

Waste Management Plan

Campus Point Master Plan Project City of San Diego, California

prepared for

LPA Design Studios 1600 National Avenue San Diego, California 92113

> prepared by Rincon Consultants, Inc.

> > April 24, 2020





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April 24, 2020 Project 19-08066

Eric Jones, Managing Director LPA Design Studios 1600 National Avenue San Diego, California 92113 *Via email: ejones@lpadesignstudios.com*

Subject: Waste Management Plan Campus Point Master Plan Project City of San Diego, California

Dear Mr. Jones,

Rincon has prepared a Waste Management Plan (WMP) for the Campus Point Master Plan Project (Project) located in the City of San Diego (City), California. The estimated solid waste to be generated by the proposed Project would exceed the City's Significance Determination Thresholds for the California Environmental Quality Act (CEQA). Therefore, preparation of the enclosed WMP is required to demonstrate how the proposed Project would reduce solid waste impacts to below a level of significance.

The purpose of this WMP for the Project is to provide analysis of the solid waste impacts anticipated for the Project and how those impacts would be mitigated in order to meet the goal established in Assembly Bill 341.

If you have any questions, or if we can be of any further assistance, please contact the undersigned.

Sincerely, Rincon Consultants, Inc.

undsay The

Lindsay Ellingson, EIT Environmental Engineer

Taks!

Torin Snyder, PG, CHG, ToR QSD/P, CPSS Principal

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1 Introduction

On behalf of Alexandria Real Estate Equities (ARE) and LPA Design Studios, consultant to ARE, Rincon Consultants, Inc. (Rincon) has prepared this Waste Management Plan (WMP) for the Campus Point Master Plan Project (Project). The purpose of this WMP for the Project is to provide analysis of the solid waste impacts anticipated for the Project and how those impacts would be mitigated. The goal of this WMP is to identify sufficient mitigation to reduce the potential impacts of the Project on solid waste services. Without implementation of the waste reduction and diversion methods herein, the estimated solid waste to be generated by the proposed Project would exceed the City of San Diego's (City) Significance Determination Thresholds for the California Environmental Quality Act (CEQA; City of San Diego, 2011). Preparation of a WMP is required to demonstrate how the proposed Project would reduce solid waste impacts to below a level of significance.

Two acceptable approaches to managing waste are to reduce construction and demolition waste disposed to 60 tons or less, or to provide diversion of 75 percent or more, thus meeting the goal established by Assembly Bill 341.

1.1 Project Location

The Project area consists of eight parcels totaling approximately 84.79 acres. The Project site is generally bounded by Los Peñasquitos Lagoon and Torrey Pines on the north, Interstate 805 (I-805) and Mira Mesa on the east, State Route 52 (SR-52) on the south, and La Jolla and the Pacific Ocean on the west (Figure 1).

The Project site is situated east of Interstate 5 (I-5), north of Campus Point Court, west of Campus Point Drive, and south of Roselle Street (Assessor's Parcel Numbers 343-230-13, 343-230-14, 343-230-38, 343-230-43, 343-230-42, 343-230-40, 343-230-41, 343-230-17). The Project site is in the unsectioned Pueblo Lands of San Diego land grant of the U.S. Geological Survey (USGS) 7.5-minute topographic map, Del Mar quadrangle. The Project site is bound on the north by undeveloped land, on the west by a steep hillside adjacent to I-5, on the east by vacant land, and on the south by industrial development (Figure 2).

The Project site is located on private property and is within the boundaries of the City's Multiple Species Conservation Program (MSCP) Subarea Plan and is partly within a Multi-Habitat Planning Area (MHPA; SANDAG, 2019). However, for this Project the construction work is being done to the south and west, away from the MHPA. The site is not within the Coastal Overlay Zone.

1.2 Project Description

The 84.79-acre Project site is bound by Campus Point Drive to the east, open space to the northeast, north, and west, and Campus Point Court to the south. The Project site consists of an 8 parcel campus and is located within the University Planning Area of San Diego. The existing parcels include 10300 Campus Point Drive, 10290 Campus Point Drive, 4110 Campus Point Court, 4161 Campus Point Court, 10260 Campus Point Drive, 4224 Campus Point Court, 4242 Campus Point Court, and 10210 Campus Point Drive, as well as two utility/central plant structures. The applicant proposes to

increase the existing approved development intensity of the combined sites from 1,673,633 gross floor area (GFA) to 1,901,913 GFA. The net increase of the proposed development intensity over the previous is 228,280 GFA.

The proposed development intensity increase would include the following existing buildings to remain: CP1, CP1-1, CP2, CP2-1, CPS1, CPS2, CPS3, and CPS4 with a total of 1,345,250 GFA. New buildings that are being processed separately under a ministerial permit include CP4 and P1, with a total of 245,607 GFA. Proposed new buildings within this permit include CP3, P5, CP6, CP7, and P2, which make up a total of 626,332 GFA. Other proposed improvements include reconfiguration of the main "Boulevard" (private road), which provides for circulation through the campus. Three existing buildings are planned to be demolished including the buildings at 10260 Campus Point Drive, 4110 Campus Point Court, and 4161 Campus Point Court, with a total of 315,276 GFA to be demolished. Additional new buildings proposed as a part of the development include CP3, CP5, CP6, CP7, and P2, with a total of 626,332 GFA.

1.3 Waste Management Plan

This WMP consists of four sections corresponding to the implementation of site development. These are the demolition phase, grading phase, construction phase, and occupancy (postconstruction). Each phase addresses the amount of waste that could be generated by Project activities based on current City generation rates and estimates, waste reduction goals, and the recommended techniques to achieve the waste reduction goals. Project construction is anticipated to begin in July of 2020 and would span approximately 22 months in total. This WMP includes the following general information known at the time the WMP was prepared:

- Projected waste generation calculations and identification of types of waste materials generated;
- Source separation techniques for waste generated;
- How materials will be reused on-site;
- Name and location of current recycling, reuse, and landfill facilities where waste will be disposed of if not reused on-site;
- A "buy recycled" program;
- Measures to be implemented directed at reducing construction debris;
- Method(s) for communicating waste reduction and recycling goals to subcontractors;
- A general timeline for construction and development; and
- A list of required progress and inspections by City staff, based on current ordinances.

2 Background

In 1989, the California Legislature passed Assembly Bill (AB) 939: Integrated Waste Management Act, which mandated that all cities reduce waste disposed in landfills from generators within their borders by 50 percent by the year 2000 (State of California, 1989). AB 939 required all local governments to prepare a Source Reduction and Recycling Element, which incorporates waste management policies and programs to achieve the mandated waste reduction. Since 1990, the City has diverted more than 50 percent of its generated waste stream from disposal. This bill specified that solid waste should be considered by the equation GENERATED = DISPOSED + DIVERTED. "Diverted" materials are put into a hierarchy in the law, as follows:

- First source reduction, such as using a reusable bag, making double-sided copies, or other measure that stops waste at the source.
- Secondary measures include recycling and composting. These measures are considered less
 preferable than source reduction because they often have transportation and processing
 impacts.
- In the Public Resources Code (PRC), various methods of "transformation" for energy production are limited to 10 percent of the total waste reduction target.

In 2008, Senate Bill (SB) 1016 was chaptered. Known as the Solid Waste Disposal Measurement Act, SB 1016 maintained the 50 percent diversion requirement but changed to a disposal-based measurement system, expressed as the 50 percent Equivalent Per Capita Disposal Target (State of California, 2010). This built upon AB 939 by implementing a simplified and timelier indicator of jurisdiction performance that focuses on reported disposal at California Integrated Waste Management Board-permitted disposal facilities. This established a goal of not recycling more; but disposing of less. AB 341: Jobs and Recycling, chaptered in 2011, was intended to create green jobs by expanding recycling to every multifamily dwelling and business (State of California, 2011). It charged CalRecycle with responsibility for ensuring that California is diverting at least 75 percent of the waste generated within the state by 2020. SB 1016 establishes that compliance with state law is measured by reducing the amount of waste material requiring disposal.

Additional local regulations pertaining to solid waste management include City of San Diego Municipal Code Chapter 14 Article 2 Division 8: §142.0810, and §142.0820 (City of San Diego, 2007b); Chapter 6 Article 6 Division 7: §66.0706, §66.0709, and §66.0710 (City of San Diego, 2007a); and Chapter 6 Article 6 Division 6: §66.0711, §66.0604, and §66.0606 (City of San Diego, 2008a). These statutes designate refuse and recycling space allocation requirements for:

- On-site refuse and recyclable material storage requirements;
- Diversion of construction and demolition debris regulations; and
- Diversion of recyclable materials generated from residential facilities, businesses, commercial/institutional facilities, apartments, condominiums, and special events requiring a City permit.

The City has established a threshold of 40,000 square feet of development as generating sufficient waste (60 tons) to have a potentially cumulatively significant impact on solid waste services. The

Project as proposed exceeds this threshold. The purpose of this WMP is to identify mitigation measures to reduce this potential impact to below a level of significance.

The City Recycling Ordinance is found in Municipal Code Section 66.0701 et. seq. It requires the provision of recycling service for all single-family residences; and commercial facilities and multifamily residences with service for 4 cubic yards or more. In addition, the ordinance also requires development of educational materials to ensure occupants are informed about the City's ordinance and recycling services, including information on types of recyclable materials accepted.

On July 13, 2015, the City Council approved a Zero Waste Plan. The Zero Waste Plan is a framework of potential sustainable diversion strategies for future action that would be implemented in incremental steps to achieve 75 percent diversion by 2020; 90 percent diversion by 2035, the goal currently proposed in the City's Draft Climate Action Plan; and zero waste by 2040. Construction and Demolition (C&D) Debris Diversion Deposit Program applies to all applicants for building, demolition, and removal permits. This ordinance requires that the applicant post a deposit (Table 1, Construction & Demolition Debris Deposit Table). The deposit is not returned until the applicant demonstrates that a minimum amount of the material generated has been diverted from disposal in landfills. Mixed construction debris recycling facilities in San Diego are evaluated quarterly to determine how much of the throughput is recycled, and how much is a "residual" material requiring disposal. Facilities that accept mixed debris typically achieve a 68 percent or less diversion rate. Single materials recyclers, such as metal recyclers, often achieve a nearly 100 percent diversion rate. When comingled materials are sent to a mixed facility, the 75 percent diversion goal established by AB 341 will not be met. Depending on the Project, to ensure that the overall diversion goal is attained, some materials must often be separated and trucked to facilities with higher diversion rates, such as aggregate and metal recyclers.

AB 1826, approved September 2014 and partially effective January 2016 requires a business in California that generates greater than two cubic yards of organic waste per week to arrange for recycling services for that organic waste in a specified manner (State of California 2014).

The Project would implement environmentally sound waste management by salvaging material such as steel, copper, other metals, and equipment; and reusing material such as concrete, steel, and asphalt. To the extent feasible, the Project would recycle, salvage, and reuse materials and then divert materials to the landfill.

Building Category	Square Feet Subject to Ordinance	Deposit per Square Foot	Range of Deposits
Residential New Construction	500-125,000 detached 500-100,000 attached	\$0.40	\$200-\$50,000 \$200-\$40,000
Non-residential New Construction	1,000-25,000 commercial 1,000-75,000 industrial	\$0.20	\$200-\$5,000 \$200-\$15,000
Non-residential Alternations	286 with no maximum	\$0.70	\$200 and up
Residential Demolition	286 with no maximum	\$0.70	\$200 and up
Non-residential Demolition	1,000 with no maximum	\$0.20	\$200 and up
Roof Tear-off	All projects	-	\$200
Residential Alterations	500 and above	_	\$1,000

Source: City of San Diego Environmental Services Department CEQA Guidelines for a Waste Management Plan (City of San Diego, 2013).

*Projects under the minimum square footage subject to the ordinance are exempt from the C&D debris recycling deposit.

2.1 Exterior Refuse and Recyclable Material Storage Area Requirements

The Project would be developed in four phases (grading, demolition, construction, and operational/occupancy) over an approximate 18-month period. Development is anticipated to begin October 2020. The Project would provide exterior refuse and recyclable material storage areas in accordance with City regulations per Chapter 14, Article 2, Division 8: Refuse and Recyclable Material Storage Regulations, §142.0820 and §142.0830 (City of San Diego, 2007b).

2.2 Exterior Refuse and Recyclable Material Storage Areas for the Science and Business Park

The Project would develop a Science and Business Park covering an area of approximately 1,901,913 square feet (approximately 43.66 acres). The increase in square footage based on new construction is approximately 228,280 square feet (5.24 acres). Table 2, Minimum Exterior and Recyclable Material Storage Areas for New Nonresidential Development, shows the required amount of refuse and recyclable storage areas for the Project. For nonresidential buildings, the total storage area is based on the gross floor area on the premises.

Per the requirements in Table 2, the Project would be required to provide a minimum 480 square feet of each exterior refuse and recyclable material storage area, for a total of 960 square feet of material storage area.

Gross Floor Area Per Development (square feet)	Minimum Refuse Storage Area Per Development (square feet)	Minimum <i>Recyclable Material</i> Storage Area Per Development (square feet)	Total Minimum Storage Area Per Development (square feet)			
0-5,000	12	12	24			
5,000-10,000	24	24	48			
10,001-25,000	48	48	96			
25,001-50,000	96	96	192			
50,001-75,000	144	144	288			
75,001-100,000	192	192	384			
100,001+192 plus 48 square feet for every 25,000 square feet of building area above 100,001192 plus 48 square feet for every 25,000 square feet of building area above 100,001384 plus 96 square feet for every 25,000 square feet of building area above 100,001						
Source: City of San Diego Municipal Code, Chapter 14, Article 2, Division 8: Refuse and Recyclable Material Storage Regulations, §142.0820, Table 142-08C, effective January 1, 2000						

Table 2Minimum Exterior Refuse and Recyclable Material Storage Areas for
Nonresidential Development

3 Construction and Demolition Waste

The following describes grading phase, the demolition phase, and the construction phase.

3.1 Grading Phase

The proposed development would occur within previously disturbed and developed portions of the site. Implementation of the proposed Project would require approximately 201,510 cubic yards of soil cut and 40,820 cubic yards of fill (160,690 cubic yards net export) to allow for construction of the subgrade building development and the construction of the subgrade parking structure, exporting all materials. Based on the ESD Construction and Demolition Debris Conversion Rate Table, export soil weighs approximately 1.3 tons per cubic yard. Therefore, grading for the Project would result in a net export of approximately 208,897 tons, as shown in Table 3. All exported soil would be recycled using the City of San Diego Clean Fill Dirt Program or an approved clean fill dirt handler (City of San Diego, 2019a).

Table 3 Grading Phase Waste Generation

Net Export (cubic yards)	Generation Rate (tons per cubic yard)	Tons Exported	Percent Diverted	Diverted	Disposed
160,690	1.3	208,897	100	208,897	0

Any vegetation removed would be taken to the Miramar Greenery facility for 100 percent reuse. Diversion goals will be communicated to contractors through contract documents.

3.2 Demolition Phase

The Project site currently serves as a scientific research and development facility. The demolition phase will include the deconstruction/demolition and removal of the 4110 and 4161 Campus Point Court buildings, associated structures, asphalt parking and walkway areas, and interior landscaping. A total of approximately 315,276 square feet would be demolished. According to a 2009 study by the U.S. Environmental Protection Agency (U.S. EPA), a sample of nonresidential demolition projects generated an average of 158 pounds of waste per square foot (U.S. EPA, 2009). Approximately 24,907 tons of waste is expected to be generated during demolition.

Estimates of material type and amounts are included in Table 4. Anticipated proportions of demolition debris to be diverted for recycling are 87 percent. Estimates of material type and amounts are based on the County of San Diego's Construction and Demolition Debris Recycling Calculator. As such, these estimates have a degree of uncertainty and would be revised as more demolition information is made available. As outlined in Table 4, materials anticipated to be involved in demolition include:

- Asphalt and concrete
- Brick/Masonry/Tile

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- Carpet/Padding/Foam
- Drywall
- Landscape Debris
- Mixed C&D Debris
- Scrap Metal
- Untreated Wood Waste
- Garbage/Trash

Waste Type	Estimated Waste ¹ (tons)	Percent Diverted	Nearest Handling Facility ²	Diverted (tons)	Disposed (tons)
Asphalt and Concrete	9,839	100	Hanson Aggregates West – Miramar 9229 Harris Plant Rd San Diego, CA 92154	9,839	_
Brick/ Masonry/ Tile	946	100	Vulcan Carol Canyon Landfill and Recycle Site 10051 Black Mountain Rd San Diego, CA 92126	946	_
Carpet/ Padding/ Foam	573	100	Los Angeles Fiber Company 4920 S. Boyle Ave Vernon, CA 90058	573	_
Drywall	174	100	SCOR Industries 2321 South Willow Ave Bloomington, CA 92316	174	_
Landscape Debris	199	100	Miramar Greenery, City of San Diego 5180 Convoy St San Diego, CA 92126	199	_
Mixed C&D Debris	5,305	68	EDCO Recovery & Transfer 3660 Dalbergia St San Diego, CA 92113	3,607	1,698
Scrap Metal	2,042	100	Allan Company 6733 Consolidated Wy San Diego, CA 92121	2,042	_
Untreated Wood Waste	4,359	100	Miramar Greenery, City of San Diego 5180 Convoy St San Diego, CA 92126	4,359	_
Garbage/ Trash	1,469	0	EDCO Recovery & Transfer 3660 Dalbergia St San Diego, CA 92113	_	1,469
Total	24,907	-	-	21,739 (87%)	3,168 (13%)

Table 4 Demolition Phase Waste Generation	Demolition Phase Waste Generation
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¹ County of San Diego Department of Public Works Debris Recycling Calculator (County of San Diego, 2007).

² City of San Diego ESD 2019 Certified C&D Recycling Facility Directory (City of San Diego, 2019b)

3.3 Construction Phase

According to the above referenced 2009 study by the U.S. EPA, a sample of nonresidential renovation projects generated an average of 4.34 pounds of waste per square foot (U.S. EPA, 2009). Based on these generation rates, the proposed development area of 228,280square feet, it is estimated that 495 tons of waste would be generated during construction. Estimates of material type and amounts are included in Table 5. Anticipated proportions of demolition debris to be diverted for recycling are 84 percent. Estimates of material type and amounts are based on the County of San Diego's Construction and Demolition Debris Recycling Calculator. As such, these estimates have a degree of uncertainty and would be revised as more construction information is made available. As outlined in Table 5, materials anticipated to be involved in construction include:

- Asphalt concrete
- Brick/masonry/tile
- Carpet/padding/foam
- Drywall
- Landscape debris
- Mixed C&D debris
- Scrap metal
- Untreated wood waste
- Garbage/Trash

Material Type	Estimated Waste ¹ (tons)	Percent Diverted ¹	Nearest Handling Facility	Estimated Diversion (tons)	Estimated Disposal (tons)
Asphalt and Concrete	123	100	Hanson Aggregates West – Miramar 9229 Harris Plant Rd San Diego, CA 92154	123	_
Brick/ Masonry/ Tile	57	100	Vulcan Carol Canyon Landfill and Recycle Site 10051 Black Mountain Rd San Diego, CA 92126	57	_
Carpet/ Padding/ Foam	5	100	Los Angeles Fiber Company 4920 S. Boyle Ave Vernon, CA 90058	5	-
Drywall	33	100	SCOR Industries 2321 South Willow Ave Bloomington, CA 92316	33	_
Landscape Debris	8	100	Miramar Greenery, City of San Diego 5180 Convoy St San Diego, CA 92126	8	_
Mixed C&D Debris	82	68	EDCO Recovery & Transfer 3660 Dalbergia St San Diego, CA 92113	56	26
Scrap Metal	15	100	Allan Company 6733 Consolidated Wy San Diego, CA 92121	15	_
Untreated Wood Waste	119	100	Miramar Greenery, City of San Diego 5180 Convoy St San Diego, CA 92126	119	_
Garbage/ Trash	52	0	EDCO Recovery & Transfer 3660 Dalbergia St San Diego, CA 92113	-	52
Total	495	_	-	416 (84%)	79 (16%)

Table 5	Construction	Phase	Waste	Generation
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Note:

Quantity estimates are approximate

¹County of San Diego Department of Public Works Debris Recycling Calculator (County of San Diego, 2007).

²City of San Diego ESD 2019 Certified C&D Recycling Facility Directory (City of San Diego, 2019b).

3.4 Use of Recycled Construction Materials

Consistent with the proposed LEED Silver standard, the proposed Project target the purchase of recycled construction materials. This would be verified by providing "materials purchased summaries" to City staff at the beginning of construction and throughout construction as materials are purchased.

3.5 Waste Diversion

Waste diversion methods include mixed debris and source separation. Diversion of mixed debris requires all material waste to be disposed of in a single container for transport to a mixed C&D transfer station or facility. Source separated diversion requires materials to be separated on-site before transport to appropriate facilities that accept specific material types.

Source separation would be the primary method implemented during demolition and construction. Separation of the materials listed in Tables 4 and 5 and subsequent transfer of separated materials to handling facilities would achieve greater than 74 percent diversion rate required for the proposed Project.

In order to ensure source separation is being carried out to the greatest extent possible, waste diversion strategies would be discussed with the contractor during preconstruction meetings.

3.5.1 Mixed Debris

In the cases where items are difficult to separate, source separation may be infeasible, and materials would therefore be disposed of in a single container. Such mixed C&D material would be disposed of at a mixed C&D transfer station or facility. As shown in the City of San Diego's ESD 2019 Certified C&D Recycling Facility Directory (Appendix A; City of San Diego, 2019b), a diversion rate of less than 68% would be achieved. To ensure that the overall diversion goal of 75 percent is attained, materials must be source separated and trucked to facilities with higher diversion rates whenever possible.

3.5.2 Source Separation

The types of construction and demolition waste listed in Tables 4 and 5 would be separated on-site into material-specific containers to facilitate reuse and recycling. Source separation achieves a nearly 100 percent diversion rate and is essential to attain the overall diversion goal of 75 percent, to minimize the costs associated with transportation and disposal, and to facilitate compliance with the City of San Diego's C&D ordinance.

3.5.3 Contractor Education and Responsibilities

To facilitate management of construction materials, the construction contractor shall identify one person or agency connected with the proposed Project to act as Solid Waste Management Coordinator (SWMC). The responsibility of the SWMC would be to work with all contractors and subcontractors to ensure material separation and coordinate proper disposal and diversion of waste generated. The SWMC would ensure all diversion practices outlined in this WMP are upheld and communicate goals to all contractors involved efficiently. The responsibilities of the SWMC include, but are not limited to:

- Review the WMP at the preconstruction meetings and distribute WMP to all contractors;
- Coordinate and oversee salvage operations, if practical;
- Review and update procedures as needed for material separation and verify availability of containers needed to avoid delays;
- Review and update procedures for periodic solid waste collection and transportation to recycling and disposing facilities; and
- The authority to issue stop work orders if proper procedures are not being followed.

4 Occupancy

While demolition of the existing buildings and construction of the new buildings occur as a onetime waste generation event, tenant/owner occupancy requires an ongoing plan to manage waste disposal to meet the waste reduction goals established by the City and state.

4.1 Solid Waste Recycling

Table 6 expresses the anticipated refuse and recyclable storage requirements based on Table 142.08C of the City of San Diego Municipal Code §142.0820 (City of San Diego, 2007b).

Land Use	Gross Floor Area (square feet)	Minimum Refuse Storage Area (square feet)	Minimum <i>Recyclable Material</i> Storage Area (square feet)	Total Minimum Storage Area (square feet)	
Commercial Office/ Restaurant Space	228,280	480	480	960	
Source: City of San Diego Municipal Code, Chapter 14, Article 2, Division 8: Refuse and Recyclable Material Storage Regulations, §142.0820, Table 142-08C, effective January 1, 2000.					

Table 6 Minimum Exterior and Recyclable Storage Areas

As shown in Table 7, Estimated Solid Waste Generation from the Project – Occupancy Phase, the expected generated waste per year from the Project when fully occupied would be approximately 18.25 tons.

Land Use	Intensity/Size (square feet)	Waste Generation Rate (Ibs/sf/day)	Estimated Waste Generated (tons/year)									
Commercial Office/ Restaurant Space	228,280	0.05	1,489									
Source: 2006 Waste Characterization, Commercial Sector Generation Rates: Estimated Solid Waste Generation Rates: California Department of Resources Recycling and Recovery (State of California, 2006).												
Note: Estimated annual Office of Personnel Man	•	s an average of 260.9 wor	king days per year (U.S.									

On-site recycling services shall be provided to the Project. Tenants of the new buildings shall participate in a recycling program by separating recyclable materials from other solid waste and depositing the recyclable materials in the recycling container provided for each tenant. Recycling services are required by Section 66.0707 of the City of San Diego Land Development Code. Based on current requirements, these services shall include the following:

- Collection of recyclable materials as frequently as necessary to meet demand;
- Collection of plastic bottles and jars, paper, newspaper, metal containers, cardboard, and glass containers;
- Collection of other recyclable materials for which markets exist, such as scrap metal, wood pallets;
- Collection of food waste for recycling by composting, where available (prior to issuance of building and occupancy permits, the Project proponent would meet with representatives from ESD to ensure that their educational materials and haulers can comply with the requirements for this service);
- Use of recycling receptacles or containers that comply with the standards in the Container and Signage Guidelines established by ESD;
- Designated recycling collection and storage areas;
- Signage on all recycling receptacles, containers, chutes, and/or enclosures in compliance with the standards described in the Container and Signage Guidelines established by ESD.

As required by Section 66.0707 of the City of San Diego Land Development Code, the building management or other designated personnel shall ensure that occupants are educated about the recycling services as follows:

- Information, including the types of recyclable materials accepted, the location of recycling containers, and the occupants' responsibility to recycle shall be distributed to all occupants annually;
- All tenants shall be given information and instructions upon occupancy; and
- All tenants shall be given information and instructions upon any change in recycling service.

4.2 Landscaping and Green Waste Recycling

Plant material selection would be guided by the macro-and micro-climate characteristics of the Project site and surrounding region to encourage long-term sustainability without the excessive use of water pesticides and fertilizers. Irrigation of these areas, where practical, would utilize reclaimed water applied via low precipitation rate spray heads, drip emitters, or other highly efficient systems. Landscape maintenance would include the collection of green waste and disposal of green waste at recycling centers that accept green waste. This would help further reduce the waste generated by developments within the Project during the occupancy phases.

5 Conclusion

The City of San Diego Development Services Department is requiring that this preliminary WMP be prepared and submitted to the City of San Diego's ESD. Since the Project is in the Draft CEQA document phase, this is only a preliminary plan, which specifies the intent to meet the requirements and goals of the PRC and City plans and ordinances.

This WMP would be implemented to the fullest degree of accuracy and efficiency. Additionally, the Project would be required to adhere to City ordinances, including the Construction and Demolition Debris Diversion Deposit Program, the City's Recycling Ordinance, and the Refuse and Recyclable Materials Storage Regulations. The WMP plan for the Project is designed to implement and adhere to all City ordinances and regulations with regard to waste management. The measures in the WMP would ensure that impacts are mitigated to below a level of significance.

Prior to the issuance of any grading or construction permits, SWMC would ensure ESD's attendance at a pre-construction meeting. The SWMC would ensure that (1) the proposed approach to contractor education is approved, (2) the written specifications for base materials, concrete pavers, decomposed granite, and mulch, are approved, and (3) that the ESD inspector approves the separate waste containers, signage, and hauling contract(s) for the following materials:

- Asphalt concrete
- Brick/masonry/tile
- Carpet/padding/foam
- Drywall
- Landscape debris
- Mixed C&D debris
- Scrap metal
- Untreated wood waste
- Garbage/Trash

The Project would be designed to achieve 75 percent of construction waste to be diverted and/or recycled, by incorporating several measures above and beyond the requirements of local ordinance.

Recycling rates can be used as an indication of the effectiveness of the campus waste reduction program, but the goal is not to recycle more, but to dispose of less. Ongoing coordination with the City and implementation of revised programs shall ensure that the disposal rate is below the disposal rate of the existing facility, with a goal to continually decline over time.

- The Project would include landscaping that would reduce yard waste and would provide transportation to a composting facility for the yard waste that is produced. ESD would review the landscaping plans and hauling contract for the Project to verify that waste reduction goals are met.
- The Project would include LEED measures to reduce waste.
- The Project would implement environmentally sound waste management by salvaging material such as steel, copper, other metals, and equipment; and reusing material such as concrete,

steel, and asphalt. To the extent feasible, the Project would recycle, salvage, and reuse materials and then divert materials to a landfill.

The following standard mitigation applies to the Project to reduce cumulative impacts on solid waste to below a level of significance:

I. Prior to Permit Issuance or Bid Opening/Bid Award

- A. Land Development Review Plan check
 - Prior to the issuance of any construction permit, including but not limited to demolition, grading, building, or any other construction permit, the Assistant Deputy Director Environmental Designee shall verify that the all the requirements of the Refuse and Recyclable Materials Storage Regulations and all of the requirements of the waste management plan are shown and noted on the appropriate construction documents. All requirements, notes, and graphics shall be in substantial conformance with the conditions and exhibits of the associated discretionary approval.

The construction documents shall include a waste management plan. Notification shall be sent to the following:

MMC Environmental Review Specialist Development Service Department 9601 Ridgehaven Court Ste. 220, MS 1102 B San Diego, California 92123 1636 (619) 980 7122

Environmental Services Department (ESD) 9601 Ridgehaven Court Ste. 210, MS 1102 A San Diego, California 92123 1636 (858) 573-1236

II. Prior to Start of Construction

- A. Grading and Building Permit Prior to issuance of any grading or building permit, the permittee shall be responsible to arrange a preconstruction meeting to coordinate the implementation of the Mitigation Monitoring Reporting Program (MMRP). The Preconstruction Meeting shall include the Construction Manager, Building/Grading Contractor; MMC; and ESD and the Building Inspector (BI) and/or the Resident Engineer (RE) (whichever is applicable) to verify that implementation of the waste management plan shall be performed in compliance with the plan approved by LDR and the San Diego ESD, to ensure that impacts to solid waste facilities are mitigated to below a level of significance.
 - 1. At the Preconstruction Meeting, the Permittee shall submit reduced copies (11 inches x 17 inches) of the approved waste management plan to the RE, BI, MMC, and ESD.
 - 2. Prior to the start of construction, the Permittee/Construction Manager shall submit a construction schedule to the RE, BI, MMC, and ESD.

III. During Construction

The Permittee/Construction Manager shall call for inspections by the RE/BI and both MMC and ESD, who would periodically visit the demolition/construction site to verify implementation of the waste management plan. The Consultant Site Visit Record shall be used to document the Daily Waste Management Activity/progress.

IV. Post Construction

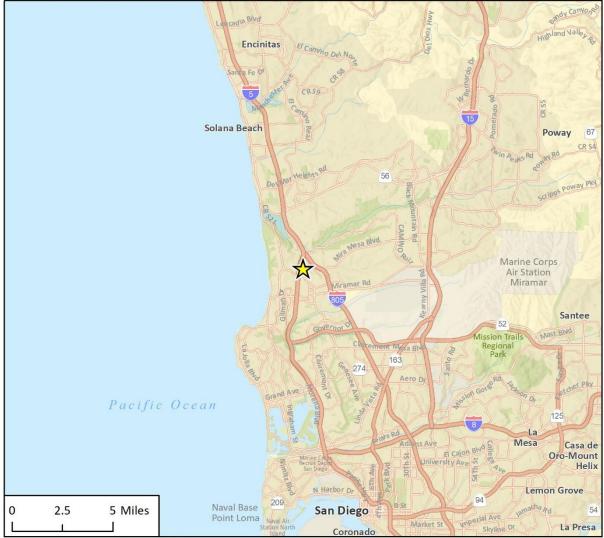
Within 30 days after the completion and implementation of the MMRP, for any demolition or construction permit, a final results report shall be submitted to both MMC and ESD for review and approval to the satisfaction of the City. MMC would coordinate the approval with ESD and issue the approval notification. ESD would review/approve City Recycling Ordinance required educational materials prior to occupancy.

6 References

- City of San Diego. 2007a. Recycling Ordinance. San Diego Municipal Code Chapter 6, Article 6, Division 7. November 20, 2007.
- _____. 2007b. Refuse and Recyclable Materials Storage Regulations. Municipal Code Chapter 14, Article 2, Division 8. December 9, 2007.
- _____. 2008a. Construction and Demolition Debris Diversion Deposit Program. San Diego Municipal Code Chapter 6, Article 6, Division 6.
- _____. 2008b. Construction and Demolition Debris Conversion Rate Table. San Diego Environmental Services Department. May 2008.
- _____. 2011. Significance Determination Thresholds. California Environmental Quality Act. January 2011.
- 2013. California Environmental Quality Act Guidelines for a Waste Management Plan. San Diego Environmental Services Department. June 2013. https://www.sandiego.gov/sites/default/files/legacy/environmentalservices/pdf/recycling/wmpguidelines.pdf Accessed online January 10, 2020.
 - ___. 2019a. Clean Fill Dirt Program. San Diego Environmental Services Department. http://www.sandiego.gov/environmental-services/miramar/cfdp.shtml. Accessed online January 10, 2020.
- _____. 2019b. 2019 Certified Construction and Demolition Recycling Facility Directory, San Diego Environmental Services Department.
- County of San Diego. 2007. County of San Diego Construction and Demolition Debris Recycling. https://www.sandiegocounty.gov/content/sdc/dpw/recycling/cdfaq.html. Accessed online January 13, 2020.
- San Diego Association of Governments (SANDAG). 2019. Multi-Habitat Planning Area in San Diego.
- State of California. 1989. Assembly Bill 939. Integrated Waste Management Act.
 - _____. 2006. Waste Characterization, Commercial Sector Generation Rates: Estimated Solid Waste Generation Rates: California Department of Resources Recycling and Recovery. https://www2.calrecycle.ca.gov/WasteCharacterization/General/Rates. Accessed online January 10, 2020.
- _____. 2010. Senate Bill 1016. Solid Waste Per Capita Disposal Measurement Act.
- _____. 2011. Assembly Bill 341. Jobs and Recycling.
- U.S. Environmental Protection Agency (U.S. EPA). 2009. Estimating 2003 Building-Related Construction and Demolition Materials Amounts. March 2009.
- U.S. Office of Personnel Management. 2020. Fact Sheet: Computing Hourly Rates of Pay Using the 2,087-Hour Divisor. https://www.opm.gov/policy-data-oversight/pay-leave/pay-administration/fact-sheets/computing-hourly-rates-of-pay-using-the-2087-hour-divisor/. Accessed online January 15, 2020

Figures





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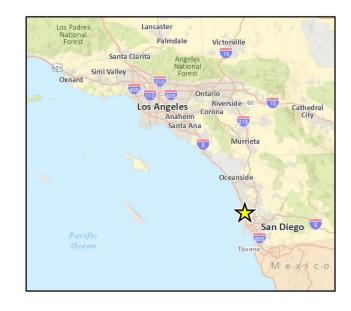
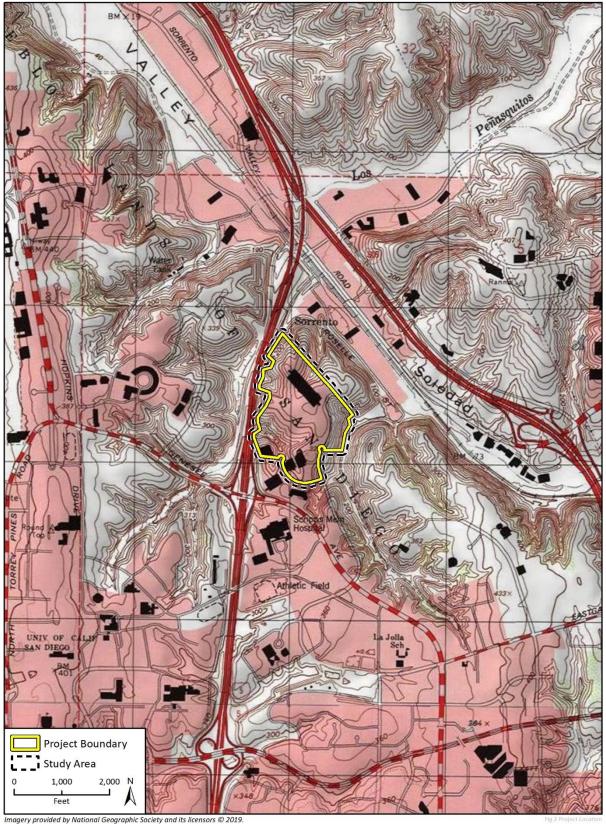


Figure 2 Project Site





City of San Diego Environmental Services Department 2019 Certified Construction and Demolition Recycling Facility Directory



2019 Certified Construction & Demolition (C&D) Recycling Facility Directory

These facilities are certified by the City of San Diego to accept materials listed in each category. Hazardous materials are not accepted. The diversion rate for these materials shall be considered 100 percent, except mixed C&D debris, which update quarterly. The City is not responsible for changes in facility information. Please call ahead to confirm details such as accepted materials, days and hours of operation, limitations on vehicle types, and cost. For more information visit: www.recyclingworks.com

*Transfer Stations offer both recycling and trash disposal																		
services. In order to receive recycling credit, you must:																		
-Notify the weighmaster your load is subject to the City of San				ğ														
Diego C&D Ordinance.				(en:							Iste							
-If your load is mixed Construction and Demolition (C&D) debris,				or					ain		٨a			ŝ				
ensure it is coded correctly on the receipt. Tickets coded as	iz.	e l	<u> </u>	ls f					cel		sen		s	nre			s	
"MSW, trash or refuse" will receive 0% credit.	Mixed C&D Debris	Asphalt/Concrete	Brick/Block/Rock	Building Materials for Reuse			ng		Ceramic Tile/Porcelain		Clean Wood/Green Waste		Industrial Plastics	Lamps/Light Fixtures			Styrofoam Blocks	
-Ensure the project address and Permit number are added to the	DD	l G	Ř	/at	8		Carpet Padding	e	ile/	Clean Fill Dirt	/po		Pla	ght		Mixed Inerts	BI ا	
receipt.	30	₽	Sec.	20	Cardboard		: Pa	Ceiling Tile	ic T	Ē	۸o	=	rial	/Li£		Ine	oan	
Please note: Miramar Landfill and other landfills DO NOT	ked	ha	ck/i	ldir	db.	Carpet	pet	ling	am.	an	an	Drywall	ust	sdu	Metal	ked	rof	Trash
recycle mixed C&D debris.	Ξ	Asp	Bri	Bui	Gal	Cal	Cai	Cei	Cel	Cle	Cle	Ъ	Ind	Lar	Me	Δi	Sty	Tra
EDCO Recovery & Transfer					-													
3660 Dalbergia St, San Diego, CA 92113	68%																	
619-234-7774 <u>www.edcodisposal.com</u>	0070											-						
EDCO Station Transfer Station & Buy Back Center																		
8184 Commercial St, La Mesa, CA 91942	68%				•							•			•			
619-466-3355 www.edcodisposal.com	0870											-			-			
EDCO CDI Recycling & Buy Back Center		<u> </u>																
224 S. Las Posas Rd, San Marcos, CA 92078	89%						•											
760-744-2700 www.edcodisposal.com	0570				•	•	•								•			
Escondido Resource Recovery																		
1044 W. Washington Ave, Escondido	68%																	
760-745-3203 <u>www.edcodisposal.com</u>	0670																	
Fallbrook Transfer Station & Buy Back Center					-													
550 W. Aviation Rd, Fallbrook, CA 92028	68%																	
760-728-6114 www.edcodisposal.com	0070				•										•			
Otay C&D/Inert Debris Processing Facility																		
1700 Maxwell Rd, Chula Vista, CA 91913	79%																	
619-421-3773 <u>www.sd.disposal.com</u>	1370																	
Ramona Transfer Station & Buy Back Center																		
324 Maple St, Ramona, CA 92065	68%																	
760-789-0516 www.edcodisposal.com	0070														-			
SANCO Resource Recovery & Buy Back Center																		
6750 Federal Blvd, Lemon Grove, CA 91945	68%						•											
619-287-5696 www.edcodisposal.com	0870					-	-								-			
Allan Company																		
6733 Consolidated Wy, San Diego, CA 92121																		
858-578-9300 www.allancompany.com/facilities															-			
Allan Company Miramar Recycling																		
5165 Convoy St, San Diego, CA 92111																		
858-268-8971 www.allancompany.com/facilities															-			
Armstrong World Industries, Inc.																		
300 S. Myrida St, Pensacola, FL 32505																		
877-276-7876 (Press 1, Then 8)								•										
www.armstrong.com/commceilingsna																		
CMS Recycling Inc.																		
1428 West Mission Rd, Escondido, CA 92029					•										•			
760-741-6300 www.cmsmetals.com																		
DFS Flooring																		
10178 Willow Creek Rd, San Diego, CA 92131						•	•											
858-630-5200 www.dfsflooring.com																		
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*Transfer Stations offer both recycling and trash disposal services. In order to receive recycling credit, you must: -Notify the weighmaster your load is subject to the City of San Diego C&D Ordinance. -If your load is mixed Construction and Demolition (C&D) debris, ensure it is coded correctly on the receipt. Tickets coded as "MSW, trash or refuse" will receive 0% credit. -Ensure the project address and Permit number are added to the receipt. Please note: Miramar Landfill and other landfills DO NOT recycle mixed C&D debris.	Mixed C&D Debris	Asphalt/Concrete	Brick/Block/Rock	Building Materials for Reuse	Cardboard	Carpet	Carpet Padding	Ceiling Tile	Ceramic Tile/Porcelain	Clean Fill Dirt	Clean Wood/Green Waste	Drywall	Industrial Plastics	Lamps/Light Fixtures	Metal	Mixed Inerts	Styrofoam Blocks	Trash
Duco Metals 220 Bingham Drive Suite 100, San Marcos, CA 92069 760-747-6330 I <u>www.ducometals.com</u>															•			
Escondido Materials 500 N. Tulip St, Escondido, CA 92025 760-432-4690 <u>www.weirasphalt.com</u>		•																
Habitat for Humanity ReStore 8101 Mercury Ct, San Diego, CA 92108 619-516-5267 <u>www.sandiegohabitat.org</u>				•														
Hanson Aggregates – Hollister St 389 Hollister St, San Diego, CA 92154 858-974-3849		•																
Hanson Aggregates West – Lakeside Plant 12560 Highway 67, Lakeside, CA 92040 858-547-2141		•																
Hanson Aggregates West – Miramar 9229 Harris Plant Rd, San Diego, CA 92126 858-974-3849		•								•								
HVAC Exchange 2675 Faivre St, Chula Vista, CA 91911 619-423-1564 <u>www.hvacx.com</u>															•			
Inland Pacific Resource Recovery 12650 Slaughterhouse Canyon Rd, Lakeside, CA 92040 619-390-1418 <u>www.iprrgreen.com</u>											•							
Los Angeles Fiber Company 4920 S. Boyle Ave, Vernon, CA 90058 323-589-5637 <u>www.lafiber.com</u>						•	•											
Miramar Greenery, City of San Diego 5180 Convoy St, San Diego, CA 92111 858-694-7000 <u>www.miramargreenery.com</u>											•							
Moody's 3210 Oceanside Blvd, Oceanside, CA 92056 760-433-3316 <u>www.moodyselcorazonrecycling.com</u>		•								•						•		
Planet Recycling 187 Mace St, Chula Vista, CA 91911 888-258-7755 <u>www.planetrecyclingphoenix.com</u>						•												
RAMCO 8354 Nelson Way, Escondido, CA 92026 760-205-1797 <u>www.ramco.us.com</u>		•																
Reclaimed Aggregates Chula Vista 855 Energy Way, Chula Vista, CA 91913 619-656-1836		•														•		
Robertson's Ready Mix 2094 Willow Glen Dr, El Cajon, CA 92019 619-593-1856 <u>www.rrmca.com</u>		•								•						•		
Rockridge Crushing 12485 Highway 67, Lakeside, CA 92040 619-324-6570		•																
SA Recycling 3055 Commercial St, San Diego, CA 92113 619-238-6740 <u>www.sarecycling.com</u>															•			

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SA Recycling 1211 S. 32 nd St, San Diego, CA 92113															•			
619-234-6691 www.sarecycling.com																		
SCOR Industries																		
2321 South Willow Ave, Bloomington, CA 92316		•	•		•				•		•	•	•		•	•		
909-820-5046 www.scorindustries.com																		
Terra Bella Nursery																		
302 Hollister St, San Diego, CA 92154										•	•							
619-585-1118 www.terrabellanursery.com																		
Vulcan Carol Canyon Landfill and Recycle Site																		
10051 Black Mountain Rd, San Diego, CA 92126		•	•							•						•		
858-530-9465 <u>www.vulcanmaterials.com</u>																		
Vulcan Materials Company																		
2275 Hard Rock Rd, Chula Vista, CA 91913		•																
858-530-9472 www.vulcanmaterials.com																		
Vulcan Otay Asphalt Recycle Center																		
7522 Paseo de la Fuente, San Diego, CA 92154		•																
619-571-1945 <u>www.vulcanmaterials.com</u>																		