



**Waste Management Plan for the
Britannia Airway Logistics Center Project
San Diego, California**

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A handwritten signature in black ink, appearing to read "Nick Larkin".

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1: City of San Diego Waste Generation Factors – Occupancy Phase

Acronyms and Abbreviations

AB	Assembly Bill
C&D	Construction and Demolition
CalRecycle	California Department of Resources Recycling and Recovery
City	City of San Diego
ESD	Environmental Services Department
project	Britannia Airway Logistics Center Project
SB	Senate Bill
SWMC	Solid Waste Management Coordinator
WMP	Waste Management Plan

1.0 Introduction

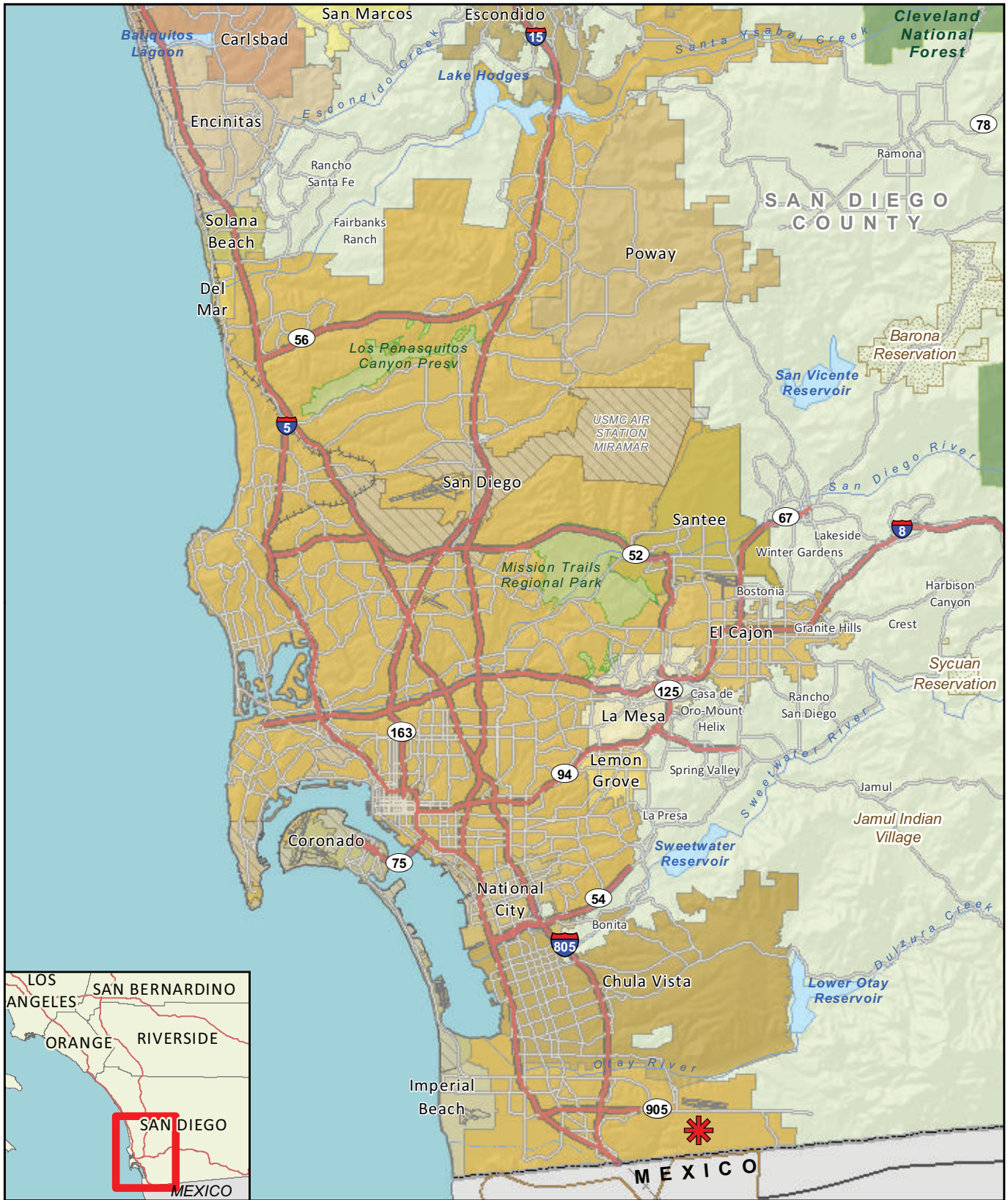
The purpose of this Waste Management Plan (WMP) is to identify the solid waste impacts that would be generated by construction and operation of the proposed Britannia Airway Logistics Center Project (project) and to identify measures to reduce those impacts. The direct impact threshold of significance 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.

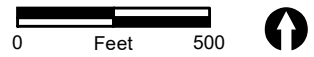
2.0 Existing Conditions

The project site is located on assessor parcel number 646-100-74, immediately south of Airway Road, west of Britannia Boulevard, and east of Cactus Road, in the Otay Mesa Community Plan area, in the city of San Diego, California. Figure 1 presents the regional location. Figure 2 presents an aerial photograph of the project site and vicinity. The 32.47-acre project site is currently undeveloped and surrounded by existing commercial/industrial uses to the south and east, a mix of existing commercial/industrial uses and undeveloped land to the north, and undeveloped land to the west.



 Project Location

FIGURE 1
Regional Location



 Project Boundary

FIGURE 2
Project Location on Aerial Photograph

3.0 Proposed Conditions

The project would develop a fenced truck/trailer parking facility providing a total of 895 truck/trailer parking spaces that would be available for up to nine tenants/users. Each tenant/user would have a modular trailer office of approximately 1,440 square feet with 3 vehicle parking spaces, for a total of up to 12,960 square feet of modular trailer office and 27 vehicle parking spaces. The project would improve the abutting frontages of Airway Road, Cactus Road, and Britannia Boulevard, consistent with the Otay Mesa Community Plan. Additionally, the project would provide landscaping and a perimeter fence 8 feet in height abutting the public rights-of-ways. Figure 3 presents the proposed site plan.

4.0 Regulatory Framework

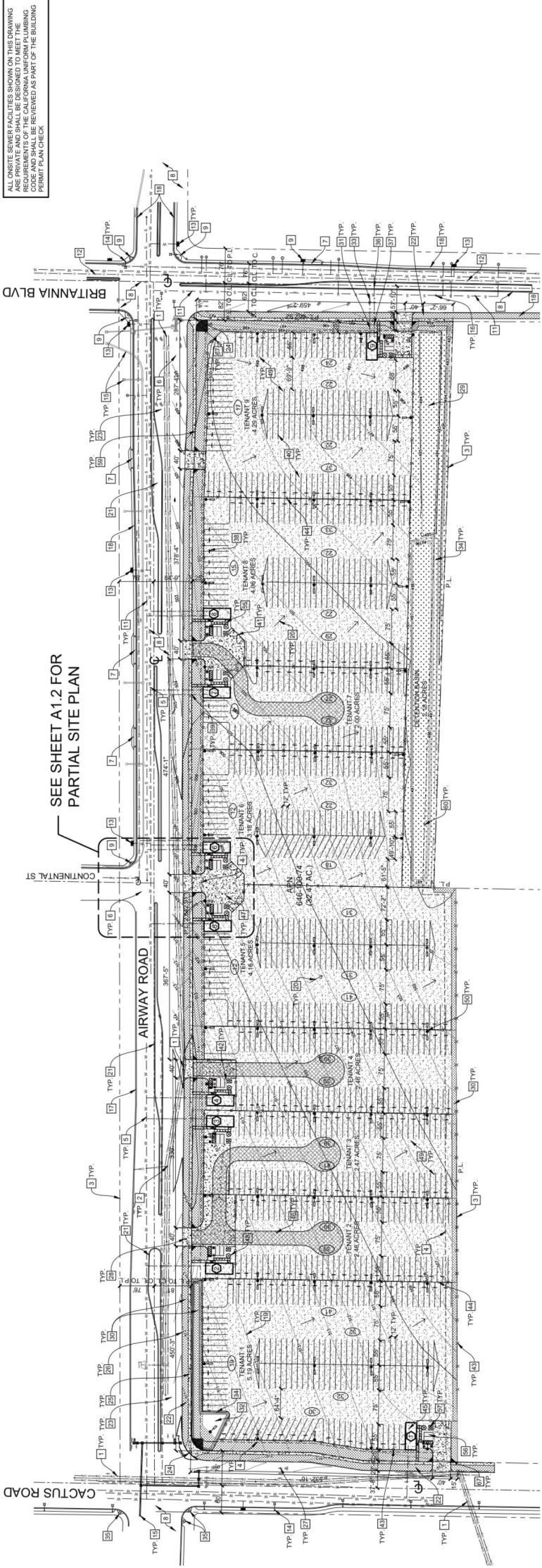
4.1 State Regulations

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 complying 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.



SEE SHEET A1.2 FOR PARTIAL SITE PLAN

BRITANNIA BLVD

AIRWAY ROAD

CONTINENTAL ST

CACTUS ROAD

SEE SHEET A1.2 FOR PARTIAL SITE PLAN

BRITANNIA BLVD

AIRWAY ROAD

CACTUS ROAD

SEE SHEET A1.2 FOR PARTIAL SITE PLAN

BRITANNIA BLVD

AIRWAY ROAD

CONTINENTAL ST

CACTUS ROAD

SEE SHEET A1.2 FOR PARTIAL SITE PLAN

BRITANNIA BLVD

AIRWAY ROAD

CACTUS ROAD

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- 1 EXISTING ELECTRICAL POLE TO BE REMOVED PER SDG&E - V.I.F.
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- 4 EXISTING OVERHEAD DATA/CABLE LINES TO BE REMOVED PER UTILITY COMPANIES - V.I.F.
- 5 EXISTING WATER MAIN - V.I.F.
- 6 EXISTING ASPHALT PAVEMENT - V.I.F.
- 7 EXISTING DRIVEWAY (NOT-A-PART) - V.I.F.
- 8 EXISTING STREET IMPROVEMENTS - V.I.F.
- 9 EXISTING ACCESSIBLE PEDESTRIAN RAMP - V.I.F.
- 10 EXISTING IRRIGATION WATER MAIN - V.I.F.
- 11 EXISTING SEWER MAIN - V.I.F.
- 12 EXISTING FIRE HYDRANT - V.I.F.
- 13 EXISTING STREET LIGHT - V.I.F.
- 14 EXISTING STORM DRAIN - V.I.F.
- 15 EXISTING SEWER MANHOLE - V.I.F.
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TENANT TABLE

TENANT	AREA	ASPHALT SPACES	CONCRETE	DIAGRAM	LANDSCAPE	FINISH	WASH	DOUBLE
1	5.19 AC.	194	1,220 S.F.	3,960 S.F.	197,261 S.F.	23,742 S.F.	3	1
2	2.49 AC.	78	1,220 S.F.	3,194 S.F.	90,648 S.F.	4,130 S.F.	3	1
3	2.47 AC.	80	1,220 S.F.	3,794 S.F.	95,304 S.F.	4,629 S.F.	3	1
4	2.46 AC.	78	1,220 S.F.	3,794 S.F.	95,304 S.F.	4,101 S.F.	3	1
5	4.16 AC.	115	1,220 S.F.	4,488 S.F.	107,905 S.F.	7,679 S.F.	3	1
6	3.16 AC.	84	1,220 S.F.	3,629 S.F.	126,109 S.F.	6,658 S.F.	3	1
7	2.09 AC.	63	1,220 S.F.	4,501 S.F.	79,807 S.F.	5,165 S.F.	3	1
8	4.09 AC.	121	1,220 S.F.	3,824 S.F.	105,938 S.F.	8,101 S.F.	3	1
9	4.29 AC.	122	1,220 S.F.	4,139 S.F.	101,387 S.F.	21,381 S.F.	3	1
DB	2.18 AC.	-	-	-	94,981 S.F.	3	1	2
TOTAL	32.87 AC.	885	10,960 S.F.	43,525 S.F.	1,179,168 S.F.	180,015 S.F.	27	9

FENCE TABLE

SYMBOL	TYPE	DESCRIPTION	LOCATION	HEIGHT	LENGTH
→	CHAIN LINK W/ GREEN SHADE CLOTH	NEW	PROJECT PERIMETER STREET FRONTAGE	6'-0"	3,383 FT.
→	CHAIN LINK W/ GREEN SHADE CLOTH	NEW	PROJECT PERIMETER BACK FRONTAGE	6'-0"	6,079 FT.

LIGHT STANDARD TABLE

SYMBOL	NO.	TYPE	DESCRIPTION	LUMENS	KELVIN	HEIGHT	LAMP
●	30	SINGLE LIGHT FIXTURE	NEW	12,270	4000	30'-0"	LED
○	42	DUAL LIGHT FIXTURE	NEW	13,100	4000	30'-0"	LED

STRUCTURES TABLE

SYMBOL	AREA	HEIGHT	STATUS	DESCRIPTION	TENANT	OCCUP	TYPE	USE	YEAR	REMARKS
⊙	1,440 S.F.	12'-6"	USED	SINGLE STORY BUILDING	1	M	V/B	OFFICE	2008	
⊙	1,440 S.F.	12'-6"	USED	SINGLE STORY BUILDING	2	M	V/B	OFFICE	2008	
⊙	1,440 S.F.	12'-6"	USED	SINGLE STORY BUILDING	3	M	V/B	OFFICE	2008	
⊙	1,440 S.F.	12'-6"	USED	SINGLE STORY BUILDING	4	M	V/B	OFFICE	2008	
⊙	1,440 S.F.	12'-6"	USED	SINGLE STORY BUILDING	5	M	V/B	OFFICE	2008	
⊙	1,440 S.F.	12'-6"	USED	SINGLE STORY BUILDING	6	M	V/B	OFFICE	2008	
⊙	1,440 S.F.	12'-6"	USED	SINGLE STORY BUILDING	7	M	V/B	OFFICE	2008	
⊙	1,440 S.F.	12'-6"	USED	SINGLE STORY BUILDING	8	M	V/B	OFFICE	2008	
⊙	1,440 S.F.	12'-6"	USED	SINGLE STORY BUILDING	9	M	V/B	OFFICE	2008	
TOTAL	12,960 S.F.									

LEGEND

- EXISTING PROPERTY LINE
- - - EXISTING SETBACK LINE
- - - EXISTING OVERHEAD UTILITY LINE
- - - EXISTING WATER LINE
- - - EXISTING IRRIGATION WATER LINE
- - - EXISTING GAS LINE
- - - EXISTING STREET LIGHT PER CIVIL PLANS
- - - EXISTING FIRE HYDRANT PER CIVIL PLANS
- - - PROPOSED SEWER LINE
- - - PROPOSED WATER LINE
- - - PROPOSED 6" HIGH INTERIOR FENCE
- - - PROPOSED 6" HIGH PERIMETER FENCE
- - - PROPOSED SINGLE LIGHT STANDARD AS REQUIRED
- - - PROPOSED DUAL LIGHT STANDARD AS REQUIRED
- - - PROPOSED ASPHALT PAVEMENT
- - - PROPOSED CONCRETE PAVEMENT
- - - PROPOSED GRAVEL OR DO BASE PER OWNER
- - - PROPOSED LANDSCAPING AND IRRIGATION
- - - PROPOSED STRUCTURE NUMBER
- - - PROPOSED CONTOUR LINE PER CIVIL DRAWINGS
- - - PROPOSED DIRECTION OF DRAINAGE
- KEYNOTE SYMBOL, THIS SHEET
- PROPOSED STATE APPROVED OFFICE TRAILER
- NEW MULTI-PURPOSE DRY CHEMICAL FIRE EXTINGUISHER WITH MINIMUM U.L. RATING OF 3A-40B FENCE OR AN APPROVED CABINET, BETWEEN 3 1/2 AND 5 FEET FROM FLOOR LEVEL, AND CLEARLY VISIBLE (C.F.P. CODE 906)
- CL CENTER LINE
- PL PROPERTY LINE
- C CURB



FIGURE 3
Site Plan

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

This section discusses the waste generation and diversion rates from the demolition, grading, and construction phases of the project. According to the Waste Composition Study prepared by the ESD, C&D waste constituted approximately 657,455 tons (39.1 percent) of the overall 1,680,211 tons of waste that were disposed in 1999 (City of San Diego 2000).

5.1 Demolition

As discussed in Section 2.0, Existing Conditions, the project site is currently undeveloped (see Figure 2). Therefore, no demolition would be required, and no demolition waste would be generated.

5.2 Grading

Project construction would require approximately 19,074 cubic yards of cut and 103,365 cubic yards of fill, resulting in a net import of approximately 84,291 cubic yards of fill. Therefore, the project would not require any soil export.

Project grading would generate green waste that would be source separated and recycled at the Otay Landfill facility for 100 percent diversion. Goals for this phase would 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 develop a fenced truck/trailer parking facility providing a total of 895 truck/trailer parking spaces that would be available for up to nine tenants/users. Each tenant/user would have three vehicle parking spaces, for a total of up to 27 vehicle parking spaces. Paving activities associated with development of the truck/trailer parking spaces and vehicle spaces would not generate any construction waste. Structures on-site would be limited to nine modular trailer offices, approximately 1,440 square feet each, for a total of up to 12,960 square feet of modular trailer office. The modular trailer offices would be pre-fabricated off-site and transported onto the project site once paving activities are completed. As the project proposes improvements to the abutting frontages of Airway Road, Cactus Road, and Britannia Boulevard, in addition to installation of a perimeter fence, minor construction activity would occur on-site that may generate minimal amounts of waste. As no asphalt removal or other demolition would occur, construction waste generation is anticipated to be minimal. To address the minimal construction activities proposed, the project would include the designation of a SWMC for the duration of project construction in order to ensure that diversion of construction waste (if any) would occur during 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 non-recyclable materials, by volume.
 - Be inspected daily to remove contaminants and evaluate discarded material for reuse on-site.

- 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.
- 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.

5.3.1 Total Diversion

The project would not generate any solid waste during the demolition or grading phases. Structures onsite would be limited to nine modular trailers that would be pre-fabricated off-site and transported onto the project site once paving activities are completed. Improvements to the abutting frontages of Airway Road, Cactus Road and Britannia Boulevard, installation of a perimeter fence, and minor construction activity onsite may generate minimal amounts of waste. As no asphalt removal or other demolition would occur, construction waste generation is anticipated to be minimal. With the oversight of the SWMC, the project would meet City waste diversion goals.

6.0 Occupancy – Operational Waste

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 non-residential uses (Attachment 1).

The estimated solid waste generation rate per square foot of office space is 0.0017 ton/year. The estimated annual amount of solid waste in tons is calculated below.

Non-Residential (Office):

$$12,960 \text{ square feet} \times \frac{0.0017 \text{ tons}}{\text{square foot/year}} = 22.0 \text{ tons/year}$$

Table 1 shows that the proposed office use associated with the nine modular trailer offices would generate approximately 22.0 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 1 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
Office	12,960 square feet	0.0017 tons/ square feet/ year	22.0	50%	11.0	11.0

SOURCE: Attachment 1.

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 50 percent. Therefore, it is anticipated the project would divert approximately 11.0 tons per year during the occupancy phase. The remaining 11.0 tons per year would not 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).

- Although a cumulative impact would not result, the site would receive required solid waste collection services consistent with City Municipal Code requirements as follows: 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.
- 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.
- 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.
- 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.

6.3 Exterior Storage

This WMP follows the San Diego Municipal Code regarding site refuse and recyclable material storage space requirements (City of San Diego 2007b). Table 2 shows the exterior storage area requirements for non-residential developments.

Because the project would introduce 12,960 square feet of non-residential uses that would generate operational waste, a minimum of 48 square feet of refuse storage area and a minimum of 48 square feet of recyclable material storage area would be required. The total exterior refuse and recyclable material storage requirement for the project would be 96 square feet. The project has been designed to include one refuse/recycling material storage area for each modular trailer office that would be 48 square feet in size. Inclusion of these nine refuse/recycling material storage areas would provide a total of 432 square feet of refuse/recycling material storage, which would exceed the City requirement to provide 96 square feet of refuse and recyclable material storage.

Table 2 Minimum Exterior Refuse and Recyclable Material Storage Areas for Non-Residential Development			
Gross Floor Area per Development (square feet)	Minimum Refuse Storage Area per Development (square feet)	Minimum Recyclable Material Storage Area per Development (square feet)	Total Minimum Storage Area per Development (square feet)
0–5,000	12	12	24
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
Project Total	48	48	96
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.			

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. At such time that franchisee’s begin offering organic waste recycling services to consumers in the project area to comply with the latest legislation related to organic material diversion from landfills, organic waste disposed at landfills would be further reduced to meet City goals for organics diversion from landfills.

7.0 Conclusion

7.1 Demolition, Grading, and Construction Waste

The project would require a net import of approximately 84,291 cubic yards of fill and would not require any soil export. All green waste would be recycled at the Otay Landfill facility for 100 percent diversion. Therefore, the project would achieve 100 percent diversion during grading. Structures onsite would be limited to nine modular trailer office of approximately 1,440 square feet each, for a total of up to 12,960 square feet of modular trailer office. The nine modular trailer offices would be pre-fabricated structures brought to the site fully constructed once paving activities are completed. Construction waste is anticipated to be minimal as no demolition is proposed and minimal construction is proposed associated with frontage improvements and fence installations. Therefore, the project would not conflict with the City’s current 75 percent waste diversion goal.

7.2 Occupancy – Operational Waste

The project would introduce 12,960 square feet of non-residential uses that would generate approximately 22.0 tons of waste per year. As such, the project would be required to provide a minimum of 48 square feet of exterior refuse area and 48 square feet of recyclable material storage area (total of 96 square feet; see Table 2). The project would provide nine 48-square-foot refuse storage and recycling areas that would collectively provide 432 square feet of refuse/recycling material storage, which would exceed the City requirement to provide 96 square feet of refuse and recyclable material storage.

According to the City Guidelines for a Waste Management Plan (City of San Diego 2013), compliance with existing ordinances is expected to achieve a 50 percent diversion rate. Approximately 11.0 tons of non-recyclable waste per year would be generated from the project, which would not exceed the 60 ton-per-year threshold of significance for having a cumulative impact on solid waste services. Therefore, cumulative solid waste impacts would be less than significant.

8.0 Overall Compliance

The project would not generate any solid waste during the demolition or grading phases. Structures on-site would be limited to nine modular trailer offices of approximately 1,440 square feet each, for a total of up to 12,960 square feet of modular trailer offices. The nine modular trailer offices would be pre-fabricated structures brought to the site fully constructed once paving activities are completed. Construction waste is anticipated to be minimal as no demolition is proposed and minimal construction is proposed associated with frontage improvements and fence installations. Nonetheless, the project would include the designation of a SWMC for the duration of project construction in order to ensure that diversion of minimal amounts of waste would occur during project construction. Overall, impacts associated with waste disposal during construction would be 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. The project would provide nine 48-square-foot refuse storage and recycling areas, consistent with City Municipal Code requirements described herein. Compliance with existing ordinances is expected to achieve a 50 percent diversion rate. Approximately 11.0 tons of non-recyclable waste per year would be generated from the project, which would not exceed the 60 ton-per-year threshold of significance for having a cumulative impact on solid waste services. Therefore, cumulative solid waste impacts would be 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.
- 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.

ATTACHMENT 1

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