



**Waste Management Plan for the  
College View Apartments Project  
San Diego, California**

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A handwritten signature in black ink, appearing to read "Morgan Weintraub".

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## Acronyms and Abbreviations

AB	Assembly Bill
C&D	Construction and Demolition
CalRecycle	California's Department of Resources Recycling and Recovery
City	City of San Diego
ESD	Environmental Services Department
MHPA	Multi-habitat planning area
project	College View Apartments Project
SDSU	San Diego State University
SWMC	Solid Waste Management Coordinator
U.S. EPA	U.S. Environmental Protection Agency
WMP	Waste Management Plan

## 1.0 Introduction

The College View Apartments Project (project) is located at 5420–22 55<sup>th</sup> Street in the city of San Diego, California. The 2.39-acre project site is located west of 55<sup>th</sup> Street and northwest of Canyon Crest Drive adjacent to the San Diego State University (SDSU) campus. Existing development occurs to the east and south of the site. A small canyon occurs to the west of the site along with scattered smaller developments on the ridgelines. The project site is currently developed with a 32-unit apartment complex.

The project would demolish the existing buildings on-site and construct a six-story building consisting of 90 one- to four-bedroom units for a total of 301 bedrooms. The six-story 90-unit apartment building would be 175,667 square feet and consist of a 48-space parking garage (21,132 square feet), a leasing office (980 square feet), a lobby (1,721 square feet), and a fitness center (953 square feet). The project would also include a pool and spa totaling 847 square feet.

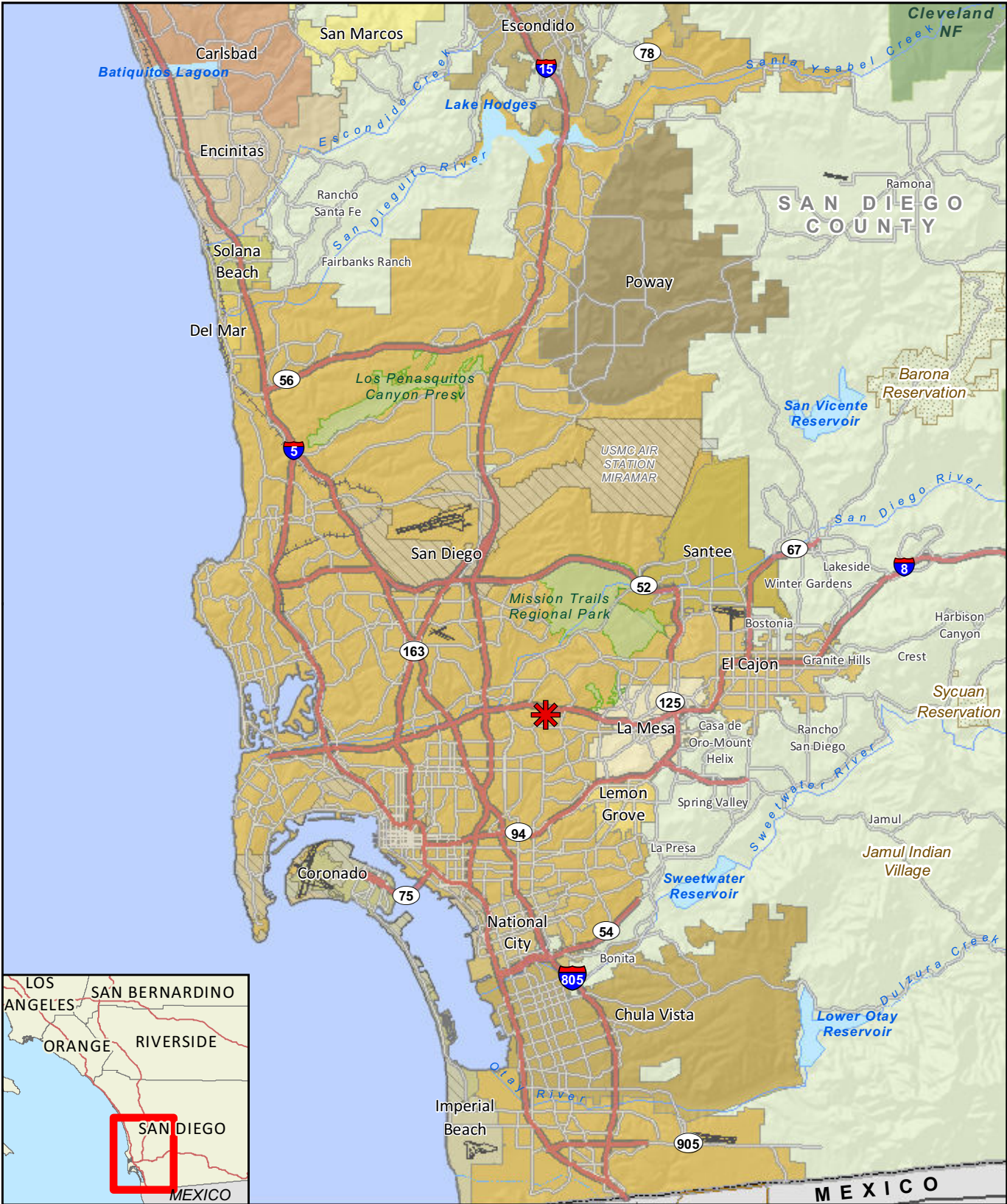
Figure 1 shows the regional location of the project site. Figure 2 shows an aerial photograph of the project vicinity. The proposed grading plan is depicted in Figure 3.

The purpose of this Waste Management Plan (WMP) is to identify the solid waste impacts that would be generated by construction and operation of the proposed project and to identify measures to reduce those impacts.

The direct impact threshold of significance for projects in the city of San Diego is 1,500.0 tons of waste per year, which would likely occur when developments are over 1 million square feet. Projects that generate more than 60.0 tons of waste per year would have the potential to result in a cumulative impact on solid waste services and are required to prepare a WMP to demonstrate how the project would reduce solid waste impacts to below a level of significance.

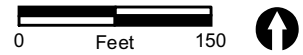
The WMP consists of four sections corresponding to the progress of site development, which are the Demolition Phase, the Grading Phase, the Construction Phase, and the Occupancy (post-construction) Phase. The WMP addresses each phase and describes the amount of waste that would be generated by project activities, waste reduction goals, and the recommended techniques to achieve the waste reduction goals. More specifically, for each phase, the WMP includes the following:

- Tons of waste anticipated to be generated.
- Material/type and amount of waste anticipated to be diverted.
- Project features that would reduce the amount of waste generated.
- Project features that would divert or limit the generation of waste.
- Source separation techniques for waste generated.
- How materials shall be reused on-site.
- Name and location of recycling, reuse, or landfill facilities where waste shall be taken.



**\*** Project Location

**FIGURE 1**  
Regional Location



 Project Boundary

**FIGURE 2**  
Project Location on Aerial Photograph

**LEGEND**

- EXISTING IMPROVEMENTS**
- WATER ——— W ———
  - SEWER ——— SS ———
- PROPOSED IMPROVEMENTS**
- WATER SERVICE ——— W ———
  - SEWER LATERAL ——— SS ———
  - STORM DRAIN ——— SD ———
  - FIRE SERVICE ——— FV ———
  - BACKFLOW PREVENTER [Symbol]
  - STORMWATER BMP [Symbol]
  - GRASSCRETE [Symbol]
  - RETAINING WALL [Symbol]
  - CURB AND GUTTER [Symbol]
  - STREET TREE [Symbol]
  - AREA DRAIN [Symbol]
  - GATE VALVE [Symbol]

**GRADING QUANTITIES**

TOTAL SITE AREA: 2.38 AC  
 DISTURBED AREA: 1.24 AC ±  
 AMOUNT OF CUT: 2,000 CY ±  
 MAX. DEPTH OF CUT: 1 FT ±  
 AMOUNT OF FILL: 2,000 CY ±  
 MAX. DEPTH OF FILL: 1 FT ±  
 MAX. HEIGHT OF FILL SLOPE(S): 0 FT  
 MAX. HEIGHT OF CUT SLOPE(S): 0 FT  
 AMOUNT OF IMPORT/EXPORT SOIL: 0 CY  
 RETAINING/CRIB WALLS: LENGTH: 143 FT, MAX. HEIGHT: 17.8 FT

**NOTES**

1. STREETScape, STREET LIGHTS, AND STREET TREES SHOWN FOR REFERENCE ONLY, REFER TO ARCHITECT DRAWINGS FOR DETAILS
2. IF A 3" OR LARGER METER IS REQUIRED FOR THIS PROJECT, THE OWNER/PERMITEE SHALL CONSTRUCT A NEW METER ABOVE GROUND WITHIN THE PUBLIC ROW, OR ADEQUATELY SIZED PUBLIC WATER EASEMENT, IN A MANNER SATISFACTORY TO THE PUBLIC UTILITIES DIRECTOR AND CITY ENGINEER
3. ALL PROPOSED WATER AND SEWER FACILITIES (PUBLIC AND PRIVATE) WITHIN THE PUBLIC ROW OR PUBLIC EASEMENT MUST BE DESIGNED, CONSTRUCTED, OR ABANDONED IN ACCORDANCE WITH THE CRITERIA ESTABLISHED WITHIN THE CITY OF SAN DIEGO'S CURRENT WATER AND SEWER FACILITY DESIGN GUIDELINES, REGULATIONS, STANDARDS, AND PRACTICES PERTAINING THERETO.
4. ALL WATER LINES SERVICING THIS DEVELOPMENT MUST PASS THROUGH A PERMITTED, PRIVATE, ABOVE GROUND, BACKFLOW PREVENTION DEVICE (BFPD)
5. THE OWNER/PERMITEE SHALL BE RESPONSIBLE FOR ANY DAMAGE CAUSED TO CITY OF SAN DIEGO WATER AND SEWER FACILITIES IN THE VICINITY OF THE PROJECT SITE, DUE TO THE CONSTRUCTION ACTIVITIES ASSOCIATED WITH THIS PROJECT, IN ACCORDANCE WITH MUNICIPAL CODE SECTION 142.0607 IN THE EVENT THAT ANY SUCH FACILITY LOSES INTEGRITY THEN, THE OWNER/PERMITEE SHALL REPAIR OR RECONSTRUCT ANY DAMAGED PUBLIC WATER AND SEWER FACILITY IN A MANNER SATISFACTORY TO THE PUBLIC UTILITIES DIRECTOR AND THE CITY ENGINEER
6. PRIOR TO THE ISSUANCE OF ANY CONSTRUCTION PERMIT, THE OWNER/PERMITEE SHALL INCORPORATE ANY CONSTRUCTION BEST MANAGEMENT PRACTICES NECESSARY TO COMPLY WITH CHAPTER 14, ARTICLE 2, DIVISION 1 (GRADING REGULATIONS) OF THE SAN DIEGO MUNICIPAL CODE, INTO THE CONSTRUCTION PLANS OR SPECIFICATIONS.

**TOPOGRAPHY SOURCE**

TOPOGRAPHY SHOWN HEREON WAS GATHERED BY AEROTECH MAPPING INC.  
 29970 TECHNOLOGY DRIVE, SUITE 220-C  
 MURRIETA, CA 92563  
 (619) 606-5020  
 FLIGHT DATE: AUGUST 22, 2018  
 SUPPLEMENTAL TOPO PREPARED BY FUSCOE ENGINEERING  
 DATED AUGUST 24, 2018

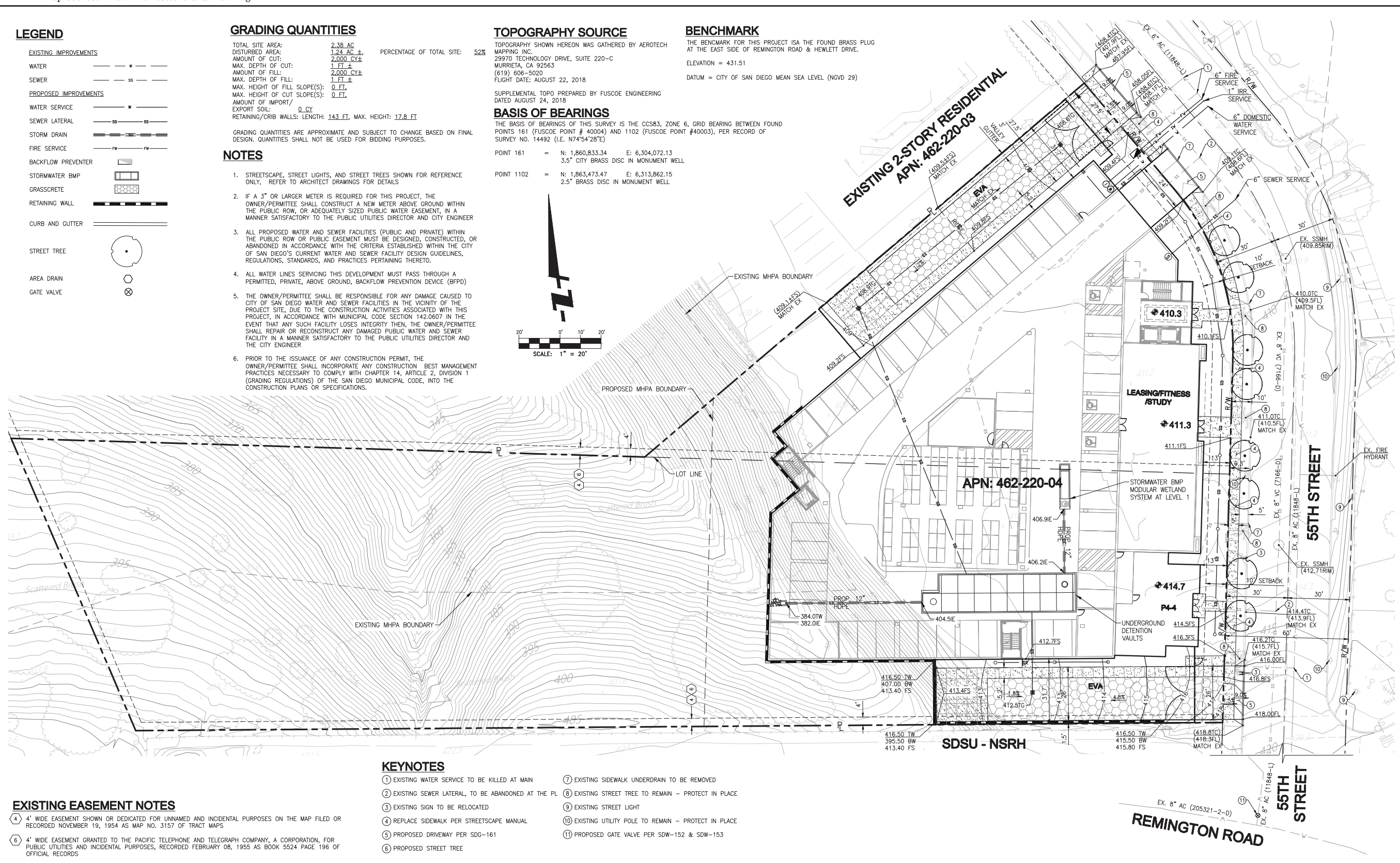
**BASIS OF BEARINGS**

THE BASIS OF BEARINGS OF THIS SURVEY IS THE CCS83, ZONE 6, GRID BEARING BETWEEN FOUND POINTS 161 (FUSCOE POINT # 40004) AND 1102 (FUSCOE POINT #40003), PER RECORD OF SURVEY NO. 14492 (I.E. N74°54'28"E)

- POINT 161 = N: 1,860,833.34 E: 6,304,072.13  
 3.5" CITY BRASS DISC IN MONUMENT WELL
- POINT 1102 = N: 1,863,473.47 E: 6,313,862.15  
 2.5" BRASS DISC IN MONUMENT WELL

**BENCHMARK**

THE BENCHMARK FOR THIS PROJECT IS A THE FOUND BRASS PLUG AT THE EAST SIDE OF REMINGTON ROAD & HEWLETT DRIVE.  
 ELEVATION = 431.51  
 DATUM = CITY OF SAN DIEGO MEAN SEA LEVEL (NGVD 29)



**KEYNOTES**

- |   |  |
|---|--|
| ① EXISTING WATER SERVICE TO BE KILLED AT MAIN       | ⑦ EXISTING SIDEWALK UNDERDRAIN TO BE REMOVED         |
| ② EXISTING SEWER LATERAL, TO BE ABANDONED AT THE PL | ⑧ EXISTING STREET TREE TO REMAIN - PROTECT IN PLACE  |
| ③ EXISTING SIGN TO BE RELOCATED                     | ⑨ EXISTING STREET LIGHT                              |
| ④ REPLACE SIDEWALK PER STREETScape MANUAL           | ⑩ EXISTING UTILITY POLE TO REMAIN - PROTECT IN PLACE |
| ⑤ PROPOSED DRIVEWAY PER SDG-161                     | ⑪ PROPOSED GATE VALVE PER SDW-152 & SDW-153          |
| ⑥ PROPOSED STREET TREE                              |  |

**EXISTING EASEMENT NOTES**

- ④ 4' WIDE EASEMENT SHOWN OR DEDICATED FOR UNNAMED AND INCIDENTAL PURPOSES ON THE MAP FILED OR RECORDED NOVEMBER 19, 1954 AS MAP NO. 3157 OF TRACT MAPS
- ⑥ 4' WIDE EASEMENT GRANTED TO THE PACIFIC TELEPHONE AND TELEGRAPH COMPANY, A CORPORATION, FOR PUBLIC UTILITIES AND INCIDENTAL PURPOSES, RECORDED FEBRUARY 08, 1955 AS BOOK 5524 PAGE 196 OF OFFICIAL RECORDS



## **2.0 Existing Conditions**

The project site is located at 5420–22 55<sup>th</sup> Street, San Diego, California, on assessor parcel number 462-220-0400. The project site is surrounded by SDSU student housing to the east, SDSU student housing to the north, open space land to the west, and a site that is currently under construction to the south. Existing development occurs to the east and south of the site. A small canyon occurs west of the site along with scattered smaller developments on the ridgelines. The eastern portion of the project site is flat and developed with a 16,488-square-foot, 32-unit apartment complex, while the western portion of the project site consists of an undeveloped steep sloped canyon.

## **3.0 Proposed Conditions**

The project would demolish the existing buildings on site and construct a six-story building consisting of 90 one- to four-bedroom units (for a total of 301 bedrooms). The 90-unit apartment building would be 175,667 square feet and consist of a 48-space parking garage (21,132 square feet), a leasing office (980 square feet), a lobby (1,721 square feet), and a fitness center (953 square feet). The project would also include a pool and spa totaling 847 square feet.

## **4.0 Regulatory Framework**

### **4.1 State Regulations**

The California state legislature has enacted several bills intended to promote waste diversion. In 1989, Assembly Bill (AB) 939, the Integrated Waste Management Act—as modified in 2010 by Senate Bill (SB) 1016—mandated that all local governments reduce disposal waste in landfills from generators within their borders by 50 percent by the year 2000 (State of California 1989 and 2010).

AB 341, approved October 2011, sets a policy goal of 75 percent waste diversion by the year 2020 (State of California 2011). This bill also created a mandatory commercial recycling requirement that would hold local jurisdictions responsible for implementing and to be in compliance with the 75 percent diversion rate through outreach and monitoring programs. SB 1383, approved in September 2016, established targets to reduce the amount of organic waste that is landfilled from the 2014 level by 50 percent by 2020, and by 75 percent by 2025. The law grants California’s Department of Resources Recycling and Recovery (CalRecycle) the regulatory authority required to achieve the organic waste disposal reduction targets. SB 1383 granted CalRecycle the regulatory authority to achieve these organic waste disposal reduction targets, and it has been working to develop regulations necessary to implement the new law.

## 4.2 City of San Diego Requirements

All landfills within the San Diego region are approaching capacity and are due to close within the next 3 to 20 years. In compliance with the state requirements, the City of San Diego (City) Environmental Services Department (ESD) developed the Source Reduction and Recycling Element, which describes local waste management policies and programs. The City's Recycling Ordinance, adopted November 2007, requires on-site recyclable collection for residential and commercial uses (City of San Diego 2007a). The ordinance requires recycling of plastic and glass bottles and jars, paper, newspaper, metal containers, and cardboard. The focus of the ordinance is on education, with responsibility shared between the ESD, haulers, and building owners and managers. On-site technical assistance, educational materials, templates, and service provider lists are provided by the ESD. Property owners and managers provide on-site recycling services and educational materials annually and to new tenants. Strategies for compliance are discussed in Section 6.2, Waste Reduction Measures.

The City's Refuse and Recyclable Materials Storage Regulations, adopted December 2007, indicate the minimum exterior refuse and recyclable material storage areas required at residential and commercial properties (City of San Diego 2007b). These are intended to provide permanent, adequate, and convenient space for the storage and collection of refuse and recyclable materials; encourage recycling of solid waste to reduce the amount of waste material entering landfills; and meet the recycling goals established by the City Council and mandated by the State of California. These regulations are discussed further in Section 6.3, Exterior Storage.

In July 2008, the Construction and Demolition (C&D) Debris Deposit Ordinance was adopted by the City (City of San Diego 2008). The ordinance requires that the majority of construction, demolition, and remodeling projects requiring building, combination, or demolition permits pay a refundable C&D Debris Recycling Deposit and divert at least 50 percent of their waste by recycling, reusing, or donating reusable materials. The required diversion rate is currently proposed for an increase to 65 percent. The ordinance is designed to keep C&D materials out of local landfills. Requirements are discussed further in Section 5.4.1, Contractor Education and Responsibilities.

In December 2013, the City Council adopted the Zero Waste Plan, implementing the 75 percent diversion of waste target goal from landfills by the year 2020 and zero waste by 2040. An additional City target of 90 percent diversion by 2035 is proposed in the City's Zero Waste Plan, which is a component of the City's Climate Action Plan.

## 5.0 Demolition, Grading, and Construction Waste

According to the Waste Composition Study prepared by the ESD, C&D waste constituted the largest single component of disposed waste in San Diego in 2000 (City of San Diego 2000). Of the almost 590,000.0 tons of waste disposed of that year, C&D waste was composed of 34 percent.

## 5.1 Demolition

The project site is currently developed with a 16,488-square-foot, 32-unit apartment complex. The project would demolish the existing buildings on site and construct a six-story building consisting of 90-unit apartment complex.

Estimated demolition waste from the existing 32-unit apartment complex is based on a 2009 study by the U.S. Environmental Protection Agency (U.S. EPA), where a sample of residential demolition projects generated an average of 127 pounds of waste per square foot (U.S. EPA 2009). Based on this generation rate, existing building demolition will produce 1,047.0 tons as shown in the calculation below.

Estimates of material type and amounts are included in Table 1.

### Existing Buildings:

$$16,488 \text{ square feet} \times \frac{127 \text{ pounds}}{\text{square foot}} \times \frac{1 \text{ ton}}{2,000 \text{ pounds}} = 1,047.0 \text{ tons}$$

Estimates of building material type and amounts are based on the specific characteristics of the buildings to be demolished. Nearest handling facilities are based on the ESD 2020 Certified C&D Recycling Facilities Directory (Attachment 1). Estimates have a degree of uncertainty and would be revised as the project progresses and demolition debris is more specifically identified and weighed.

Table 1 Projected Materials Generated by Demolition Activities					
Material	Tons Generated	Percent Diverted	Nearest Handling Facility <sup>1</sup>	Tons Diverted	Tons Disposed
<b>Existing Buildings</b>					
Concrete Paving	802.0	100	Hanson Aggregates West-Miramar	802.0	0
Building Materials (doors, windows, cabinets, etc.)	2.7	100	Habitat for Humanity ReStore	2.7	0
Tile	10.1	100	Enniss Incorporated	10.1	0
Carpet	124.0	100	DFS Flooring	124.0	0
Carpet Padding/Foam	4.2	100	DFS Flooring	4.2	0
Drywall (5/8-inch thick)	89.7	66	EDCO Recovery & Transfer	59.2	30.5
Ceiling Tiles	14.4	100	AMS	14.4	0
<b>TOTAL</b>	<b>1047.0</b>	<b>100</b>		<b>1016.5</b>	<b>30.5</b>
NOTE: Totals may vary due to independent rounding. Portions of material types are based on specific characteristics of buildings to be demolished					
<sup>1</sup> City of San Diego ESD 2020 Certified C&D Recycling Facility Directory (see Attachment 1).					

## 5.2 Grading

Project construction would require 2,000 cubic yards of cut and 2,000 cubic yards of fill, resulting in a net balance of soils on the project site. Therefore, no net export of soil would occur from the project.

Project grading would also generate green waste that would be source separated and recycled at the Miramar Greenery facility at 5180 Convoy Street. Goals for this phase will be communicated to grading contractors through contract documents, the California Environmental Quality Act document, project conditions of approval that require implementation of WMP measures, and the Solid Waste Management Coordinator (SWMC) for the project.

## 5.3 Construction

As described in Section 3.0, Proposed Conditions, the project would construct a six-story building consisting of 90 one- to four-bedroom units (for a total of 301 bedrooms). The six-story building would be 175,667 square feet. The 90-unit apartment building would be 175,667 square feet and consist of a 48-space parking garage (21,132 square feet), a leasing office (980 square feet), a lobby (1,721 square feet), and a fitness center (953 square feet). The project would also include a pool and spa totaling 847 square feet.

The U.S. EPA (2009) provides an average generation rate of 4.39 pounds of construction waste per square foot for residential types of uses, which would apply to the project’s 90-unit apartment complex. The study also provides an average generation rate of 4.34 pounds of construction waste per square foot for non-residential types of uses, which would apply to the remainder of the project uses. Table 2 shows how much project construction waste would be generated by the proposed land uses. Although the commercial and recreation uses generate the same amount of construction waste as the parking structure, they have been calculated separately for use in the next step of the analysis.

Land Use	Amount (square feet)	Generation Rate (pounds per square foot)	Tons Generated
Residential	150,034	4.39	329.3
Non-Residential (Office and Recreation Uses)	4,501	4.34	9.8
Non-Residential (Parking Structure)	21,132	4.34	45.9
<b>Total</b>			<b>384.9</b>
SOURCE: U.S. Environmental Protection Agency 2009.			

**Residential:**

$$150,034 \text{ square feet} \times \frac{4.39 \text{ pounds}}{\text{square foot}} \times \frac{1 \text{ ton}}{2,000 \text{ pounds}} = 329.3 \text{ tons}$$

**Non-Residential (Office and Recreation Uses):**

$$4,501 \text{ square feet} \times \frac{4.34 \text{ pounds}}{\text{square foot}} \times \frac{1 \text{ ton}}{2,000 \text{ pounds}} = 9.8 \text{ tons}$$

**Non-Residential (Parking Structure):**

$$21,132 \text{ square feet} \times \frac{4.34 \text{ pounds}}{\text{square foot}} \times \frac{1 \text{ ton}}{2,000 \text{ pounds}} = 45.9 \text{ tons}$$

## 5.4 Waste Diversion

Implementing the City's 75 percent diversion of waste target goal adopted under the Zero Waste Objective requires a majority of waste to be handled at facilities other than landfills. There are two types of waste diversion: "mixed-debris diversion" and "source-separated diversion." Mixed-debris diversion is a method in which all material waste is disposed of in a single container for transport to a mixed C&D recycling facility. Under source-separated diversion, materials are separated on-site before transport to appropriate facilities that accept specific material types. Generally, a greater diversion rate is achieved under source-separated diversion, as facilities that accept mixed debris typically achieve 50 to 70 percent diversion, whereas single material recyclers often achieve a nearly 100 percent diversion rate (City of San Diego 2013).

The project would implement source-separated diversion, and recyclable waste materials would be separated on-site into material-specific containers and diverted to an approved recycler selected from the City's ESD directory of facilities that recycle specific waste materials from construction and demolition (see Attachment 1). These facilities achieve a 100 percent diversion rate for most materials with the exception of a 75 percent diversion rate for roof material.

Table 3 provides a breakdown of the 384.9 tons by anticipated types of material and provides the most likely handling facility and diversion method. The amount of construction waste generated by all three uses associated with the project have been combined together in Table 3. As shown in Table 3, use of the source separation method for most of the material types (where feasible) would result in the total diversion of approximately 302.8 tons, with 23.4 tons of drywall and 58.7 tons of trash/garbage being disposed of in the landfill.

<b>Table 3 Construction Waste Diversion and Disposal by Material Type</b>					
<b>Material Type</b>	<b>Estimated Waste (tons)</b>	<b>Percent Diverted<sup>1</sup></b>	<b>Nearest Handling Facility<sup>1</sup></b>	<b>Estimated Diversion (tons)</b>	<b>Estimated Disposal (tons)</b>
Asphalt and Concrete	63.7	100%	Vulcan Carol Canyon Landfill and Recycle Site	63.7	0.0
Metals	92.2	100%	Allan Company Miramar Recycling	92.2	0.0
Brick/Masonry/Tile	27.6	100%	Vulcan Carol Canyon Landfill and Recycle Site	27.6	0.0
Clean Wood/Wood Pallets	15.3	100%	Miramar Greenery	15.3	0.0
Carpet, Padding/ Foam	27.4	100%	DFS Flooring	27.4	0.0
Drywall	75.4	68%	EDCO Recovery & Transfer	51.9	23.4
Corrugated Cardboard	24.5	100%	Allan Company Miramar Recycling	24.5	0.0
Trash/Garbage	58.7	0%	Ramona Transfer Station and Buy Back Center	0.0	58.7
<b>Total</b>	<b>384.9</b>			<b>302.8 78.7%</b>	<b>82.1 21.3%</b>

NOTE: Totals may vary due to independent rounding.  
<sup>1</sup>City of San Diego ESD 2020 Certified C&D Recycling Facility Directory (see Attachment 1).

With implementation of the diversion-estimated calculations outlined in Table 3, it is estimated that approximately 78.7 percent of the waste generated during the construction phase of the project would be diverted to appropriate facilities for reuse. Thereafter, 23.4 tons of drywall and 58.7 tons of trash/garbage, equivalent to 21.3 percent of the total construction waste, would be required to be disposed of in the landfill.

### 5.4.1 Contractor Education and Responsibilities

In order to ensure that the anticipated diversion of waste would occur during project construction, the project would include the designation of a SWMC for the duration of project construction. The SWMC would ensure that all contractors and subcontractors are educated and trained to follow City waste diversion regulations and that procedures for waste reduction and recycling efforts are implemented. Specific responsibilities of the SWMC would include the following:

- Review the WMP at the preconstruction meeting, including the SWMC responsibilities.
- Distribute the WMP to all contractors when they first begin work on-site and when training workers, subcontractors, and suppliers on proper waste management procedures applicable to the project.
- Work with the contractors to estimate the quantities of each type of material that would be salvaged, recycled, or disposed of as waste, then assist in documentation.

- Use detailed material estimates to reduce risk of unplanned and potentially wasteful material cuts.
- Review and enforce procedures for source-separated receptacles. Containers of various sizes shall:
  - Be placed in readily accessible areas that will minimize misuse or contamination.
  - Be clearly labeled with a list of acceptable and unacceptable materials, the same as the materials recycled at the receiving material recovery facility or recycling processor.
  - Contain no more than 10 percent nonrecyclable materials, by volume.
  - Be inspected daily to remove contaminants and evaluate discarded material for reuse on-site.
- Review and enforce procedures for transportation of materials to appropriate recipients selected from ESD's directory of facilities that recycle C&D materials (see Attachment 1 for ESD's facility directory).
- Ensure removal of C&D waste materials from the project site at least once every week to ensure no over-topping of containers. The accumulation and burning of on-site construction, demolition, and land-clearing waste materials will be prohibited.
- Document the return or reuse of excess materials and packaging to enhance the diversion rate.
- Coordinate implementation of a "buy recycled" program for green construction products, including incorporating mulch and compost into the landscaping.
- Coordinate implementation of solid waste mitigation with other requirements such as storm water requirements, which may include specifications such as the placement of bins to minimize the possibility of runoff contamination.

The SWMC would ensure that the project meets the following state law and City Municipal Code requirements. Adjustments would be made as needed to maintain conformance:

- The City's C&D Debris Diversion Deposit Program, which requires a refundable deposit based on the tonnage of the expected recyclable waste materials as part of the building permit requirements (City of San Diego 2008).
- The City's Recycling Ordinance, which requires that collection of recyclable materials is provided (City of San Diego 2007a).
- The City's Storage Ordinance, which requires that areas for recyclable material collection must be provided (City of San Diego 2007b).
- The name and contact information of the waste contractor provided to ESD at least 10 days prior to the start of any work and updated within 5 days of any changes.

## 5.4.2 Total Diversion

With the oversight of the SWMC, the project would meet City waste diversion goals. Table 4 summarizes the amount of waste estimated to be generated and diverted by each phase of the project. Of the 1,431.9 tons estimated to be generated (1,047.0 tons from demolition and 384.9 tons from construction), 1,319.3 tons would be diverted (1,016.5 tons from demolition and 302.8 from construction). This would result in the diversion and reuse of 78.9 percent of the waste material generated from the project from the landfill, which would meet the City’s current 75 percent waste diversion goal.

Phase	Tons Generated	Tons Diverted	Tons Disposed
Demolition	1,047.0	1,016.5	30.5
Grading	0.0	0.0	0.0
Construction	384.9	302.8	82.1
<b>TOTAL</b>	1,431.9	1,319.3	112.6
		92.1%	7.9%
NOTE: Totals may vary due to independent rounding.			

## 6.0 Occupancy – Operational Waste

Unlike grading and construction, occupancy is an ongoing process. Therefore, it requires an ongoing plan to manage and reduce waste in order to meet the waste reduction goals established by local and state policy. All of the units (90 multi-family units) would be served by the City during occupancy of the project.

The City operates the Miramar Landfill, which is currently the only municipal landfill in the city. According to the City Municipal Code (San Diego Municipal Code, Chapter 6, Article 6, Division 7, Section 66.0701), the Miramar Landfill is expected to close and preserving landfill capacity is a realistic concern. City efforts have made progress, but studies have shown that there is room for improvement through additional recycling efforts. Approximately 21 percent of the waste generated in the city of San Diego and delivered for landfill disposal is paper and 16 percent is compostable organics, all of which could be diverted from landfill disposal.

### 6.1 Waste Generation

The estimated annual waste to be generated during occupancy of the project is based on the expected waste generation that was calculated using the City ESD Waste Generation Factors for residential uses (Attachment 2). The estimated solid waste generation rate for multi-family uses is 1.2 tons/year/unit. The estimated annual amount in tons is calculated below.



**Residential:**

$$90 \text{ dwelling units} \times \frac{1.2 \text{ tons}}{\text{year/unit}} = 108.0 \text{ tons/year/unit}$$

The estimated solid waste generation rate for non-residential uses is 0.0017 ton/year (office uses). Although recreation uses would likely generate waste at a lower rate, the same office rate was used in the calculation to provide a conservative estimate. The parking structure would not generate waste during operation, and therefore has been excluded from this calculation. The estimated annual amount in tons is calculated below.

**Non-Residential (Office and Recreation):**

$$4,501 \text{ square feet} \times \frac{0.0017 \text{ tons}}{\text{square feet/year}} = 7.7 \text{ tons/year}$$

Table 5 shows the amount of tons that would be generated during the occupancy phase. The proposed 90 multi-family units would generate approximately 108.0 tons of waste per year, and the non-residential uses would generate approximately 7.7 tons of waste per year. As discussed in the following section, Waste Reduction Measures, an ongoing plan to manage waste disposal in order to meet state and City waste reduction goals would be implemented by the applicant (or applicant’s successor in interest).

Table 5 Occupancy Phase Annual Waste Generation						
Land Use	Dwelling Units/ Square Feet	Generation Rate	Waste Generated (tons/unit/year)/ (tons/square feet/year)	Percent Diverted	Tons Diverted	Tons Disposed
Multi-Family Units	90 Units	1.2 tons/unit/year	108.0	40%	43.2	64.8
Non-Residential Uses	4,501 square feet	0.0017 tons/square feet/year	7.7	40%	3.1	4.6
<b>Total</b>			115.7		46.3	69.4

SOURCE: Attachment 2.

## 6.2 Waste Reduction Measures

According to the City’s Guidelines for a Waste Management Plan (City of San Diego 2013), compliance with the City’s Recycling Ordinance is expected to provide a minimum recycling service volume of 40 percent. Therefore, waste anticipated to be diverted during the occupancy phase would be approximately 46.3 tons per year. The remaining 69.4 tons per year would exceed the 60.0 ton-per-year threshold of significance for a cumulative impact on solid waste services in the City (City of San Diego 2016).

To mitigate for the cumulative impact on solid waste, the applicant (or applicant’s successor in interest) shall be responsible for implementing a long-term WMP, as outlined below, which would ensure that the development meets or exceeds the requirements set forth in

AB 939 and AB 341. This program shall include recyclable collection services required by and in accordance with the Recycling Ordinance, as well as providing exterior storage space for refuse, recyclable materials, and a means of handling landscaping and green waste materials. Specific program measures shall include the following:

- For commercial facilities, which receive solid waste collection services from a franchisee, the responsible person shall provide on-site recycling services to occupants as required by the dates prescribed in the City Municipal Code, Chapter 6, Article 6, Division 7, Section 66.0707a.
- For multi-family residential facilities, which receive solid waste collection services from a franchisee, the responsible person shall provide on-site recycling services to occupants as required by the dates prescribed in the City Municipal Code, Chapter 6, Article 6, Division 7, Section 66.0706c.
- Occupants of commercial facilities, which receive solid waste collection services from a franchisee, shall participate in a recycling program by separating recyclable material from other solid waste and depositing the recyclable materials in the recycling container provided by the Franchisee or Recyclable Materials Collector.
- Occupants of multi-family residential facilities which receive solid waste collection services from a franchisee, shall participate in a recycling program by separating recyclable material from other solid waste and depositing the recyclable materials in the recycling container provided by the Franchisee or Recyclable Materials Collector (City Municipal Code, Chapter 6, Article 6, Division 7, Section 66.0706d).
- At a minimum, commercial facilities' recycling services would include the following (City Municipal Code, Chapter 6, Article 6, Division 7, Section 66.0707c):
  1. Collection of recyclable materials as frequently as necessary to meet demand.
  2. Collection of plastic bottles and jars, paper, newspaper, metal containers, cardboard, and glass containers.
  3. Collection of other recyclable materials for which markets exist, such as scrap metal, wood pallets, and food waste.
  4. Utilization of recycling receptacles which comply with the standards in the Container and Signage Guidelines established by the City ESD or its successor.
  5. Designated recycling collection and storage areas.
  6. Signage on all recycling receptacles, containers, and/or enclosures which comply with the standards described in the Container and Signage Guidelines established by the City ESD or its successor.

- At a minimum, multi-family residential facilities' recycling services would include the following (City Municipal Code, Chapter 6, Article 6, Division 7, Section 66.0706e):
  1. Collection of recyclable materials at least two times per month.
  2. Collection of plastic bottles and jars, paper, newspaper, metal containers, cardboard, and glass containers.
  3. Utilization of recycling receptacles which comply with the standards in the Container and Signage Guidelines established by the City ESD or its successor.
  4. Designated recycling collection and storage areas.
  5. Signage on all recycling receptacles, containers, chutes, and/or enclosures which comply with the standards described in the Container and Signage Guidelines established by the City ESD or its successor.
- Occupant Education – For commercial facilities, the responsible person shall ensure that occupants are educated about the recycling services as follows (City Municipal Code, Chapter 6, Article 6, Division 7, Section 66.0707d):
  1. 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.
  2. All new occupants shall be given educational information on recycling programs and procedures and instructions upon occupancy.
  3. All occupants shall be given information and instructions upon any change in recycling service to the facility.
- Occupant Education – For multi-family residential facilities, the responsible person shall ensure that occupants are educated about the recycling services as follows (City Municipal Code, Chapter 6, Article 6, Division 7, Section 66.0706f):
  1. 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.
  2. All new occupants shall be given information and instructions upon occupancy.
  3. All occupants shall be given information and instructions upon any change in recycling service to the facility.

Implementation of a project-specific waste management program would reduce the project's cumulative portion of impacts on solid waste, as, per the City's California Environmental Quality Act Significance Determination Thresholds, the implementation of a WMP would ensure that the overall waste produced is reduced sufficiently to comply with waste reduction targets established in the Public Resources Code (City of San Diego 2016).

### 6.3 Exterior Storage

This WMP follows the City’s Municipal Code on site refuse and recyclable material storage space requirements (City of San Diego 2007b). Table 6 shows the exterior storage area requirements for residential developments and Table 7 shows the exterior storage area requirements for non-residential developments.

<b>Table 6 Minimum Exterior Refuse and Recyclable Material Storage Areas for Residential Development</b>			
<b># of units</b>	<b>Minimum Refuse Area (square feet)</b>	<b>Minimum Recyclable Area (square feet)</b>	<b>Total Storage Area (square feet)</b>
2–6	12	12	24
7–15	24	24	48
16–25	48	48	96
26–50	96	96	192
51–75	144	144	288
<b>76–100</b>	<b>192</b>	<b>192</b>	<b>384</b>
101–125	240	240	480
126–150	288	288	576
151–175	336	336	672
176–200	384	384	768
200+	384 plus 48 square feet for every 25 dwelling units above 201	384 plus 48 square feet for every 25 dwelling units above 201	768 plus 96 square feet for every 25 dwelling units above 201
<b>Project (90 units)</b>	<b>192</b>	<b>192</b>	<b>384</b>

SOURCE: City of San Diego Municipal Code, Chapter 14, Article 2, Division 8: Refuse and Recyclable Material Storage Regulations, Section 142.0820, Table 142-08B.

<b>Table 7 Minimum Exterior Refuse and Recyclable Material Storage Areas for Non-Residential Development</b>			
<b>Gross Floor Area per Development (square feet)</b>	<b>Minimum Refuse Storage Area per Development (square feet)</b>	<b>Minimum Recyclable Material Storage Area per Development (square feet)</b>	<b>Total Minimum Storage Area per Development (square feet)</b>
<b>0–5,000</b>	<b>12</b>	<b>12</b>	<b>24</b>
5,001–10,000	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
100,000+	192 plus 48 square feet for every 25,000 square feet of building area above 100,001	192 plus 48 square feet for every 25,000 square feet of building area above 100,001	384 plus 96 square feet for every 25,000 square feet of building area above 100,001
<b>Project Total</b>	<b>144</b>	<b>144</b>	<b>288</b>

SOURCE: City of San Diego Municipal Code, Article 2, Division 8: Refuse and Recyclable Material Storage Regulations, Section 142.0830, Table 142-08C; effective, January 2000.

Because the project would include a total of 90 multi-family dwelling units and 4,501 square feet of non-residential uses that would generate operational waste, a minimum of 204 square feet of refuse storage area and a minimum of 204 square feet of recyclable material storage area would be required. The total exterior refuse and recyclable material storage requirement for the project would be 408 square feet.

During occupancy, the expected annual waste to be generated from the proposed 90 units would be approximately 108 tons, based on a residential waste generation rate of 1.2 tons per year per square foot. Similarly, operation of the non-residential components of the project would generate approximately 7.7 tons of waste each year based on an office waste generation rate of 0.0017 tons per square foot for office uses. An ongoing plan to manage waste disposal in order to meet state/city certification waste reduction goals shall be implemented by the property manager through this WMP. Included in this program shall be the provision of a minimum of 204 square feet of exterior refuse storage area and 204 square feet of exterior recyclable material storage area, as required by the City's Municipal Code. The project would meet this requirement by providing a 412-square-foot refuse storage and recycling room.

## **6.4 Organic Waste Recycling**

The project would require landscaping, landscape maintenance, and brush management. Drought-tolerant plants would be used to reduce the amount of green waste produced. Collection of organic waste and its disposal at recycling centers that accept organic waste would further reduce the waste generated by the project during occupancy. Implementation of ongoing WMP requirements would include a means for handling landscaping and other organic waste materials. The ongoing WMP measures discussed in Section 6.2, Waste Reduction Measures, would include a means for handling landscaping and other organic waste materials.

## **7.0 Conclusion**

### **7.1 Demolition, Grading, and Construction Waste**

Diversion goals will be communicated to contractors through contract documents; the project's California Environmental Quality Act document, this WMP and corresponding project conditions; and the SWMC for the project. The project would require 2,000 cubic yards of cut and 2,000 cubic yards of fill, resulting in a net balance of soils on the project site. All green waste would be recycled at the Miramar Greenery facility (5180 Convoy Street); thus, the project would achieve 100 percent diversion during grading. Of the 1,431.9 tons estimated to be generated (1,047.0 tons from demolition and 384.9 tons from construction), 1,319.3 tons would be diverted (1,016.5 tons from demolition and 302.8 from construction). This would result in the diversion and reuse of 92.1 percent of the waste

material generated from the project from the landfill, which would meet the City's current 75 percent waste diversion goal.

## 7.2 Occupancy – Operational Waste

The project would develop 90 multi-family dwelling units and 4,501 of non-residential uses that would generate approximately 115.7 tons of waste per year. As such, the project would be required to provide a minimum of 204 square feet of exterior refuse area and 204 square feet of recyclable material storage area (total of 408 square feet; see Tables 6 and 7). The project would meet this requirement by providing a 412-square-foot refuse storage and recycling room.

The applicant (or applicant's successor in interest) would implement the ongoing waste reduction measures as prescribed in this WMP to ensure that the waste is minimized and the operation of the project complies with City ordinances. According to the City Guidelines for a Waste Management Plan (City of San Diego 2013), compliance with existing ordinances is expected to achieve a 40 percent diversion rate. Therefore, approximately 69.4 tons of non-recyclable waste per year would be generated from the project, exceeding the 60 ton-per-year threshold of significance for having a cumulative impact on solid waste services by 9.4 tons per year. However, preparation of this WMP and implementation of the Waste Reduction Measures, outlined in Section 6.2 above, would reduce cumulative solid waste impacts to a level less than significant.

## 8.0 Overall Compliance

With implementation of the strategies outlined in this WMP and compliance with all applicable City ordinances, solid waste impacts would be reduced to below a level of significance regarding collection, diversion, and disposal of waste generated from C&D, grading, and occupancy. Implementation of a SWMC for the project during the construction phase would achieve 78.7 percent diversion of construction waste from landfill disposal. This would reduce the anticipated impact of waste disposal during construction to a level less than significant.

During occupancy, the applicant or applicant's successor in interest would be required to implement the ongoing WMP measures detailed herein to ensure maximum diversion from landfills. Exterior storage space for refuse, recyclable, and landscape/green waste materials would be provided consistent with City Municipal Code requirements described herein. Compliance with existing ordinances is expected to achieve a 40 percent diversion rate. Preparation of this WMP and implementation of the Waste Reduction Measures, outlined in Section 6.2 above, would reduce cumulative solid waste impacts to a level less than significant.

## 9.0 References Cited

### California, State of

- 1989 Assembly Bill 939. Integrated Waste Management Act.
- 2010 Senate Bill 1016. Solid Waste Per Capita Disposal Measurement Act.
- 2011 Assembly Bill 341. Jobs and Recycling.

### San Diego, City of

- 2000 Waste Composition Study 1999-2000. Final Report. San Diego Environmental Services Department. November 2000.
- 2007a Recycling Ordinance. San Diego Municipal Code Chapter 6, Article 6, Division 7. November 20.
- 2007b Refuse and Recyclable Materials Storage Regulations. Municipal Code Chapter 14, Article 2, Division 8. December 9.
- 2008 Construction and Demolition Debris Diversion Deposit Program. San Diego Municipal Code Chapter 6, Article 6, Division 6.
- 2013 California Environmental Quality Act – Guidelines for a Waste Management Plan. June.
- 2016 Significance Determination Thresholds. California Environmental Quality Act. July.

### U.S. Environmental Protection Agency

- 2009 Estimating 2003 Building-Related Construction and Demolition Materials Amounts. Available at <https://www.epa.gov/sites/production/files/2017-09/documents/estimating2003buildingrelatedcanddmaterialsamounts.pdf>.

# **ATTACHMENTS**



## **ATTACHMENT 1**

### **City of San Diego 2020 Certified Construction and Demolition Recycling Facility Directory**



## 2020 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](http://www.recyclingworks.com)

<p><i>*Transfer Stations offer both recycling and trash disposal services. In order to receive recycling credit, you must:</i></p> <p><i>-Notify the weighmaster your load is subject to the City of San Diego C&amp;D Ordinance.</i></p> <p><i>-If your load is mixed Construction and Demolition (C&amp;D) debris, ensure it is coded correctly on the receipt. Tickets coded as "MSW, trash or refuse" will receive 0% credit.</i></p> <p><i>-Ensure the project address and Permit number are added to the receipt.</i></p> <p><i>Please note: Miramar Landfill and other landfills DO NOT recycle mixed C&amp;D debris.</i></p>	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
<p><b>*EDCO Recovery &amp; Transfer*</b> 3660 Dalbergia St, San Diego, CA 92113 619-234-7774   <a href="http://www.edcodisposal.com">www.edcodisposal.com</a></p>	68%	•										•						•
<p><b>*EDCO Station Transfer Station &amp; Buy Back Center*</b> 8184 Commercial St, La Mesa, CA 91942 619-466-3355   <a href="http://www.edcodisposal.com">www.edcodisposal.com</a></p>	68%	•			•							•			•			•
<p><b>*EDCO CDI Recycling &amp; Buy Back Center*</b> 224 S. Las Posas Rd, San Marcos, CA 92078 760-744-2700   <a href="http://www.edcodisposal.com">www.edcodisposal.com</a></p>	89%				•	•	•								•			•
<p><b>Escondido Resource Recovery</b> 1044 W. Washington Ave, Escondido 760-745-3203   <a href="http://www.edcodisposal.com">www.edcodisposal.com</a></p>	68%																	
<p><b>*Fallbrook Transfer Station &amp; Buy Back Center*</b> 550 W. Aviation Rd, Fallbrook, CA 92028 760-728-6114   <a href="http://www.edcodisposal.com">www.edcodisposal.com</a></p>	68%				•										•			•
<p><b>Otay C&amp;D/Inert Debris Processing Facility</b> 1700 Maxwell Rd, Chula Vista, CA 91913 619-421-3773   <a href="http://www.sd.disposal.com">www.sd.disposal.com</a></p>	87%																	
<p><b>*Ramona Transfer Station &amp; Buy Back Center*</b> 324 Maple St, Ramona, CA 92065 760-789-0516   <a href="http://www.edcodisposal.com">www.edcodisposal.com</a></p>	68%				•										•			•
<p><b>SANCO Resource Recovery &amp; Buy Back Center</b> 6750 Federal Blvd, Lemon Grove, CA 91945 619-287-5696   <a href="http://www.edcodisposal.com">www.edcodisposal.com</a></p>	68%				•	•	•								•			
<p><b>Allan Company</b> 6733 Consolidated Wy, San Diego, CA 92121 858-578-9300   <a href="http://www.allancompany.com/facilities">www.allancompany.com/facilities</a></p>					•										•			
<p><b>Allan Company Miramar Recycling</b> 5165 Convoy St, San Diego, CA 92111 858-268-8971   <a href="http://www.allancompany.com/facilities">www.allancompany.com/facilities</a></p>					•										•			
<p><b>Armstrong World Industries, Inc.</b> 300 S. Myrida St, Pensacola, FL 32505 877-276-7876 (Press 1, Then 8) <a href="http://www.armstrong.com/commceilingsna">www.armstrong.com/commceilingsna</a></p>								•										
<p><b>CMS Recycling Inc.</b> 1428 West Mission Rd, Escondido, CA 92029 760-741-6300   <a href="http://www.cmsmetals.com">www.cmsmetals.com</a></p>					•										•			
<p><b>DFS Flooring</b> 10178 Willow Creek Rd, San Diego, CA 92131 858-630-5200   <a href="http://www.dfsflooring.com">www.dfsflooring.com</a></p>						•	•											

<p><b>*Transfer Stations offer both recycling and trash disposal services. In order to receive recycling credit, you must:</b></p> <p>-Notify the weighmaster your load is subject to the City of San Diego C&amp;D Ordinance.</p> <p>-If your load is mixed Construction and Demolition (C&amp;D) debris, ensure it is coded correctly on the receipt. Tickets coded as "MSW, trash or refuse" will receive 0% credit.</p> <p>-Ensure the project address and Permit number are added to the receipt.</p> <p><b><u>Please note: Miramar Landfill and other landfills DO NOT recycle mixed C&amp;D debris.</u></b></p>	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	
<p><b>Duco Metals</b> 220 Bingham Drive Suite 100, San Marcos, CA 92069 760-747-6330   <a href="http://www.ducometals.com">www.ducometals.com</a></p>																			
<p><b>Escondido Materials</b> 500 N. Tulip St, Escondido, CA 92025 760-432-4690   <a href="http://www.weirasphalt.com">www.weirasphalt.com</a></p>		•																	
<p><b>Habitat for Humanity ReStore</b> 8101 Mercury Ct, San Diego, CA 92108 619-516-5267   <a href="http://www.sandiegohabitat.org">www.sandiegohabitat.org</a></p>				•															
<p><b>Hanson Aggregates – Hollister St</b> 389 Hollister St, San Diego, CA 92154 858-974-3849</p>		•																	
<p><b>Hanson Aggregates West – Lakeside Plant</b> 12560 Highway 67, Lakeside, CA 92040 858-547-2141</p>		•																	
<p><b>Hanson Aggregates West – Miramar</b> 9229 Harris Plant Rd, San Diego, CA 92126 858-974-3849</p>		•								•									
<p><b>HVAC Exchange</b> 2675 Fairve St, Chula Vista, CA 91911 619-423-1564   <a href="http://www.hvacx.com">www.hvacx.com</a></p>															•				
<p><b>Inland Pacific Resource Recovery</b> 12650 Slaughterhouse Canyon Rd, Lakeside, CA 92040 619-390-1418   <a href="http://www.iprrgreen.com">www.iprrgreen.com</a></p>											•								
<p><b>Los Angeles Fiber Company</b> 4920 S. Boyle Ave, Vernon, CA 90058 323-589-5637   <a href="http://www.lafiber.com">www.lafiber.com</a></p>						•	•												
<p><b>Miramar Greenery, City of San Diego</b> 5180 Convoy St, San Diego, CA 92111 858-694-7000   <a href="http://www.miramargreenery.com">www.miramargreenery.com</a></p>											•								
<p><b>Moody's</b> 3210 Oceanside Blvd, Oceanside, CA 92056 760-433-3316   <a href="http://www.moodyselecorazonrecycling.com">www.moodyselecorazonrecycling.com</a></p>		•								•						•			
<p><b>Planet Recycling</b> 187 Mace St, Chula Vista, CA 91911 888-258-7755   <a href="http://www.planetrecyclingphoenix.com">www.planetrecyclingphoenix.com</a></p>						•													
<p><b>RAMCO</b> 8354 Nelson Way, Escondido, CA 92026 760-205-1797   <a href="http://www.ramco.us.com">www.ramco.us.com</a></p>		•																	
<p><b>Reclaimed Aggregates Chula Vista</b> 855 Energy Way, Chula Vista, CA 91913 619-656-1836</p>		•														•			
<p><b>Robertson's Ready Mix</b> 2094 Willow Glen Dr, El Cajon, CA 92019 619-593-1856   <a href="http://www.rrmca.com">www.rrmca.com</a></p>		•								•						•			
<p><b>Rockridge Crushing</b> 12485 Highway 67, Lakeside, CA 92040 619-324-6570</p>		•																	
<p><b>SA Recycling</b> 3055 Commercial St, San Diego, CA 92113 619-238-6740   <a href="http://www.sarecycling.com">www.sarecycling.com</a></p>															•				

<p><b><i>*Transfer Stations offer both recycling and trash disposal services. In order to receive recycling credit, you must:</i></b>  <i>-Notify the weighmaster your load is subject to the City of San Diego C&amp;D Ordinance.</i>  <i>-If your load is mixed Construction and Demolition (C&amp;D) debris, ensure it is coded correctly on the receipt. Tickets coded as "MSW, trash or refuse" will receive 0% credit.</i>  <i>-Ensure the project address and Permit number are added to the receipt.</i>  <b><i>Please note: Miramar Landfill and other landfills DO NOT recycle mixed C&amp;D debris.</i></b></p>	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
<p><b>SA Recycling</b>            1211 S. 32<sup>nd</sup> St, San Diego, CA 92113            619-234-6691   <a href="http://www.sarecycling.com">www.sarecycling.com</a></p>																		
<p><b>SCOR Industries</b>            2321 South Willow Ave, Bloomington, CA 92316            909-820-5046   <a href="http://www.scorindustries.com">www.scorindustries.com</a></p>		•	•		•				•		•		•		•	•		
<p><b>Terra Bella Nursery</b>            302 Hollister St, San Diego, CA 92154            619-585-1118   <a href="http://www.terrabelnanursery.com">www.terrabelnanursery.com</a></p>										•	•							
<p><b>Vulcan Carol Canyon Landfill and Recycle Site</b>            10051 Black Mountain Rd, San Diego, CA 92126            858-530-9465   <a href="http://www.vulcanmaterials.com">www.vulcanmaterials.com</a></p>		•	•							•						•		
<p><b>Vulcan Materials Company</b>            2275 Hard Rock Rd, Chula Vista, CA 91913            858-530-9472   <a href="http://www.vulcanmaterials.com">www.vulcanmaterials.com</a></p>		•																
<p><b>Vulcan Otay Asphalt Recycle Center</b>            7522 Paseo de la Fuente, San Diego, CA 92154            619-571-1945   <a href="http://www.vulcanmaterials.com">www.vulcanmaterials.com</a></p>		•																

## **ATTACHMENT 2**

### City of San Diego Waste Generation Factors – Occupancy Phase

## Waste Generation Factors – Occupancy Phase

The following factors are used by the City of San Diego Environmental Services Department to estimate the expected waste generation in a new residential or commercial development.

### **Residential Uses**

Residential Unit = 1.6 tons/year/unit  
 Multi-family Unit = 1.2 tons/year/unit

**Example:** To calculate the amount of waste that will be generated from a project with 100 new homes, multiply the number of homes by the generation factor.

100 single family homes x 1.6 = 160 tons/year  
 100 multi-family units x 1.2 = 120 tons/year

### **Commercial/Industrial Uses**

General Retail	0.0028
Restaurants & Bars	0.0122
Hotels/Motels	0.0045
Food Stores	0.0073
Auto/Service/Repair	0.0051
Medical Offices	0.0033
Hospitals	0.0055
Office	0.0017
Transp/Utilities	0.0085
Manufacturing	0.0059
Education	0.0013
Unclassified Services	0.0042

**Example:** To calculate the amount of waste that could be generated from a new building with 10,000 square feet for offices and 10,000 square feet for manufacturing, multiply the square footage for each use by the generation factor.

10,000 square feet x 0.0017 = 17 tons/year

10,000 square feet x 0.0059 = 59 tons per year

Total estimated waste generation for building = 76 tons/year