/san/faces/wcnav_externalId/s-lsh-wwd-s-r-cdr?_adf.ctrl-state=s2ljriqzq_70&_afrLoop=18847361971932160#!, accessed February 14, 2017.*

an exclusive franchise system with 11 zones. With a single trash hauler responsible for each zone, the franchise system will allow for the efficient collection and sustainable management of solid waste resources and recyclables. Among other requirements, the City will mandate maximum annual disposal levels and specific diversion requirements for each franchise zone to promote solid waste diversion from landfills in an effort to meet the City's zero waste goals. This program began in July 2017.

(j) City of Los Angeles Green Building Program

In 2008, Mayor Villaraigosa, in partnership with the City Council, amended Chapter I of the LAMC by adding Sections 16.10 and 16.11, establishing the City's Green Building Program. The City's Green Building Program created a series of requirements and incentives for developers to meet the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED®) standards. The purpose of the Green Building Program is to reduce the use of natural resources, create healthier living environments, and minimize the negative impacts of development on local, regional, and global ecosystems. One of the key areas addressed by the Green Building Program concerns materials reuse and the use of recycled materials, both of which aim to reduce the amount of solid waste.

(k) City of Los Angeles Green Building Ordinance

On December 17, 2013, the Los Angeles City Council approved Ordinance No. 182,849, which amended Chapter IX, Article 9 of the LAMC to reflect local administrative changes and incorporate by reference portions of the 2013 CALGreen Code, which was the code in effect at that time. The amended Article 9 is referred to as the "Los Angeles Green Building Code." Projects filed on or after January 1, 2014, must comply with the Los Angeles Green Building Code as amended to comply with various provisions of the latest CALGreen Code.

(l) Citywide Construction and Demolition Waste Recycling Ordinance

On March 5, 2010, the Los Angeles City Council approved Council File 09-3029 pertaining to a Citywide Construction and Demolition Waste Recycling Ordinance that requires all mixed construction and demolition waste generated within City limits be taken to City-certified construction and demolition waste processors. LASAN is responsible for the construction and demolition waste recycling policy.

b. Existing Conditions

Demand for landfill capacity is continually evaluated by Los Angeles County through preparation of the County Integrated Waste Management Plan Annual Reports. This analysis is based in part on the County of Los Angeles Countywide Integrated Waste

Management Plan 2016 Annual Report, which was completed by the County of Los Angeles Department of Public Works in September 2017.

Based on the 2016 Annual Report, a discussion of the County's waste disposal at in- and out-of-County landfills and transformation facilities, existing landfill capacity data, and an overview of various technologies in use to reduce solid waste disposal is provided below.

(1) Solid Waste Generation and Disposal in the County of Los Angeles

(a) In-County Landfills

Landfills within the County are categorized as either Class III or unclassified landfills. Non-hazardous municipal solid waste is disposed of in Class III landfills, while inert waste such as construction waste, yard trimmings, and earth-like waste are disposed of in unclassified landfills.[21] Ten Class III landfills and one unclassified landfill with solid waste facility permits are currently operating within the County.[22] Figure IV.L.3-1 on page IV.L.3-13 illustrates the locations of County landfills in relation to the Project Site.

(i) Class III Landfills

As shown in Table IV.L.3-1 on page IV.L.3-14, based on the information provided in the 2016 Annual Report, the remaining disposal capacity for the County's Class III landfills is estimated at approximately 103.18 million tons.[23] In 2016, approximately 5.134 million tons of solid waste were disposed of at the County's Class III landfills. In addition, approximately 0.528 million tons of solid waste were disposed of at County transformation facilities in 2016.[24] Assuming a Countywide diversion rate of 65 percent for 2016, the 2016 Annual Report estimated that approximately 28.05 million tons of solid waste were generated within the County in 2016.

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[21] *Inert waste is waste which is neither chemically or biologically reactive and will not decompose. Examples of this are sand and concrete.*

[22] *County of Los Angeles, Department of Public Works; Los Angeles County Integrated Waste Management Plan 2016 Annual Report, September 2017.*

[23] *This total excludes the estimated remaining capacity at the Puente Hills Landfill, which closed on October 31, 2013.*

[24] *County of Los Angeles, Department of Public Works; Los Angeles County Integrated Waste Management Plan 2016 Annual Report, September 2017.*

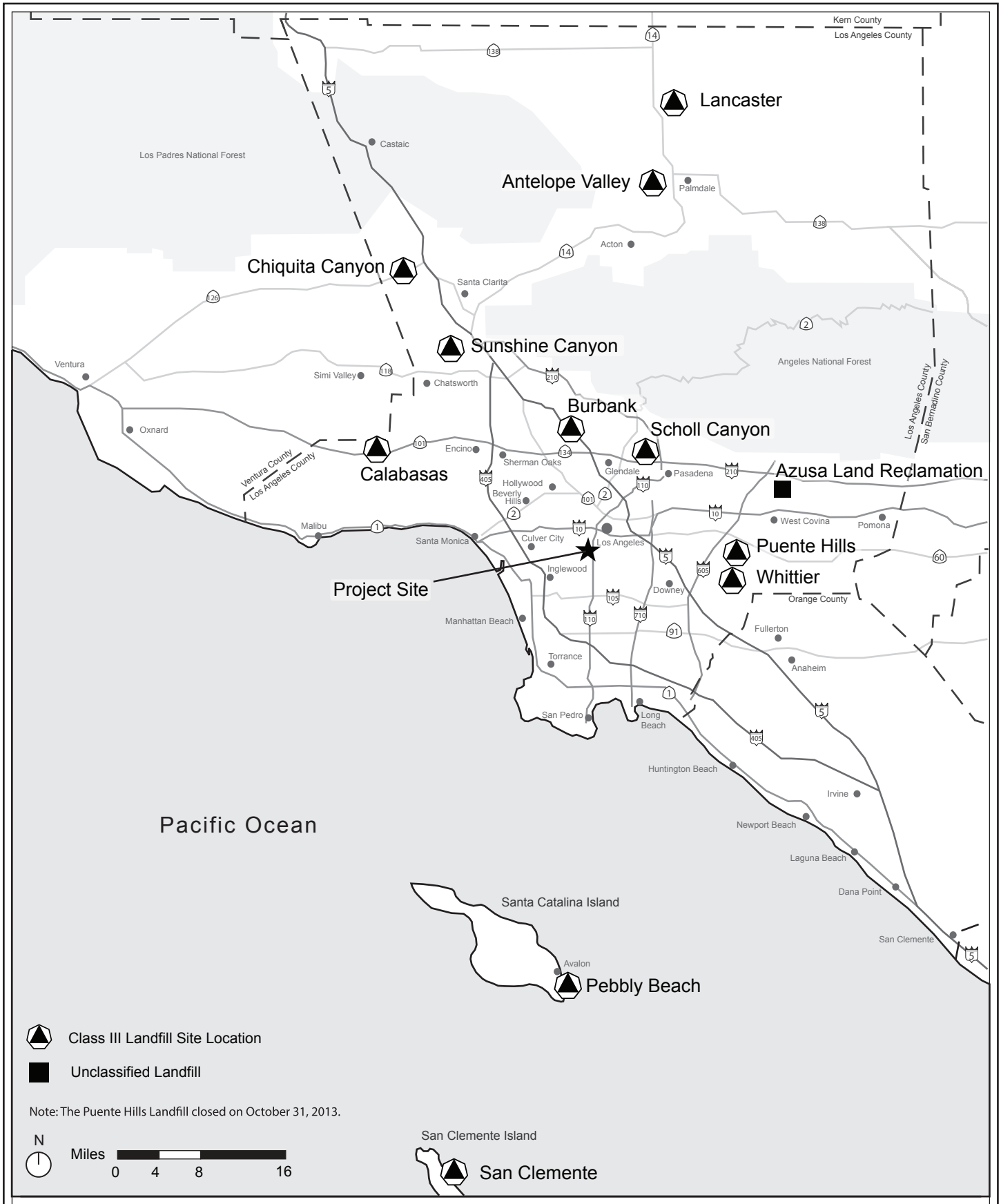

Figure IV.L.3-1
County of Los Angeles Landfills

Source: Google Earth, 2014.

Table IV.L.3-1
Solid Waste Disposal and Estimated Remaining Capacity for County of Los Angeles Landfills

	Location	2016 Total Disposal (million tons)[a]	Estimated Remaining Permitted Capacity as of 12/31/16 (million tons)[b]
Class III			
Antelope Valley[c]	Palmdale	0.485	12.89
Burbank[d]	Burbank	0.033	2.71
Calabasas[e]	Unincorporated	0.287	5.95
Chiquita Canyon[f]	Unincorporated	1.391	N/A
Lancaster	Unincorporated	0.154	10.45
Pebbly Beach[g]	Unincorporated	0.004	0.07
San Clemente Island[h]	Unincorporated	0.0006	0.04
Scholl Canyon[i]	Glendale/ Unincorporated	0.350	4.08
Sunshine Canyon City/County	Los Angeles/ Unincorporated	2.339	62.11
Whittier (Savage Canyon)[j]	Whittier	0.091	4.89
Class III Total Overall		**5.134**	**103.18**
Class III Total Open to City of Los Angeles		4.37	**85.45**
Unclassified			
Azusa Land Reclamation	Azusa	0.280	56.34
Unclassified Total Overall		0.280	56.34

Landfills open to the City of Los Angeles are highlighted in gray within the table.

[a] *Disposal quantities are based on actual tonnages reported by owners/operators of permitted solid waste disposal facilities to the Los Angeles County Department of Public Works' Solid Waste Information Management System.*

[b] *Estimated Remaining Permitted Capacity is based on landfill owner/operator's response in a written survey conducted by the Los Angeles County Department of Public Works in May 2017, as well as site-specific permit criteria established by local land use agencies, Local Enforcement Agencies, CalRecycle, California Regional Water Quality Control Board, and the South Coast Air Quality Management District.*

[c] *The City of Palmdale approved the expansion and combined Antelope Valley Landfills #1 and #2 on September 19, 2011.*

[d] *Limited to the City of Burbank use only.*

[e] *Limited to Calabasas Wasteshed, as defined by Los Angeles County Ordinance No. 91-0003, which is composed of the incorporated cities of Hidden Hills, Agoura Hills, Westlake Village, and Thousand Oaks; that portion of the City of Los Angeles bordered by the northerly line of Township 2 North on the north, Interstate Highway 405 on the east, Sunset Boulevard and the Pacific Ocean on the south, and the City boundary on the west; and certain unincorporated areas in the Counties of Los Angeles and Ventura.*

[f] *CUP expires November 24, 2019 or when the maximum capacity is reached, whichever is sooner. Proposed expansion pending. Conditional Use Permit (CUP) limits waste disposal to 30,000 tons per week.*

[g] *Land Use Permit (LUP) expires July 29, 2028.*

[h] *Landfill owned and operated by the U.S. Navy.*

Table IV.L.3-1 (Continued)
Solid Waste Disposal and Estimated Remaining Capacity for County of Los Angeles Landfills

	Location	2016 Total Disposal (million tons)[a]	Estimated Remaining Permitted Capacity as of 12/31/16 (million tons)[b]
[i] *Limited to Scholl Canyon Wasteshed as defined by City of Glendale Ordinance No. 4780, which is defined as County incorporated cities of Glendale, La Canada Flintridge, Pasadena, South Pasadena, San Marino, and Sierra Madre; County unincorporated communities known as Altadena, La Crescenta, Montrose; unincorporated area bordered by the cities of San Gabriel, Rosemead, Temple City, Arcadia, and Pasadena; and the unincorporated area immediately to the north of the City of San Marino bordered by the City of Pasadena on the west, north and east sides.*			
[j] *Limited to use by the City of Whittier and waste haulers contracted with the City of Whittier.*			
Source: Eyestone Environmental, 2018, based on information from County of Los Angeles, Department of Public Works; Los Angeles County Integrated Waste Management Plan 2016 Annual Report, September 2017.			

Of the remaining Class III landfill capacity in the County of Los Angeles, approximately 85.45 million tons are available to the City of Los Angeles.[25] As is the case with solid waste haulers, landfills operate in a free-enterprise system. Their operating funds and profits are obtained by collecting disposal fees from the haulers on a per ton basis. Landfill capacity is regulated primarily through the amount of solid waste that each particular facility is permitted to collect on a daily basis relative to its capacity.

As summarized above, the Annual Report indicates that the countywide cumulative need for Class III landfill disposal capacity, approximately 103.5 million tons in 2029,will exceed the 2016 remaining permitted Class III landfill capacity of 103.2 million tons. Wasteshed boundaries, geographic barriers, weather, and natural disasters could place further constraints on accessibility of Class III landfill capacity. Therefore, the Annual Report evaluated seven scenarios to increase capacity and determined that the County would be able to meet the disposal needs of all jurisdictions through the 15-year planning period with six of the seven scenarios. The Annual Report also concluded that in order to maintain adequate disposal capacity, individual jurisdictions must continue to pursue strategies to maximize waste reduction and recycling, expand existing landfills, promote and develop alternative technologies, expand transfer and processing infrastructure, and use out of county disposal, including waste by rail.

[25] *Total excludes Class III landfills not open to the City of Los Angeles for disposal (i.e., Scholl Canyon, Whittier, Burbank, Pebbly Beach, and San Clemente). In addition, total excludes the Calabasas Landfill, as its wasteshed does not include the Project Site. Total also excludes the additional expansion that may be provided by the Chiquita Canyon Landfill Expansion, as this expansion is pending.*

(ii) Unclassified Landfills

The County's unclassified landfills generally do not face capacity issues. As shown in Table IV.L.3-1 on page IV.L.3-14, the remaining disposal capacity for Azusa Land Reclamation is estimated at approximately 56.34 million tons. In 2016, approximately 0.369 million tons of inert waste (e.g., soil, concrete, asphalt, and other construction and demolition debris) were disposed of at this unclassified landfill. Given the remaining permitted capacity and based on the average disposal rate of 1,183 tons per day (based on 260 days of disposal per year) in 2016, this capacity would be exhausted in 153 years.[26] Thus, the unclassified landfill serving the County has adequate long-term capacity.

(b) Out-of-County Landfills

Solid waste disposal at out-of-County facilities has increased in recent years. As shown in Table IV.L.3-2 on page IV.L.3-17, in 2016 (the most recent year that data were available), approximately 13,289 tons per day of County solid waste was disposed at out-of-County landfills.[27]

As shown in Table IV.L.3-2, waste-by-rail (WBR) has the potential to create substantial solid waste disposal capacity. WBR systems allow the County to transport waste via existing railways to remote out-of-County disposal facilities. They involve the collection of recyclable waste at material recovery facilities and the loading of remaining non-hazardous wastes into rail-ready shipping containers. These containers are delivered by truck to local rail yard loading facilities where they are then transported to remote landfills designed and permitted to receive waste via rail. One WBR landfill could become available for use by the County: the Mesquite Regional Landfill in Imperial County, located approximately 210 miles east of Downtown Los Angeles, along the Union Pacific Railroad. The Sanitation Districts of Los Angeles County completed acquisition of the landfill in 2002, and completed construction of all infrastructure in December 2008. This landfill is permitted to accept up to 20,000 tons per day with a total disposal capacity for 660 million tons of solid waste, which is equivalent to a lifespan of nearly 109 years.[28] This landfill is not currently used by the City of Los Angeles.

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[26] *County of Los Angeles, Department of Public Works; Los Angeles County Integrated Waste Management Plan 2016 Annual Report, September 2017.*

[27] *County of Los Angeles, Department of Public Works; Los Angeles County Integrated Waste Management Plan 2016 Annual Report, September 2017, Appendix E-2 Table 3.*

[28] *County of Los Angeles, Department of Public Works; Los Angeles County Integrated Waste Management Plan 2016 Annual Report, September 2017.*

Table IV.L.3-2
Solid Waste Disposal and Estimated Remaining Capacity for Out-of-County Landfills[a]

Facility Location Owner/Operator	Rail Access	Distance from Downtown Los Angeles	2016 Average Daily Disposal Rate (tons per day)	2016 Average Disposal from Los Angeles County[a,b] (tons per day)	Permitted Daily Disposal (tons per day)	Remaining Permitted Disposal Capacity[c] (million tons)
Mesquite Regional Landfill[d] Imperial County Sanitation Districts of Los Angeles County	Yes	210 miles	—	—	20,000	660
H.M. Holloway Landfill, Inc. Kern County Holloway Environmental, LLC.	Yes	156 miles	357	202	2,000	4
Frank R. Bowerman Sanitary Landfill[d] Orange County O.C. Integrated Waste Mgmt. Dept.	No	45 miles	6,865	1,918	11,500	107
Olinda Alpha Sanitary Landfill[d] Orange County O.C. Integrated Waste Mgmt. Dept.	No	30 miles	6,891	3,079	8,000	19
Prima Deshecha Sanitary Landfill[e] Orange County O.C. Integrated Waste Mgmt. Dept.	No	60 miles	867	248	4,000	78
El Sobrante Landfill Riverside County Waste Mgmt., Inc.	No	60 miles	8,503	3,875	16,054	141
Mid-Valley Sanitary Landfill San Bernardino County San Bernardino County Solid Waste Management Division	No	53 miles	3,061	1,950	7,500	40
San Timoteo Sanitary Landfill San Bernardino County San Bernardino County Solid Waste Management Division	No	67 miles	878	449	2,000	7

Table IV.L.3-2 (Continued)
Solid Waste Disposal and Estimated Remaining Capacity for Out-of-County Landfills

Facility Location Owner/Operator	Rail Access	Distance from Downtown Los Angeles	2016 Average Daily Disposal Rate (tons per day)	2016 Average Disposal from Los Angeles County[a,b] (tons per day)	Permitted Daily Disposal (tons per day)	Remaining Permitted Disposal Capacity[c] (million tons)
Simi Valley Landfill & Recycling Center Ventura County Waste Mgmt., Inc.	No	50 miles	2,933	1,568	6,000	52
Total			**30,355**	**13,289**	**77,054**	**1,108**

[a] *Estimated quantity based on the data provided by the Counties in the Solid Waste Information Management System (SWIMS) and/or the Disposal Reporting System.*

[b] *Waste exported to other out-of-county landfills accounts for another 203 tons per day. Total waste exported in 2016 was approximately 13,492 tons per day.*

[c] *Estimated quantity provided by landfill operators in tons, otherwise a conversion factor of 1,200 pounds per cubic yard was used.*

[d] *The operation of the Mesquite Regional Landfill (MRL) and waste by rail system (WBR) is entirely dependent on the availability of in-county and near-county disposal capacity, diversion from landfills and the cost of disposal. When the MRL/WBR disposal capacity is needed and when the tipping fees make MRL/WBR economically viable, then the system may begin operation. However, for the purpose of the analysis, the waste-by-rail system is assumed to begin its operation in 2018.*

[e] *The County of Orange has import waste agreements to import waste into Orange County with waste hauling companies and County Sanitation Districts through June 30, 2025.*

Source: County of Los Angeles, Department of Public Works; Los Angeles County Integrated Waste Management Plan 2016 Annual Report, September 2017.

(c) Transformation Facilities

Per Title 14, California Code of Regulations, Section 18720, a transformation facility's principal function is to convert, combust, or otherwise process solid waste by incineration, pyrolysis, distillation, gasification, or to chemically or biologically process solid waste for the purpose of volume reduction, synthetic fuel production, or energy recovery. Transformation facilities do not include biomass conversion or composting facilities. There are two solid waste transformation facilities within Los Angeles County that convert, combust, or otherwise process solid waste for the purpose of energy recovery. The Commerce Refuse to Energy Facility processed approximately 0.109 million tons of solid waste in 2016 and has a permitted capacity of 400 million tons.[29] The Southeast Resource Recovery Facility, located in the City of Long Beach, processed approximately 0.419 million tons of solid waste in 2016 and has an available average daily capacity of 1,370 million tons.[30] It is expected that these two facilities will continue to operate at their current permitted capacities through 2031. The owners and operators of these facilities have indicated that there are no plans to increase the daily capacity at either facility.

(d) Use of Conversion Technologies

The County is exploring the use of conversion technologies to reduce future disposal needs, as well as address global climate change. These state-of-the-art technologies encompass a wide variety of processes that convert normal household trash into renewable energy, biofuels, and other useful products in an environmentally beneficial way. The Southern California Conversion Technology Demonstration Project is an initiative of the County.[31] Conversion technologies include a variety of thermal, chemical and biological processes that break down solid waste into usable resources, such as ethanol, biodiesel, and other green fuels.[32]

(e) Class I Landfills

Hazardous wastes are disposed of at Class I landfills. The closest Class I landfill to the Project Site is the Buttonwillow Landfill located in Kern County, approximately 125 miles northwest of the Project Site. Buttonwillow is a fully permitted hazardous waste

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[29] *County of Los Angeles, Department of Public Works; Los Angeles County Integrated Waste Management Plan 2016 Annual Report, September 2017, Appendix E-2 Table 1.*

[30] *County of Los Angeles, Department of Public Works; Los Angeles County Integrated Waste Management Plan 2016 Annual Report, September 2017, Appendix E-2 Table 1.*

[31] *Southern California Conversion Technology, About Us, http://dpw.lacounty.gov/epd/SoCalConversion/About, accessed February 14, 2017.*

[32] *Southern California Conversion Technology, About: Why Conversion Technologies?, http://dpw.lacounty.gov/epd/SoCalConversion/About/WhyConversionTechnologies, accessed February 14, 2017.*

facility, permitted by various State of California regulatory agencies to receive, store, treat and landfill a variety of hazardous and non-hazardous waste streams. This facility is capable of managing a large number of Resource Conservation and Recovery Act hazardous wastes, California hazardous waste, and non-hazardous waste for stabilization treatment, solidification, and landfill. The treatment methods utilized at this facility typically reduce toxicity of waste materials and make it suitable for disposal. Buttonwillow has a permitted landfill capacity in excess of 10 million cubic yards and serves a wide variety of industrial customers throughout California.[33] Hazardous wastes may also be disposed of at Kettleman Hills Facility, a Class I landfill located in Kings County, approximately 175 miles northwest of the Project Site. The Kettleman Hills Facility is permitted to accept most types of hazardous wastes as defined by the U.S. Environmental Protection Agency and the State of California. Materials accepted at the Kettleman Hills Facility include asbestos debris, lead-based paint materials, polychlorinated biphenyls, petroleum-contaminated soils and debris, soils and debris with metal contamination, household hazardous wastes from collection events, baghouse dusts, various ash waste, filter cake, catalyst solids, latex paint, groundwater, stormwater, clarifier water, and various sludges.[34]

(2) Solid Waste Generation and Disposal in the City of Los Angeles

The City of Los Angeles, LASAN collects an average of 6,652 tons per day of refuse, recyclables, yard trimmings, horse manure and bulky items from more than 750,000 homes.[35] The four-bin collection system consists of blue bins (recyclables), green bins (tree and yard trimmings), black bins (residual waste) and brown bins (horse manure). Using the calculation methodology adopted by the State of California, the City has achieved a landfill diversion rate of 76.4 percent.[36] As previously discussed, while LASAN generally provides waste collection services to single-family and some multi-family developments, private haulers permitted by the City provide waste collection services for most multi-family residential and commercial developments within the City. Solid waste transported by both public and private haulers is either recycled, reused, or transformed at a waste-to-energy facility, or disposed of at a landfill.

As shown in Table IV.L.3-3 on page IV.L.3-21, in 2017, the City of Los Angeles disposed of approximately 2.52 million tons of solid waste at the County's Class III landfills

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[33] *Clean Harbors Environmental Services, Transportation & Disposal: Buttonwillow, California Facility Facts.*

[34] *Chemical Waste Management, Inc., Kettleman Hills, Brochure.*

[35] *LA Sanitation, Recycling, www.lacitysan.org/san/faces/home/portal/s-lsh-wwd/s-lsh-wwd-s/s-lsh-wwd-s-r?_adf.ctrl-state=alxbkb91s_4&_afrLoop=1885086489149411#!, accessed February 14, 2017.*

[36] *Ibid.*

Table IV.L.3-3
City of Los Angeles Solid Waste Disposal (2017)

Landfill/Transformation Facility	2017 Total Disposal[a] (tons)
Class III Landfills	
Antelope Valley	257,702.96
Calabasas	170,146.40
Chiquita Canyon	838,018.22
Lancaster	27,267.68
Savage Canyon Landfill	5,080.30
Scholl Canyon	2,292.79
Sunshine Canyon	1,067,478.84
Total Class III Landfills	***2,367,987.19***
Transformation Facilities	
Commerce Refuse-to-Energy	12,835.86
Southeast Resource Recovery	9,411.67
Total Transformation Facilities	***22,247.53***
Unclassified (Inert) Landfills—Azuza Land Reclamation	***124,920.94***
Total Disposal	**2,515,155.66**

Note: Numbers may not total due to rounding.

[a] *Additional materials were also received for recycling and beneficial use (e.g., construction and demolition debris, sediment, green waste, auto shred) that are not part of these disposal amounts.*

Source: County of Los Angeles, Department of Public Works, Solid Waste Information System, Detailed Solid Waste Disposal Activity Report By Jurisdictions by Los Angeles (Reporting Period: January 2017 to December 2017).

and approximately 22,247 tons at transformation facilities.[37] The 2.52 million tons of solid waste accounts for approximately 2.9 percent of the total remaining capacity (85.45 million tons) for the County's Class III landfills open to the City.[38]

As indicated in Table IV.L.3-1, as of December 2016, the latest period for which annual data are available, the remaining disposal capacity for the Azusa Land Reclamation, an unclassified landfill open to the City of Los Angeles, is approximately 56.34 million tons. As shown in Table IV.L.3-1, in 2017, the City landfilled approximately

[37] *These numbers represent waste disposal, not generation, and thus do not reflect the amount of solid waste that was diverted via source reduction and recycling programs within the City.*

[38] *(2.52 million tons ÷ 85.45 million tons) X 100 = 2.9 percent.*

97,956.82 tons of construction and demolition waste in the unclassified landfill. This amount accounts for 0.17 percent of the total remaining capacity at the unclassified landfill.

(3) City of Los Angeles Hazardous Waste Disposal Programs

LASAN has established six permanent waste collection sites throughout the City known as S.A.F.E. (solvents/automotive/flammables/electronics) Centers, which are open every weekend to allow residents and businesses to conveniently dispose of their household hazardous waste. These S.A.F.E. centers generally accept used motor oil and filters; paint and solvents; e-waste, such as computers, cell phones and televisions; household cleaning products; car and household batteries; fluorescent tubes and bulbs; home-generated sharps, such as needles and lancets; and unused medicine (except controlled substances).[39] To facilitate disposal of household hazardous waste throughout the City, LASAN also provides Mobile Collection Events in areas not served by S.A.F.E. Centers.[40] In addition, CalRecycle has certified used motor oil collection centers throughout the state. These locations accept uncontaminated oil throughout the year. For further discussion of the use, storage, handling, and disposal of hazardous materials and hazardous wastes, refer to Section IV.E, Hazards and Hazardous Materials, of this Draft EIR.

(4) City of Los Angeles Recycling Programs

LASAN develops and implements source reduction, recycling, and composting programs in the City. Such programs include mandatory commercial organics recycling, commercial recycling, blue bin recycling, green bin recycling, tire recycling, and multi-family residential recycling, among others. LASAN and the Department of Building and Safety also implement the City's construction and demolition waste recycling ordinance, which requires that all haulers and contractors handing construction and demolition waste must obtain a waste hauler permit for hauling of such material to a certified construction and demolition processing facility.

(5) On-Site Waste Generation

The Project Site is currently developed with retail and restaurant uses with accompanying surface parking areas. As summarized in Section II, Project Description of

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[39] *City of Los Angeles Department of Public Works, Bureau of Sanitation, Hazardous Waste S.A.F.E. Centers & Mobile Collection Events, S.A.F.E. Center Flyer.*

[40] *LA Sanitation, Hazardous Waste, S.A.F.E. Centers & Mobile Collection Events, www.lacitysan.org/san/faces/home/portal/s-lsh-wwd/s-lsh-wwd-s/s-lsh-wwd-s-c/s-lsh-wwd-s-c-hw/s-lsh-wwd-s-c-hw-safemc?_adf.ctrl-state=qbflb4qjn_273&_afrLoop=3331564728185060 3#!, accessed February 14, 2017.*

this Draft EIR, existing uses comprise a total of approximately 100,781 square feet of retail space and 418 parking spaces. The existing uses within the Project Site generate municipal solid wastes typical of commercial uses, including, but not limited to, paper, glass, metal, plastics, food waste, wood, cardboard, and landscape waste. As shown in Table IV.L.3-5 on page IV.L.3-29 in the analysis below, based on the City's solid waste generation rates, the Project Site currently generates an estimated 297 tons of solid waste per year.

3. Project Impacts

a. Thresholds of Significance

In accordance with the State CEQA Guidelines Appendix G, the Project would have a significant impact related to solid waste if it would:

Threshold (a): Not be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs; or

Threshold (b): Not comply with federal, state, and local statutes and regulations related to solid waste.

For this analysis, the Appendix G Thresholds listed above are relied upon. The analysis utilizes factors and considerations identified in the City's 2006 L.A. CEQA Thresholds Guide, as appropriate, to assist in answering the Appendix G Threshold questions.

The L.A. CEQA Thresholds Guide identifies the following criteria to evaluate solid waste impacts:

- Amount of projected waste generation, diversion, and disposal during demolition, construction, and operation of the project, considering proposed design and operational features that could reduce typical waste generation rates;
- Need for an additional solid waste collection route, or recycling or disposal facility to adequately handle project-generated waste; and
- Whether the project conflicts with solid waste policies and objectives in the Source Reduction and Recycling Element or its updates, the City of Los Angeles Solid Waste Management Policy Plan, the City Framework or the City Curbside Recycling Program, including consideration of the land use-specific waste

diversion goals contained in Volume 4 of the Source Reduction and Recycling Element.[41]

b. Methodology

The Project's potential solid waste impacts are based on an analysis of the estimated amount of waste generated during both construction and operation of the Project relative to area-wide disposal rates and the remaining capacity at facilities serving the Project area. The Project's solid waste generation is considered both in terms of total amount of waste generated, as well as the amount of waste that would actually be disposed of at a landfill following diversion (e.g., recycling, reuse, or other methods).

(1) Construction

Anticipated solid waste generation for the Project's construction activities was determined using rates provided by the United States Environmental Protection Agency (USEPA) based on the types of land use and amount of floor area proposed for demolition and construction. The results of these calculations were compared with the available capacity at the landfills that currently accept construction waste from the area of the City that includes the Project Site in order to assess the significance of the Project's solid waste disposal.

(2) Operation

The Project's waste generation and anticipated waste disposal needs during operations were estimated using the waste generation factors and disposal data provided by the City of Los Angeles, LASAN, City Waste Characterization and Quantification Study, dated July 2002 for non-residential uses and the *L.A. CEQA Thresholds Guide* solid waste generation rate for the residential uses of the Project. The Project's estimated waste generation and waste disposal quantities were then compared with the remaining capacity at Class III landfills open to the City of Los Angeles to determine whether adequate capacity would be available to accommodate the Project.

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[41] *Waste diversion goals have been identified for a limited number of targeted waste generators and materials. Future updates of the Source Reduction and Recycling Element may expand the land uses and materials covered, or modify the current waste diversion goals. The City of Los Angeles Department of Public Works Bureau of Sanitation, City of Los Angeles Solid Waste Planning Background Studies Summary Report, January 2006.*

c. Analysis of Project Impacts

(1) Project Design Features

The following project design features are proposed with regard to solid waste.

Project Design Feature SW-PDF-1: Implementation of a construction waste management plan to recycle and/or salvage nonhazardous debris to achieve a minimum 75-percent diversion from landfills.

Project Design Feature SW-PDF-2: Use of building materials with a minimum of 10 percent recycled content for the construction of the Project.

(2) Project Impacts

Threshold (a): Would the Project not be served by a landfill with sufficient permitted capacity to accommodate the Project's solid waste disposal needs?

(a) Construction Impacts

(i) Solid Waste Collection Route

Construction of the Project would involve demolition and building construction activities. These activities would generate construction and demolition wastes (e.g., wood, concrete, asphalt, cardboard, brick, glass, plastic, and metal). In accordance with City requirements, a haul permit would be obtained by the contractor or hauler to dispose of the materials at a City-certified waste processing facility. Since construction and demolition waste would be hauled by a private construction contractor permitted by the City, the Project would not result in the need for an additional solid waste collection route.

(ii) Solid Waste Recycling and Disposal Facilities

As shown in Table IV.L.3-4 on page IV.L.3-26, based on construction and debris rates established by the USEPA, it is anticipated that construction of the Project would generate a total of approximately 11,219 tons of demolition debris and 2,602 tons of construction debris, for a combined total of 13,821 tons of construction-related waste generation. It should be noted that soil export is not typically included in the calculation of construction waste to be landfilled since soil is not disposed of as waste but, rather, is typically used as a cover material or fill at other construction sites requiring soils import. Thus, soil export is not included in these totals.

Pursuant to the requirements of SB 1374 and Project Design Feature SW-PDF-1, provided above, the Project would implement a construction waste management plan to recycle and/or salvage a minimum of 75 percent of non-hazardous demolition and

Table IV.L.3-4
Project Demolition and Construction Waste Generation

Land Use	Size/Units	Generation Rate[a] (lbs/sf)	Total (tons)
Existing Uses			
Retail	100,781 sf	155	7,811
Surface Parking	142,000 sf	48[c]	3,408
Subtotal for Demolition			***11,219***
Total Proposed Uses			
Residential (658 du)	647,029 sf	4.38	1,417
Retail	13,650 sf	3.89	27
Restaurant	13,650 sf	3.89	27
Parking Structure	581,698 sf	3.89	1,131
Subtotal for Construction			***2,602***
Total (prior to recycling)			**13,821**
Total (after 75 percent recycling)[b]			**3,455**

sf = square feet

[a] *U.S. Environmental Protection Agency, Report No. EPA530-98-010, Characterization of Building-Related Construction and Demolition Debris in the United States, June 1998, Table 3, Table 4 and Table 6.*

[b] *Pursuant to requirements of SB 1374 and Project Design Feature L.3-1.*

[c] *National Asphalt Pavement Association, How to Determine Quantities, www.asphaltpavement.org/index.php?option=com_content&view=article&id=144&Itemid=330, accessed February 24, 2017.*

Source: TCA Architects; Eyestone Environmental, January 2017.

construction debris. Furthermore, as discussed above, the Project's construction contractor would be required to deliver all remaining construction and demolition waste generated by the Project to a certified construction and demolition waste processing facility. Thus, although the total diversion rate would likely exceed 75 percent, this analysis conservatively assumes a diversion rate of 75 percent. Applying this rate, the Project would dispose of approximately 3,455 tons of construction-related waste in the County's inert landfill throughout the construction period. This amount of construction and debris waste would represent approximately 0.006 percent of the Azusa Land Reclamation Landfill's existing remaining disposal capacity of 56.34 million tons (refer to Table IV.L.3-1 on page IV.L.3-14).

Based on the above, the total amount of construction and demolition waste generated by the Project would represent a fraction of the remaining capacity at the unclassified landfill serving Los Angeles County. Since the County's unclassified landfill generally does not face capacity shortages, and the County's unclassified landfill would be

able to accommodate Project-generated waste, construction of the Project would not result in the need for an additional disposal facility to adequately handle Project-generated construction-related waste. **Therefore, construction impacts to solid waste facilities would be less than significant.**

(iii) Hazardous Waste

As discussed in Section IV.E, Hazards and Hazardous Materials, of this Draft EIR, in the event asbestos containing materials, lead based paints, and polychlorinated biphenyls are found in the buildings proposed for demolition, suspect materials would be removed in accordance with all applicable local, state, and federal regulations prior to demolition activities. In addition, although not expected, it is possible that contaminated soils may be uncovered during construction. Any such materials shall be taken to a licensed hazardous waste disposal facility, such as the Buttonwillow Landfill or the Kettleman Hills Facility for disposal. In addition, construction activities would require the use of fuel and oils associated with construction equipment, as well as coatings, paints, adhesives, and caustic or acidic cleaners involved in the construction of the proposed structures. Those hazardous materials that are not consumed during the construction process would also require proper disposal at a licensed hazardous waste disposal facility, in accordance with all of the requirements of applicable regulatory agencies, which could include the Los Angeles Fire Department, Los Angeles Regional Water Quality Control Board, and/or the Department of Toxic Substances Control. **Compliance with such requirements, outlined in detail in Section IV.E, Hazards and Hazardous Materials, of this Draft EIR, would reduce the potential for a Project impact associated with disposal of construction-related hazardous waste to a less-than-significant level.**

(b) Operational Impacts

(i) Solid Waste Collection Route

Operation of the Project would generate municipal solid waste typical of residential and commercial developments. Solid waste generated by the Project would be recycled or collected by private waste haulers contracted by the Applicant and permitted by the City and taken for disposal at one of the County's Class III landfills open to the City of Los Angeles.[42] The Project Site is located in an urban area with established solid waste collection routes. The transport of Project-generated solid waste to waste management/

[42] *Private solid waste haulers hold individual contracts with landfill operators for the disposal of waste. Thus, it is unknown at this time which landfills would ultimately receive Project-generated waste. However, it is assumed that Project-generated waste would generally be disposed of at a Class III landfill open to the City of Los Angeles.*

disposal facilities would occur along existing solid waste routes of travel. Furthermore, such waste would be disposed of in accordance with the Zero Waste LA Franchise System described above. As such, the Project would not result in the need for additional solid waste collection routes to adequately handle Project-generated waste.

(ii) Solid Waste Recycling and Disposal Facilities

Operation of the new uses on the Project Site would generate solid waste. As shown in Table IV.L.3-5 on page IV.L.3-29, when accounting for the removal of the existing uses, operation of the Project would result in a net increase of approximately 1,314 tons of solid waste generated on the Project Site annually, or approximately 3.6 tons per day.

Pursuant to the City's Solid Waste Management Policy Plan as directed by AB 939, during operation, the Project would need to maintain a solid waste diversion rate of at least 50 percent. In addition, as discussed above, the Project would be subject to the City's Zero Waste LA franchising system, which is expected to result in a reduction of landfill disposal citywide with a goal of reaching a citywide recycling rate of 90 percent by the year 2025.

Conservatively assuming a minimum diversion rate of approximately 50 percent, the net increase in solid waste disposal associated with the Project would be approximately 657 tons per year (1.8 tons per day) as shown in Table IV.L.3-5. This net increase in solid waste disposal associated with the Project would represent an approximate 0.03-percent increase in the City's annual solid waste disposal quantity, based on the 2017 citywide landfill disposal of approximately 2.52 million tons (refer to Table IV.L.3-3 on page IV.L.3-21).[43]

Project-generated solid waste would be collected by a private solid waste hauler and taken for disposal at one of the County's Class III landfills open to the City of Los Angeles. As shown in Table IV.L.3-1 on page IV.L.3-14, the estimated remaining capacity for the County's Class III landfills open to the City of Los Angeles is approximately 85.45 million tons as of December 31, 2016.[44,45] Thus, the Project's net increase of 657 tons of annual

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[43] *County of Los Angeles, Department of Public Works; Los Angeles County Integrated Waste Management Plan 2015 Annual Report, December 2016.*

[44] *Total excludes Class III landfills not open to the City of Los Angeles for disposal (i.e., Scholl Canyon, Whittier, Burbank, Pebbly Beach, and San Clemente). Total excludes the Calabasas Landfill, as its wasteshed does not include the Project Site. Total also excludes the additional expansion that may be provided by the Chiquita Canyon Landfill Expansion, as this expansion is not currently operational.*

[45] *From the Los Angeles County Integrated Waste Management Plan 2015 Annual Report, December 2016. Estimated remaining Permitted Capacity based on landfill owner/operator responses in a written survey by Los Angeles County Department of Public Works as well as a review of the site specific permit criteria*

(Footnote continued on next page)

Table IV.L.3-5
Project Solid Waste Generation

Land Use	Area/Units	Employees[a] Households or Visitors	Solid Waste Generation Factor[b,c] (tons/employee or household/year)	Waste Generation (tons/year)
Existing Uses				
Retail	92,249 sf	250	0.91 tons/employee	228
Restaurant	8,532 sf	23	2.98 tons/employee	69
Total Existing				***297***
Total Proposed Uses				
Residential Units	658 du	—	2.23 tons/household	1,467
Retail	13,650 sf	37	0.91 tons/employee	34
Restaurant	13,650 sf	37	2.98 tons/employee	110
Total Proposed				***1,611***
Total Net Generation (prior to diversion)				**1,314**
Total Net Disposal (after 50% diversion/recycling)				**657**

sf = square feet

du = dwelling unit

Note: Numbers may not sum due to rounding.

[a] *Based on employment generation factors from Los Angeles Unified School District, 2012 Developer Fee Justification Study, February 9, 2012, Table 11. Assumes employee generation rate of 0.00271 employee per average square foot (Neighborhood Shopping Centers) for retail and restaurant uses.*

[b] *Non-residential yearly solid waste generation factors from City of Los Angeles Bureau of Sanitation, City Waste Characterization and Quantification Study, Table 4, July 2002. Assumes rate of 0.91 ton per employee per year (Retail—Miscellaneous) for retail uses and 2.98 ton per employee per year (Retail—Restaurant) for restaurant uses.*

[c] *Residential solid waste generation factor based on a rate of 12.23 pounds per household per day (or 2.23 tons per household per year), pursuant to the L.A. City CEQA Thresholds Guide.*

Source: Eyestone Environmental, 2017.

solid waste disposal would represent approximately 0.0008 percent of the estimated remaining Class III landfill capacity available to the City of Los Angeles.

As previously discussed, the 2016 Annual Report indicates that the countywide cumulative need for Class III landfill disposal capacity, approximately 103.5 million tons in

established by local land use agencies, Local Enforcement Agencies, California Regional Water Control Board, and the South Coast Air Quality Management District.

2029, will exceed the 2016 remaining permitted Class III landfill capacity of 103.2 million tons. Wasteshed boundaries, geographic barriers, weather, and natural disasters could place further constraints on accessibility of Class III landfill capacity. Therefore, the Annual Report evaluated seven scenarios and determined that the County would be able to meet the disposal needs of all jurisdictions through the 15-year planning period with six of the scenarios. The Annual Report also concluded that in order to maintain adequate disposal capacity, individual jurisdictions must continue to pursue strategies to maximize waste reduction and recycling, expand existing landfills, promote and develop alternative technologies, expand transfer and processing infrastructure, and use out of county disposal, including waste by rail.

The County will continue to address landfill capacity through the preparation of Countywide Integrated Waste Management Plan annual reports. The preparation of each annual report provides sufficient lead time (15 years) to address potential future shortfalls in landfill capacity. Solid waste disposal is an essential public service that must be provided without interruption in order to protect public health and safety, as well as the environment. Jurisdictions in the County of Los Angeles continue to implement and enhance the waste reduction, recycling, special waste, and public education programs identified in their respective planning directives. These efforts, together with countywide and regional programs implemented by the County and the cities, acting in concert or independently, have achieved significant, measurable results, as documented in the 2016 Annual Report. As discussed below, the Project would be consistent with and would further City policies that reduce landfill waste streams. Such policies and programs serve to implement the strategies outlined in the 2016 Annual Report to adequately meet countywide disposal needs through 2031 without capacity shortages. **Thus, based on the amount of solid waste to be generated by the Project, waste reduction measures that would be implemented, and the existing capacity of Los Angeles County landfills, potential impacts associated with solid waste disposal would be less than significant.**

(c) Conclusion

Based on the analysis above, the Project would not create a need for an additional solid waste collection route, or recycling or disposal facility to adequately handle project-generated solid waste. The Project would not conflict with solid waste policies and objectives in the City of Los Angeles Source Reduction and Recycling Element or its updates, City of Los Angeles Solid Waste Management Policy Plan, the City of Los Angeles General Plan Framework Element or the Curbside Recycling Program, or the County Integrated Waste Management Plan, including the most recent Annual Report. **Therefore, Project-level impacts with regard to solid waste would be less than significant during construction and operation.**

Threshold (b): Would the Project not comply with federal, state, and local statutes and regulations related to solid waste?

As discussed above, the Project's construction contractor shall deliver all construction and demolition waste generated by the Project to a certified construction and demolition waste processing facility in accordance with City requirements. Furthermore, in accordance with regulatory requirements, the Project would implement waste reduction measures as set forth above in Project Design Features SW-PDF-1 and SW-PDF-2, which include reducing construction-related solid waste generation through the recycling of construction and demolition debris, and using recycled building materials for new construction. Thus, the Project would promote source reduction and recycling, consistent with AB 939 and the City's Solid Waste Integrated Resources Plan, the City's General Plan Framework Element, the RENEW LA Plan, and the Green LA Plan.

In addition, the Project would provide recycling containers and associated storage areas on-site in accordance with City Ordinance No. 171,687. As discussed in Section II, Project Description, of this Draft EIR, the Project would comply with the City's Green Building Ordinance, as applicable. Furthermore, the Zero Waste LA Franchise System began operation in 2017. Thus, as discussed above in Section 2.a.(3)(i), operational waste from the Project would likely be diverted at a rate greater than the 50 percent diversion rate set forth by the City's Solid Waste Management Policy Plan. Therefore, the Project would not conflict with solid waste policies and objectives in the City of Los Angeles Source Reduction and Recycling Element or its updates, the City of Los Angeles Solid Waste Management Policy Plan, the City of Los Angeles General Plan Framework Element or the Curbside Recycling Program, or the County Integrated Waste Management Plan.

Based on the above, the Project would not conflict with federal, state, and local statutes and regulations related to solid waste, and impacts would be less than significant.

d. Cumulative Impacts

The geographic context for the cumulative impact analysis for solid waste is the entire County of Los Angeles because the landfills open to the City of Los Angeles serve the entire County. The Project and the related projects, in conjunction with growth forecasted in the County through 2023 (i.e., the Project buildout year), would cumulatively generate solid waste, thus potentially resulting in cumulative impacts on solid waste facilities. Cumulative growth in the greater Project area through 2023 includes 39 specific known development projects as well as general ambient growth projected to occur, as described in Section III, Environmental Setting, of this Draft EIR. These related projects primarily include retail, restaurant, residential, and office uses.

(1) Landfill Capacity

(a) Construction

(i) Solid Waste Collection Routes

Construction of the Project, in combination with the related projects described in Section III, Environmental Setting, of this Draft EIR) would involve demolition and building construction activities. These activities would generate construction and demolition wastes that would be recycled or collected by private waste haulers contracted by the Applicant and other developers and taken to City-certified waste processing facilities for sorting and final distribution, including disposal at the County's unclassified landfill. Since construction and demolition waste would be hauled by a private construction contractor permitted by the City, the Project and each of the related projects would not result in the need for an additional solid waste collection route. Therefore, cumulative impacts on solid waste collection routes would be less than significant.

(ii) Solid Waste Recycling and Disposal Facilities

Construction of the Project, in conjunction with forecasted growth in the County through 2023 (inclusive of the related projects), would generate construction and demolition waste, resulting in a cumulative increase in the demand for unclassified landfill capacity. As analyzed above, the Project would dispose of approximately 3,455 tons of construction and demolition waste in the County's unclassified landfill after accounting for recycling pursuant to the requirements of SB 1374 and Project Design feature SW-PDF-1. Given the requirements of the Citywide Construction and Demolition Debris Recycling Ordinance (Ordinance No. 181,519), which requires all mixed construction and demolition waste generated within City limits to be taken to a City certified construction and demolition waste processor, it is anticipated that future cumulative development would also implement similar measures to divert construction and demolition waste from landfills. Furthermore, as described above in Section 2.b.(1)(a)(ii), Unclassified Landfills, the unclassified landfill that serves the City of Los Angeles does not face capacity issues. Therefore, cumulative impacts on the unclassified landfill would be less than significant.

(iii) Hazardous Waste

As discussed in Section IV.E, Hazards and Hazardous Materials, of this Draft EIR, development of the Project, in combination with the related projects described in Section III, Environmental Setting, of this Draft EIR, would require the disposal of hazardous materials. Asbestos or asbestos containing materials, lead based paints, polychlorinated biphenyls, and other ground/soil contamination may be present with the related projects sites. In the event that these hazardous materials are found in the buildings that would be demolished to accommodate site redevelopment, suspect materials would be removed prior to

demolition activities, in accordance with all applicable local, state, and federal regulations discussed in Section IV.E, Hazards and Hazardous Materials, of this Draft EIR. In addition, soils with concentrations of hazardous substances above acceptable levels would be properly handled and disposed. Any such materials would be expected to be ultimately disposed of at permitted hazardous materials disposal facilities, such as the Buttonwillow Landfill, which has a permitted landfill capacity in excess of 10 million cubic yards, or the Kettleman Hills Facility, which has a projected remaining life of over thirty years, for disposal.[46,47]

Construction activities of the Project and the related projects would also require the use of fuel and oils associated with construction equipment, as well as coatings, paints, adhesives, and caustic or acidic cleaners involved in the construction of the new or rehabilitated structures. Those hazardous materials that are not utilized during the construction process would require proper disposal at a licensed hazardous waste disposal facility, in accordance with all of the requirements of applicable regulatory agencies, which could include the Los Angeles Fire Department, City of Los Angeles Department of Public Works, Los Angeles Regional Water Quality Control Board, and/or the Department of Toxic Substances Control. **The Project and each of the related projects would, therefore, have less-than-significant impacts from hazardous waste disposal. In addition, because the use of hazardous materials is largely site-specific, compliance of each individual project with such requirements would reduce the potential for cumulative impacts associated with disposal of construction-related hazardous waste to a less-than-significant level.**

(b) Operation

(i) Solid Waste Collection Routes

Operation of the Project, along with each of the related projects in the area, would generate municipal solid waste typical of residential and commercial developments. Solid waste generated by cumulative development in the area would be recycled or collected by private waste haulers contracted by the Applicant and permitted by the City and taken for disposal at one of the County's Class III landfills open to the City of Los Angeles.[48] The transport of solid waste generated by cumulative development to waste management/disposal facilities would continue to occur along existing solid waste routes of

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[46] *Clean Harbors Environmental Services, Transportation & Disposal: Buttonwillow, California Facility Facts.*

[47] *Chemical Waste Management, Inc., Kettleman Hills, Brochure.*

[48] *Private solid waste haulers hold individual contracts with landfill operators for the disposal of waste. Thus, it is unknown at this time which landfills would ultimately receive Project-generated waste. However, it is assumed that Project-generated waste would generally be disposed of at a Class III landfill open to the City of Los Angeles.*

travel and would be a part of the City's Zero Waste LA Franchise System. As such, the Project and each of the related projects would not result in the need for additional solid waste collection routes to adequately handle new solid waste generated by cumulative development. **Therefore, cumulative impacts on solid waste collection routes would be less than significant.**

(ii) Solid Waste Disposal Facilities

Operation of the Project, in conjunction with forecasted growth in the County through 2023 (inclusive of the related projects), would generate municipal solid waste and result in a cumulative increase in the demand for waste disposal capacity at Class III landfills. As previously stated, the Countywide demand for landfill capacity is continually evaluated by the County through preparation of the County Integrated Waste Management Plan Annual Reports. Each Annual Report assesses future landfill disposal needs over a 15-year planning horizon. As such, the 2016 Annual Report projects waste generation and available landfill capacity through 2031. Per the 2016 Annual Report, the forecasted 2023 waste generation volume for the County is approximately 30.3 million tons. The estimated Project generation net increase of approximately 657 tons of waste per year would represent only 0.002 percent of the County waste generation of 30.3 million tons. **Thus, the Project's contribution to the County's cumulative waste stream would not be cumulatively considerable.**

(2) Consistency with Applicable Regulations

The Project's and each related project's construction contractor would deliver all construction and demolition waste generated to a Certified Construction and Demolition Waste Processing Facility in accordance with City Ordinance No. 181,519. Furthermore, in accordance with regulatory requirements, the Project, along with each related project, would implement waste reduction measures, including reducing construction-related solid waste generation through the recycling of construction and demolition debris and using recycled building materials for new construction. Thus, the Project and each of the related projects would promote source reduction and recycling, consistent with AB 939 and the City's Solid Waste Integrated Resources Plan, the City's General Plan Framework Element, the RENEW LA Plan, and the Green LA Plan. **Therefore, construction of the Project and each of the related projects would not conflict with any applicable state or City solid waste regulations.**

As mentioned above in Section 2.(a)(2)(a), Los Angeles County Integrated Waste Management Plan, the 2016 Annual Report determined that future disposal needs can be adequately met through 2031. The County will continue to address landfill capacity through the preparation of Countywide Integrated Waste Management Plan annual reports to address potential future shortfalls in landfill capacity. In addition, jurisdictions in the County

of Los Angeles continue to implement and enhance the waste reduction, recycling, special waste, and public education programs identified in their respective planning directives. These efforts, together with Countywide and regional programs implemented by the County and the cities, acting in concert or independently, have achieved significant, measurable results, as documented in the 2016 Annual Report. Based on this trend and because solid waste disposal is an essential public service that must be provided without interruption to protect public health and safety and the environment, concerted actions would continue to be taken by jurisdictions towards expanding and enhancing waste reduction and recycling programs, and implementing prudent solid waste management strategies in response to the strategies identified in the 2016 Annual Report. In addition, these actions would be consistent with AB 939, the County Integrated Waste Management Plan, and the City's Solid Waste Integrated Resources Plan, City's General Plan Framework Element, the RENEW LA Plan, and the Green LA Plan. Similar to the Project, the related projects would not conflict with AB 939, the County Integrated Waste Management Plan, the City's Solid Waste Integrated Resources Plan, the City's General Plan Framework Element, the RENEW LA Plan, or the Green LA Plan, and would promote source reduction and recycling, and be consistent with the relevant regulations and plans identified above. **Thus, cumulative impacts with regard to solid waste would be less than significant.**

e. Mitigation Measures

As discussed above, Project-level and cumulative impacts with regard to solid waste would be less than significant, and no mitigation measures are required.

f. Level of Significance After Mitigation

Project-level and cumulative impacts with regard to solid waste would be less than significant without mitigation.