WASTE MANAGEMENT PLAN
RADY CHILDREN'S HOSPITAL–SAN DIEGO
INTENSIVE CARE UNIT AND EMERGENCY SERVICES PAVILION PROJECT

Amendments to PDP 268049; CUP 268050; SDP 413591
Project No. 697308

PREPARED FOR:

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1. PURPOSE OF REPORT

The City of San Diego (City) *California Environmental Quality Act (CEQA) Significance Determination Thresholds* for solid waste identify a threshold of 1,500 tons of waste or more during construction and demolition (C&D) for direct solid waste impacts, and 60 tons of waste or more during operations for potentially significant cumulative solid waste impacts. Projects that consist of the construction, demolition and/or renovation of 40,000 square feet (SF) or more of building space have the potential to generate 60 tons of waste or more and are required to prepare a project-specific Waste Management Plan (WMP) to reduce their cumulative impacts to solid waste facilities.

The purpose of this WMP is to identify the quantity of solid waste that would be generated by the Rady Children's Hospital-San Diego (RCHSD) – Intensive Care Unit and Emergency Services Pavilion (ICU/ESP) Project (project) throughout its construction and operational phases, and to identify measures to reduce the project's direct and cumulative impacts from solid waste in accordance with the City's waste reduction ordinances and the waste diversion goals. Two acceptable approaches to managing solid waste are to reduce the tons disposed to 60 tons or less or to provide diversion of 75 percent or more, thus meeting the goal established by Assembly Bill (AB) 341.

1.1 Regulatory Background

State

The Assembly Bill 939 (**AB 939)**: Integrated Waste Management Act, passed in 1989, requires a 50 percent reduction in solid waste generation from all jurisdictions in California by 2000. In 2008, Senate Bill 1016 was passed. Known as the Solid Waste Disposal Measurement Act, Senate Bill 1016 maintained the 50 percent diversion requirement established by AB 939 but changed to a disposal-based measurement system. In 2011, AB 341 was passed by the State Legislature to create green jobs by expanding recycling to every multifamily dwelling and business and increased the diversion target to 75 percent in the state by the year 2020. The City satisfied the original goal and is currently working to achieve the new, higher goal.

AB 1826 (2014) requires businesses to recycle their organic waste on and after April 1, 2016, depending on the amount of waste they generate on a weekly basis. Additionally, AB 1826 requires that, after January 1, 2016, all local jurisdictions implement an organic waste recycling program to divert organic waste generated by businesses, including multi-family residential dwellings with five or more units. Organic waste includes food waste, green waste, landscape and pruning waste, nonhazardous wood waste, and food-soiled paper waste that is mixed in with food waste. This law phases in the mandatory recycling of commercial organics over time. Because the minimum threshold of organic waste generation by businesses will be decreased over time (e.g., in 2016, affected businesses were those generating 8 cubic yards or more of organic waste per week; in 2019, affected businesses will be those generating 4 or more cubic yards of organic waste), an increasingly greater proportion of the commercial sector will be required to comply. AB 1826 is intended to achieve California's recycling and greenhouse gas emissions

reduction goals. Reducing the amount of organic materials sent to landfills and increasing the production of compost and mulch are part of the AB 32 Scoping Plan.

Senate Bill 1383 (**SB 1383**) (2016) requires a 50% reduction in disposal of organic waste from the 2014 level by 2020, and a 75% reduction by 2025. The law grants CalRecycle the regulatory authority required to achieve the organic waste disposal reduction targets and establishes an additional target that not less than 20% of currently disposed edible food be recovered for human consumption by 2025. Effective January 1, 2022, SB 1383 requires all generators statewide to reduce organic waste that is disposed of in landfills. All residents and commercial businesses are now required to separate their organic waste for organic waste recycling. Organic waste recycling is the recycling of organic material - food scraps, food-soiled paper and yard waste.

Local

The City has enacted codes and policies directed at the achievement of State-required diversion levels, including the Refuse and Recyclable Materials Storage Regulations (San Diego Municipal Code [SDMC] Chapter 14, Article 2, Division 8), Recycling Ordinance (City 2007; Municipal Code Chapter 6, Article 6, Division 7), and the C&D Debris Deposit Ordinance (City 2008; Municipal Code Chapter 6, Article 6, Division 6). The City's Zero Waste Plan, a component of the City's Climate Action Plan, was approved and adopted by City Council on July 13, 2015. The Zero Waste Plan identifies goals and strategies to achieve 75 percent diversion by 2020, 90 percent diversion by 2035, and "zero" waste by 2040 (City 2015).

In 1997, the City adopted SDMC Section 142.0801, *Refuse and Recyclable Materials Storage Regulations*. The ordinance requires minimum storage areas to facilitate the diversion of recyclable materials from landfill disposal. Specifically, Section 142.0801 provides for permanent, adequate, and convenient space for the storage and collection of refuse and recyclable material to encourage recycling of solid waste. In 2022, this Municipal Code section was updated to address the collection, management and minimum storage requirements for organic waste, including commingled yard trimmings, nonhazardous wood waste, food material, or food-soiled paper mixed with food material.

In 2007, the City adopted a *Recycling Ordinance* contained in SDMC Section 66.0701 et seq. The ordinance requires recycling of plastic and glass bottles and jars, paper, newspaper, metal containers and cardboard at all single-family residences, commercial facilities, multifamily residences with service for 4 cubic yards (CY) or more and at certain special events requiring a City permit. The Recycling Ordinance requires not only the provision of recycling service but also the education of tenants on waste reduction and recycling methods.

As of 2008, the City adopted a *Construction and Demolition (C&D) Debris Diversion Deposit Ordinance*. The ordinance, contained in SDMC Section 66.0601, requires that the majority of construction, demolition, and remodeling projects requiring building, combination, and demolition permits apply for a demolition or construction permit to estimate the volume of waste they will generate and post a refundable C&D Debris

Recycling deposit. The deposit is held until receipts are shown that demonstrate the project diverted from disposal at least 50 percent of their debris by recycling, reusing or donating usable materials. The ordinance is designed to keep C&D materials out of local landfills and ensure they get recycled.

The ordinance further stipulates that when mixed debris facilities with a permitted daily tonnage capacity of at least 1,000 tons maintain a 75 percent diversion rate for three consecutive calendar year quarters, projects would be required to divert 75 percent of their wastes. Greater than 75 percent diversion also may be required for a project if a higher goal is specified during discretionary permitting. Mixed debris recyclers in San Diego County currently achieve between 73 and 90 percent diversion rates at their facilities (refer to Appendix A). For a project that would dispose of mixed debris at one of the facilities that achieve a 73 percent diversion rate, virtually all clean C&D waste from a project must be source separated and sent to a material-specific recycling facility, such as aggregate and metal recyclers, in order to achieve a 75 percent diversion rate. Higher diversion rates can also be accomplished by salvage and/or on-site reuse of C&D materials.

In accordance with the ordinance, a properly completed *Waste Management Form – Part I* must be filed with the Building Permit or Demolition/Removal Permit application (see Appendix B to this WMP)

In response to SB 1383, the City of San Diego is currently developing collection operations, amending agreements with non-exclusive franchise haulers, amending the City's municipal code, enacting building requirements, preparing enforcement responsibilities and strategizing public education and outreach efforts. As such, the City requires businesses to subscribe to organic waste recycling collection service in a separate container for pick up at least twice per month for yard trimmings and nonhazardous wood waste. In addition, businesses must subscribe to organics waste recycling collection service in a separate container for pick up at least one time per week for food scraps and food-soiled paper, in order to comply with the State regulations pertaining to organics diversion (City of San Diego 2022c).

1.2 CEQA Significance Determination Thresholds

As stated in the City Development Services Department *CEQA Significance Determination Thresholds* (City 2020), implementation of the City's local solid waste regulations and ordinances alone is not projected to achieve a 50 percent diversion rate, far below the current 75 percent diversion level targeted by the State and identified in the Zero Waste Plan for 2020. Therefore, discretionary projects must undertake additional measures to comply with existing regulations.

Direct Impacts

Discretionary projects that include the construction, demolition, or renovation of 1,000,000 SF or more of building space may generate approximately 1,500 tons of waste or more during C&D and are considered to have direct impacts on solid waste services.

- Direct impacts result from the generation of large amounts of waste, which brings facilities closer to daily throughput limits, shortens facility lifespans, requires increased numbers of trucks and other equipment, and makes it difficult for the City to achieve required waste reduction levels. Waste management planning is based on a steady rate of waste generation and does not assume increased waste generation due to growth.
- While all projects are required to comply with the City's waste management ordinances, direct impacts are mitigated by the implementation of project-specific WMPs, which may reduce solid waste impacts to below a level of significance.
- For projects over 1,000,000 SF, a significant direct and cumulative solid waste impact would result if the compliance with the City's ordinances and the WMP fail to reduce the impacts of such projects to below a level of significance and/or if a WMP for the project is not prepared and conceptually approved by the ESD prior to distribution of the draft environmental document for public review.

Cumulative Impacts

Discretionary projects that include the construction, demolition, and/or renovation of 40,000 SF or more of building space may generate approximately 60 tons of waste or more and are considered to have cumulative impacts on solid waste services.

- While all projects are required to comply with the City's waste management ordinances, cumulative impacts are typically mitigated by the implementation of a project-specific WMP that reduces solid waste impacts to below a level of significance.

Potential Project Impacts

As discussed in Section 2, the project, located at 3020 Children's Way in San Diego, would involve the demolition of existing buildings (totaling 76,450 SF), removal of a surface parking lot, and the construction of new building area totaling 556,600 SF (or a net new 480,210 SF) with only 522,000 SF of floor area expected to generate solid waste (i.e., excluding connector building linking existing hospital to proposed ICU/ESP building). The project would not include construction, demolition, or renovation of 1,000,000 SF or more of building space. Therefore, the project would not generate more than 1,500 tons of solid waste materials during demolition and construction and direct impacts are not expected. However, the project proposes construction of more than 40,000 SF of building area, thereby exceeding the City's threshold for cumulative solid waste impacts without implementation of solid waste diversion measures.

Because implementation of the project without waste diversion measures may exceed cumulative solid waste thresholds, the City has required preparation of this WMP in compliance with CEQA and City Guidelines, to ensure that the project contribution to the overall waste produced within the City would be reduced sufficiently to allow the City to comply with the waste reduction targets established in the Public Resources Code and state statutes.

1.3 Exterior Refuse and Recyclable Materials Storage Area Requirements

Table 1, *Required Minimum Storage Areas for Nonresidential Development,* provides information on minimum exterior refuse, recyclable material, and organic waste storage areas for non-residential development. The project would provide the minimums identified for nonresidential uses as discussed below.

RCHSD uses a centralized approach to collect and store refuse and recyclable material for most of the campus buildings. Centralized storage is located at the Nelson-Hahn Pavilion soiled dock and at the Acute Care Pavilion dock. These locations provide 4,697 SF of storage to serve 1,220,810 SF of gross building area, which includes the proposed ICU/ESP building and the existing buildings to remain. According to the Table 1, the required refuse and recycling storage area for the expanded RCHSD campus is 4,688 SF (i.e., 1,220,810 SF * 48/25,000 * 2), which is 9 SF less storage than currently exists on the RCHSD campus.

RCHSD will designate exterior storage area for organic waste based on the new buildings being added with this development project. The ICU/ESP building will add 486,000 SF and the CUP will add 36,000 SF for a total of 522,000 SF. The Connector building has been excluded since it contains no waste generating program (it contains only corridors). The modifications to the MOB have also been excluded as the changes result in a net reduction in building area. According to Table 1, the required organic storage area required to serve the ICU/ES pavilion and CUP is 1,003 SF (522,000 SF * 48/25,000). The required space will be located adjacent to the existing Acute Care Pavilion dock.

Table 1
REQUIRED MINIMUM EXTERIOR STORAGE AREAS FOR NONRESIDENTIAL DEVELOPMENT

Gross Floor Area (SF)	Minimum Refuse Storage Area (SF)	Minimum Recyclable Material Storage Area (SF)	Minimum Organic Waste Storage Area (SF)	Total Minimum Storage Area (SF)
0–5,000	12	12	12	36
5,001–10,000	24	24	24	72
10,001–25,000	48	48	48	144
25,001–50,000	96	96	96	288
50,001–75,000	144	144	144	432
75,001–100,000	192	192	192	576
100,001+	192+48 SF for every 25,000 SF of building area above 100,001	192+48 SF for every 25,000 SF of building area above 100,001	192+48 SF for every 25,000 SF of building area above 100,001	576+144 SF for every 25,000 SF of building area above 100,001

Source: San Diego Municipal Code Table 142-08C (2022)
Note: SF = square feet

2. PROJECT LOCATION AND DESCRIPTION

The 27.47-acre project site is located within the City of San Diego south of the Interstate 805 and State Route 163 freeways interchange (Figure 1, *Regional Map*). The project site is located on the Rady Children's Hospital San Diego (RCHSD) campus and is generally bounded by Frost Street on the north, Children's Way on the east, Birmingham Way on the south, and the Sharp Memorial Hospital Campus to the west (Figure 2, *Aerial Photograph*).

The project consists of the demolition of hospital buildings, removal of a paved surface parking lot, and the construction of an ICU/ESP, a Campus Connector Building, and a Central Utility Plant (CUP) on the RCHSD campus. Site utilities, access ways, and utility lines would also be constructed as part of the project. The project would demolish approximately 76,450 SF of existing hospital buildings, including portions of the Nelson Pavilion, Nelson Warehouse Building 12 Gait Lab, an enclosed elevated corridor to Sharp Hospital, the stair tower at the end of the Medical Office Building (MOB), and the bridge between the MOB and the Hahn Pavilion. The project would include removal of the Frost Street parking lot, which contains 173 surface parking spaces. Construction would include the construction of 556,660 SF of new building area, consisting collectively of the ICU/ESP, a Campus Connector Building, a Central Utility Plant and the 1,160 SF MOB replacement stairs. The ICU/ESP would be an approximately 486,000-SF, seven-story building constructed at the southwest corner of the intersection of Frost Street and Children's Way. The Campus Connector Building would be a 33,500-SF, three-story pedestrian connector in the center of the campus for patient, public, staff, and service flow across campus. The CUP would be constructed south of the Nelson Pavilion. It would be a 36,000 SF, five-level replacement building for utility plant infrastructure currently located at several locations within the Hahn Pavilion. The CUP would provide emergency electrical power, heating and chilled water to the new ICU/ESP, the existing Acute Care Pavilion, Rose Pavilion, and Hahn/Nelson pavilions and would provide steam to the existing buildings.

The project site is completely developed with existing hospital uses. The project would also include modifications to site access, with three new driveways into the RCHSD campus from Frost Street for emergency drop off, ambulance drop off, and a service drive. The project includes changes to several existing outdoor spaces on the RCHSD campus, including regrading a courtyard at the MOB to support the proposed Campus Connector Building and redevelopment of spaces between the Hahn Pavilion and the ICU/ESP. Certain utilities would be reconfigured and/or installed for the new buildings and would connect to the existing electric, natural gas, water, and sanitary sewer systems that service RCHSD. Some of the existing utility lines on the RCHSD main campus would need to be removed and relocated on the ICU/ESP site to allow for construction of the project buildings, such as natural gas and electrical infrastructure. The project's on-site utility improvements for the ICU/ESP include stormwater treatment and sewer, water, and storm water connections to existing City facilities. A project site plan is contained in Figure 3, *Site Plan*.

Grading is anticipated to require 110,850 CY of soil material to be cut and exported off site. Some portions of the soil may include contamination from past uses. Soil would be tested as necessary to determine contamination, and if contamination is determined to be present, contaminated soil would be removed and disposed of according to applicable federal, state, and local laws. Any contaminated soil would be discharged to a legal disposal site and would not be available for reuse. For the purposes of this analysis, it is assumed that ten percent (11,085 CY) of the export material associated with project construction would be deemed contaminated and would not be available for reuse. Thus, export of soil associated with the project would be 99,765 CY of clean soil for reuse at another location.

Site preparation, structure demolition, grading, building construction, paving, and application of architectural materials would occur during the construction phase of the project, which is anticipated to occur from June 2023 through February 2027. Demolition would occur over 6 months, site preparation would occur over 7 months, and grading would occur over 5 months. Building construction would occur over 28 months, with paving occurring over approximately 8 months (spilt into two phases), and architectural coating would occur over 11 months (split into two phases). During project operation, the site would be served by private waste haulers who would bring waste to a City waste disposal facility.

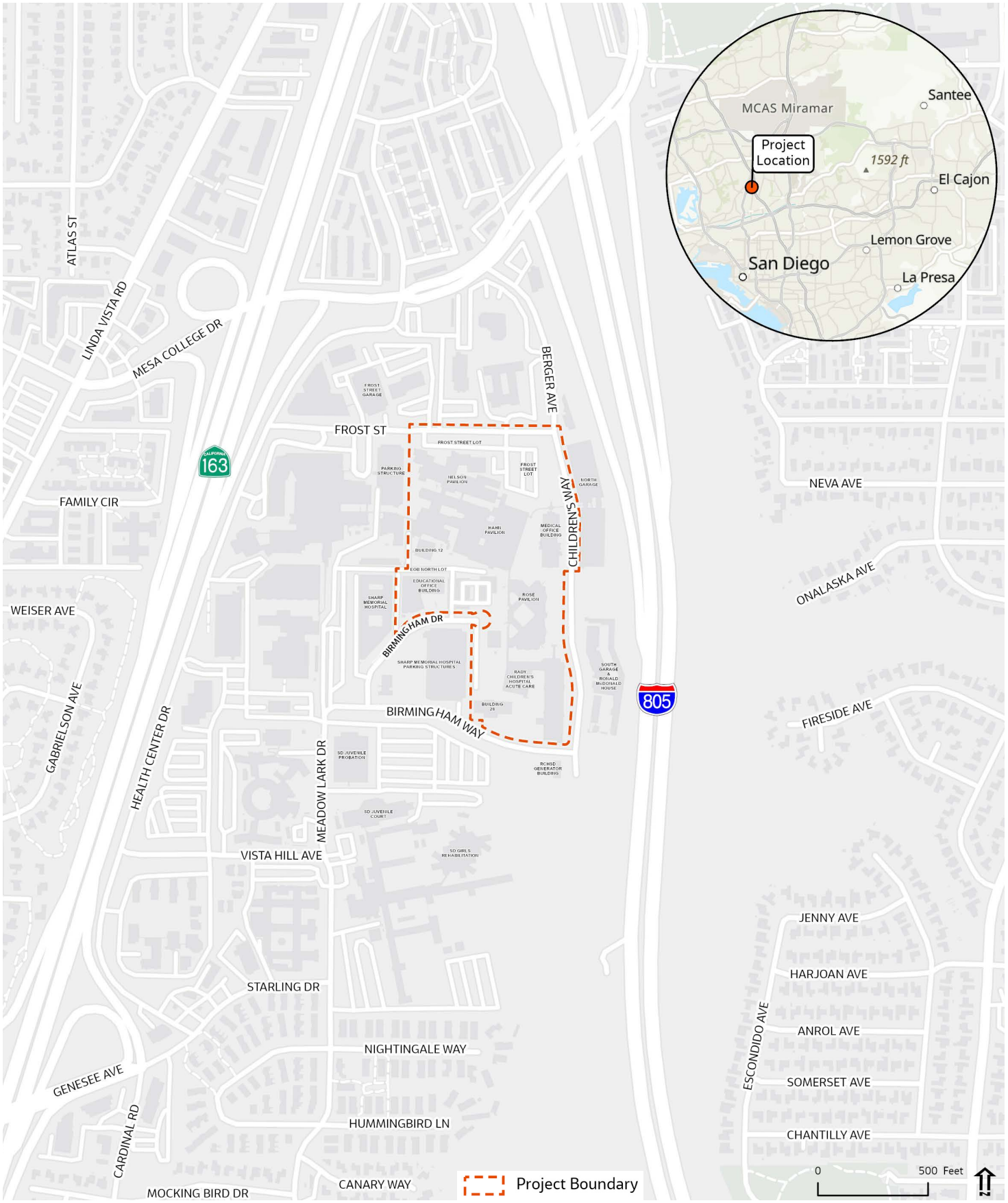

Figure 1

Regional Map

RADY CHILDREN'S HOSPITAL SAN DIEGO -
INTENSIVE CARE UNIT AND EMERGENCY SERVICES PAVILION PROJECT

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Figure 2

Aerial Photograph

RADY CHILDREN'S HOSPITAL SAN DIEGO -
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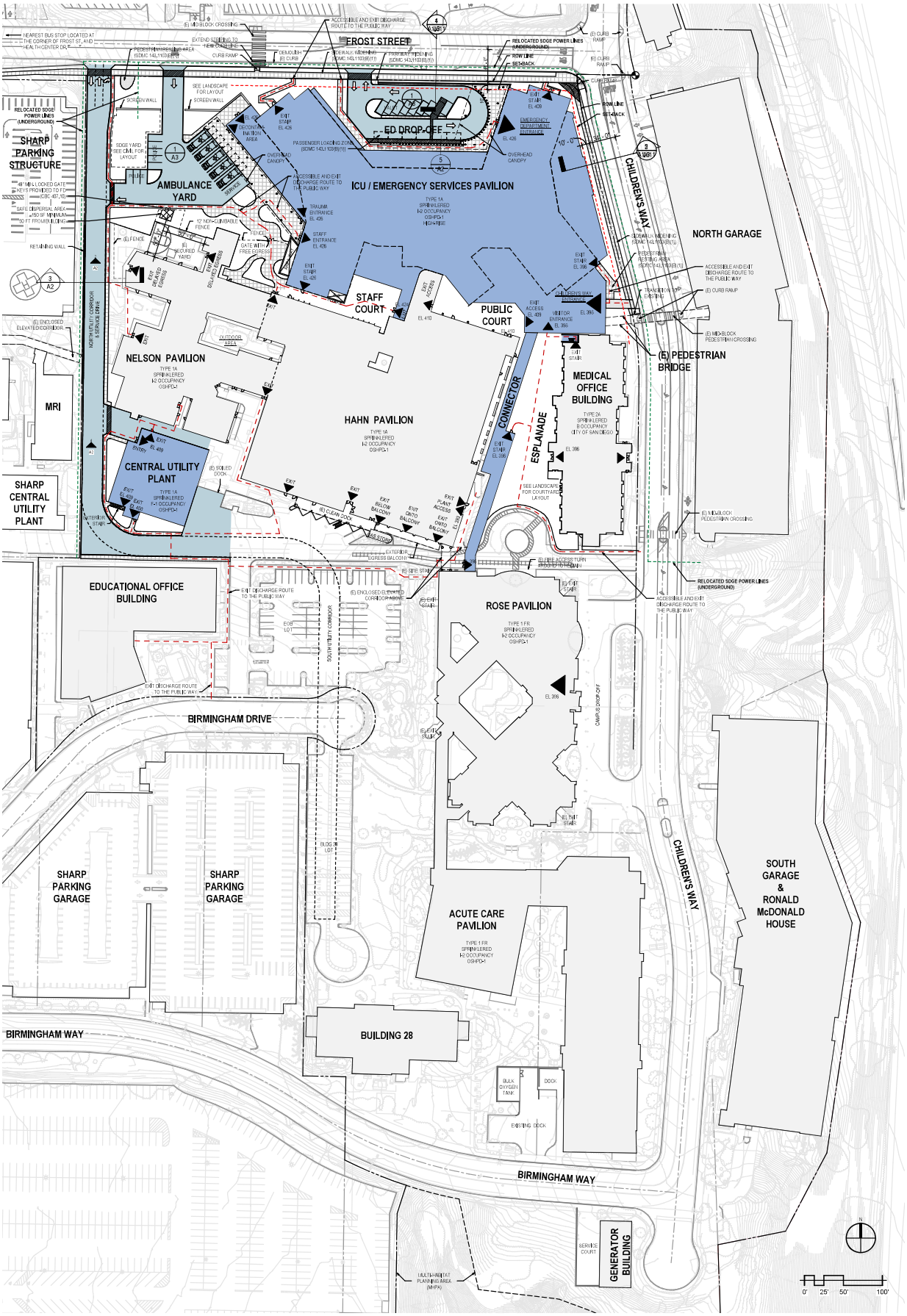

Figure 3

Site Plan

RADY CHILDREN'S HOSPITAL SAN DIEGO -
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3. PRECONSTRUCTION WASTE GENERATION AND DIVERSION

The City's *2022 Certified Construction & Demolition Recycling Facility Directory* (Appendix A) provides guidance on identifying recycling/reuse facility locations, accepted materials, and recycling/reuse rates. The California Department of Resources Recycling and Recovery's (CalRecycle) online *Recycled-Content Product Manufacturers* (https://www2.calrecycle.ca.gov/buyrecycled/manufacturers/directory/) provides the name of product manufacturers offering source materials made with recycled materials. Waste disposal sites and recycling methods and opportunities may change from those available in listed locations; however, it is not expected that the named waste diversion and disposal sites noted herein would change by the time the project is anticipated to begin construction.

All C&D-generated waste would be subject to compliance with the source separation and diversion requirements contained in this WMP to divert, recycle, and/or re-use these materials, to the maximum degree possible. As identified in the City's *2022 Certified Construction & Demolition Recycling Facility Directory* (Appendix A), "Mixed C&D Debris" recyclers attain at most a 90 percent diversion rate, but more typically achieve 73 percent diversion; whereas, single-material recyclers often achieve a nearly 100 percent diversion rate (City 2013), as identified in City's *Guidelines for a Waste Management Plan*. As a result, in order to achieve the highest level of waste diversion from landfills, and highest dollar value for the quality of materials, the project would source separate (segregate) clean recyclable materials on the site by material type and divert them for recycling or reuse at City-certified facilities specializing in each material type.

Responsibility for ensuring ongoing WMP compliance would be under the direction of the Project Solid Waste Management Coordinator (SWMC), as assigned by RCHSD (Applicant). The SWMC will have the authority to provide guidelines and procedures for contractor(s) and staff to implement waste reduction and recycling efforts. These responsibilities include, but not limited to, the following:

- Review and understand the WMP, including responsibilities of the SWMC.
- Communicate waste reduction and recycling goals to all contractors and subcontractors and ensure material separation and coordinate proper disposal and diversion of waste generated.
- Work with contractor(s) to estimate quantities of each type of material that will be salvaged, recycled, or disposed of as waste, then assist contractor(s) with documentation.
- Review and update procedures as needed for material separation and verify availability of containers and bins needed to avoid delays.
- Review and update procedures for periodic solid waste collection and transportation to recycling and disposal facilities.
- Review and update solid waste management requirements for each trade.

- Possess the authority to issue stop work orders if proper procedures are not being followed.

3.1 Demolition

Site preparation would require the removal of hospital buildings and a paved surface parking lot. Removal of existing sidewalks, utilities, landscaping, and all other site features would also be required in the areas proposed for demolition. Other waste materials associated with the demolition are anticipated to include negligible amounts of waste generated by contractors working on the site during the demolition process.

Demolition activities would include removal of hospital buildings, including portions of the Nelson Pavilion, Nelson Warehouse, Building 12 Gait Lab, the enclosed elevator corridor to Sharp Hospital, the stair tower at the end of the MOB, and the bridge between the MOB and the Hahn Pavilion. Total square footage of the existing buildings to be removed is 76,450 SF. Building materials demolition debris is expected to be diverted at a rate of 73 percent. Building materials expected during building demolition include the following:

- Asphalt
- Building materials
- Brick/Masonry/Tile
- Concrete
- Drywall (used)
- Mixed Debris
- Roofing Materials
- Scrap Metals
- Textiles/Carpet/Carpet Padding
- Wood

The project would include removal of the Frost Street parking lot, which contains 173 spaces. Approximately 1,568 CY or 1,098 tons of asphalt would be removed during demolition activities. In addition, approximately 4,647 CY or 5,576 tons of concrete, and 400 CY or 60 tons of landscaping would be removed during demolition activities. These estimates are based the City's *C&D Debris Conversion Rate Table*, which identifies a weight of 0.7 tons/CY for asphalt construction debris, 1.2 tons/CY for concrete construction debris, and 0.15 tons/CY of landscape debris (Appendix C). Asphalt and concrete would be recycled at one of the listed asphalt/concrete recycling facilities (likely the Hanson Aggregates West – Miramar site), resulting in a 100 percent diversion rate. Landscaping would be diverted to Miramar Greenery, for a diversion rate of 100 percent.

According to the City's *Guidelines for a Waste Management Plan* (City 2013), during demolition, three pounds per square foot of waste are generated during demolition, construction, and also per year during ongoing use of a site. If more specific information on waste generation is not available, the total amount of waste can be equally distributed between the types of waste expected. Based on this generation rate, and best estimates of asphalt, concrete, and landscaping debris, it is estimated that approximately 6,848.7 tons of waste would be generated during demolition, consisting of 114.7 tons from building demolition, 1,098 tons from asphalt, 5,576 tons from concrete, and 60 tons from landscaping. Approximately 31 tons of the demolition debris are expected to be disposed of in a landfill, while approximately 6,817.7 tons of demolition debris are expected to be

diverted. Table 2, *Preconstruction Solid Waste Generation and Diversion*, contains a summary of the preconstruction waste that would be generated by the project.

3.2 Grading

Grading is anticipated to require 110,850 CY (144,105 tons) of soil material to be cut and exported off site. Cut material may include some soil that is contaminated from past uses. Soil would be tested as necessary to determine contamination, and if contamination is determined to be present, contaminated soil would be removed and disposed of according to applicable federal, state, and local laws. Any contaminated soil would be discharged to a legal disposal site and would not be available for reuse. For the purposes of this analysis, it is assumed that ten percent (11,085 CY or 14,410.5 tons) of the export material associated with project construction would be deemed contaminated and would not be available for reuse. The contaminated soil precludes the reuse of the soil at another location. As such, the contaminated portion of the soil would be required to be disposed of in accordance with applicable requirements and diversion is not possible. Thus, export of soil associated with the project would be 99,765 CY (129,694.5 tons) of clean soil for reuse at another location. Estimates for tonnage are based the City's *C&D Debris Conversion Rate Table*, which identifies an excavated soil weight of 1.30 tons/CY (Appendix C of the WMP). Other waste materials associated with grading are anticipated to include negligible amounts of garbage waste generated by contractors working on site during the site preparation process.

3.3 Preconstruction Total Diversion

During the project's preconstruction phase, an overall 99.6 percent diversion rate is targeted for materials generated during preconstruction activities, as shown in Table 2 (as noted in the table footnotes, ten percent of the graded soils that would require export from the site are excluded from preconstruction solid waste generation and diversion totals, due to the potential presence of contamination in the soil, which eliminates it from being appropriate for diversion and reuse). From preconstruction to occupancy of the project, the WMP will provide contractors guidelines to ensure the proper reduction, segregation, recycling, and disposal of demolition, and construction waste. Proper segregation of recyclable materials is required based on type of materials generated and the availability of recycling facilities able to accept those materials. This responsibility will be under the direction of the assigned SWMC.

The project SWMC will coordinate with ESD and/or Mitigation Monitoring staff, including regular communication and invitations to the work site. An invitation will be extended to an ESD representative at least 7 days prior to attend each preconstruction meeting of each phase of the development.

Table 2
PRECONSTRUCTION SOLID WASTE GENERATION AND DIVERSION

Phase	Material	SF[1]	Pounds[2]	Tons[3]	Diversion Rate (Percent)[4]	Recycling Facility/ Destination[5]	Tons Diverted	Tons Disposed
Demolition	Buildings	76,450	229,350	114.7	73	A	83.7	31.0
Phase	Material	Volume[1] (CY)	Tons/Unit Conversion Factor	Tons	Diversion Rate (Percent)[4]	Recycling Facility/ Destination[5]	Tons Diverted	Tons Disposed
Demolition	Asphalt	1,568	0.7	1,098	100	B	1,098	0
Demolition	Concrete	4,647	1.2	5,576	100	B	5,576	0
Demolition	Landscaping	400	0.15	60	100	C	60	0
			TOTAL DEMOLITION	**6,848.7**	**99.5**	**—**	**6,817.7**	**31.0**
Grading	Soil Export	99,765[6]	1.3	64.8	100	D	64.8	0
			TOTAL PRECONSTRUCTION	**6,913.5**	**99.6**	**—**	**6,882.5**	**31.0**

SOURCES: City of San Diego *2022 Certified Construction & Demolition Recycling Facility Directory* (Appendix A); City of San Diego C&D Debris Conversion Rate Table (Appendix C)

NOTES:

CY = cubic yards

1 Table information subject to field verification during preconstruction.
2 Generate rate = 3 pounds per SF (City 2013)
3 Pounds divided by 2,000 = tons
4 Total diversion rate based on the percentage of total tons of waste diverted over the total tons of waste generated.
5 If for any reason listed facilities are not available, the Applicant would contract with another source separating recycling facility listed in the City's *2022 Certified Construction & Demolition Recycling Facility Directory* with an equal or greater diversion rate to ensure diversion rates meet those estimated in this table.
6 Soil available for diversion or disposal is calculated as 90 percent (99,765 CY) of the soils expected to require export.

RECYCLING FACILITY/DESTINATION KEY:

A = EDCO Recovery & Transfer, 3660 Dalbergia Street, San Diego, CA 92113
B = Hanson Aggregates, 9229 Harris Plant Road, San Diego, CA 92126
C = Miramar Greenery, 5180 Convoy Street, San Diego, CA 92111
D = Disposal site to be identified at the time of construction initiation

4. CONSTRUCTION WASTE GENERATION AND DIVERSION

As previously described, the project proposes construction of 556,660 SF of new buildings, consisting of the ICU/ESP, a Campus Connector Building, a CUP and replacement stairs for the MOB. The ICU/ESP would be an approximately 486,000-SF, seven-story building. The Campus Connector Building would be a new 33,500-SF, three-story pedestrian connector in the center of the campus for patient, public, staff, and service flow across campus. The CUP would be a 36,000 SF, five-level replacement building for utility plant infrastructure currently located at several locations within the Hahn Pavilion. The project would also include modifications to site access, installation of new utility infrastructure, and modification of outdoor spaces, including regrading a courtyard and redevelopment of outdoor spaces between the Hahn Pavilion and the ICU/ESP.

The proposed buildings would be considered as Type I-A construction, fully sprinklered. The buildings would consist of steel frame structures, with concrete over metal deck floors and roofs, with curtain wall, metal panel, and terracotta non-bearing exterior walls. The CUP would have loadbearing concrete exterior walls clad in metal panel, with steel framing with concrete-filled metal decks on the interior.

Based on the type of structures proposed, the following building materials are likely to generate waste during construction:

- Asphalt/Concrete
- Brick/Terracotta Tile
- Cardboard
- Carpet/Padding
- Drywall
- Landscape Debris
- Mixed Debris
- Roofing Materials
- Scrap Metals
- Wood

According to the U.S. Environmental Protection Agency (USEPA), nonresidential construction projects typically generate an average of 4.34 pounds of construction waste per SF of building construction (USEPA 2009). Based on this estimate, construction waste generated by the project is shown in Table 3, *RCHSD ICU/ESP Construction Waste Generation*, and would total appropriately 1,208 tons.

Table 3
PROJECT CONSTRUCTION WASTE GENERATION

Building Type	Size (SF)	Generation Rate (pounds per SF)	Tons Generated
Non-Residential	556,660	4.34	1,208

In addition to the construction debris noted above, a negligible amount of trash would be generated by contractors working on site during the construction process. Trash generated on site would be collected by a commercial trash collection company and taken to the Miramar Landfill.

4.1 Construction Waste Generation and Diversion

Diversion and disposal of these construction materials is estimated below for the project in Table 4, *Construction Waste Diversion by Material Type*, based on the project's diversion rate goals, while Table 5, *Construction Solid Waste Diversion Facilities*, provides a listing of the diversion facilities by waste type.

Table 4
CONSTRUCTION WASTE DIVERSION BY MATERIAL TYPE

Source	Waste Material	Estimated Waste (tons)	Diversion Rate (percent)[1]	Estimated Diverted (tons)[2]	Estimated Disposed (tons)
Building Construction (556,660 SF)	Asphalt/Concrete	109.8	100	109.8	0
	Brick/Terracotta Tile	109.8	100	109.8	0
	Cardboard	109.8	100	109.8	0
	Carpet/padding	109.8	73	80.1	29.8
	Drywall	109.8	73	80.1	29.8
	Landscape Debris	109.8	100	109.8	0
	Mixed Debris	109.8	73	80.1	29.8
	Roofing Materials	109.8	100	109.8	0
	Scrap Metal	109.8	100	109.8	0
	Wood	109.8	100	109.8	0
	Trash	109.8	0	0	109.8
		TOTAL[3]	**1,008.9**		**199.2**

NOTES:

1 Facilities that process metals, asphalt/concrete, and wood all achieve a 100 percent diversion rate for these materials. City staff have indicated that applicable facilities to handle drywall and carpet/carpet padding construction debris may not be available and these materials should be assumed to be sent to a mixed debris facility with a 73 percent diversion rate (City 2022a). Facilities that process mixed debris achieve a minimum 73 percent diversion rate, which was conservatively assumed for this project (City 2022a; Appendix A).

2 For each material type, construction waste quantities are calculated based on:
4.34 lbs. of waste per nonresidential uses SF (e.g., 556,660 SF for nonresidential uses x 4.34 lbs. per SF = 2,416 lbs., or 1,208 tons); Total construction waste in Table 3 x 9.1 percent (i.e., equally divided across the eleven waste materials (with trash added) = anticipated quantity of construction waste generated by material type (109.8 tons). General refuse or trash is listed separately from waste materials.

3 Total estimated diverted tonnage (1,008.9) and estimated disposal tonnage (199.2) add up to 1,208.1 tons, which is 0.1 ton more than the waste generation shown in Table 3. This slight variation is due to rounding tonnage numbers for each waste material to the nearest tenth of a ton.

Table 5
CONSTRUCTION SOLID WASTE DIVERSION FACILITIES

Material	Diversion Goals (percent)	Destination[1]
Asphalt/Concrete	100	Hanson Aggregates 9229 Harris Plant Road San Diego, CA 92126
Brick/Terracotta Tile	100	Vulcan Carroll Canyon Landfill and Recycling 10051 Black Mountain Road San Diego, CA 92126
Cardboard	100	Allan Company Miramar Recycling 5165 Convoy Street San Diego, CA 92111
Carpet/padding	73	SANCO Resource Recovery & Buy Back Center 6750 Federal Boulevard Lemon Grove, CA 91945
Drywall	73	EDCO Station Transfer Station & Buy Back Center 8184 Commercial Street La Mesa, CA 91942
Landscape Debris	100	Miramar Greenery 5180 Convoy Street San Diego, CA 92111
Mixed Debris	73	SANCO Resource Recovery & Buy Back Center 6750 Federal Boulevard Lemon Grove, CA 91945
Roofing Materials	100	Allan Company Miramar Recycling 5165 Convoy Street San Diego, CA 92111
Scrap Metal	100	Allan Company Miramar Recycling 5165 Convoy Street San Diego, CA 92111
Wood	100	Miramar Greenery 5180 Convoy Street San Diego, CA 92111

NOTE:

[1] Trash would be taken to the Miramar Landfill (5180 Convoy Street, San Diego, CA 92111) at a 0 percent diversion rate. All other construction debris would be taken to an appropriate facility listed on the City's Certified Construction & Demolition Recycling Facility Directory.

Construction debris would be separated onsite into material-specific containers, corresponding to the material types in Table 5, to facilitate reuse and recycling and to increase the efficiency of waste reclamation. Because the project construction and materials details are preliminary and the estimated quantities in Table 4 are theoretical, the project is committed to implementing programs to divert a minimum 75 percent of construction debris from landfills.

4.2 Post-consumer Content Construction Materials

In order to further minimize waste, the project would utilize recycled content construction materials, where possible. The contractor may identify products with recycled content by consulting the state's database (http://www.calrecycle.ca.gov/RCPM/) or product representatives. Given the preliminary nature of the project plans, an overall target of 20 percent of the total value of materials purchased for project construction activities would be either post-consumer recycled or pre-consumer recycled materials. Receipts demonstrating post-consumer content would be provided to ESD staff at or prior to the preconstruction meeting(s).

5. OCCUPANCY WASTE GENERATION AND DIVERSION

The project would be managed under the Applicant or its designee(s). The City's Storage Ordinance (SDMC Section 142.0801 et. seq.) requires the provision of separate bins for organic waste and recyclable materials to be separated from non-recyclable solid waste. Recycling facilities would be provided for the project in compliance with the Storage Ordinance, meeting or exceeding the minimums. The project would provide more than the 4,688 SF of total refuse and recycling storage area to support the campus and 1,003 SF of organic waste storage area to support the ICU/ES Pavilion and the CUP in accordance with the SDMC requirements.

The Applicant or its designee(s), would educate the employee populations regarding the appropriate waste diversion program to ensure the proper handling of waste. Each employee would be educated on the principles of proper waste handling and diversion to meet the Applicant's goal to reduce/reuse/recycle. The project would construct 480,210 SF of hospital floor area. Table 6, *Project Operational Solid Waste Generation* summarizes the expected solid waste generation associated with the project. Solid waste generation for the project is based on the City of San Diego's Occupancy Phase Waste Generation Factor for hospitals (Appendix D).

RCHSD has on-site recycling services and a recycling program in place that requires separating recyclable materials from other solid waste by depositing the recycling materials into designated containers. Recycling services are required by City of San Diego Land Development Code Section 66.0707. The new structures proposed for the project would comply with RCHSD's existing on-site recycling program. The RCHSD Recycling of Hospital Resources policy identifies policies and procedures specific to recycling facility wide and includes a list of materials to be recycled. The specific actions associated with the Recycling of Hospital Resources policy implemented at RCHSD would also be implemented for the project and include the following:

- Any items that can be recycled through RCHSD process for market value (i.e., cans and bottles) shall be processed through the hospital's Recycling Program, which is administered by the Director of Environmental Services.
- At this time, RCHSD is not recycling the following items: waxed coated paper, plastic coated papers, tissue or paper towels, food waste, plastic trash bag, styrofoam, and paper/containers contaminated with food, film plastic.
- Encourage employees to reduce the amount of materials used and reduce waste output. Recommendations for waste reduction include:
    1. Use both sides of a piece of paper.
    2. Reply to messages and memos on the same piece of paper the original memo was written on whenever possible.
    3. Use recycled paper for scratch paper.
    4. Minimize or eliminate the number of disposable items used at work.
    5. Bring a coffee mug to work.

6. Bring eating utensils to work.
7. Use recycled supplies whenever possible.

- Material Management will identify and purchase items that can be recycled.
- Reduce printing of electronic email and attachments.
- Every measure should be taken to reduce papers and handouts for all meetings.
    - Make meeting handouts electronic, to the extent feasible.
    - Meeting minutes should be approved electronically.
- Forms for all purchasing will be made available electronically and submitted electronically.
- Presentations will be electronic using PowerPoint or other suitable media.

The following procedures are part of the RCHSD Recycling of Hospital Resources policy:

- Recycling and all Green efforts and responsibilities will be shared by all employees and venders of RCHSD.
- Generating Department Responsibility
    1. Departments generating materials that are deemed recyclable should deposit these materials into the appropriate approved recycling bin.
    2. All individual office containers will be emptied by the occupant of the office or person using the container. Office container materials will be placed into area containers.
- Role of Environmental Services (EVS)
    1. EVS will be responsible for pick-up of all area recycling containers, relining the containers and transporting the materials to the appropriate recycling container in the waste yard.
- Preparing Material for Recycling
    1. Keep all recycling bins free from ordinary (non-recyclable) trash.
    2. Confidential information may never go into a blue recycling container.
    3. It is good practice to rinse of glass, plastic bottles, aluminum cans or other small containers before placing them into the recycle bin.
    4. Paper should be dry and free from oils, food or dirt.
    5. Whenever possible flatten containers and plastic bottles to reduce volume.
- Green Team
    1. The Green Team is a group of employees from all disciplines and departments who have a desire and passion for safe and healthy

environment. The Green team will be responsible for driving the recycling policies within each discipline/department.

The following materials and their recyclable status are defined in the RCHSD Recycling of Hospital Resources policy:

- **HIPAA Materials** (as identified in CPM 11-63 Record Management Policy) – HIPAA Compliant Confidential Containers shall be picked up by HIPAA compliant hauler and all materials in confidential bins are shredded and recycled.
- **Paper** – All paper can be placed into the Confidential Containers and all materials shall be shredded and recycled.
- **Comingled Recycle Items** – Blue Co-Mingle Containers shall be used to collect aluminum cans, plastic bottles, recycle items 1-7, phone books, paper plates, non-confidential paper, newspapers, mail, plastic utensils, cardboard (thin), metal cans, and metal. Comingled containers are lined with a purple liner that have a recycling icon on it.
- **Universal Wastes** (as defined by SM-19 Universal Wastes Containers) – Universal wastes are located in the Waste Yard in the Universal Waste Cage. Identified battery containers are located in utility rooms or other identified locations. Electronic equipment, computers, printers, cable, batteries, lamps, lamp ballasts and all equipment that has an electrical cord shall be recycled.
- **Medical Supplies & Equipment -** Unused or outdated medical equipment or unused supplies can be collected and sent to organizations that place them in hospitals around the world that are in need of such equipment and supplies. Equipment that is no longer operational will be recycled as universal waste.
- **Reusable Sharp Containers** –Serviced by a licensed medical waste hauler. Sharp containers will be used for all sharps.
- **Cardboard** –All cardboard will be placed in the comingle compactor and sent to a recycling facility.
- **Printer and Copy Machine Cartridges** – All cartridges shall be placed back into old packaging and return to managed service provider.
- **Wooden Pallets** – Shall be placed in waste yard and picked up by recycling company.
- **Glass Containers** – (i.e., non-pharmaceutical) All glass containers must be empty and free of all fluids. Glass is placed in comingle recycling containers.
- **Chemical Bottles** – Bottles that have leftover fluids may not be placed into a trash container, but shall be placed in marked hazardous waste containers.

In addition to the recycling of materials identified in the Recycling of Hospital Resources policy, RCHSD's Receiving, Moving and Disposing of Equipment or Furniture policy contains direction for disposition of equipment and furniture that is no longer needed at RCHSD. As noted in the policy, "If the item is in good condition and has value, Supply Chain Management will either move the item to storage or sell it to an equipment or furniture broker." Further, if "the item(s) to be disposed have no value, Supply Chain

Management will either contact a salvage company to remove the item or inform EVS that the item can be discarded."

With regard to organics, RCHSD would provide 1,003 SF of organic waste storage area for the ICU/ESP building and CUP near the Acute Care Pavilion dock and continue to contract with competitively selected vendors to haul both green waste and pre-consumer food waste from any food services associated with the RCHSD existing campus. These facilities accept pre-consumer food scraps diverted from the waste stream along with some paper products from food-serving operations (e.g., coffee filters, parchment paper, kitchen paper towels, etc.). Food waste from the RCHSD, if applicable, would be collected in food bins to be placed in exterior custom-made bins for collection. The material would be hauled by contracted waste service. Senate Bill 1383 requires that businesses subscribe to an organic waste collection service that either "source separates" the waste (e.g., separate bins) or transports all unsegregated waste to a facility that recovers 75 percent of the organic content collected from the system. This project intends to conform to this requirement.

Table 6
PROJECT OCCUPANCY SOLID WASTE GENERATION

Project Component	SF	Waste Generation Factor (tons/year/SF or unit)	Tons Generated (per year)	Expected Percent Diverted from Source-Separated Recycling[1,2]	Estimated Diverted (per year)	Estimated Disposed (per year)
Intensive Care Unit/Emergency Services Pavilion Project	480,210	0.0055	2,641	50	1,320.5	1,320.5
				TOTAL	**1,320.5**	**1,320.5**

SOURCE: City 2012 (Appendix D of the WMP)

NOTES:

1 Reflects compliance with existing City Storage Ordinance and City Recycling Ordinance and state laws.
2 The Applicant would contract with City-approved recycling haulers and disposal facilities.

In order to get closer to meeting the 75 percent diversion target, common area landscaping would be maintained by professional landscape contractors who would be required to divert all landscape greenery directly to a greenery recycling yard and diverted to Miramar Greenery, for a diversion rate of 100 percent. Thus, the actual diversion levels would be slightly higher than 1,320.5 tons per year.

While diversion of organics and landscaping materials would divert some additional waste from being disposed of, the expected operational waste generated by the RCHSD ICU/ESP Project annually taking into account compliance with City regulations on diversion would be approximately 1,320.5 tons. Additional diversion from organics and landscaping greenery diversion would not reduce the estimated solid waste generation during project occupancy to below the 60 tons per year threshold established for

cumulative solid waste impacts. To mitigate for the cumulative impact on solid waste, the applicant shall be responsible for implementing a long-term WMP, which would ensure that the project meets or exceeds the requirements set for in AB 939 and AB 341. The project's long-term WMP shall include compliance with the Recycling Ordinance; the provision of exterior storage space required for the project for refuse, recyclable materials, and organic materials (refer to Table 1); and a means of handling landscaping and green waste materials.

The project shall also implement the following long-term WMP measures to minimize its disposal of waste:

- The project shall implement materials and resources strategies as required for Leadership in Energy and Environmental Design (LEED) certification, including, but not limited to, storage and collection of recyclables, construction and demolition waste management planning, Persistent Bioaccumulative and Toxic (PBT) source reduction for mercury, and construction and demolition waste management.

- RCHSD, which receives solid waste collection services from a franchisee, would continue implementing the existing recycling program throughout the facility, including the new buildings associated with the project. 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.

- RCHSD, which receives solid waste collection services from a franchisee, would continue implementing the existing recycling program throughout the facility, including the new buildings associated with the project. The new buildings shall participate in the established 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, RCHSD 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 RCHSD, the responsible person shall ensure that occupants of the new buildings 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.

Implementation of a project-specific WMP would reduce the project's cumulative portion of impacts on solid waste, as, per the City's CEQA 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 2020).

6. CONCLUSION

The project proposes construction of more than 40,000 SF of building area, thus exceeding the City's threshold for cumulative solid waste impacts without implementation of solid waste diversion measures. The City Development Services Department is requiring that this WMP be prepared and submitted to the City's ESD.

Based on the quantified waste generation and diversion rates discussed above, the project would meet the 75 percent solid waste diversion rate for waste produced during the construction phases. The project would, however, fail to meet the 75 percent waste reduction target annually once the building is occupied. Nonetheless, the project would result in less-than-significant direct and cumulative impacts to solid waste facilities as follows:

- Project construction activities would fall below the City's *CEQA Significance Determination Threshold* (generation of more than 1,500 tons of solid waste materials) for direct impacts to solid waste facilities during construction (i.e., 199.2 tons of C&D materials to Miramar Landfill).
- Project operations would dispose of 1,317.5 tons of solid waste to Miramar Landfill, which would exceed the City's *CEQA Significance Determination Threshold* (of 60 tons or more of waste) for cumulative impacts to solid waste services; however, as described above in Section 5, *Occupancy Waste Generation and Diversion*, the project would implement a long-term WMP, incorporating the described measures. 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 CEQA Significance Determination Thresholds to a less-than-significant impact.

The operational diversion rates noted in Table 6 would be assured or exceeded when the RCHSD campus provides trash, recycling and organics storage space per the City Storage Ordinance and complies with the City Recycling Ordinance by providing adequate space, bins, and educational materials for recycling.

This WMP will be implemented to the fullest degree of accuracy and efficiency. Additionally, the project will 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 for the project is designed to implement and adhere to all City ordinance and regulations related to solid waste management.

Prior to the issuance of any grading or construction permit, the SWMC will ensure ESD's attendance at a preconstruction meeting. The SWMC will ensure that (1) the proposed approach to the contractor education is approved; (2) the written specifications for base materials, concrete pavers, decomposed granite, and mulch is approved; and (3) the ESD

inspector approved the separate waste containers, signage, and hauling contractors for the following materials:

- Asphalt/concrete
- Brick/Terracotta Tile
- Cardboard
- Carpet/padding
- Drywall
- Landscape debris
- Mixed C&D debris
- Roofing materials
- Scrap metal
- Wood
- Refuse/garbage/trash

The project would be designed to achieve 75 percent of construction waste to be source reduced and/or recycled. While diversion activities during occupancy would achieve only 50 percent diversion and would not achieve the State target of 75 percent, the project incorporates several measures above and beyond the requirements of the local ordinances. Specifically, the project would:

- Exceed the local C&D ordinance and even the State waste reduction target during construction.
- Include landscaping that would reduce yard waste and transport yard waste to a composting facility (Miramar Greenery).
- Ensure that ESD reviews the landscape plans and hauling contract to verify that landscape yard waste reduction goals are met.
- Target 20 percent recycled content of construction materials and 75 percent for landfill diversion.

The above project efforts would ensure that the solid waste generated by the project would be properly managed and that the City's solid waste services would not be significantly impacted by the proposed project.

7. REFERENCES

California Department of Resources Recycling and Recovery (CalRecycle)

2022 CalRecycle Recycled Content Products Directory: https://www2.calrecycle.ca.gov/buyrecycled/manufacturers/directory/.

City of San Diego (City)

2022a *2022 Certified Construction & Demolition Recycling Facility Directory*. Environmental Services Department. April 7.

2022b *Recycling Collection Service Providers for Businesses and Multi-Family Complexes*. April.

2022c *New Food Waste and Yard Waste Recycling Rules*. https://www.sandiego.gov/environmental-services/recycling/sb1383. Accessed June 20.

2022d City of San Diego Refuse, Organic Waste, and Recyclable Materials Exterior Storage Regulations (Municipal Code Chapter 14, Article 2, Division 8). February.

2020 *California Environmental Quality Act Significance Determination Thresholds*. Development Services Department. Available at: http://www.sandiego.gov/development-services/pdf/news/sdtceqa.pdf. December.

2016a *Waste Management Form – Part I, Construction & Demolition (C&D) Debris Deposit Program*. June 7.

2016b *City of San Diego Construction & Demolition (C&D) Debris Conversion Rate Table*. June 6.

2015 *City of San Diego Zero-Waste Plan*. Environmental Services Department. June.

2013 California Environmental Quality Act Guidelines for a Waste Management Plan. June.

2012 *City of San Diego Waste Generation Factors – Occupancy Phase*. October 1.

2011 *CEQA Waste Management Plan Information Bulletin*.

2008 *Construction and Demolition Debris Deposit Ordinance* (Municipal Code Chapter 6, Article 6, Division 6). August 6.

2007 *Recycling Ordinance* (Municipal Code Chapter 6, Article 6, Division 7). November.

State of California (State)

1989 *California Integrated Waste Management Act of 1989*. State of California Assembly Bill 939.

2014 *Mandatory Commercial Organics Recycling* law. State of California Assembly Bill 1826.

2016 *Short-Lived Climate Pollutant Reduction* law**,** State of California Senate Bill 1383.

United States Environmental Protection Agency

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

Appendix A

2022 Certified Construction & Demolition Recycling Facility Directory

Environmental Services

2022 Certified Construction & Demolition (C&D) Recycling Facility Directory

- **Material taken to a landfill is DISPOSAL. NO diversion credit is given for any material taken to a landfill.**
- You must use one of these facilities to receive diversion credit.
- Please call ahead to confirm details such as accepted materials, days and hours of operation, limitations on vehicle types, and cost.
- Ensure the project address and permit number are on the receipt.

The facilities marked below with an asterisk are transfer stations

IMPORTANT DRIVER INSTRUCTIONS - If you deliver to a transfer station, you must have your driver:
- State that your load is Construction and Demolition (C&D) debris, and ensure it is coded correctly on the receipt.
- Tickets coded as "**MSW, trash, or refuse**" will receive 0% credit.

	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	Mixed C & D Debris
EDCO Recovery & Transfer 3660 Dalbergia St, San Diego, CA 92113 619-234-7774 | www.edcodisposal.com	•									•							•	**73%**
EDCO Station Transfer Station & Buy Back Center 8184 Commercial St, La Mesa, CA 91942 619-466-3355 | www.edcodisposal.com	•			•						•			•				•	**73%**
EDCO CDI Recycling & Buy Back Center 224 S. Las Posas Rd, San Marcos, CA 92078 760-744-2700 | www.edcodisposal.com				•	•	•							•				•	**80%**
Escondido Resource Recovery 1044 W. Washington Ave, Escondido 760-745-3203 | www.edcodisposal.com																		**73%**
Fallbrook Transfer Station & Buy Back Center 550 W. Aviation Rd, Fallbrook, CA 92028 760-728-6114 | www.edcodisposal.com				•									•				•	**73%**
Otay C&D/Inert Debris Processing Facility 1700 Maxwell Rd, Chula Vista, CA 91913 619-421-3773 | www.sd.disposal.com																		**90%**
Ramona Transfer Station & Buy Back Center 324 Maple St, Ramona, CA 92065 760-789-0516 | www.edcodisposal.com				•									•				•	**73%**
SANCO Resource Recovery & Buy Back Center 6750 Federal Blvd, Lemon Grove, CA 91945 619-287-5696 | www.edcodisposal.com				•	•	•							•					**73%**
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				•									•					
Alpine Asphalt & Concrete Recycling 5690 Willows Rd, Alpine, CA 91901 760-451-6481 | www.alpineasphaltandconcrete.com	•	•	•					•										
Alpine Asphalt & Concrete Recycling 0 Duro Rd, Escondido, CA 92028 760-451-6481 | www.alpineasphaltandconcrete.com	•	•	•					•										
Aquafil Carpet Collection 187 Mace St, Chula Vista, CA 91911 619-816-0787 | www.aquafil.com					•	•												

Last updated 4/7/2022

Environmental Services

2022 Certified Construction & Demolition (C&D) Recycling Facility Directory

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- You must use one of these facilities to receive diversion credit.
- Please call ahead to confirm details such as accepted materials, days and hours of operation, limitations on vehicle types, and cost.
- Ensure the project address and permit number are on the receipt.

***If using a transfer station, you must:**
- State that your load is Construction and Demolition (C&D) debris, and ensure it is coded correctly on the receipt.
- Tickets coded as "**MSW, trash, or refuse**" will receive 0% credit.

	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	Mixed C & D Debris
Aquafil Carpet Collection 7720 Formula Pl, San Diego , CA 92126 602-562-0444 | www.aquafil.com					•	•												
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					•	•												
Duco Metals 220 Bingham Drive Suite 100, San Marcos, CA 92069 760-747-6330 I www.ducometals.com													•					
Escondido Materials 500 N. Tulip St, Escondido, CA 92025 760-432-4690 | www.weirasphalt.com	•																	
F.J. Willert Contracting 2385 Cactus Rd, San Diego, CA 92154 619-421-1980 | www.fjwillert.com	•																	
Habitat for Humanity ReStore 8101 Mercury Ct, San Diego, CA 92108 619-516-5267 | www.sandiegohabitat.org			•															
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 | www.hvacx.com													•					

Last updated 4/7/2022

Environmental Services

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Inland Pacific Resource Recovery 12650 Slaughterhouse Canyon Rd, Lakeside, CA 92040 619-390-1418 | www.iprrgreen.com								•										
Los Angeles Fiber Company 4920 S. Boyle Ave, Vernon, CA 90058 323-589-5637 | www.lafiber.com					•	•												
Miramar Greenery, City of San Diego 5180 Convoy St, San Diego, CA 92111 858-694-7000 | www.miramargreenery.com								•										
Moody's 3210 Oceanside Blvd, Oceanside, CA 92056 760-433-3316 | www.moodyselcorazonrecycling.com	•							•						•				
RAMCO 8354 Nelson Way, Escondido, CA 92026 760-205-1797 | www.ramco.us.com	•																	
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 | www.rrmca.com	•							•						•				
Rockridge Crushing 12485 Highway 67, Lakeside, CA 92040 619-324-7065	•																	
SA Recycling 3055 Commercial St, San Diego, CA 92113 619-238-6740 | www.sarecycling.com													•					
SA Recycling 1211 S. 32nd 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								•	•									

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Environmental Services

2022 Certified Construction & Demolition (C&D) Recycling Facility Directory

- **Material taken to a landfill is DISPOSAL. NO diversion credit is given for any material taken to a landfill.**
- You must use one of these facilities to receive diversion credit.
- Please call ahead to confirm details such as accepted materials, days and hours of operation, limitations on vehicle types, and cost.
- Ensure the project address and permit number are on the receipt.

***If using a transfer station, you must:**
- State that your load is Construction and Demolition (C&D) debris, and ensure it is coded correctly on the receipt.
- Tickets coded as "**MSW, trash, or refuse**" will receive 0% credit.

	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	Mixed C & D Debris
Vulcan Carol Canyon Landfill and Recycle Site 10051 Black Mountain Rd, San Diego, CA 92126 858-530-9465 | www.vulcanmaterials.com	•	•						•						•				
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| www.vulcanmaterials.com	•																	

Last updated 4/7/2022

Appendix B

Waste Management Form – Part I

Waste Management Form – Part I
Construction & Demolition (C&D) Debris Deposit Program

Required for projects described in Municipal Code §66.0601-66.0610.

Deposit will be fully refunded if debris generated from the project is recycled at the required rate.* If the minimum required recycling rate is not met, the deposit refund will be prorated. **Refund request must be submitted within 180 days from final inspection** and must be accompanied by weigh tickets for ALL debris generated, including all trash, reuse and recycling.

Complete Part I before obtaining a building, combination or demolition permit.
Submit this form and your deposit to the Development Services Department staff at permit issuance.

Refundable Party Contact Information:

Name _____ Title _____ Company _____

Address _____ City _____ State ____ Zip _____

Phone _____ Email _____

Project Information:

Approval/Permit No. _____ Project Title _____

Project Address _____ Zip _____

Project Type: ☐ *New Construction* ☐ *Addition/Alteration* ☐ *Demolition*

Building Type: ☐ *Commercial* ☐ *Residential*

Estimated Square Feet _____

Estimated Start Date _____/_____/_____

Estimated Completion Date _____/_____/_____

TO BE FILLED OUT BY DSD STAFF
"C&D Deposit" Paid $_____
Invoice # _____ Date Paid _____

Fill out the table with *estimated* quantities in tons for each material that will be generated by your project. **Note: A + B = C**
Please use the ***City Construction and Demolition Debris Conversion Table*** if converting from volume to tonnage.

Material Type	A *Estimated* Salvage, Reuse or Recycle	B *Estimated* Disposal (Trash)	C *Estimated* Total Debris Quantity	Hauler	Certified Recycling Facility or Disposal Destination
Asphalt & Concrete					
Brick / Masonry / Tile					
Cabinets, Doors, Fixtures, Windows (circle all that apply)					
Cardboard					
Carpet, Padding / Foam					
Ceiling Tile (acoustic)					
Dirt					
Drywall					
Landscape Debris					
Mixed C&D Debris					
Mixed Inerts					
Roofing Materials					
Scrap Metal					
Stucco					
Unpainted Wood & Pallets					
Garbage / Trash					
Other:					
TOTAL					

*** Diversion Requirement: 50% for permits issued through June 30, 2016, and 65% for permits issued starting on July 1, 2016.**
To estimate Recycling Rate: (Total A/Total C) x 100 = Recycling %

C&D debris may contain paint, asbestos, mercury switches, light bulbs, ballasts or other hazardous wastes that require removal prior to disposal. The Miramar Landfill cannot accept hazardous waste. For information on waste acceptance at the Miramar Landfill, call (858) 694-7000.

Waste Management Form – Part II
Construction & Demolition (C&D) Debris Deposit Program

Required for projects described in Municipal Code §66.0601-66.0610.

Complete Part II after final inspection.
Submit with ALL trash, salvage, reuse and recycling weigh tickets.

Send this completed form and all documentation:

By Mail

City of San Diego
Environmental Services Department
Attn: C&D Diversion Coordinator
9601 Ridgehaven Court, Suite 320
San Diego, CA 92123-1636

By Fax

Attn: C&D Diversion Coordinator
(858) 492-5089

By Email

ESD_CD@sandiego.gov

Applicants must submit refund requests within 180 days from project final inspection. Requests submitted after 180 days will not be eligible for a refund. Refunds will not be issued if all requested information and documentation is not provided. Refunds will be mailed within 45 business days following receipt of all proper forms and documentations. If the minimum required recycling rate is not met, the deposit refund will be prorated.

Project Information

Approval/Permit No. _____ Project No. _____ Project Title _____

Final Inspection Date _____/_____/_____ Project Address _____

Affirmation

Applicant is advised of San Diego Municipal Code section 11.0401(b) which states: "No person willfully shall make a false statement or fail to report any material fact in any application for City license, permit, certificate, employment or other City action under the provisions of the San Diego Municipal Code."

I certify under penalty of perjury under the laws of the State of California that the information provided in and with this form pertains to construction and demolition debris generated only from the project listed in Part I, that I have reviewed the accuracy of the information, and that the information is true and correct to the best of my knowledge and belief.

Name _____ Title _____ Company _____

Signature _____ Date _____

Payment Information

Check will be made payable to the Refundable Party identified on the Development Services Department's paid invoice on which the "C&D Deposit" was assessed. Please provide complete mailing address below.

If payment is to be made to a different party, the Refundable Party must *sign* in the box below, *designate* to whom the check will be payable, and *provide* complete mailing address.

By signing my name, I _____ (Refundable Party (print name)), _____ (Company), _____ (Signature),

authorize the refund check to be made payable to: _____

Refund Mailing
Address: _____ City _____ State _____ Zip+4_____

For more information, please contact the City of San Diego Environmental Services Department: (858) 627-3346 or visit www.recyclingworks.com and follow the link to C&D recycling.

Appendix C

City of San Diego: Construction & Demolition Debris Conversion Rate Table

CITY OF SAN DIEGO
Construction & Demolition (C&D) Debris
Conversion Rate Table

This worksheet lists materials typically generated from a constructionor demolition project and provides formulas for converting common units (i.e. cubic yards, square feet, and board feet) to tons. It is a tool that should be used for preparing your Waste Mangement Form - Part I, which requires that quantities be provided in tons.

Note: Weigh receipts are required for your refund request.

Step 1: Enter the estimated quantity for each applicable material in Column I, based on units

Step 2: Multiply by Tons/Unit figure listed in Column II. Enter the result for each material in Column III.
If using Excel version, column III will automatically calculate tons.

Step 3: Enter quantities for each separated material from Column III on this worksheet into the corresponding section of your Waste Management Form - Part I.

		Column I			Column II		Column III
Category	**Material**	**Volume**	**Unit**		**Tons/Unit**		**Tons**
Asphalt/Concrete	Asphalt (broken)		cy	x	0.70	=	
	Concrete (broken)		cy	x	1.20	=	
	Concrete (solid slab)		cy	x	1.30	=	
Brick/Masonry/Tile	Brick (broken)		cy	x	0.70	=	
	Brick (whole, palletized)		cy	x	1.51	=	
	Masonry Brick (broken)		cy	x	0.60	=	
	Tile		sq ft	x	0.00175	=	
Building Materials (doors, windows, cabinets, etc.)			cy	x	0.15	=	
Cardboard (flat)			cy	x	0.05	=	
Carpet	By square foot		sq ft	x	0.0005	=	
	By cubic yard		cy	x	0.30	=	
Carpet Padding/Foam			sq ft	x	0.000125	=	
Ceiling Tiles	Whole (palletized)		sq ft	x	0.0003	=	
	Loose		cy	x	0.09	=	
Drywall (new or used)	1/2" (by square foot)		sq ft	x	0.0008	=	
	5/8" (by square foot)		sq ft	x	0.00105	=	
	Demo/used (by cubic yd)		cy	x	0.25	=	
Earth	Loose/Dry		cy	x	1.20	=	
	Excavated/Wet		cy	x	1.30	=	
	Sand (loose)		cy	x	1.20	=	
Landscape Debris (brush, trees, etc)			cy	x	0.15	=	
Mixed Debris	Construction		cy	x	0.18	=	
	Demolition		cy	x	1.19	=	
Scrap metal			cy	x	0.51	=	
Shingles, asphalt			cy	x	0.22	=	
Stone (crushed)			cy	x	2.35	=	
Unpainted Wood & Pallets	By board foot		bd ft	x	0.001375	=	
	By cubic yard		cy	x	0.15	=	
Garbage/Trash			cy	x	0.18	=	
Other (estimated weight)			cy	x	estimate	=	
			cy	x	estimate	=	
			cy	x	estimate	=	
					Total All		

Appendix D

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

Appendix E

Recycling Collection Service Providers Businesses and Multifamily Complexes

Environmental Services

Recycling Collection Service Providers for Businesses and Multifamily Complexes

CERTIFIED RECYCLERS and FRANCHISE WASTE HAULERS

Companies listed below are **City-certified recyclers** or **franchise waste haulers** that will report your recycling service to the City on your behalf to document your compliance with the City Recycling Ordinance pursuant to § 66.0711 of the San Diego Municipal Code (SDMC).
Visit recyclingworks.com to find out more about the City Recycling Ordinance.

COMPANY	PHONE	paper	cardboard	steel & tin cans	CRV aluminum	CRV glass	non - CRV glass containers	CRV (PET) plastic	non-CRV plastic containers	mixed rigid plastic	Industrial plastic	film plastic *	Styrofoam™ *	wood pallets	green waste	food waste	multifamily service
A.B. Jones and Co.	(619) 549-3587															●	●
AgriService	(760) 295-6255													●	●		
Allan Company	(858) 578-9300	●	●	●	●	●	●	●	●	●							●
Cactus Recycling	(619) 661-1283	●	●	●	●			●	●	●	●	●	●				●
Cal Pac Recycling	(760) 768-3236	●	●	●	●	●	●	●	●								
Coast Waste Management	(760) 439-2824	●	●	●	●	●	●	●	●	●					●	●	●
Daily Disposal	(619) 702-3300	●	●	●	●	●	●	●	●	●		●		●	●	●	●
Debris Box	(619) 284-9245	●	●	●				●	●	●				●	●	●	●
Dependable Disposal	(619) 460-3551	●	●	●	●	●	●	●	●	●				●	●	●	●
EDCO Waste & Recycling	(619) 287-7555	●	●	●	●	●	●	●	●	●		●	●	●	●	●	●
Express Waste & Recycling	(858) 677-0881	●	●	●	●	●	●	●	●	●				●	●	●	●
Food 2 Soil/Inika Small Earth	(858) 324-5973															●	●
Ingenium	(760) 745-8780	●	●				●		●	●	●	●	●	●			
KD Farms Trucking, Inc.	(760) 644-3400														●	●	
Republic Services	(800) 421-9401	●	●	●	●	●		●	●	●		●			●	●	●
San Diego Fibers Corp.	(619) 262-8090	●	●		●	●		●	●			●					
Sani-Tainer	(619) 287-7555	●	●	●	●	●	●	●	●			●		●	●	●	●
Specialized Waste Solutions	(858) 699-7785	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Tayman Industries	(858) 453-8878	●	●	●	●	●	●	●	●	●		●			●	●	●

Last Updated April 2022

Environmental Services

Recycling Collection Service Providers for Businesses and Multifamily Complexes (continued)

CERTIFIED RECYCLERS and FRANCHISE WASTE HAULERS																
COMPANY	**PHONE**	paper	cardboard	steel & tin cans	CRV aluminum	CRV glass	non - CRV glass containers	CRV (PET) plastic	non-CRV plastic containers	mixed rigid plastic	Industrial plastic	film plastic *	Styrofoam™ *	wood pallets	green waste	food waste	multifamily service
Urban Corps of San Diego	(619) 235-6884		●	●	●	●	●	●	●	●	●						
Ware Disposal	(877) 714-9273	●	●	●	●	●	●	●	●	●	●	●		●	●	●	●
Waste Management	(800) 596-7444	●	●	●	●	●	●	●	●	●					●	●	●
Webco	(619) 287-7555	●	●	●	●	●	●	●	●	●		●	●	●	●	●	●
Zero Waste San Diego	(619) 940-5487														●	●	

* Film plastic and Styrofoam™ must be bagged or separated - contact your hauler/recycler for details.

Some companies require a minimum quantity of material and/or may charge for collection. This guide is for information purposes only – the City of San Diego does not endorse these companies, make any guarantees, or assume any liability for the services they perform.

For more information on City recycling and waste reduction programs, please email the Environmental Services Department at sdrecyclingworks@sandiego.gov, call (858)694-7000 or visit recyclingworks.com.