UC San Diego

Addendum No. 3 to the University of California San Diego Hillcrest Campus 2019 Long Range Development Plan Environmental Impact Report

Hillcrest Medical Center Renewal Project

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June 2026

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1 INTRODUCTION

This document is Addendum No. 3 to the 2019 Long Range Development Plan (2019 LRDP) for the University of California, San Diego (UC San Diego) Hillcrest Campus Program Environmental Impact Report (2019 LRDP EIR; State Clearinghouse No. 2018031003). This Addendum has been prepared pursuant to the California Environmental Quality Act (CEQA), Public Resources Code Section 15164.

1.1 PROJECT BACKGROUND

In November 2019, the UC Board of Regents approved the 2019 Long Range Development Plan (LRDP) and certified the 2019 LRDP EIR. The 2019 LRDP allows for the redevelopment of approximately 34 acres of the 62-acre UC San Diego Hillcrest Campus (Hillcrest Campus), resulting in the removal of all but two of the existing buildings. As shown in Table 2-3 of the 2019 LRDP EIR, total development would include up to 1,440,000 gross square feet (gsf) and 300 inpatient beds in the Health Care District; 1,070,000 gsf and 950 multi-family units in the Residential District; 4,000 gsf in the Open Space District; and 213,000 gsf and 50 multi-family units in the Mixed-Use District, with no development identified for the Canyon District. In addition, the 2019 LRDP included development of a new Central Utility Plant (CUP), and additional amenities encompassing approximately 2.7 million gsf. Under the LRDP, overall redevelopment of the Hillcrest Campus was divided into five phases (1A/1B, 2A/2B, 3, 4, and 5) and requires demolition, including the export of demolition materials for recycling or disposal, grading activities, building construction, and installation of underground utilities. Because this level of project information was available at the time the 2019 LRDP EIR was prepared, and due to the need to reconstruct the hospital by the deadline established under Senate Bill (SB) 1953, the 2019 LRDP development plan was presented as a long-term, multi-year construction project. Therefore, although considered a Program EIR, the 2019 LRDP EIR was able to include project-level analysis and mitigation for each redevelopment phase.

Following certification of the 2019 LRDP EIR, the UC Board of Regents has approved two addendums:

1. Addendum No. 1, approved in September 2021, covered the Phase 1A boundary of the 2019 LRDP, as well as the area encompassing the Bachman Parking Structure and the adjacent segment of Bachman Place south of Arbor Drive. Addendum No. 1 evaluated construction of the Outpatient Pavilion (since renamed the McGrath Outpatient Pavilion), the Main Parking Structure (since renamed the 1ST Avenue Parking Structure), the non–Office of Statewide Health Planning and Development (now known as the Department of Health Care Access and Information [HCAI])

portion of the CUP, and the Spine (1ST Avenue extension). It also analyzed associated circulation improvements, including partial widening of Bachman Place, a new intersection at Arbor Drive and Bachman Place, and widening of Arbor Drive, as well as demolition of approximately five structures and four surface parking lots. These project components were completed in 2025.

2. Addendum No. 2, approved in June 2024, covered the revised Phase 1B boundary of the 2019 LRDP EIR, and included four distinct components of the 2019 LRDP: the widening of Bachman Place, the construction of the north access driveway, the construction of a new temporary haul road, and the demolition of existing structures. It also included demolition of approximately seven structures and three surface parking lots. Of these planned project components, only the widening of Bachman Place has been constructed to date and was completed in 2025.

1.2 PURPOSE OF ADDENDUM

This document, Addendum No. 3, evaluates the 2019 LRDP in relation to the Hillcrest Medical Center Renewal Project (HMCR project) as discussed in greater detail in Section 2. The 2019 LRDP EIR, as amended by the prior Addendums, and Addendum No. 3, along with the other documents incorporated by reference herein, serve as environmental review of the HMCR project, as required pursuant to the provisions of CEQA, the CEQA Guidelines, and 14 California Code of Regulations Section 15164 et seq. The environmental analysis in this Addendum, and all feasible mitigation measures identified in the 2019 LRDP EIR, shall be incorporated into the resolutions approving the HMCR project.

1.3 BASIS FOR ADDENDUM

Section 15164 (a) of the CEQA Guidelines states, “The lead agency or responsible agency shall prepare an addendum to a previously certified EIR if some changes or additions are necessary but none of the conditions described in Section 15162 calling for preparation of a subsequent Environmental Impact Report (EIR) have occurred.” Pursuant to Section 15162 of the CEQA Guidelines, no subsequent EIR or Negative Declaration may be required for the project unless the lead agency determines, on the basis of substantial evidence, that one or more of the following conditions are met:

1. When an EIR has been certified or a negative declaration adopted for a project, no subsequent EIR shall be prepared for that project unless the lead agency determines, on the basis of substantial evidence in light of the whole record, one or more of the following:

    a. Substantial changes are proposed in the project which would require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;

b. Substantial changes occur with respect to the circumstances under which the project is undertaken which would require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or

c. New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete or the negative declaration was adopted, shows any of the following:

    i. The project would have one or more significant effects not discussed in the previous EIR or negative declaration;

    ii. Significant effects previously examined would be substantially more severe than shown in the previous EIR;

    iii. Mitigation measures or alternatives previously found not to be feasible would in fact be feasible, and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or

    iv. Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative.

2. If changes to a project or its circumstances occur or new information becomes available after adoption of a negative declaration, the lead agency shall prepare a subsequent EIR if required under subdivision a. Otherwise, the lead agency shall determine whether to prepare a subsequent negative declaration, an addendum, or no further documentation.

3. Once a project has been approved, the lead agency's role in project approval is completed, unless further discretionary approval on that project is required. Information appearing after an approval does not require reopening of that approval. If after the project is approved, any of the conditions described in subdivision a occurs, a subsequent EIR or negative declaration shall only be prepared by the public agency which grants the next discretionary approval for the project, if any. In this situation, no other responsible agency shall grant an approval for the project until the subsequent EIR has been certified or subsequent negative declaration adopted.

1.4 CEQA DETERMINATION

UC San Diego has assessed the proposed modifications in light of the requirements defined under Section 15162 of the CEQA Guidelines. As discussed in this Addendum, none of the conditions requiring preparation of a subsequent negative declaration or EIR under Section 15162 of the CEQA Guidelines are satisfied. On the basis of this evaluation and pursuant to the CEQA Guidelines:

☒ UC San Diego finds that the project WOULD NOT have new significant effects on the environment or a substantial increase in the severity of previously identified significant effects addressed by the 2019 LRDP EIR, no substantial changes have occurred with respect to the circumstances under which the project will be undertaken which will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects, and no new information of substantial importance to the project has been identified as defined by CEQA Guidelines, Section 15162(a)(3). However, minor technical changes or additions are necessary, and in accordance with Section 15164 of the CEQA Guidelines, an ADDENDUM has been prepared.

☐ UC San Diego finds that although the project WOULD include the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects, there will not be new or substantially increased significant effects in this case because new project-specific mitigation measures have been identified that would reduce the effects to a less than significant level. In accordance with Section 15162 of the CEQA Guidelines, a TIERED MITIGATED NEGATIVE DECLARATION has been prepared.

☐ UC San Diego finds that the project MAY have a new significant effect on the environment that was not adequately addressed in the previous EIR or a significant effect previously examined will be substantially more severe than shown in the previous EIR, and there may not be feasible mitigation which would reduce the new significant effect to a less than significant level. In accordance with Section 15162 of the CEQA Guidelines, a TIERED ENVIRONMENTAL IMPACT REPORT is required.



Signature of Project Sponsor

June 23, 2026

Date

2 HILLCREST MEDICAL CENTER RENEWAL PROJECT

2.1 PROJECT SUMMARY

Project name:	Hillcrest Medical Center Renewal Project (HMCR project)
Lead agency's name and address:	The Regents of the University of California 1111 Franklin Street Oakland, California 94607
Contact person:	Lauren Lievers, Principal Environmental Planner
Project sponsor's name and mailing address:	UC San Diego Campus Planning 9500 Gilman Drive #0074 La Jolla, California 92037-0074
Location of administrative record:	UC San Diego Campus Planning Office 10280 North Torrey Pines Road, Suite 460 La Jolla, California 92037

2.2 PROJECT LOCATION AND SETTING

The Hillcrest Campus is in the central part of the city of San Diego, California (Figure 1). More specifically, the Hillcrest Campus is in the northern portion of the City of San Diego's (City) Uptown Community in the Medical Complex neighborhood, atop a mesa that overlooks Interstate 8 (I-8) and Mission Valley to the north. The Hillcrest Campus occupies 62 acres and is approximately 2.5 miles north of Downtown San Diego and approximately 13 miles south of the UC San Diego La Jolla Campus. The property boundaries are generally defined on the northern, western, and most of the eastern sides of the campus by undeveloped, steep-sloped canyons, with slopes east of Bachman Place generally composing the remainder of the eastern property line. The southern boundary is generally defined by West Arbor Drive except for a portion of one city block bounded by 1ST Avenue, Front Street, Montecito Way, and West Arbor Drive and a parcel in the southwestern corner of Front Street and Albatross Drive. The HMCR project is in the northern and eastern portions of the Hillcrest Campus, within the Health Care Land Use District of the 2019 LRDP (Figure 2). The Hillcrest Campus boundary depicted in Figure 2 reflects subsequent implementation of the 2019 LRDP, including City-approved street vacations and acquisition of parcels adjacent to Arbor Drive that established a contiguous campus boundary. These actions were identified as part of the campus development plan evaluated in the 2019 LRDP EIR (see pp. 2-11 and 2-13).

2.3 PROJECT DESCRIPTION

The HMCR project would construct a new hospital and CUP, along with associated utility connections and circulation improvements. Prior to construction, the HMRC project would demolish nine existing structures and their associated utilities. Additional details are provided below.

2.3.1 Demolition

As shown in Table 1, the HMCR project would demolish nine non-historic structures and their associated utilities. The 2019 LRDP called for the removal of these aging and, in some cases, obsolete structures to provide adequate space to site the proposed replacement hospital, while also relocating the existing programs to facilities supporting more modern technologies and meeting current development codes and sustainability considerations. During demolition, a temporary haul road with a security gate would be constructed providing access from Bachman place and connecting to the existing roadway located west of the demolition area, extending from Dickinson Street. Figure 3 shows the proposed demolition included as part of the HMCR project. Demolition components of the HMCR project in comparison to the 2019 LRDP are shown in Table 1.

Table 1
HMCR Project Demolition in Comparison to the 2019 LRDP

HMCR Project	2019 LRDP Phase
Mail Services, 138 Dickinson Street (2,100 gsf)	Phase 1A
136 Dickinson Street (2,900 gsf)	Phase 1A
134 Dickinson Street (1,800 gsf)	Phase 1A
150 Dickinson Street (800 gsf)	Phase 1A
Camelot (1,700 gsf)	Phase 1A
Surgery Research Laboratory (15,000 gsf)	Phase 1B
Medical Library (11,100 gsf)	Phase 2B
Theodore Gildred Facility (37,800 gsf)	Phase 2B
Clinical Teaching Facility (131,000 gsf)	Phase 2B

As shown in Table 1, all demolition associated with the HMCR project was previously evaluated as part of the 2019 LRDP. While the overall extent of demolition would remain the same, demolition under the HMCR project would not follow the phasing schedule identified in the 2019 LRDP. Prior to demolition, various abatement activities would occur to remove hazardous materials and associated risks from the buildings, including asbestos-containing materials, lead-based materials, biohazardous waste, pharmaceutical waste, and other regulated materials. Hazardous materials abatement and disposal would be conducted in accordance with UC San Diego Environmental Health and Safety policies and applicable local, state, and federal regulations. Site preparation activities, anticipated to begin in summer 2026, would include building abatement, tree removal, brush clearing,

and utility capping. Heavy equipment, such as bulldozers, concrete crusher machines, hydraulic excavators, and high-reach arms, would be used during demolition activities. Major demolition mobilization is anticipated to begin in January 2027.

2.3.2 Construction

The HMCR project would construct a new hospital and CUP, along with associated utility connections and circulation improvements. Construction components of the HMCR project, as compared to the 2019 LRDP, are shown in Table 2. In addition to the components listed in Table 2, the HMCR project would construct a generator yard, cooling tower yard, and a San Diego Gas & Electric (SDG&E) yard located on the north and south sides of the CUP building. Figure 4 presents the proposed site plan, Figure 5 presents the conceptual overall massing, and Figure 6 presents an aerial view of the conceptual design.

Construction staging and worker break areas would be located on-site. Parking for construction workers would be provided on-site and/or in a designated off-site area; workers would not be permitted to park in surrounding neighborhoods. Construction is anticipated to take approximately 6.5 years to complete, with completion targeted for the first quarter of 2033.

Grading for the HMCR project would consist of approximately 240,000 cubic yards of cut and 12,000 cubic yards of fill, resulting in a net export of approximately 228,000 cubic yards of soil that would be disposed of at a legal disposal facility. The maximum cut depth would be 50 feet, and the maximum fill depth would be 20 feet.

Table 2
HMCR Project Construction in Comparison to the 2019 LRDP

2019 LRDP Phase	2019 LRDP	HMCR Project
Phase 3	Replacement Hospital (300 inpatient beds; 740,000 gsf)	Replacement Hospital (300 inpatient beds; 810,000 gsf)
Phase 3	CUP with HCAI-compliant and non-HCAI-compliant components (73,000 gsf[1])	HCAI-compliant component of the CUP (17,000 gsf)
Phase 3	Utility connections from the new CUP to the new hospital	Utility connections from the new CUP to the new hospital
Phase 3	Circulation improvements to new hospital, north of Dickinson Street	Circulation improvements to new hospital, north of Dickinson Street
Phase 3	Circulation improvements to new hospital service dock	Circulation improvements to new hospital service dock

[1]Under the modified Phase 1A of the 2019 LRDP (Addendum No. 1), 12,000 gsf of the non-HCAI-compliant portion of the CUP was constructed.

REPLACEMENT HOSPITAL

The replacement hospital would be located immediately northeast of the existing hospital, between the north access driveway to the west and the 1ST Avenue extension to the east. The selected location allows the existing hospital and utility systems to remain operational during construction, thereby avoiding disruption to facilities that must stay online. Consistent with the 2019 LRDP, the replacement hospital would provide 300 inpatient beds. The facility would total approximately 810,000 gsf, which is 70,000 gsf more than what was analyzed in the 2019 LRDP EIR. The replacement hospital would include eight above-grade levels and two partially below-grade levels, with a maximum height of 200 feet. Public access to the hospital's main entry would be provided via the 1ST Avenue extension that was constructed as part of Addendum No. 1. Public and Ambulance access to the Emergency Department would utilize the Arbor Drive and Front Street corridors, bypassing the 1ST Avenue extension altogether. Truck traffic for the loading dock would be provided via Bachman Place and McGrath Outpatient Pavilion (MOP) loading dock that was constructed as part of Addendum No. 1. The replacement hospital would also include a helipad to support emergency transport, replacing the existing helipad that is located on the Medical Offices North building. Conceptual design renderings of the proposed replacement hospital are included as Figure 7. The architectural design details presented in this document's figures, including the materials, colors, signage, and fenestration, are conceptual and may be altered during the final design process, though the overall height and massing will stay consistent.

CENTRAL UTILITY PLANT

The CUP would be located east of the replacement hospital and west of Bachman Place. The facility would total 29,000 gsf (consisting of a 17,000 gsf HCAI-compliant component and a 12,000 gsf non-HCAI-compliant component constructed under Phase 1A), which is 44,000 gsf less than analyzed in the 2019 LRDP EIR. The CUP would support the main hospital building and provide redundant chilled water connections to the HCAI-3 MOP CUP. The all-electric CUP would incorporate both central chilled water and central heating hot water systems in compliance with HCAI requirements. The CUP would be completely decarbonized, with no natural gas usage. This approach would not allow for the cogeneration (co-gen) design previously analyzed in the 2019 LRDP EIR because the co-gen system would require large amounts of natural gas to fire the turbine generator. As a result, the proposed CUP would be significantly smaller in square footage and would not include co-generation equipment or the additional office space assumed in the 2019 LRDP EIR. The CUP would have sufficient capacity to serve the new hospital, including an additional 20 percent capacity consistent with UC San Diego standards to accommodate for future needs.

UTILITY CONNECTIONS

The all-electric CUP would support the replacement hospital with heating, cooling, and emergency power. Other utilities supporting the hospital and CUP include domestic water, fire water, sewer, stormwater, and electrical connections to existing utility infrastructure around the project site. Code-required emergency storage systems would be provided for domestic water, fire water, fuel, and waste. Stormwater treatment and detention vaults would be installed to comply with UC San Diego stormwater quality requirements. Utilities would be routed primarily underground to minimize disruption to campus circulation. Proposed utility points of connection are shown in Figure 8.

CIRCULATION IMPROVEMENTS

Circulation improvements would include roadway and pedestrian enhancements serving the new hospital north of Dickinson Street and the hospital service dock. As shown in Figure 4, access to the hospital would be provided via Front Street, Dickinson Street, 1ST Avenue, and Bachman Place. The project would extend 1ST Avenue to the hospital entrance, requiring demolition of the north end of the existing 1ST Avenue, located immediately adjacent and just south of the project site boundaries shown in Figure 4, and repaving to create the connection to the new hospital. Roadway improvements would be designed to accommodate emergency vehicles, with ambulance entry provided on the northwest side of the hospital. Service docks on the eastern side of the hospital would allow for the efficient delivery of supplies, equipment, and waste handling, separate from public and emergency ambulance traffic. Fire access would be provided via a looping north service road that would connect Dickinson Street and Bachman Place, providing both hose pull coverage and code required aerial (ladder) access to both the hospital and CUP

buildings. Pedestrian pathways would connect the hospital entrances with adjacent campus facilities, ensuring safe and accessible circulation throughout the site. The segments of Front Street and Dickinson Street that were previously planned to be closed to vehicular traffic for pedestrian-only use in the final development phase of the LRDP would now continue to be utilized for public and emergency vehicular access as they are today.

2.3.3 Sustainability Features

The UC Sustainable Practices Policy covers 13 practices: green building, clean energy, climate protection, transportation, sustainable operations, zero waste, procurement, foodservice, water, health care, performance assessment, health and well-being, and diversity, equity, inclusion and justice. The policy establishes guidelines and includes climate change goals for the campuses.

The HMCR project would comply with the UC Sustainable Practices Policy by implementing the following energy efficiency, water conservation, and general sustainability strategies:

- Provide a healthy building environment that promotes wellness through access to quality daylight, thermal comfort, good acoustics, and fresh air.
- Meet the requirements to achieve Leadership in Energy and Environmental Design (LEED) Gold (minimum) certification while striving for a higher performance level.
- Use cost-effective, energy-efficient building design targeting whole-building energy performance stretch target of 115 kBtU/sfy .
- No on-site natural gas consumption. The CUP would be all-electric and would incorporate both central chilled water and heating hot water systems.
- Procure 100 percent off-site renewable energy through the UC's wholesale power procurement.
- Prioritize water conservation through efficient indoor plumbing fixtures and lab and kitchen equipment water efficiency, as well as by utilizing drought-tolerant plant species in landscaping that reduce irrigation usage by at least 50 percent.
- Support staff commuting through alternative modes of transportation by providing facilities for bicycle commuters and showers.
- Design building envelope to support occupant thermal and visual comfort and increased energy efficiency.
- Select building materials that support health across five categories: climate, ecosystem, human health, social health and equity, and circularity:

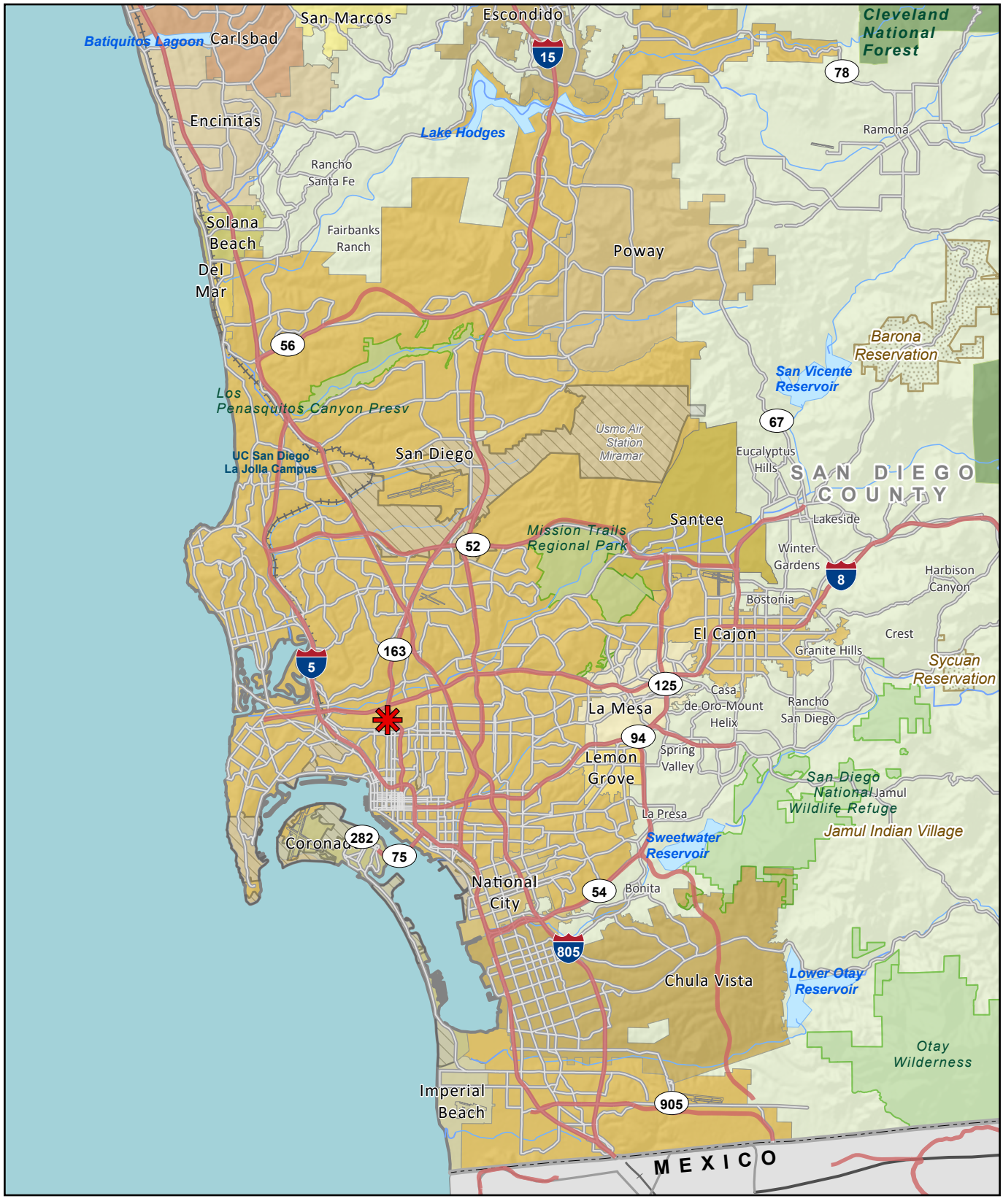
    - Climate health through selection of low-embodied carbon materials
    - Ecosystem health through use of materials such as certified wood
    - Human health by avoiding toxic chemical ingredients
    - Social health and equity through consideration of supply chain impacts on workers and communities
    - Circularity through extending product life cycles and enabling reuse where feasible
- Protect local ecosystems during construction, divert construction waste from landfills, and track carbon emissions from construction activities.

In addition, the 2019 LRDP includes a Greenhouse Gas (GHG) reduction strategy that identified a Screening Table to be used for each project developed during implementation of the 2019 LRDP. The purpose of the Screening Table is to specify the reduction of GHG emissions that are attributable to the design and construction of the development projects. The GHG Reduction Strategy Screening Table for the HMCR project is included as Appendix A to this EIR Addendum and indicates that the HMCR project would achieve 211 points, which is 111 points higher than the goal of 100 points. Some of the key HMCR project GHG reduction strategies include the following:

- Enhanced cool roof
- Very tight envelope with enhanced insulation
- Very high-efficiency lights
- Very high-efficiency water heater
- Only low-water landscape plants
- Weather-based irrigation controller
- Local bus stop at medical facility
- User-secured bike racks
- Shower and changing facilities

2.4 PROJECT APPROVAL/SCHEDULE

As a public agency principally responsible for approving or carrying out a project, the University of California (UC) is considered the lead agency under CEQA. Due to its constitutional autonomy, the UC is not subject to local land use regulation. This Addendum would be considered by The Regents or their delegate and the HMCR project may be approved at The Regents (or their delegate's) discretion, and only if The Regents (or their delegate) determine that such approval complies with CEQA. In addition, the HMCR project will require approval from the Federal Aviation Administration and Caltrans Division of Aeronautics to relocate the hospital's helipad and a hospital building permit from the HCAI Office of Statewide Hospital Planning and Development. Currently, no permits are needed from the City of San Diego to support the HMCR project.



Project Location

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FIGURE 1
Regional Location

Image Source: Nearmap (flown September 2025) Data Source: UC San Diego 2026, SanGIS derived

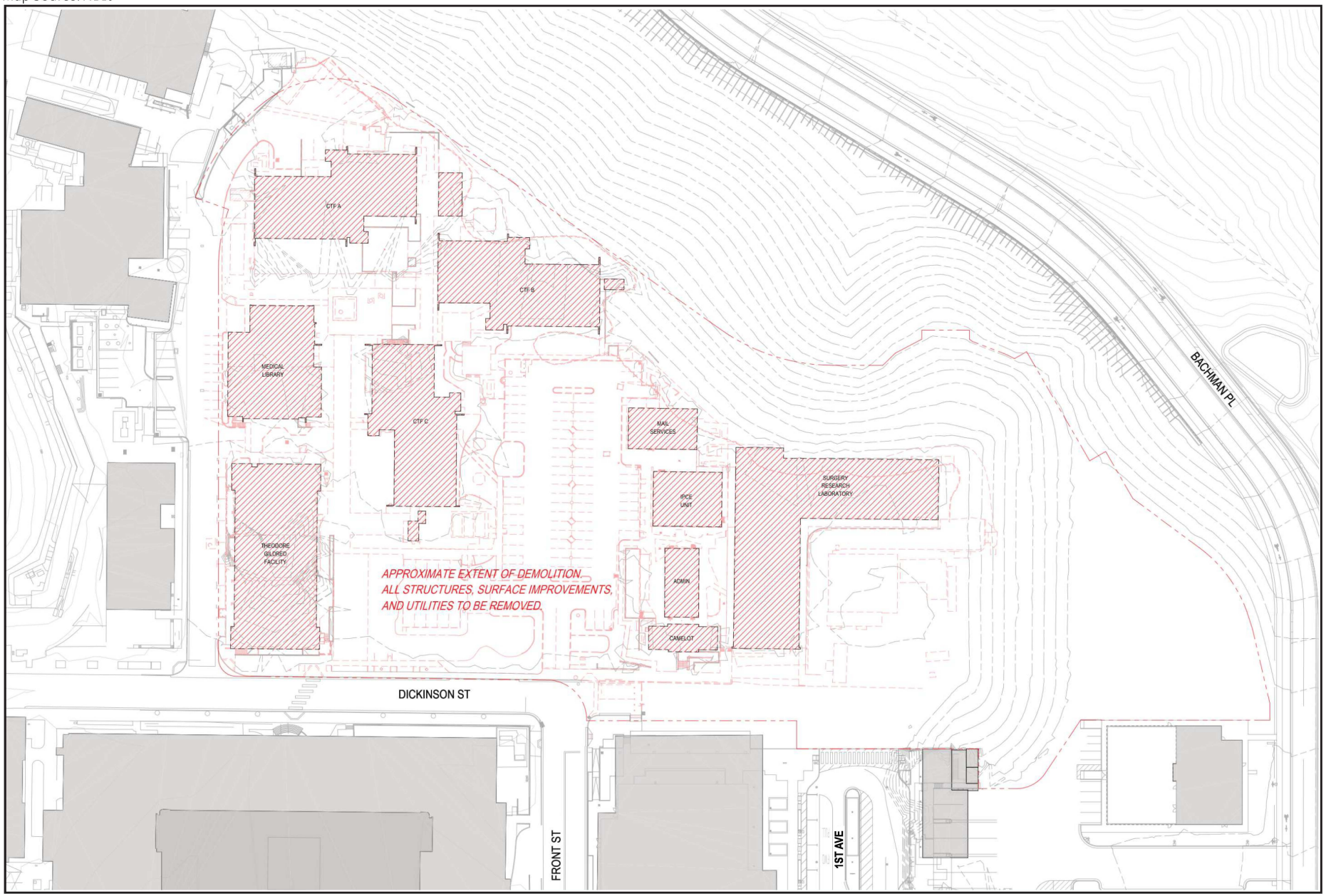


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FIGURE 2
Project Location on Aerial Photograph

Map Source: NBBJ

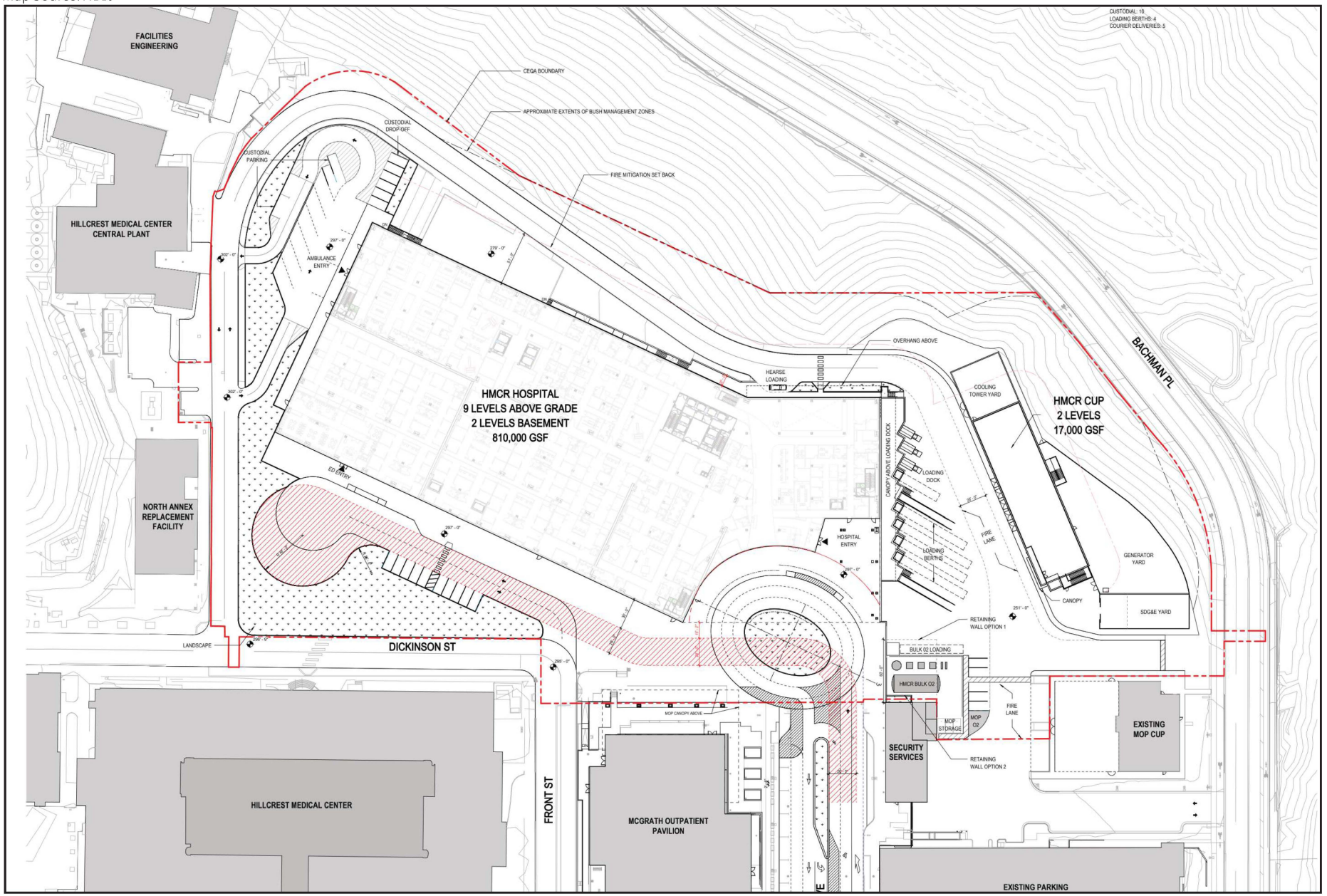


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FIGURE 3
Demolition Plan

Map Source: NBBJ



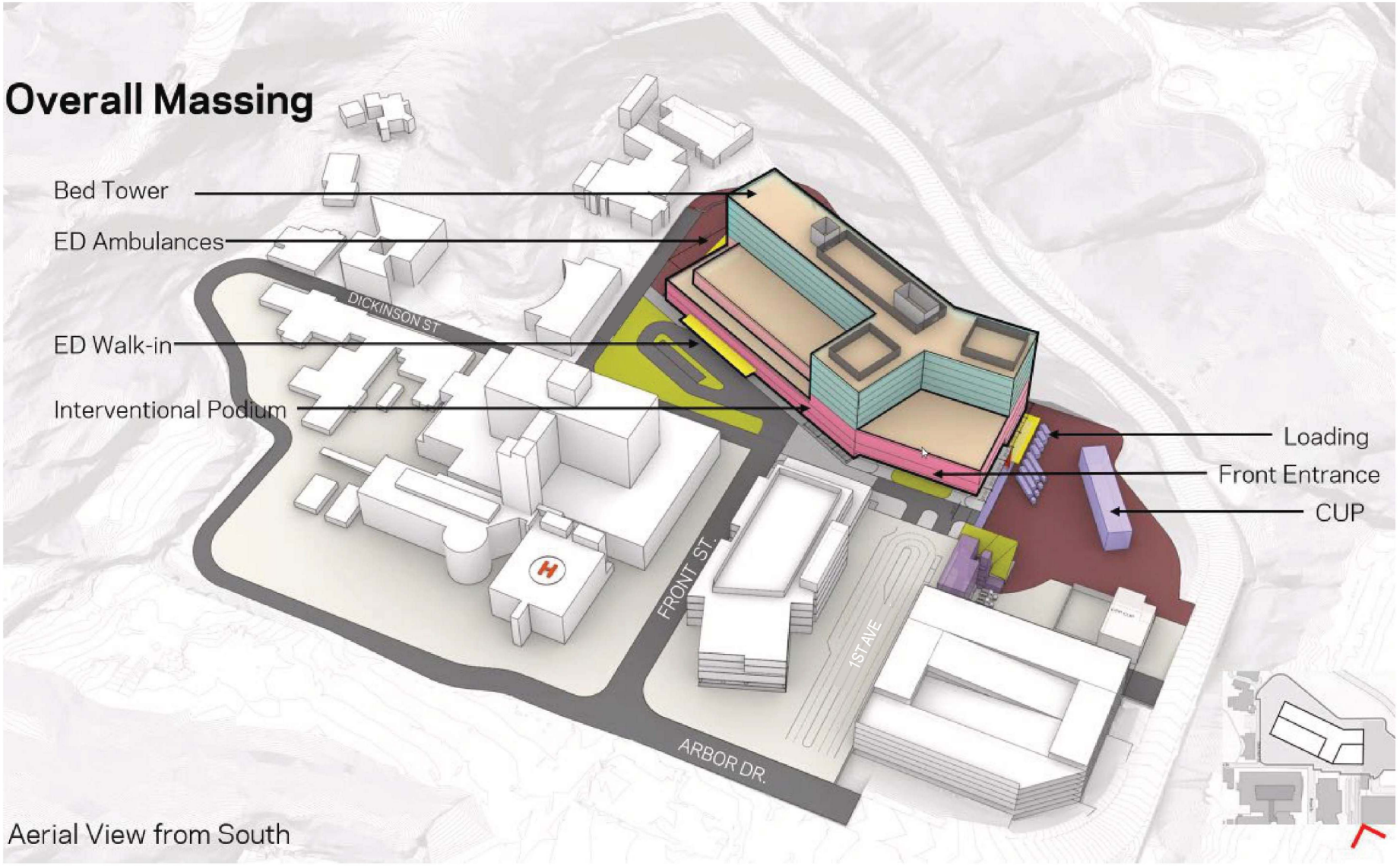
Project Boundary

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FIGURE 4
Site Plan

Map Source: NBBJ



Note: Not a final design

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FIGURE 5
Conceptual Overall Massing

Map Source: NBBJ



SE Aerial Showing McGrath Plaza



SW Aerial Showing ED Entrances

Note: Not a final design; for illustrative purposes only; existing hospital not shown

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FIGURE 6
Aerial View of Conceptual Design



View Looking North along 1ST Avenue



View Looking Northeast from Dickinson Street

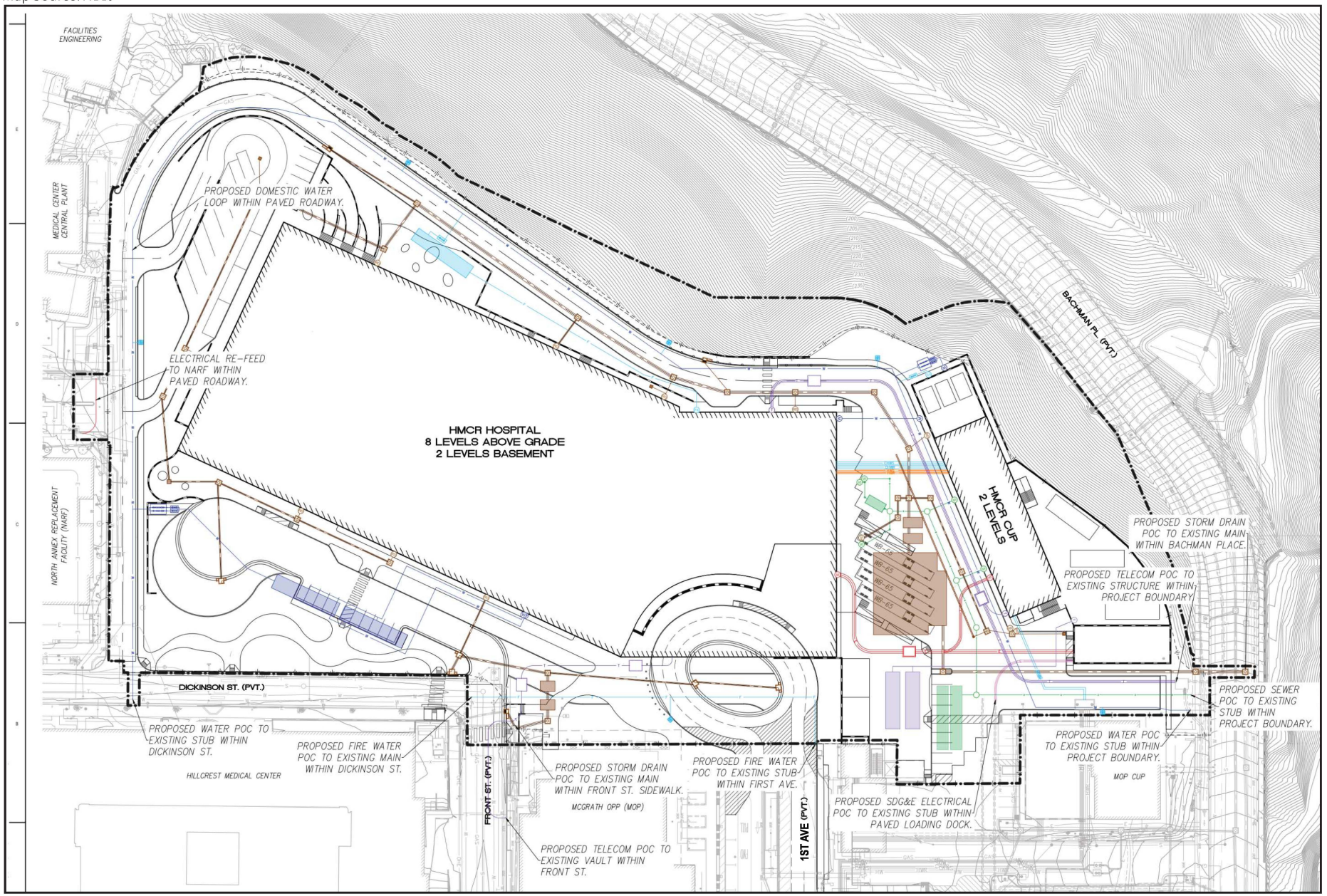
Note: Not a final design

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FIGURE 7
Replacement Hospital Conceptual Renderings

Map Source: NBBJ



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FIGURE 8
Utility Points of Connection

3 CONSISTENCY WITH 2019 LRDP

To assist in determining whether the project is within the scope of the 2019 LRDP EIR, UC San Diego considers the following questions:

- Are the objectives of the project consistent with the objectives adopted for the 2019 LRDP?
- Are the changes to campus population associated with the project included within the scope of the 2019 LRDP's population projections?
- Is the proposed location of the project in an area designated for this type of use in the 2019 LRDP?
- Is the project included in the amount of the development projected in the 2019 LRDP?
- Are the project activities within the scope of the environmental analysis in the 2019 LRDP EIR?
- Have the conditions described in CEQA Guidelines, Section 15162, calling for the preparation of a subsequent EIR occurred?

Section 3 below, Consistency with 2019 LRDP, documents the project's consistency with the objectives, population projections, land use designations, and development projections contained in the 2019 LRDP. However, an inconsistency alone does not mean that the project would result in new or substantially more severe impacts.

Section 4 below, Consistency with 2019 LRDP EIR, contains a detailed examination of environmental topics with the potential for significant impacts addressed in the 2019 LRDP EIR and documents whether or not the project is consistent with and within the scope of the environmental impact analysis of the 2019 LRDP EIR.

3.1 2019 LRDP OBJECTIVES

Key applicable objectives of the 2019 LRDP, as outlined in the 2019 LRDP EIR, are provided below. Only the applicable objectives are listed, and numbering is based on the 2019 LRDP EIR. Consistent with the 2019 LRDP and 2019 LRDP EIR, the HMCR project would support the following 2019 LRDP objectives:

1. **Replace aging and obsolete buildings and redevelop the Hillcrest Campus to create a modern, patient-centered environment that leverages UC San Diego Health's capabilities as an academic medical institution while also providing live-work-learn housing for UC San Diego affiliates, wellness-driven programming, and accessible open spaces.** The HMCR project would meet this

objective by constructing a replacement hospital and CUP with modern medical facilities designed to support a patient-centered care environment and advanced academic medical functions. As identified in Table 2, the HMCR project is included in the 2019 LRDP and represents a key component of the broader redevelopment of the Hillcrest Campus.

2. **Meet the seismic safety requirements of SB 1953 by replacing the existing hospital building by 2030 while maintaining existing community health care operations.** The HMCR project would meet this objective by replacing the existing hospital building in order to meet the seismic safety requirements of SB 1953. UC San Diego has submitted the project schedule to HCAI, which administers SB 1953 compliance requirements, under the assumption that the existing hospital will have continuous acute care operations until the opening of the HMCR project in 2033.

7. **Improve the roadway circulation network adjacent to and within the campus while minimizing traffic impacts to adjoining neighborhoods.** The HMCR project would meet this objective by including circulation improvements, including roadway and pedestrian enhancements serving the replacement hospital north of Dickinson Street and the hospital service dock. Roadway improvements would be designed to accommodate emergency vehicles, with ambulance entry provided on the northwest side of the hospital, and the primary hospital drop-off would connect with the 1ST Avenue extension that was completed with the first phase of redevelopment. Service docks on the eastern side of the hospital would allow for the efficient delivery of supplies, equipment, and waste handling, separate from public and emergency traffic, from Bachman Place. Pedestrian pathways would connect the hospital entrances with adjacent campus facilities, ensuring safe and accessible circulation throughout the site.

8. **Improve transportation-related facilities, including parking structures, transit stops, and passenger drop-off and pick-up areas, in a way that allows for intuitive vehicular, biking, and patient-oriented access and multimodal improvements for wayfinding.** The HMCR project would meet this objective by incorporating roadway and pedestrian improvements that support intuitive vehicular, biking, and patient-oriented access. Roadways north of Dickinson Street would accommodate emergency vehicles, with clearly designated ambulance access on the northwest side of the hospital, while the eastern service dock would separate delivery and waste functions from public and emergency traffic. Passenger drop-off and pick-up areas and connected pedestrian pathways would facilitate safe, accessible circulation between hospital entrances and adjacent campus facilities. Together, these improvements would enhance multimodal access, reduce circulation conflicts, and improve wayfinding throughout the site.

10. **Provide on-site energy infrastructure that is cost effective, redundant, and energy efficient and is in compliance with regulations for acute care hospital and related medical facilities.** The HMCR project would meet this objective by

constructing a new all-electric CUP designed to provide cost-effective, redundant, and energy-efficient on-site infrastructure in compliance with acute care hospital regulations. The CUP would include HCAI-compliant chilled water and central heating hot water. The replacement hospital would be connected to the CUP through five campus-dedicated utility corridors providing water, sewer, stormwater, electrical, and heating and cooling services, with utilities routed primarily underground to minimize disruption to campus circulation. Together, these features would ensure compliant and resilient utility service to support continuous hospital operations.

11. **Site the CUP in a location on the campus such that it does not impair construction sequencing, impact existing utilities that serve current facilities that must remain online, or impact the efficient replacement of facilities under the 2019 LRDP.** The HMCR project would meet this objective by locating the new CUP east of the replacement hospital and west of Bachman Place in a manner that supports phased redevelopment of the Hillcrest Campus. The selected location allows the existing hospital and utility systems to remain operational during construction, thereby avoiding disruption to facilities that must stay online. In addition, the CUP's siting facilitates logical construction sequencing and provides connection to the replacement hospital through dedicated utility corridors, supporting efficient implementation of facility replacement under the 2019 LRDP.

3.2 2019 LRDP LAND USE DESIGNATION AND DEVELOPMENT AND POPULATION PROJECTIONS

The 2019 LRDP designates the project site's land use as Health Care District, which allows for health care facilities, including hospitals, and support infrastructure including utility plants. The 2019 LRDP anticipated the construction of a 300-bed replacement hospital in generally the same location as the HMCR project, resulting in a reduction in inpatient beds from the existing 370-licensed bed hospital at the Hillcrest Medical Center. In addition, the 2019 LRDP projected a faculty and staff population of approximately 5,200 people at LRDP buildout, which is inclusive of the proposed hospital and other facilities within the campus boundaries.

Consistent with the site's land use and development assumptions of the 2019 LRDP, the HMCR project proposes a 300-bed hospital and CUP. The staff population serving the new hospital would largely be existing UC San Diego employees relocated from the existing hospital, which is slated for removal following opening of the HMCR project. Therefore, the HMCR project would also be consistent with the population projections of the 2019 LRDP.

4 CONSISTENCY WITH 2019 LRDP EIR

The potential impacts of the HMCR project on the environmental factors in the checklist below, relative to the findings of the 2019 LRDP EIR, were evaluated in this Addendum. As demonstrated in this Addendum and supported by the CEQA Feasibility Study (outlined below), none of the project's impacts involve new significant environmental effects or a substantial increase in the severity of environmental effects either due to a change in the certified 2019 LRDP EIR, change in circumstances, or new information of substantial importance. The HMCR project would not result in new or more severe environmental effects, and no new mitigation would be required.

In addition, a Hillcrest Hospital Expansion Feasibility Study (CEQA feasibility study; Appendix B) was prepared to evaluate whether subsequent environmental review would be required for a larger hospital development scenario of up to 500 beds. The purpose of the CEQA feasibility study was to assess whether a hospital of this size would result in new or more severe significant environmental impacts beyond those identified in the 2019 LRDP EIR. The CEQA feasibility study presented an analysis of each environmental topic area included in the 2019 LRDP EIR. It concluded that a hospital of 340 beds or less would not result in a new significant impact or substantially more severe significant impact. Although the currently proposed HMCR project no longer includes development of a larger hospital and maintains the same number of beds anticipated by the 2019 LRDP EIR (i.e., 300), the CEQA feasibility study is referenced herein as additional supporting evidence that development of the HMCR project would not result in new significant impacts or a substantial increase in the severity of previously identified impacts.

4.1 EVALUATION OF PROJECT ENVIRONMENTAL IMPACTS

Checklist Explanation

On the basis of the tiering and subsequent review concepts identified in the CEQA Guidelines, the UC has defined the following column headings in this Addendum. Both headings rely on the relevant analyses in the 2019 LRDP EIR:

- **Impacts Adequately Examined in the 2019 LRDP EIR:** This column is checked where the potential impacts of the project were adequately examined in the certified 2019 LRDP EIR. Where applicable, mitigation measures identified in the 2019 LRDP EIR would mitigate the impacts of the project. All applicable mitigation measures from the 2019 LRDP are incorporated into the project as noted in Section 5, Applicable Mitigation Measures, of this Addendum. The project is consistent with the analysis evaluated in the 2019 LRDP EIR.

- **Impacts Not Examined in the 2019 LRDP EIR:** If a column is checked in this section, this indicates that potential effects of the project were not adequately evaluated in the certified 2019 LRDP EIR. However, as described in the supporting text, the potential effects of the project could result in (a) no impact in the category, (b) less than significant impact in the category with or without mitigation, or (c) new or substantially more severe potentially significant impact. In the instance that (a) or (b) is checked, no additional CEQA documentation would be necessary. In the instance that (c) is checked, additional CEQA documentation would be necessary to further address the issue. All applicable mitigation measures (LRDP Program and/or project-specific) would be incorporated into the project as noted in Section 5 of this Addendum.

Environmental Topics Addressed

The following environmental resources, if checked below, would be potentially affected by this project and would involve at least one significant impact that substantially exceeds or is otherwise outside the scope of activities evaluated for potential environmental effects in the 2019 LRDP EIR, as discussed in Sections 4.1.1 through 4.1.18 of the Addendum. Agriculture and Forestry and Mineral Resources are discussed in Section 4.1, Other Effects Found Not to Be Significant, of the 2019 LRDP EIR. As noted in those discussions, no potential for significant impacts to those topics would occur due to the lack of such resources on the Hillcrest Campus. As such, those topics are not discussed in this Addendum.

If "None" is checked below, this project is deemed entirely consistent with and covered by the environmental analysis contained in the 2019 LRDP EIR.

☐ Aesthetics	☐ Air Quality	☐ Biological Resources
☐ Cultural and Tribal Cultural Resources	☐ Energy	☐ Geology and Soils
☐ Greenhouse Gas Emissions	☐ Hazards and Hazardous Materials	☐ Hydrology and Water Quality
☐ Land Use and Planning	☐ Noise	☐ Population and Housing
☐ Public Services	☐ Recreation	☐ Transportation/Traffic
☐ Utilities and Service Systems	☐ Wildfire	☐ Mandatory Findings of Significance
☒ None		

4.1.1 Aesthetics

Section 3.1 of the 2019 LRDP EIR evaluated the potential for aesthetics impacts associated with implementation of the 2019 LRDP. The 2019 LRDP EIR concluded that implementation of the 2019 LRDP would result in less than significant impacts related to scenic vistas and lighting and glare (Sections 3.1.3.1 and 3.1.3.3), and no impact to scenic resources (Section 3.1.5). The 2019 LRDP EIR determined that implementation of the 2019 LRDP could result in a potentially significant impact to community character (Section 3.1.5).

Mitigation Measure AES-2A requires any proposed structure or phase with the potential to substantially degrade visual character undergo design review by the UC San Diego Design Review Board to ensure consistency with the visual landscape and/or character of the surrounding development. Mitigation Measure AES-2B requires proposed structures located along the southern and eastern Hillcrest Campus boundaries to be reviewed by the UC San Diego Design Review Board, the Campus Architect, and other relevant campus committees at the conceptual design stage to ensure structures are designed to incorporate pedestrian-scale features along facades facing the public realm. Implementation of Mitigation Measures AES-2A and AES-2B would reduce impacts to visual character to a less than significant level.

AESTHETICS		Impact Not Examined in 2019 LRDP EIR		
Would the HMCR project…	Impact Examined in 2019 LRDP EIR	No Impact	Less than Significant Impact	Potentially New or More Severe Significant Impact
a) Have a substantial adverse effect on a scenic vista?	☒	☐	☐	☐
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☒	☐	☐	☐
c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	☒	☐	☐	☐
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☒	☐	☐	☐

a) The 2019 LRDP EIR addressed three key vantage points (KVPs) pertaining to this issue question: KVPs-5, -6, and -7 (refer to Figures 3.1-4 and 3.1-5 in the 2019 LRDP EIR). The HMCR project would not be visible from KVPs-5, -6, and -7. Therefore, the HMCR project would not result in any new significant environmental effects or a substantial increase in the severity of previously identified significant effects regarding scenic vistas.

b) Implementation of the HMCR project would not result in substantial damage to scenic resources within a state scenic highway. The nearest scenic highway designation is an approximately 1-mile segment of State Route 163 located in Balboa Park within a topographic low area and is generally visually isolated from the surrounding developed communities. Because of its distance from the campus and intervening buildings and topography, the Hillcrest Campus is not visible from this location. Therefore, the HMCR project would result in less than significant impacts and would not result in any new significant environmental effects or a substantial increase in the severity of previously identified significant effects regarding scenic resources.

c) The HMCR project is in an urbanized area and is consistent with the 2019 LRDP, the applicable land use plan, as well as UC San Diego regulations regarding scenic quality, as stated above. Though the project is not located within a non-urbanized area, the 2019 LRDP EIR addressed five KVPs pertaining to this issue question: KVPs-1, -2, -3, -4, and -8. KVP-1 is off-site and west of the 2019 LRDP boundary at the eastern end of Arbor Drive approximately 1,390 feet southwest of the project site. The HMCR project would not be visible from this location because of intervening canyon vegetation and structures.

   KVP-2 is a northerly view along 1ST Avenue from the intersection of 1ST Avenue and Arbor Drive, taken along the southern Campus Boundary. This view was altered with the construction of Phase 1A, which extended 1ST Avenue northward past Dickinson Street and redeveloped/filled in the previous canyon and vegetation. This change in visual character was disclosed and evaluated in the 2019 LRDP EIR. No change in the impact significance determination would occur as a result of the HMCR project.

   KVP-3 is east of the campus on Arbor Drive with a westerly view of the campus. The HMCR project would not be visible from this location due to intervening development, including the 1ST Avenue Parking Structure completed with implementation of Phase 1A of the 2019 LRDP; therefore, the potential significant impact to visual character from KVP-3 would not occur. No change in the impact significance determination would occur as a result of the HMCR project.

   KVP-4 is just north of the northern Third Avenue cul-de-sac on a private road and provides a southwesterly view that includes the previous location of the Bachman Parking Structure which was demolished as part of Phase 1A and analyzed in Addendum No.1. The 2019 LRDP EIR identified a significant impact from this location

due to the demolition and replacement of the Bachman Parking Structure with a vegetated, flat, graded pad with steep slopes, as well as development of a future multi-use building and a replacement hospital. The proposed multi-use building located east of the replacement hospital is no longer being proposed in this location. The HMCR project would develop the replacement hospital, which would be visible from KVP-4. Consistent with the 2019 LRDP EIR, the HMCR project would implement Mitigation Measures AES-2A and AES-2B which would reduce potentially significant visual character impacts to off-site areas, including KVP-4. The HMCR project was presented to the Design Review Board on March 4, 2026, and will continue to incorporate the Board's input until endorsement is reached, pursuant to Mitigation Measure AES-2A. No change in the impact significance determination would occur as a result of the HMCR project.

KVP 8 provides a southeasterly view taken from eastbound I-8 in the vicinity of Hotel Circle South in Mission Valley. The 2019 LRDP EIR did not identify a significant impact to this KVP. Furthermore, as disclosed in the 2019 LRDP EIR, the HMCR project would be similarly prominent in the background view of KVP-8 as the existing hospital located. Some of the tree removal required to construct the HMCR project may also be visible in this background view. However, due to the limited duration of viewing time associated with eastbound motorists, as well as the considerable foreground development in this area, it would not result in a significant change to the view. No change in the impact significance determination would occur as a result of the HMCR project. Therefore, the project would not result in any new significant environmental effects or a substantial increase in the severity of previously identified significant effects regarding visual character.

d) Consistent with the 2019 LRDP EIR, new sources of light and glare introduced under the HMCR project would be minimal. The 2019 LRDP would redevelop the existing hospital campus, which already possesses numerous sources of light and glare. Consistent with the 2019 LRDP EIR, the HMCR project would be required to comply with the UC San Diego Outdoor Lighting Policy (2009) and the UC San Diego Design Guidelines (2018). Therefore, the HMCR project would result in less than significant impacts and would not result in any new significant environmental effects or a substantial increase in the severity of previously identified significant effects regarding light and glare.

4.1.2 Air Quality

Section 3.2 of the 2019 LRDP EIR evaluated air quality effects from the implementation of the 2019 LRDP. The 2019 LRDP EIR concluded that implementation of the 2019 LRDP would not conflict with or obstruct implementation of the applicable air quality plan (Section 3.2.3.1). Cumulative construction-significant impacts were identified due to the exceedance of the significance thresholds for volatile organic compound (VOC) emissions during simultaneous construction of Phases 2A and 2B (Section 3.2.3.2). Potentially significant construction-related emissions would cause exposure of sensitive receptors to substantial pollutant concentrations above the San Diego County Air Pollution Control District (SDAPCD) thresholds (Section 3.2.3.3). Less than significant impacts were identified related to consistency with the Regional Air Quality Strategy and State Implementation Plan and odors (Sections 3.2.3.1 and 3.2.3.4).

Mitigation Measure AIR-2 would reduce Volatile Organic Compounds (VOC) emissions during construction of Phases 2A and 2B by limiting construction activities from occurring simultaneously with architectural coating during these phases. Mitigation Measure AIR-2 would reduce emissions of all pollutants during construction and operation to be below the applicable thresholds, and emissions would be less than significant and less than cumulatively considerable.

Mitigation Measure AIR-3 would reduce PM emissions by up to 90 percent compared to uncontrolled Tier 1-rated equipment. The 2019 LRDP EIR acknowledges the likely effective amount of reduction from implementation of Mitigation Measure AIR-3 could not be quantified at a programmatic level and would remain significant and unavoidable.

AIR QUALITY		Impact Not Examined in 2019 LRDP EIR		
Would the HMCR project…	Impact Examined in 2019 LRDP EIR	No Impact	Less than Significant Impact	Potentially New or More Severe Significant Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?	☒	☐	☐	☐
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard?	☒	☐	☐	☐
c) Expose sensitive receptors to substantial pollutant concentrations?	☒	☐	☐	☐
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☒	☐	☐	☐

a) The growth projections used by the SDAPCD to develop the Regional Air Quality Strategy (RAQS) emissions budgets are based on the population, vehicle trends, and land use plans developed in general plans and used by SANDAG in the development of the regional transportation plans and sustainable communities strategy. As such, projects that propose development that is consistent with the growth anticipated by SANDAG's growth projections and/or the General Plan would not conflict with the RAQS. UC San Diego's applicable land use plan for the Hillcrest campus is the 2019 LRDP. The HMCR project is consistent with the land uses identified for the site in the 2019 LRDP and does not include permanent new components that would result in additional growth beyond what was accounted for in the 2019 LRDP EIR analysis. The HMCR project would also not result in a substantial increase in vehicle trips beyond the EIR analysis. Although there would be an increase in the overall square footage of the replacement hospital when compared to what was analyzed in the 2019 LRDP EIR, as discussed in subsection (b) below, this would not result in a significant increase in emissions. Thus, the HMCR project would not obstruct or conflict with implementation of the RAQS, and impacts would be considered less than significant. Therefore, the HMCR project would not result in any new significant environmental effects or a substantial increase in the severity of previously identified significant effects regarding air quality plan consistency.

b) As previously discussed in Section 4.0, a CEQA feasibility study examining the potential expansion of the replacement hospital beyond what was analyzed in the 2019 LRDP EIR was prepared by Harris & Associates on January 17, 2024, for the purpose of determining whether a larger-capacity hospital would trigger subsequent or supplemental environmental review (see Appendix B). The CEQA feasibility study analyzed a maximum of 500 beds, which is 200 more beds than what is currently proposed by the HMCR project and what was analyzed in the 2019 LRDP EIR. However, the air quality calculations presented in the CEQA feasibility study are referenced in this analysis because the calculations incorporated updates to the 2019 LRDP that have occurred since preparation of the EIR (refer to Addendums No. 1 and 2 discussed in Section 1.1). The CEQA feasibility study determined that increasing the number of beds to 500 would not result in new or more severe impacts than those analyzed in the 2019 LRDP EIR. As detailed below, because the 300-bed HMCR project would result in equal or less emissions than those associated with a 500-bed hospital analyzed in the CEQA feasibility study, it can be concluded that the HMCR project (300-beds) would also not result in new or more severe impacts than those analyzed in the 2019 LRDP EIR.

   Consistent with the 2019 LRDP EIR, the HMCR project could result in cumulatively significant construction-related impacts. Construction and operational emissions associated with the HMCR project are addressed separately below.

   Construction

The HMCR project is generally consistent with the overall redevelopment plan analyzed in the 2019 LRDP EIR. However, the building locations and footprint of the replacement hospital and CUP have changed. The replacement hospital would be located slightly north of the existing hospital, between the north access driveway to the west and the 1ST Avenue extension to the east. Consistent with the 2019 LRDP, the replacement hospital would provide 300 inpatient beds. The replacement hospital would total 810,000, which is 70,000 gsf more than what was analyzed in the 2019 LRDP EIR, and the CUP would total 29,000 gsf (consisting of a 17,000 gsf HCAI-compliant component and a 12,000 gsf non-HCAI-compliant component constructed under Phase 1A), which is 44,000 gsf less than analyzed for this phase in the 2019 LRDP EIR. Overall, the total square footage of both the replacement hospital and the CUP would be 26,000 gsf greater than what was analyzed in the 2019 LRDP EIR. An increase of 26,000 gsf would not change modeled on-site assumptions since construction phases, durations, and the amount of construction equipment is based on project acreage, which has not changed. In regard to the modeled off-site trip assumptions, the maximum number of daily construction vehicle trips was assumed for construction in the 2019 LRDP EIR. The 2019 LRDP EIR assumed 156,000 cubic yards of export while the HMCR project would require the export of 228,000 cubic yards. However, as maximum feasible number of hauling trips per day were modeled (up to 150 trips per day) in the 2019 LRDP EIR, rather than increasing the number of trips per day, the duration of excavation (number of days) would be extended rather than increasing the operations per day (number of truck trips). Likewise, the maximum feasible number of delivery trips required to bring building materials to the project site was modeled (up to 60 trips per day) and would be sufficient to deliver any additional materials associated with the 26,000 gsf increase. Therefore, maximum daily construction emissions under the HMCR project would be similar to those identified in the 2019 LRDP EIR.

The 2019 LRDP EIR identified significant impacts associated with VOC emissions during simultaneous construction of Phases 2A and 2B. Since preparation of the 2019 LRDP EIR, the SDAPCD has updated the rules and regulations related to VOC content of architectural coatings. The emission calculations included in the 2019 LRDP EIR assumed a VOC content of 250 grams per liter. SDAPCD Rule 67.0.1 specifies current VOC content restrictions of 50 grams per liter for residential and nonresidential coatings and 100 grams per liter for parking lot coatings. As a result, although the overall building square footage of the replacement hospital and CUP is 26,000 gsf greater than that assumed in the 2019 LRDP EIR, the VOC emissions associated with the HMCR project would be reduced from those calculated in the previous analysis due to current SDAPCD rules and regulations.

Consistent with the 2019 LRDP EIR, the HMCR project would implement Mitigation Measure AIR-2 which would reduce emissions of all pollutants during construction and operation to be below the applicable thresholds, and emissions would be less than significant and less than cumulatively considerable. The HMCR project would also

implement Mitigation Measure AIR-3, which would reduce PM emissions by up to 90 percent compared to uncontrolled Tier 1-rated equipment. However, as identified in the 2019 LRDP EIR, the reduction in emissions attributable to Mitigation Measure AIR-3 cannot be quantified; therefore, this construction toxic air contaminants (TAC) impact would remain significant and unavoidable.

Operation

The HMCR project proposes a replacement hospital with the same number of beds analyzed in the 2019 LRDP EIR, with a 70,000 gsf increase in building size. However, this increase in square footage would not equate to an increase in trips, since trip generation is based on the number of hospital beds. Instead, the square footage is necessary to meet current California Building Code requirements including minimum square-footage-per-bed ratios as well as support space. Based on the 2019 LRDP EIR, a 300-bed hospital would generate 20 trips per bed for a total of 6,000 trips (City of San Diego 2003). The CUP would not generate additional trips since it is a support facility that would be operated by existing staff. Thus, there would be no increase in trips and vehicle emissions were assumed to be the same as those analyzed in the 2019 LRDP EIR. As discussed above, the CEQA feasibility study analyzed a maximum of 500 beds, which is 200 more beds than what is currently proposed by the HMCR project. As previously noted, the calculations presented in the CEQA feasibility study are referenced in this analysis because the calculations incorporated updates to the 2019 LRDP that have occurred since preparation of the EIR (refer to Addendum No. 1 and 2 discussed in Section 1.1). Maximum daily buildout operational air emissions from a 500-bed hospital expansion, considering the amendments to the 2019 LRDP that have occurred since 2019 LRDP EIR certification, compared to existing conditions are presented in Table 3.

Table 3
Buildout Operational Daily Maximum Air Pollutant Emissions (500 Beds)

	Maximum Daily Emissions (pounds/day)					
Emissions Source	VOC	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
CUP Operation	6	160	96	1	9	9
Landscape	3	1	83	<1	<1	<1
Consumer Products	43	0	0	0	0	0
Vehicular Sources	91	88	861	2	243	65
Total Future Operational Emissions (2024 CEQA Feasibility Study w/ 500-Bed Hospital)	158	249	1,040	3	252	74
Total Future Operational Emissions (2019 LRDP EIR w/ 300-Bed Hospital)	133	381	642	3	214	64
Total Existing	**167**	**363**	**1,001**	**3**	**189**	**61**

Table 3 Buildout Operational Daily Maximum Air Pollutant Emissions (500 Beds)						
	Maximum Daily Emissions (pounds/day)					
Emissions Source	VOC	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
Net Change in Emissions (2024 CEQA Feasibility Study)	*(-9)*	*(-114)*	*39*	*0*	*63*	*13*
Net Change in Emissions (2019 LRDP EIR)	*(-34)*	*18*	*(-359)*	*0*	*25*	*3*
Significance Threshold	137	250	550	250	100	55
Significant Impact? (2024 CEQA Feasibility Study and 2019 LRDP EIR)	*No*	*No*	*No*	*No*	*No*	*No*

As shown in Table 3, a 500-bed project would not exceed the significance thresholds for any pollutant. Therefore, an increase in hospital beds up to 500 is not anticipated to result in a new significant impact related to cumulative increases in criteria pollutants during operation. Because the HMCR project proposes only a 300-bed hospital, emissions associated with the HMCR project would be less than those summarized in Table 3 and it can therefore be concluded that the HMCR project would not result in a new significant impact related to cumulative increases in criteria pollutants during operation.

It should be noted that the hospital building size modeled in the CEQA feasibility study is smaller than what is currently proposed in terms of square feet. However, this would not have a significant effect on the emission calculations for the following reasons. The CUP would be smaller than what was analyzed in the 2019 LRDP EIR, thus, based on size alone, emissions associated with the CUP would not increase over what was calculated in the 2019 LRDP EIR or the CEQA feasibility study. Additionally, the previously proposed CUP was analyzed as a co-gen facility and the currently proposed CUP would be all-electric. The new CUP is completely decarbonized, with no natural gas usage. Thus, CUP-related emissions would be significantly less than those analyzed in the 2019 LRDP EIR. Other operational sources of emissions include landscaping equipment and consumer products. Landscaping emissions are calculated in the California Emissions Estimator Model based on overall building square footage, however, the landscaping equipment associated with the HMCR project would be similar to equipment previously analyzed in the 2019 LRDP EIR since the overall landscaping on the campus would generally be the same. Consumer product emissions are also calculated based on overall building square footage at a rate of 2.14×10^{-5} pounds of VOC per square foot per day. Thus, a 26,000 gsf increase in overall hospital and CUP building size would result in an additional 0.56 pounds of VOC per day compared to the 2019 LRDP EIR. This slight increase would not result in any new impacts. Lastly, vehicular emissions, which is the largest emission source, are based on the number of trips per bed. The HMCR project does not propose new or expanded land uses that were not included in buildout of the 2019 LRDP that would result in an

increase in vehicle trips to the campus compared to those analyzed in the 2019 LRDP EIR. The calculations presented in Table 3 are based on a 500-bed hospital and are therefore greater than what would be generated by the proposed 300-bed hospital, which is consistent with the number of beds analyzed in the 2019 LRDP EIR. In summary, the HMCR project would not result in a new significant impact related to cumulative increases in criteria pollutants during operation.

Construction and operation of the HMCR project would not exceed the significance threshold for any air quality emission pollutant. Therefore, the HMCR project would not result in any new significant environmental effects or a substantial increase in the severity of previously identified significant effects identified in the 2019 LRDP EIR regarding net increases in criteria pollutant emissions.

c) Since the trip generation is based on the number of hospital beds, the HMCR project does not propose new or expanded land uses that were not included in the buildout of the 2019 LRDP that would result in an increase in vehicle trips to the campus compared to those analyzed in the 2019 LRDP EIR. Therefore, no additional congestion would occur as a result of the HMCR project. Carbon monoxide (CO) concentrations would be the same or improved under the HMCR project compared to those in the 2019 LRDP EIR, and impacts would be less than significant.

TACs were addressed in the 2019 LRDP EIR for both construction and operation activities in terms of a health risk assessment. The CEQA feasibility study discusses TACs associated with operation of a 500-bed hospital. As stated in the study, it is anticipated that the increase in building size to accommodate additional hospital beds may require new generators or an increase in utility plant operations that would have the potential to result in TAC emissions. However, health risks from a combination of all sources of TACs at campus buildout would be less than half the significance threshold for cancer or noncancer risks. Even a doubling of generator operations and associated health risk at the hospital, which represents only a portion of total campus TAC emissions, would not cause the calculated campus health risk to exceed 10.0 in a million for cancer risk or a health hazard index of 1.0 for noncancer risk. Therefore, an increase of up to 500 hospital beds is not anticipated to result in a new significant impact related to health risk from TACs during operation. Likewise, the proposed 300-bed hospital would not result in a new significant impact related to health risk from TACs during operation.

Potentially significant cancer risks were identified for construction under the 2019 LRDP. This impact was identified as significant and unavoidable in the 2019 LRDP EIR and would continue to be significant and unavoidable for the HMCR project. Construction of the replacement hospital and demolition of the existing hospital were modeled together and calculated to result in an average of 0.034 tons per year of diesel particulate matter, which accounts for approximately 28 percent of the total 0.121 average tons per year from all construction phases. The hospital expansion would result in an incremental increase in these emissions and may incrementally increase

potential cancer health risk. Similar to the 2019 LRDP EIR, Mitigation Measure AIR-3 would be required to reduce impacts; however, impacts would be significant and unavoidable even after mitigation. Therefore, the HMCR project would not result in a new impact compared to the 2019 LRDP EIR.

d) As indicated in the 2019 LRDP EIR, the HMCR project would not create objectionable odors associated with diesel-heavy equipment exhaust affecting a substantial number of people. Potential impacts from construction and operation of the HMCR project would be the same as those identified in the 2019 LRDP EIR. No new sources of odor are proposed by the HMCR project. Impacts would be less than significant and consistent with the findings of the 2019 LRDP EIR. Therefore, the HMCR project would not result in any new significant environmental effects or a substantial increase in the severity of previously identified significant effects regarding odors.

4.1.3 Biological Resources

Section 3.3 of the 2019 LRDP EIR evaluated the potential for biological resource impacts associated with implementation of the 2019 LRDP. The 2019 LRDP EIR concluded that implementation of the 2019 LRDP would result in potentially significant impacts to sensitive plant species (Section 3.3.3.1), sensitive animal species (Section 3.3.3.2), sensitive upland habitats and riparian habitats (Section 3.3.3.3), and federally protected wetlands (Section 3.3.3.4). The 2019 LRDP EIR found no potential for significant impacts to wildlife corridors or linkages and identified no conflicts with local policies or ordinances, including any adopted habitat conservation plans (Section 3.3.5).

For impacts to sensitive plants, the site would be surveyed in accordance with Mitigation Measure BIO-1A. If applicable, San Diego barrel cactus (*Ferocactus viridescens*) would be relocated pursuant to Mitigation Measure BIO-1B, San Diego goldenstar (*Bloomeria clevelandii*) would be relocated pursuant to Mitigation Measure BIO-1C, and seeding of wart-stemmed ceanothus (*Ceanothus verrucosus*) would be conducted in accordance with Mitigation Measure BIO-1D.

For impacts to sensitive animal species, Mitigation Measures BIO-2A and BIO-2B require species-specific surveys and agency consultation, and Mitigation Measures BIO-2C and BIO-2D require raptor and other avian nest surveys and implementation of avoidance measures.

Mitigation Measures BIO-3A and BIO-3E require vegetation survey and jurisdictional delineation, while Mitigation Measures BIO-3C and BIO-3D require compensatory mitigation. General construction impacts were addressed through implementation of Mitigation Measures BIO-3F through BIO-3J, and indirect operational impacts would require compliance with Mitigation Measures BIO-K through BIO-3O. Implementation of these measures were found to reduce impacts to less than significant levels.

BIOLOGICAL RESOURCES Would the HMCR project…	Impact Examined in 2019 LRDP EIR	Impact Not Examined in 2019 LRDP EIR: No Impact	Impact Not Examined in 2019 LRDP EIR: Less than Significant Impact	Impact Not Examined in 2019 LRDP EIR: Potentially New or More Severe Significant Impact
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	☒	☐	☐	☐
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or US Fish and Wildlife Service?	☒	☐	☐	☐
c) Have a substantial adverse effect on state or federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☒	☐	☐	☐
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☒	☐	☐	☐
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☒	☐	☐	☐
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☒	☐	☐	☐

The analysis in this section is based on the Biological Resources Comparison of the HMCR project to the 2019 LRDP EIR prepared by Recon Environmental (see Appendix C). The "survey area" referenced in this section consists of the HMCR project boundary and a 500-foot buffer.

a) **Direct Impacts**

Sensitive Plant Species

Pursuant to Mitigation Measure BIO-1A of the 2019 LRDP EIR, a special-status plant survey was conducted on the project site plus a 100-foot buffer on November 7, 2025, and on April 1, 2026. No sensitive plants were observed. As a result, the HMCR project would not result in any new significant environmental effects or a substantial increase in the severity of previously identified significant effects regarding sensitive plant species. Because no sensitive plant species were identified, mitigation measures BIO-1B, BIO-1C, and BIO-1D do not apply to the HMCR project. Mitigation Measures BIO-3K, BIO-3L, BIO-3N, and BIO-3O are not required to reduce indirect impacts to sensitive plant species, but they would be implemented to reduce impacts to native vegetation communities, as described further in Section 4.1.3(b), below.

Sensitive Animal Species

Pursuant to Mitigation Measure BIO-2A of the 2019 LRDP EIR, nine protocol Coastal California Gnatcatcher (CAGN) surveys were conducted in late 2025 and early 2026 within the project site and surrounding 500-foot buffer. No CAGN were observed during the surveys. The southern mixed chaparral habitat along the northern edge of the HMCR project site is taller (over 10 feet in height) and denser than CAGN prefer. Potentially suitable coastal sage scrub habitats were observed only within the survey area, east of Bachman Place, and at least 300 feet away from the proposed permanent impact areas. A 2025 habitat assessment concluded that no coastal sage scrub habitat is present within any areas proposed for the HMCR project, including the fuel management zones. See Appendix C for more detail. The CAGN survey report documenting the methods and results of these surveys is provided as Attachment 2 to Appendix C.

Consistent with the 2019 LRDP EIR, impacts to Cooper's hawk could occur through removal of vegetation during construction, specifically removal of Eucalyptus trees. These impacts would be potentially significant. Implementation of Mitigation Measure BIO-2C, which requires preconstruction raptor nest surveys, would reduce the potential for impacts to this species to a less than significant level.

Consistent with the 2019 LRDP EIR, impacts to orange-throated whiptail and loggerhead shrike foraging habitat would be less than significant due to relatively minor impacts on native vegetation (i.e., southern mixed chaparral) and the large stands of intact chaparral and coastal sage scrub vegetation north, west, and east of the HMCR project.

Sensitive Avian Species

Direct impacts to sensitive avian species would result from removal of habitat during the site preparation, grading activities, and ongoing disturbance from construction activities. Specifically, removal of nesting habitat in the nonsensitive eucalyptus woodland and within southern mixed chaparral (Figure 9) could result in direct impacts to Cooper's hawk habitat and sensitive nesting birds, including western bluebird, and raptors. As shown in Table 4, implementation of the HMCR project would result in impacts to 0.09 acres of southern mixed chaparral and impacts to 0.97 acres of eucalyptus woodland.

Impacts to loggerhead shrike could occur during removal of 0.09 acres of native southern mixed chaparral, which is foraging habitat for this species. Consistent with the findings of the 2019 LRDP EIR, impacts to loggerhead shrike would be less than significant due to relatively minor impacts on habitat (i.e., southern mixed chaparral) and the large stands of intact chaparral and coastal sage scrub vegetation north, west, and east of the HMCR project.

CAGN is not expected to occur within the project site or 500-foot buffer based on negative survey results from 2025–2026 surveys, as well as negative results from prior surveys conducted in 2018 for the 2019 LRDP EIR. Because the survey area was not found to be occupied by CAGN, Mitigation Measure BIO-2B, which requires permitting with U.S. Fish and Wildlife Service for impacts to CAGN, would not be required.

The HMCR project would implement Mitigation Measures BIO-2C and BIO-2D for all project components to reduce potential direct impacts to sensitive avian species to a less than significant level by conducting preconstruction raptor and nesting bird surveys. With implementation of these measures, potential impacts to sensitive avian species would remain consistent with the analysis in the 2019 LRDP EIR. Therefore, the HMCR project would not result in any new significant environmental effects or a substantial increase in the severity of previously identified significant effects regarding sensitive avian species.

Sensitive Reptiles

Impacts to orange-throated whiptail could occur during removal of 0.09 acres of native southern mixed chaparral, which is habitat for this species. Consistent with the findings of the 2019 LRDP EIR, these impacts would be less than significant due to relatively minor impacts on habitat (i.e., southern mixed chaparral) and the large stands of intact chaparral and coastal sage scrub vegetation north, west, and east of the HMCR project that would not be affected.

Crotch's Bumble Bee

Since certification of the 2019 LRDP EIR, Crotch's bumble bee (*Bombus crotchii*) was designated as a candidate for listing as endangered under the California Endangered Species Act (CESA) by the California Fish and Game Commission in September 2022. The 2019 LRDP EIR determined that impacts to special-status wildlife species would be potentially significant and would require mitigation to reduce impacts to a less than significant level. Crotch's bumble bee, as a candidate species under CESA, falls within the category of special-status species addressed in the 2019 LRDP EIR. Although the likelihood that Crotch's bumble bee is present within the project area is low, both the HMCR project site and the Hillcrest Campus contain habitat potentially suitable for the species, including ornamental and native landscape plantings.

Crotch's bumble bee's current range includes the Mediterranean region (ecoregion encompassing the greater Central Valley, Sierra Foothills, and Central Coast Ranges of California south to Mexico), Pacific Coast, Great Valley, and adjacent foothills though most of southwestern California. The Hillcrest Campus is located within this range. Bumble bees have three basic habitat requirements: nesting sites for the colonies, availability of nectar and pollen from floral resources throughout the duration of the colony period (spring, summer, and fall), and overwintering sites for the queens (i.e., established by new queens, or "gynes," after the nesting season to enter a hibernation-like state until the following spring). The long-term productivity of bumble bee populations is affected by the quantity and quality of nectar and pollen available and the proximity of these resources to nesting habitat.

In California, Crotch's bumble bees typically inhabit open grassland and scrub habitats, and will nest underground and likely use, at least in part, old rodent burrows (Xerces Society 2018). Some bumble bees favor nest sites near woody transitional habitats and nest in holes or crevices in leaf litter, beneath woody debris, at the base of a tree, in herbaceous plant debris, or near grass clumps. Overwintering queens may prefer shaded areas near trees in areas without dense vegetation and north-facing slopes (Liczner and Colla 2019).

Table 4
HMCR Project Impacts to Vegetation Communities

Vegetation Community	Project Survey Area (acres)	Impacts (acres)						
		Permanent	Temporary	Temporary and Fuel Management Zone 1	Temporary and Fuel Management Zone 2	Fuel Management Zone 1 Only	**All Impacts (Permanent and Temporary)**	Fuel Management Zone 2 (Selective Thinning Only)
Riparian/Wetland								
Non-Native Riparian[2]	0.6	--	--	--	--	--	--	--
Southern Willow Scrub - Disturbed[1]	0.2	--	--	--	--	--	--	--
Subtotal[4]	*0.9*	--	--	--	--	--	--	--
Upland								
Coastal Sage Scrub[1]	3.3	--	--	--	--	--	--	--
Coastal Sage Scrub - Disturbed[1]	1.0	--	--	--	--	--	--	--
Disturbed Habitat[3]	0.6	--	--	--	--	--	--	--
Eucalyptus Woodland[3]	4.2	0.86	0.04	--	0.07	--	**0.97**	0.07
Non-Native Woodland[3]	0.4	--	--	--	--	--	**--**	--
Southern Mixed Chaparral[3]	9.5	0.04	0.00		0.05		**0.09**	0.26
Southern Mixed Chaparral - Disturbed[3]	0.3	--	--	--	--	--	--	--
Subtotal[4]	*19.4*	*0.89*	*0.04*	*0.00*	*0.12*	*0.00*	***1.05***	*0.33*
Land Cover								
Urban/Developed[3]	35.4	6.41	0.02	--	0.01	--	**6.45**	0.06
Urban/Developed - Revegetation Area[3]	1.5	0.99	--	0.03	0.03	0.03	**1.07**	0.21
Subtotal	*36.9*	*7.42*	*0.02*	*0.03*	*0.04*	*0.03*	***7.55***	*0.27*
GRAND TOTAL[4]	**57.1**	**8.30**	**0.06**	**0.03**	**0.16**	**0.03**	**8.58**	**0.60**

SOURCE: Appendix C

[1] Considered a sensitive vegetation community.

[2] Potentially sensitive resource.

[3] Nonsensitive vegetation or land cover.

[4] Totals do not sum due to rounding.

A habitat assessment was conducted on November 7, 2025, to determine if potentially suitable habitat for Crotch's bumble bee occurs within the HMCR project footprint. Additional Crotch's bumble bee flora resource habitat surveys were conducted on April 1, 2026, during the blooming period for many native and ornamental plant species. The majority of the HMCR project site is urbanized and has limited floral resources and habitat for Crotch's bumble bee. Though no Crotch's bumble bee were identified during the survey, there is low to high quality foraging, nesting, and/or overwintering habitat present within the HMCR project area as shown on Figure 9 and detailed further in Appendix C. HMCR project activities that would include ground disturbance, grading, and vegetation removal in areas that contain potential foraging, nesting, or overwintering habitat could result in direct loss of Crotch's bumble bees. Use of vehicles, heavy machinery, or other equipment used to remove vegetation could result in injury or mortality of bumble bees if these activities are conducted where habitat is present (i.e., flowering plants and underground nesting or overwintering sites).

Implementation of the new 2019 LRDP EIR Mitigation Measure BIO-2E would reduce the potential impacts on Crotch's bumble bee to a less than significant level by requiring a habitat assessment for bumble bee habitat[1]; implementation of a limited operating period, if feasible or applicable; conducting focused surveys for Crotch's bumble bees; and implementation of measures to avoid mortality of special-status bumble bees if nests are detected. Further, if impacts cannot be avoided and an Incidental Take Permit (ITP) is required, California Department of Fish and Wildlife (CDFW) would be required to find that the ITP includes "measures to minimize and fully mitigate the impacts of the proposed taking" (14 CCR Section 783).

Because the 2019 LRDP EIR previously determined that impacts to special-status wildlife species would be potentially significant and would require mitigation, and because Mitigation Measure BIO-2E is consistent with and supplemental to that existing mitigation framework, the HMCR project would not result in a new significant impact or a substantial increase in the severity of a previously identified significant impact related to candidate, sensitive, or special-status species. Rather, the addition of Mitigation Measure BIO-2E refines the mitigation program to address the species' updated regulatory status consistent with CEQA Guidelines Section 15162. Therefore, the HMCR project would not result in a new significant impact related to candidate, sensitive, or special-status species or a substantial increase in the severity of a previously identified significant impact related to candidate, sensitive, or special-status species.

[1] A habitat assessment has already been conducted for the HMCR Project.

Indirect Impacts

Consistent with the 2019 LRDP EIR, the HMCR project could result in indirect impacts to sensitive animal species, including Cooper's hawk, orange-throated whiptail, and loggerhead shrike that may occur in areas adjacent to the HMCR project. These indirect impacts could result from edge effects, increased noise, lighting, vehicle strikes, and inadvertent habitat encroachment. Mitigation Measures BIO-3F through BIO-3K and BIO-3N shall be implemented during all project construction to reduce potential indirect impacts to sensitive animal species to a less than significant level by initiating a pre-construction meeting; managing errant construction activities; implementing fire prevention; performing construction monitoring; minimizing nighttime lighting; managing runoff, water quality, and pests; and minimizing adverse edge effects. In addition, Mitigation Measure BIO-3M shall be implemented along any applicable segments of the HMCR project area to reduce wildlife mortality from vehicle strikes. Therefore, the HMCR project would not result in any new significant environmental effects or a substantial increase in the severity of previously identified significant effects regarding sensitive animal species.

b) Consistent with the 2019 LRDP, the HMCR project would have the potential to result in direct and indirect impacts to sensitive vegetation communities.

Direct Impacts

Consistent with the requirements of Mitigation Measure BIO-3A, vegetation mapping was completed for the HMCR project survey area. Therefore, the HMCR project has satisfied the requirements of Mitigation Measure BIO-3A and this measure would not be required again until after 2030. Table 4 presents the acreage impacts to vegetation communities and land covers that would occur during implementation of the HMCR project. Impacts would be limited to urban/developed, urban/developed - revegetation area, eucalyptus woodland, and southern mixed chaparral – disturbed. While southern mixed chaparral is not considered a sensitive habitat type by the CDFW (2026), the City of San Diego considers it a common, yet sensitive natural community (City of San Diego 2018). However, pursuant to Section 3.3.3.3 of the 2019 LRDP EIR, less than 0.10 acres of sensitive upland habitat are not considered significant and do not require mitigation. Therefore, no direct significant impacts on sensitive natural communities would occur. As such, Mitigation Measures BIO-3B through BIO-3D proposed in the 2019 LRDP EIR are not required. Therefore, the HMCR project would not result in any new significant environmental effects or a substantial increase in the severity of previously identified significant effects regarding direct impacts to sensitive vegetation communities.

Indirect Impacts

Consistent with the 2019 LRDP EIR, the HMCR project could result in indirect impacts to the sensitive natural communities documented in the project survey area (e.g., southern willow scrub and coastal sage scrub) from water quality degradation (e.g., through sedimentation, contaminants, or fuel release), fugitive dust, colonization of invasive or non-native plant species, edge effects, noise, wildlife mortality, lighting, inadvertent encroachments, non-native insects, and fuel management activities.

Mitigation Measures BIO-3F through BIO-3I, BIO-3K, BIO-3L, BIO-3N, and BIO-3O shall be implemented to reduce potential indirect impacts to sensitive vegetation communities to a less than significant level by initiating a preconstruction meeting; managing errant construction activities; implementing fire prevention; implementing construction monitoring; managing runoff, water quality, and pests; preventing the spread of invasive species; minimizing adverse edge effects; and implementing non-native insects avoidance. Therefore, the HMCR project would not result in any new significant environmental effects or a substantial increase in the severity of previously identified significant effects regarding indirect impacts to sensitive vegetation communities.

c) **Direct Impacts**

Mitigation Measure BIO-3E: Jurisdictional Delineation requires that a jurisdictional delineation (i.e., an aquatic resource delineation) is conducted during the project planning process if the area of disturbance is within a storm drain outlet, mapped as a potential drainage or wetland, or the project area contains or is located immediately adjacent to a natural drainage course. However, no potential aquatic resources are present within the HMCR project site. Consequently, no impacts to aquatic resources would occur, and Mitigation Measures BIO-3E and BIO-3C (related to the provision of mitigation for impacts to aquatic resources) do not apply. Therefore, the HMCR project would not result in any new significant environmental effects or a substantial increase in the severity of previously identified significant effects regarding jurisdictional aquatic resources.

Indirect Impacts

Consistent with the 2019 LRDP EIR, the HMCR project could result in indirect impacts to the jurisdictional aquatic resources documented in the project survey area from water quality degradation (e.g., through sedimentation, contaminants, or fuel release), fugitive dust, colonization of invasive or non-native plant species, edge effects, inadvertent encroachments, and Fuel Management Zone 2. Mitigation Measures BIO-3F through BIO-3I, BIO-3K, BIO-3L, and BIO-3N shall be implemented to reduce potential indirect impacts to jurisdictional aquatic resources to a less than significant level by initiating a preconstruction meeting; managing errant construction activities; implementing fire

prevention; implementing construction monitoring; managing runoff, water quality, and pests; preventing the spread of invasive species; minimizing adverse edge effects; and implementing non-native insects avoidance. Therefore, the HMCR project would not result in any new significant environmental effects or a substantial increase in the severity of previously identified significant effects regarding jurisdictional aquatic resources.

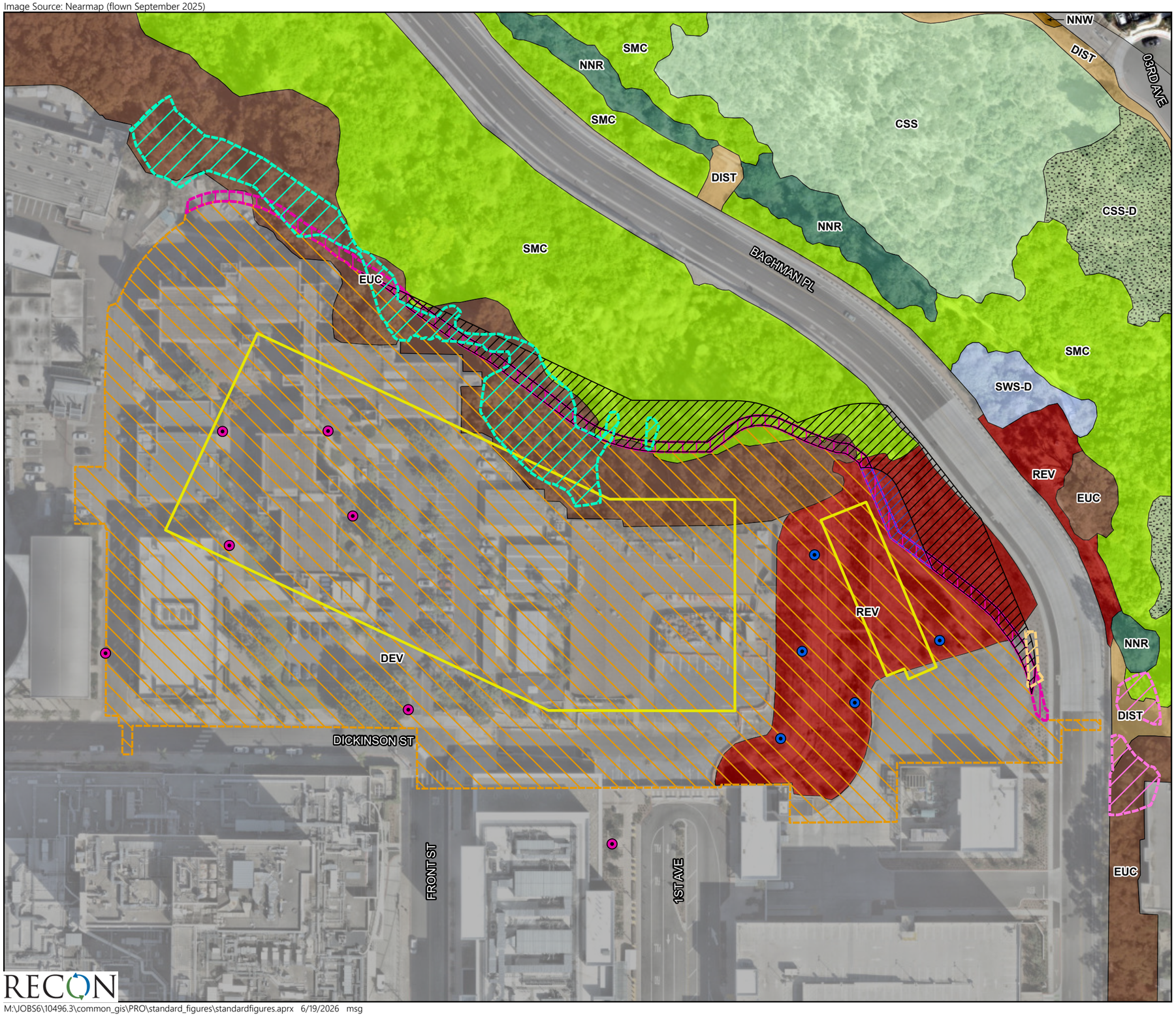
d) **Direct and Indirect Impacts**

Consistent with the 2019 LRDP EIR, the HMCR project would occur primarily within an urbanized setting that does not currently function as a wildlife corridor or wildlife nursery site. The areas in the HMCR project survey area only provide live-in habitat for wildlife and are not corridors or nursery sites that connect to larger regional wildlife corridors. Separation from other wildlife habitats is created currently by the presence of nearby State Route 163, I-8, I-5, and surrounding developed areas, consistent with the 2019 LRDP findings. Therefore, the HMCR project would not result in any new significant environmental effects or a substantial increase in the severity of previously identified significant effects regarding wildlife corridors and nursery sites.

e) Consistent with the 2019 LRDP, the HMCR project is being carried out by UC San Diego, and therefore, is not subject to municipal plans, policies, and regulations, such as county and city General Plans or local policies or ordinances, protecting biological resources due to the UC's constitutional autonomy. Therefore, the HMCR project would not result in any new significant environmental effects or a substantial increase in the severity of previously identified significant effects regarding local policies and ordinances.

f) The HMCR project would impact approximately 0.09 acres of southern mixed chaparral within an area mapped as the Multi-Habitat Planning Area (MHPA) (Table 4). However, as a State of California entity, UC San Diego is not an enrolled agency in the Natural Community Conservation Planning Program. Therefore, the Multiple Species Conservation Program (MSCP) Subarea Plan, Natural Community Conservation Planning Program, or other regional conservation plans are not applicable to UC San Diego-owned property. Furthermore, impacts to approximately 0.09 acres of southern mixed chaparral would not preclude implementation of the MSCP or assembly of the MHPA within the City of San Diego. Therefore, the HMCR project would not result in any new significant environmental effects or a substantial increase in the severity of previously identified significant effects regarding regional conservation planning.

Image Source: Nearmap (flown September 2025)



- Proposed Structures
- Permanent Impacts
- Temporary Impacts
- Fuel Management Zone 1
- Fuel Management Zone 2 (Impact Neutral)

Vegetation Communities

- CSS — Coastal Sage Scrub
- CSS-D — Coastal Sage Scrub - Disturbed
- DIST — Disturbed Habitat
- EUC — Eucalyptus Woodland
- NNR — Non-Native Riparian
- NNW — Non-Native Woodland
- SMC — Southern Mixed Chaparral
- SWS-D — Southern Willow Scrub - Disturbed
- DEV — Urban/Developed
- REV — Urban/Developed - Revegetation Area

Moderate to High Quality CBB Habitat

- Garden nasturtium (50% cover)
- Garden nasturtium in understory (+90% cover)
- Ornamental Sage (+90% cover)

Moderate Quality CBB Habitat

- Hydroseeded flowering plants (sourclover, California poppy, goldfields, beach evening-primrose) at 5-25% cover

Low Quality CBB Habitat

- Ornamental flowering plants (natal plum, natal lily, heavenly bamboo, star jasmine, and iceberg rose)

0 Feet 100

RECON

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FIGURE 9
Impacts to Vegetation

4.1.4 Cultural and Tribal Cultural Resources

Section 3.4 of the 2019 LRDP EIR evaluated the potential for impacts to archaeological and historical resources, including Tribal Cultural Resources (TCRs), from the implementation of the 2019 LRDP. The 2019 LRDP EIR concluded that implementation of the 2019 LRDP would result in potentially significant impacts due to potential alterations of historical (built environment) resources that would cause a substantial adverse change in their significance (Section 3.4.3.1), disturbance of unknown or known archaeological resources during construction (Section 3.4.3.2), disturbance of human remains and of potential human remains in unrecorded subsurface sites (Section 3.4.3.3), and disturbance of TCRs (Section 3.4.3.4).

For impacts to historical resources, Mitigation Measure CUL-1 required the preparation of a Historic American Building Survey Level 1 documentation prior to the demolition of the single-family residence located at 102 Dickinson Street. The building was incorrectly identified at 101 Dickinson Street in the 2019 LRDP EIR. Demolition of this historical resource would be a significant and unavoidable impact associated with the implementation of the 2019 LRDP. Demolition of this resource and implementation of Mitigation Measure CUL-1 were accomplished under Addendum No. 1 to the 2019 LRDP EIR for the Outpatient Pavilion and Parking Structure Project in summer 2020.

Mitigation Measure CUL-2A requires the review of project-specific grading plans to determine whether prior grading activity had removed the top 2 feet of native soils. If 2 feet or more of native soils have been removed, then no further cultural resource mitigation would be required. If native soils are present, then a qualified archaeologist shall monitor grading activities. Construction monitoring procedures that may be required by Mitigation Measure CUL-2A are described in Mitigation Measure CUL-2B. The identification of human remains during construction activities would be addressed through implementation of Mitigation Measure CUL-2B along with treatment in accordance with the California Public Resources Code and California Health and Safety Code. In addition, the identification of TCRs during construction activities would occur through implementation of Mitigation Measure CUL-2A, and treatments are specified under Mitigation Measure CUL-2B. Implementation of these measures would reduce future project-level impacts to archaeological resources, including human remains and TCRs, to less than significant levels.

CULTURAL AND TRIBAL CULTURAL RESOURCES		Impact Not Examined in 2019 LRDP EIR		
Would the HMCR project…	Impact Examined in 2019 LRDP EIR	No Impact	Less than Significant Impact	Potentially New or More Severe Significant Impact
a) Cause a substantial adverse change in the significance of a historical resource as pursuant to §15064.5?	☒	☐	☐	☐
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	☒	☐	☐	☐
c) Disturb any human remains, including those interred outside of formal cemeteries?	☒	☐	☐	☐
d) Cause a substantial adverse change in the significance of a Tribal Cultural Resource as defined in Public Resources Code § 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or	☒	☐	☐	☐
ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.				

a) As identified in Figure 3.4-1 in the 2019 LRDP EIR, the HMCR project would demolish multiple buildings constructed in 1985 or earlier. The Historic Resources Survey Report prepared for the 2019 LRDP EIR, deemed these structures as noneligible historical resources. Thus, the HMCR project would not cause a substantial adverse change in the significance of a historical resource as pursuant to Section 15064.5, and impacts would be less than significant. Therefore, the HMCR project would not result in any new

significant environmental effects or a substantial increase in the severity of previously identified significant effects regarding historical resources.

b) Consistent with the 2019 LRDP EIR, potential impacts to known or unknown archaeological resources would occur from excavation or grading activities associated with the construction of the HMCR project. Mitigation Measure CUL-2A involves the on-campus review of grading plans and construction monitoring by a qualified archaeologist and Native American monitor. Per this measure, if native soils would be disturbed, then a qualified archaeologist and Native American monitor would be required to monitor grading activities in accordance with the procedures outlined in Mitigation Measure CUL-2B. Mitigation Measure CUL-2B would be applied to the HMCR project and a Native American tribal monitor from the Kumeyaay Nation would monitor during grading and excavation within soils that have the potential to contain cultural resources. These measures would reduce the potentially significant impacts to unknown archaeological resources during project construction to a less than significant level. Therefore, the HMCR project would not result in any new significant environmental effects or a substantial increase in the severity of previously identified significant effects regarding archaeological resources.

c) Consistent with the 2019 LRDP EIR, the HMCR project involves construction activities that could disturb native terrain, including excavation, grading, and soil removal. Therefore, the potential exists for previously undiscovered human remains to be discovered. As discussed above, Mitigation Measures CUL-2A and CUL-2B require site review and monitoring of all grading activities within areas of natural deposition by a qualified archaeologist and Native American monitor. If human remains are discovered, work shall halt in that area and the procedures detailed in the California Health and Safety Code (Section 7050.5) and the California Public Resources Code (Section 5097.98), if applicable, shall be followed. Implementation of Mitigation Measures CUL-2A and CUL-2B would reduce the potentially significant impacts to human remains to a less than significant level. Therefore, the HMCR project would not result in any new significant environmental effects or a substantial increase in the severity of previously identified significant effects regarding human remains.

d) Consistent with the 2019 LRDP EIR, potential impacts to unknown TCRs may occur from excavation or grading activities associated with the HMCR project. Implementation of Mitigation Measures CUL-2A and CUL-2B, which require the on-campus review of grading plans, construction monitoring by a qualified archaeologist and a Native American monitor, and specified treatment of identified TCRs, would reduce the potentially significant impacts to TCRs to a less than significant level. Therefore, the HMCR project would not result in any new significant environmental effects or a substantial increase in the severity of previously identified significant effects regarding TCRs.

4.1.5 Energy

Section 3.5 of the 2019 LRDP EIR evaluated the potential for impacts to energy from implementation of the 2019 LRDP. The EIR concluded a significant impact would occur related to use of diesel and gasoline fuel during construction (Section 3.5.3.1). In addition, the 2019 LRDP EIR indicated that the 2019 LRDP would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency (Section 3.5.3.2). Mitigation Measure ENE-1 required construction practices that encourage efficient use of fuel beyond typical demand. Implementation of Mitigation Measure ENE-1 would reduce impacts to a less than significant level.

ENERGY		Impact Not Examined in 2019 LRDP EIR		
Would the HMCR project…	Impact Examined in 2019 LRDP EIR	No Impact	Less than Significant Impact	Potentially New or More Severe Significant Impact
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	☒	☐	☐	☐
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☒	☐	☐	☐

a) During construction, the HMCR project would result in an increase in energy consumption through the combustion of fossil fuels in construction vehicles, worker commute vehicles, and construction equipment, and the use of electricity for temporary buildings, lighting, and other construction-related uses. The HMCR project would not require any construction practices or building materials that would result in unusually high energy use or that were not accounted for in the 2019 LRDP EIR. The HMCR project does not propose new land uses and would not result in additional vehicle trips to the campus compared to the assumptions of the 2019 LRDP EIR. Additionally, limitations on idling of vehicles and equipment, requirements that equipment be properly maintained, and financial incentives to avoid wasteful, inefficient, and unnecessary consumption of energy during construction would continue to apply. Implementation of Mitigation Measure ENE-1 would be required to reduce fossil fuel use during construction beyond typical demand through the use of the most fuel-efficient construction equipment and models, encouraging workers to carpool or use public transit to access the campus during construction, and the use of larger capacity trucks to reduce total truck trips. Since certification of the 2019 LRDP EIR, construction equipment emissions and efficiency standards have become more stringent, including the November 2022 amendments to the In-Use Off-Road Diesel-Fueled Fleets

Regulation, which took effect October 1, 2023, and the project would be required to utilize equipment meeting these newer standards.

In addition, the HMCR project would facilitate improved efficiency in operation of the medical campus by replacing the existing, aging hospital with a new, more energy-efficient building. No on-site natural gas consumption would occur, and the CUP would be all-electric, utilizing purchased carbon-free energy. Thus, the HMCR project would not result in potentially significant environmental impacts due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation, and impacts would be less than significant. Therefore, the HMCR project would not result in any new significant environmental effects or a substantial increase in the severity of previously identified significant effects regarding energy usage.

b) Conformance with the UC Sustainable Practices Policy as outlined in Section 2.3.4 above and implementation of the Greenhouse Gas Reduction Strategy project-level strategies outlined in the screening sheet would ensure that the HMCR project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. Therefore, the HMCR project would not result in any new significant environmental effects or a substantial increase in the severity of previously identified significant effects regarding conflict with energy plan or policy.

4.1.6 Geology and Soils

Section 3.6 of the 2019 LRDP EIR evaluated the potential for impacts to geology and soils from the implementation of the 2019 LRDP for the Hillcrest Campus. The EIR concluded that compliance with applicable regulations for future development projects would result in less than significant impacts related to exposure to seismic-related hazards (Section 3.6.3.1), soil erosion and topsoil loss associated with ground disturbance (Section 3.6.3.2), unstable geologic or soil conditions (Section 3.6.3.3), and expansive soils (Section 3.6.3.4). Implementation of the 2019 LRDP would result in potentially significant impacts due to the disturbance of geological formations containing paleontological (fossil) resources (Section 3.6.3.5). In addition, the analysis determined that there is no potential for a significant geology or soils impact related to use of septic tanks or alternative wastewater disposal systems (Section 3.6.5).

Mitigation Measure GEO-5 required paleontological monitoring during construction and would reduce any direct or indirect impacts to paleontological resources to a less than significant level.

GEOLOGY AND SOILS Would the HMCR project…	Impact Examined in 2019 LRDP EIR	Impact Not Examined in 2019 LRDP EIR: No Impact	Less than Significant Impact	Potentially New or More Severe Significant Impact
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☒	☐	☐	☐
ii) Strong seismic ground shaking?	☒	☐	☐	☐
iii) Seismic-related ground failure, including liquefaction?	☒	☐	☐	☐
iv) Landslides?	☒	☐	☐	☐
b) Result in substantial soil erosion or the loss of topsoil?	☒	☐	☐	☐
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☒	☐	☐	☐
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	☒	☐	☐	☐
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	☒	☐	☐	☐
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☒	☐	☐	☐

a) The Hillcrest Campus is located in the seismically active southern California region. However, the project site is not within an Alquist-Priolo Earthquake Fault Zone and is not underlain by any known active faults. Therefore, the HMCR project would not be subject to surface fault rupture.

While the project site could experience strong seismic shaking during a major earthquake, the replacement hospital would be designed in compliance with SB 1953 seismic safety requirements for acute care hospitals, which are intended to ensure structural performance and patient safety under severe ground shaking.

The Hillcrest Campus is underlain by two primary bedrock formations: Pleistocene paralic deposits (siltstone, sandstone, and conglomerate) and the Eocene Mission Valley Formation (marine and nonmarine sandstone with cobble conglomerate beds). The orientation and slope of these formations contribute to overall site stability. Soils on the project site are generally dense and cohesive, and groundwater depths are sufficient to minimize liquefaction potential. Therefore, the risk of seismic-related ground failure, including liquefaction, is very low.

The Hillcrest Campus is classified as "Generally Susceptible" to slope instability. However, the combination of bedrock geology, slope angles, and soil characteristics provides overall stability, and the potential for slope failure or landslide is low.

Overall, the HMCR project would incorporate appropriate seismic design standards, and no known geologic hazards would be directly or substantially exacerbated. The HMCR project would not directly or indirectly cause potential substantial adverse effects related to seismic hazards, and impacts would be less than significant. Therefore, the HMCR project would not result in any new significant environmental effects or a substantial increase in the severity of previously identified significant effects regarding geological hazards.

b) The HMCR project would involve construction activities that would result in ground disturbance, including excavation, grading, and soil removal. Consistent with the 2019 LRDP EIR, the HMCR project would comply with appropriate measures consistent with the UC San Diego Design Guidelines, including the incorporation of erosion and sediment control BMPs as outlined in the project's SWPPP, as well as UC San Diego's Storm Water Management Program and other regulatory requirements, as needed to minimize erosion and topsoil loss. Specifically, the HMCR project would comply with relevant National Pollutant Discharge Elimination System (NPDES) permits, including the General Permit for Storm Water Discharges Associated with Construction Activity (General Construction Permit) and the General Permit for Storm Water Discharges from Small Municipal Separate Storm Sewer Systems (Phase II Small MS4 Permit), which require soil erosion control measures to ensure adequate protection against soil erosion during and after site construction. Therefore, the HMCR project would not result in any new significant environmental effects or a substantial increase in the severity of previously identified significant effects regarding soil erosion.

c) According to the 2019 LRDP Geotechnical and Geologic Hazards Review (UC San Diego 2019a), the site is in an area which is classified as "Generally Susceptible" to slope instability. The HMCR project would comply with the California Building Code (CBC) and

the University of California Seismic Safety Policy, which require building engineering to address unstable soil and slope conditions, if needed. Compliance with these regulations during construction and operation would provide adequate protection against unstable soil impacts. Therefore, the HMCR project would not result in any new significant environmental effects or a substantial increase in the severity of previously identified significant effects regarding geological or soil stability.

d) According to the Geotechnical and Geologic Hazards Review (UC San Diego 2019a), loose or compressible soils may be found within the Hillcrest Campus, especially in undeveloped areas with deposits of alluvium or slope wash/colluvium and developed areas with undocumented and/or uncompacted fill. However, the HMCR project would comply with applicable CBC regulations during construction and operation, which would provide adequate protection against expansive soils. Therefore, the HMCR project would not result in any new significant environmental effects or a substantial increase in the severity of previously identified significant effects regarding expansive soils.

e) The sewage generated by the existing Hillcrest Campus and 2019 LRDP is treated by the City of San Diego sewer system. Therefore, no septic tanks or alternative wastewater systems are used or anticipated to be associated with implementation of the 2019 LRDP. The HMCR project would connect to the existing sewer system and would not require the use of septic tanks or alternative wastewater disposal systems. Therefore, the HMCR project would not result in any new significant environmental effects or a substantial increase in the severity of previously identified significant effects regarding septic tanks or alternative wastewater disposal systems.

f) The Hillcrest Campus is underlain by two geologic units that are assigned paleontological sensitivity levels based on their potential to yield significant fossil remains. The Eocene-age Mission Valley Formation, which is made of weakly cemented, fine-grained sandstone, underlies the Linda Vista Terrace Formation on the mesa top greater than 20 feet in depth. The Mission Valley Formation is generally exposed in the steeply sloped, undeveloped canyons north, west, and east of the Hillcrest Campus and is considered to have a high paleontological resource sensitivity. It is anticipated that the Mission Valley Formation would be disturbed as part of grading activities associated with the HMCR project.

   Excavation and grading activities associated with the HMCR project would occur in the Mission Valley Formation and have the potential to impact unknown paleontological resources due to the high paleontological sensitivity of this underlying rock unit. Consistent with the 2019 LRDP EIR, the HMCR project would implement Mitigation Measure GEO-5 which would require paleontological monitoring during construction activities that have the potential to unearth unique fossil resources and would reduce potential impacts to unknown paleontological resources to a less than significant level. Therefore, the HMCR project would not result in any new significant environmental effects or a substantial increase in the severity of previously identified significant effects regarding paleontological resources.

4.1.7 Greenhouse Gas Emissions

Section 3.7 in the 2019 LRDP EIR assessed Greenhouse Gas (GHG) emissions that would be generated under implementation of the 2019 LRDP. The 2019 LRDP EIR concluded that implementation of the 2019 LRDP would not generate GHG emissions that would have a significant impact on the environment (Section 3.7.3.1) and would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions (Section 3.7.3.2). No mitigation measures were required.

After certification of the 2019 LRDP EIR, the UC Office of the President updated its Sustainable Practices Policy in July 2023. The 2023 Sustainable Practices Policy revised the Clean Energy section to indicate that the UC Clean Power Program is already achieving the clean electricity goals and to update the goals and timelines around centrally purchased biomethane to reflect current plans. The 2023 Sustainable Practices Policy also replaced the former goal of achieving carbon neutrality for Scope 1 and 2 emissions by 2025 with a goal that is aligned with state goals in the most recent 2022 California Air Resources Board (CARB) Scoping Plan of achieving carbon neutrality for all scopes of emissions by 2045. The 2023 Sustainable Practices Policy reflects the UC's desire to prioritize direct, total emissions reductions to support achievement of the state's updated reduction targets established in Assembly Bill (AB) 1279, signed into law in September 2022, that requires that statewide anthropogenic GHG emissions be reduced to at least 85 percent below 1990 levels. The 2023 Sustainable Practices Policy sets a new long-term reduction target of 90 percent below 2019 levels by 2045 for all scopes, which is more aggressive than the reduction targets established in AB 1279. After 2045, the 2023 Sustainable Practices Policy requires that any residual emissions beyond the 90 percent reduction will be negated by carbon removal to achieve complete carbon neutrality in alignment with the State's goals and the 2022 CARB Scoping Plan. Under the 2023 Sustainable Practices Policy, the campus has the option to purchase voluntary carbon offsets to meet obligations under CEQA, to achieve LEED certification, or for other purposes, but they will not count toward GHG reduction targets.

GREENHOUSE GAS EMISSIONS		Impact Not Examined in 2019 LRDP EIR		
Would the HMCR project…	Impact Examined in 2019 LRDP EIR	No Impact	Less than Significant Impact	Potentially New or More Severe Significant Impact
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☒	☐	☐	☐
b) Conflict with an applicable plan, policy, or regulation adopted for the purpose or reducing the emissions of greenhouse gases?	☒	☐	☐	☐

a) GHG emissions would be generated during both construction and operation of the HMCR project. The following is a discussion of how construction and operational emissions compare to those analyzed in the 2019 LRDP EIR.

Construction Emissions

Construction of the hospital and the CUP were modeled in Phases 3 and 4 in the 2019 LRDP EIR. The replacement hospital would total 810,000 gsf, which is 70,000 gsf more than what was analyzed in the 2019 LRDP EIR, and the CUP would total 29,000 gsf (consisting of a 17,000 gsf HCAI-compliant component and a 12,000 gsf non-HCAI-compliant component constructed under Phase 1A), which is 44,000 gsf less than analyzed for this phase in the 2019 LRDP EIR. Overall, the total square footage of both the replacement hospital and the CUP would be 26,000 gsf greater than what was analyzed in the 2019 LRDP EIR. However, the maximum number of daily construction vehicle trips was assumed for hospital construction in the 2019 LRDP EIR. An increase of 26,000 gsf would not change these assumptions since construction phases, durations, and the amount of equipment is based on project acreage. The 2019 LRDP EIR assumed 156,000 cubic yards of export for Phase 3 while the HMCR project would require the export of 228,000 cubic yards. Assuming a 15-cubic-yard dump truck capacity, the 2019 LRDP EIR modeled a total of 20,800 soil hauling trips over the entire grading period which would result in a total of 373 MT CO_2E. The additional 72,000 cubic yards of soil hauling would require 9,600 additional trips over the grading duration, or an increase of 46.2 percent. By proportionately increasing the hauling-related GHG emissions by 46.2 percent, it was calculated that these trips would result in a total GHG emissions increase of 172 MT CO_2E, which equates to 5.7 MT CO_2E per year when amortized over 30 years. When added to operational GHG emissions, this slight increase in hauling-related emissions would not result in overall emissions that exceed what was calculated in the 2019 LRDP EIR given that the CUP energy-related GHG emissions would be significantly less than what was previously modeled (see following Operational Emissions discussion). For material deliveries, the maximum feasible number of daily delivery trips required to transport building materials to the project site was modeled for each day of construction. In actuality, the number of daily trips would vary and would be less than the maximum feasible number on most days. Thus, the total number of modeled delivery trips would accommodate the delivery of any additional materials associated with the 26,000 gsf increase. Therefore, maximum daily construction emissions under the HMCR project would be similar to those identified in the 2019 LRDP EIR.

Operational Emissions

Operational-related GHG emissions associated with the HMCR project include the following sources: mobile, energy (including CUP operation), solid waste, water, and area (landscape equipment).

As discussed in Section 4.1.2, Air Quality, the HMCR project would not result in an increase in trips since trip generation is based on the number of hospital beds. Based on the 2019 LRDP EIR, a 300-bed hospital would generate 20 trips per bed for a total of 6,000 trips (City of San Diego 2003). The CUP would not generate additional trips since it is a support facility that would be operated by existing staff. Thus, there would be no increase in trips and vehicle emissions were assumed to be the same as those analyzed in the 2019 LRDP EIR.

Energy-related GHG emissions calculated in the 2019 LRDP EIR assumed that the CUP would be a co-gen facility and the currently proposed CUP would be all-electric. The new CUP is completely decarbonized, with no natural gas usage. Thus, CUP-related emissions would be significantly less than those analyzed in the 2019 LRDP EIR. Additionally, as discussed in Section 2.3.3, the HMCR project would procure 100 percent off-site renewable energy through the UC's wholesale power procurement. Through these project features along with other energy-efficiency measures identified in the GHG Reduction Strategy Screening Table for the HMCR project (Appendix A), there would be minimal energy-related GHG emissions.

Landscaping equipment associated with the HMCR project would be similar to equipment previously analyzed in the 2019 LRDP EIR since the overall landscaping on the campus would generally be the same. Thus, area source GHG emissions associated with the HMCR project would be the same as those analyzed in the 2019 LRDP EIR.

Solid waste and water-related GHG emissions are based on overall building square footage. As discussed, the total square footage of both the replacement hospital and the CUP would be 26,000 gsf greater than what was analyzed for this redevelopment phase in the 2019 LRDP EIR. Thus, the solid waste and water-related GHG emissions would be incrementally increased by approximately 3.2 percent. This equates to approximately 29 MT CO_2E annually from both sources. Given the significant reduction in energy-related GHG emissions from construction of an all-electric CUP and procurement of 100 percent renewable energy, total GHG emissions associated with the HMCR project would still be less than what was calculated in the 2019 LRDP EIR.

In summary, overall operational-related GHG emissions associated with the HMCR project would not exceed those analyzed in the 2019 LRDP EIR.

GHG Reduction Strategy

Similar to the 2019 LRDP EIR, the GHG Reduction Strategy (LSA 2019) would continue to be implemented, and similar emissions reductions would be achieved in each sector because land uses and operation would be similar under the two projects. The GHG Reduction Strategy was prepared in conjunction with the 2019 LRDP to ensure that redevelopment of the campus is implemented in alignment with the statewide GHG reduction goals.

The GHG Reduction Strategy presents a reasonably foreseeable pathway illustrating how the reduction measures would be implemented to reduce the 2035 emission inventory for the Hillcrest Campus to below the 2017 baseline levels of GHG emissions to achieve the reduction target of net zero additional emissions.

The GHG Reduction Strategy includes Screening Tables that specify the reduction of GHG emissions that are attributable to design and construction measures incorporated into the 2019 LRDP development projects (both new development and existing building retrofits). The Screening Tables provide a menu of performance standards and options related to GHG mitigation measures and design features that can be used to demonstrate consistency with the reduction measures and GHG reduction quantities in the GHG Reduction Strategy. The Screening Tables are based on the GHG Reduction Strategy, which includes GHG emission inventories (2017 baseline and 2035 forecasts), the emission reduction target of net zero additional emissions, and the measures that can be used to reach the reduction target. A GHG Reduction Strategy Screening Table has been prepared for the HMCR project and identifies 211 reduction points, which is more than the 100 reduction points required by the GHG Reduction Strategy (Appendix A). Programmatic measures that would be implemented by UC San Diego for the HMCR project include alternative work schedules, employee bicycle path linkages and commute facilities, shuttle programs, electric vehicle charging stations, and trip reduction incentives, in addition to project-level measures with applicable energy- and water-efficiency standards including enhanced window installation, cool roof, enhanced duct insulation, very high efficiency water heaters, high efficiency lights, LED surgical lights, and water efficient toilets.

Implementation of the 2019 LRDP would occur over approximately 15 years, during which services and technologies will evolve and circumstances will change. As such, the GHG Reduction Strategy includes an implementation strategy to monitor progress. The strategy uses performance standards to verify that the levels of GHG emissions reduction that are required in order to achieve the emissions reduction target are met or exceeded as a result of measure implementation regardless of the pace of development or other factors that might change over time (e.g., new weather patterns that could change the heating and cooling needs of buildings). Generally, the implementation strategy involves seven components, summarized in Table 3.7-7 of the LRDP EIR. With implementation of the GHG Reduction Strategy, the HMCR project would not result in a net increase in GHG emissions, and impacts would be less than significant. Therefore, the HMCR project would not result in any new significant environmental effects or a substantial increase in the severity of previously identified significant effects regarding GHG emissions.

b) The UC Sustainable Practices Policy is the relevant 2019 LRDP policy that seeks to reduce GHG emissions and would be relied upon to address this CEQA threshold. The GHG Reduction Strategy implements all relevant UC Sustainable Practices Policy

provisions that are designed to reduce GHG emissions, including electrification of the CUP. The 2019 LRDP EIR concluded that the 2019 LRDP would not conflict with this policy. The HMCR project is generally consistent with the overall redevelopment plan analyzed in the 2019 LRDP EIR and there are no aspects of the HMCR project that would result in a conflict with applicable plans. The HMCR project does not propose new land uses and would not result in additional vehicle trips to the campus compared to the assumptions of the 2019 LRDP EIR. Future development under the 2019 LRDP would continue to be designed and operated consistent with the UC Sustainable Practices Policy. Consistent with the 2019 LRDP, the HMCR project would not conflict with an applicable plan, policy, or regulation adopted for the purpose or reducing the emissions of GHGs and is consistent with the GHG analysis evaluated in the 2019 LRDP EIR. Therefore, the HMCR project would not result in any new significant environmental effects or a substantial increase in the severity of previously identified significant effects regarding conflicting with an applicable plan, policy, or regulation adopted for the purpose or reducing the emissions of GHGs.

4.1.8 Hazards and Hazardous Materials

Section 3.8 of the LRDP EIR evaluated the potential for impacts to hazards and hazardous materials from implementation of the 2019 LRDP. The 2019 LRDP EIR concluded that implementation of the 2019 LRDP would not result in a potentially significant impact related to the transport, use, and disposal of hazardous materials (Section 3.8.3.1) or pose a health risk to occupants of nearby schools (Section 3.8.3.3). The potential for significant hazards related to accidental release of hazardous materials could occur as part of demolition activities and contaminated soil and groundwater (Section 3.8.3.2). Aircraft operations and activities would not pose significant safety hazards (Section 3.8.3.4). Construction-related road closures or detours on the campus could impair or intervene with emergency response and result in potentially significant impacts (Section 3.8.3.5). The 2019 LRDP would have less than significant wildland fire impacts through implementation of fire protection measures, fuel management guidelines, and compliance with associated regulations (Section 3.8.3.6). The 2019 LRDP would not result in activities located on a listed hazardous materials site compiled pursuant to California Government Code, Section 65962.5 (Section 3.8.5).

Mitigation Measure HAZ-2A requires the review and remediation of buildings prior to their demolition. Mitigation Measure HAZ-2B required the assessment and remediation of known contaminated sites. Mitigation Measures HAZ-2C and HAZ-2D require construction activities to be halted if unknown contamination is encountered and implementation of remedial or treatment activities. Implementation of Mitigation Measure HAZ-2A would reduce the potential for the accidental release of hazardous materials associated with demolition activities to less than significant. Mitigation Measures HAZ-2B through HAZ-2D would reduce potential construction-related impacts from the release of hazardous substances from soil and groundwater during construction activities to less than

significant. Mitigation Measure HAZ-5 requires notification of the Hillcrest Campus Fire Marshal and the campus community of any required road closures to reduce emergency access or response impacts to less than significant levels.

HAZARDS AND HAZARDOUS MATERIALS		Impact Not Examined in 2019 LRDP EIR		
Would the HMCR project…	Impact Examined in 2019 LRDP EIR	No Impact	Less than Significant Impact	Potentially New or More Severe Significant Impact
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☒	☐	☐	☐
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☒	☐	☐	☐
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☒	☐	☐	☐
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☒	☐	☐	☐
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	☒	☐	☐	☐
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☒	☐	☐	☐
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	☒	☐	☐	☐

a) Consistent with the 2019 LRDP EIR, the HMCR project could result in the transport, use, and disposal of hazardous materials that could pose a hazard to the public and environment during construction. Adherence to existing regulations and compliance with campus safety standards mandated by applicable federal, state, university, and local laws and regulations, would minimize the risks resulting from the routine transportation, use, storage, or disposal of hazardous materials. Therefore, the HMCR project would not result in any new significant environmental effects or a substantial increase in the severity of previously identified significant effects regarding the routine transport, use, or disposal of hazardous materials.

b) Consistent with the 2019 LRDP EIR, the HMCR project involves demolition of existing campus structures, which could result in the upset or accidental release of asbestos, lead, biohazardous waste, pharmaceutical waste, and radioactive waste. Implementation of Mitigation Measure HAZ-2A, which requires that existing aging campus buildings be sampled for hazardous materials and remediated as necessary prior to demolition, would reduce the potential for accidental release of hazardous materials associated with demolition activities to a less than significant level.

   Records indicate that there was a previous release of approximately 800 to 900 gallons of diesel fuel that occurred near two underground storage tanks located outside the project site near the existing CUP. While UC San Diego is currently pursuing a remediation project for this site, ongoing monitoring has shown that the contamination is not spreading. Consistent with the 2019 LRDP EIR, components of the HMCR project would occur in portions of the delineated contaminated area associated with the 1991 spill and leaking USTs. The basement level of the proposed hospital would be 255 feet amsl, which could be below the groundwater level. As a result, dewatering may be required during construction. Therefore, there is a potential to encounter contaminated groundwater and soil during construction activities associated with the replacement hospital, resulting in a potentially significant impact. Mitigation Measures HAZ-2B through HAZ-2D would reduce potential construction-related impacts from the release of hazardous substances from soil and groundwater during construction activities associated with the replacement hospital to a less than significant level.

   Therefore, the HMCR project would not result in any new significant environmental effects or a substantial increase in the severity of previously identified significant effects regarding the accidental release of hazardous materials.

c) Consistent with the 2019 LRDP EIR, existing schools within 0.25 miles of the Hillcrest Campus still include the San Diego Cooperative Preschool located at 4190 Front Street and Green Beans Preschool located at 4153 1ST Avenue. No proposed schools within 0.25 miles of the Hillcrest Campus are known at this time. The HMCR project would involve the use and transport of hazardous materials during construction. The campus would continue to comply with federal and state regulations pertaining to hazardous wastes and with existing campus programs, practices, and procedures that would

ensure that risks associated with hazardous emissions or materials to existing or proposed primary or secondary schools located within one-quarter mile from the campus would remain less that significant through proper handling procedures, disposal practices, and/or cleanup procedures. Therefore, the HMCR project would not result in any new significant environmental effects or a substantial increase in the severity of previously identified significant effects regarding emitting hazardous materials near schools.

d) The project site is not located on a list of hazardous materials sites compiled pursuant to California Government Code, Section 65962.5, and would not create a significant hazard to the public or environment. Therefore, the HMCR project would not result in any new significant environmental effects or a substantial increase in the severity of previously identified significant effects regarding hazardous material sites.

e) As indicated in the 2019 LRDP EIR, the Hillcrest Campus is located approximately 2 miles northeast of the San Diego International Airport (SDIA) and is within the boundaries of the Airport Land Use Plan developed for SDIA. The Hillcrest Campus is located within the SDIA Airspace Safety Zone, which requires notification to the Federal Aviation Administration (FAA) for construction of buildings exceeding 200 feet in height. The HMCR project would not construct buildings with maximum heights exceeding 200 feet; therefore, notification to the FAA would not be required.

   Consistent with the 2019 LRDP, the HMCR project would relocate the existing helipad from the Medical Offices North building to the top of the HMCR hospital building. Relocating the helipad to the north end of the Hillcrest Campus and elevating it several stories higher would increase the distance from the helipad to the nearest off-site residences. Individual helicopter landings and takeoffs would continue to be a short-term, intermittent source of noise. The frequency of helicopter landings would continue to be determined by occurrence of emergencies rather than hospital operations. Thus, the HMCR project would not result in a safety hazard for people residing or working in the project area, and impacts would be less than significant. Therefore, the HMCR project would not result in any new significant environmental effects or a substantial increase in the severity of previously identified significant effects regarding airport hazards.

f) As indicated in the 2019 LRDP EIR, construction-related activities may require temporary partial lane or road closures and/or detours during construction that would interfere with an emergency response plan or emergency evacuation plan. Construction of the HMCR project would require the temporary closure of the south lane of Bachman Place, which could interfere with emergency response or evacuation plans. As required by Mitigation Measure HAZ-5, UC San Diego would require the construction contractor to notify the Campus Fire Marshal and community to prevent conflicts with emergency access or evacuation routes during construction and temporary road closures. Implementation of Mitigation Measure HAZ-5 would reduce impacts to a less than

significant level. Therefore, the HMCR project would not result in any new significant environmental effects or a substantial increase in the severity of previously identified significant effects regarding emergency access.

g) Since certification of the 2019 LRDP EIR, CAL FIRE has updated the Fire Hazard Severity Zone (FHSZ) maps. Review of the updated CAL FIRE FHSZ maps shows that the entire campus, including the HMCR project, is mapped as a local responsibility Very High FHSZ. The combustible vegetation located on the project site would be removed prior to building construction which would lessen wildland fire risk during construction. Subsequent to construction completion, the HMCR project would employ fuel management techniques that include strategic ornamental landscape along any adjacent mesa top between native steep slope vegetation and the HMCR project, as well as general compliance with the City's Brush Management Regulations (SDMC Section 142.0412). This would include, where appropriate, fuel management in two zones equaling a total width of 100 feet measured from the building facade into the canyon area. Zone 1 would be at minimum 35 feet wide from the building and could be used as a fire access lane. Zone 1 would have a relatively level surface and any combination of hardscape and irrigated landscaping with low-fuel species that would be actively maintained to reduce fuel load. Zone 2 would consist of any remaining area necessary to reach the 100-foot minimum width and contain canyon vegetation that would be managed with selective thinning and pruning to reduce fuel load in accordance with SDMC Section 142.0412 while preserving natural habitat. In addition, the replacement hospital and CUP would comply with the CBC and California Fire Code as enforced by the Hillcrest Campus Fire Marshal, which would include ignition-resistant construction materials, automatic interior sprinklers, fire apparatus access, and emergency evacuation routes.

   Consistent with the 2019 LRDP EIR, implementation of fire protection measures, fuel management regulations, and compliance with associated regulations would ensure impacts related to the exposure of people or structures to a significant risk of loss, injury, or death involving wildland would be less than significant. Therefore, the HMCR project would not result in any new significant environmental effects or a substantial increase in the severity of previously identified significant effects regarding wildfire.

4.1.9 Hydrology and Water Quality

Section 3.9 of the 2019 LRDP EIR evaluated the potential for impacts to hydrology and water quality from the implementation of the 2019 LRDP. The 2019 LRDP EIR concluded that implementation of the 2019 LRDP would result in less than significant impacts related to the potential water quality effects due to generation of pollutants or project compliance with applicable policies and regulations, alteration of site drainage and hydrology, and conflict or obstruction of the implementation of a water quality control plan or sustainable groundwater management plan (Sections 3.9.3.1, 3.9.3.2, and 3.9.3.3). No potential for

tsunamis or seiches exists on the Hillcrest Campus, and no potential exists for significant impacts related to the depletion of groundwater supplies and flooding (Section 3.9.5). No mitigation measures were identified for hydrology and water quality impacts as described in the 2019 LRDP EIR.

HYDROLOGY AND WATER QUALITY		Impact Not Examined in 2019 LRDP EIR		
Would the HMCR project…	Impact Examined in 2019 LRDP EIR	No Impact	Less than Significant Impact	Potentially New or More Severe Significant Impact
a) Violate any water quality standards or waste discharge requirements, or otherwise substantially degrade surface or groundwater quality?	☒	☐	☐	☐
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☒	☐	☐	☐
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would: (i)result in substantial erosion or siltation on- or off-site? (ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite; (iii) create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff; or (iv) impede or redirect flood flows?	☒	☐	☐	☐
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☒	☐	☐	☐
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☒	☐	☐	☐

a) Consistent with the 2019 LRDP EIR, construction activities associated with the HMCR project could result in an increase in potential discharge of pollutants to receiving waters. However, adherence with UC San Diego guidelines and policies, including the Storm Water Management Program (SWMP), and other regulatory requirements related to stormwater runoff would minimize the potential for pollutants to enter receiving waters during construction. Construction-related BMPs established as part of UC San Diego's SWMP include, but are not limited to the following:

- Proper storage, use, and disposal of construction materials
- Regular removal of sediment from surface runoff before it leaves the site by silt fences or other similar devices around the site perimeter, with particular attention to protecting impaired water bodies listed on the 303(d) list for sediment and protecting downstream environmentally sensitive habitats such as wetlands
- Protection of all storm drain inlets on-site or downstream of the construction site to eliminate entry of sediment
- Stabilization of cleared or graded slopes
- Diversion of runoff from uphill areas around disturbed areas of the site
- Prevention of tracking soil off-site through use of a gravel strip or wash facilities at exit areas
- Protection or stabilization of stockpiled soils
- Continual inspection and maintenance of all specified BMPs through the duration of construction, with special emphasis before and after rain events

A CEQA Hydrology & Stormwater Quality Memorandum (Appendix D), was prepared for the HMCR project by Latitude 33 on January 16, 2025. As discussed in the CEQA Hydrology & Stormwater Quality Memorandum, the HMCR project would incorporate compact, underground biofiltration devices to treat the required flow rates. These devices would remove pollutants and sedimentation from stormwater runoff and meet all City of San Diego and UC San Diego requirements for post-construction BMP design. Furthermore, these devices are Technology Assessment Protocol Ecology (TAPE) certified and therefore would remove the 303(d) impairment of indicator bacteria for the San Diego River watershed. Consistent with the 2019 LRDP EIR, these devices treat proposed stormwater flows to meet or exceed the pollutant and sediment removal requirements as set forth by the UC San Diego Storm Water Management Plan.

Therefore, the HMCR project would not result in any new significant environmental effects or a substantial increase in the severity of previously identified significant effects regarding the violation of water quality standards.

b) No removal of groundwater is proposed, as the HMCR project would use potable and recycled water supplied by the City's Public Utilities Department through existing and

future lines on the Hillcrest Campus. Although the HMCR project would increase the amount of impervious surface on-site, this was accounted for in the 2019 LRDP EIR. Therefore, the HMCR project would not result in any new significant environmental effects or a substantial increase in the severity of previously identified significant effects regarding groundwater.

c) Construction of the HMCR project would not contribute substantial loads of sediment or other pollutants to stormwater runoff due to compliance with the NPDES Statewide General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activity (General Permit). As part of the General Permit, campus construction projects managed by outside contractors and disturbing over 1 acre (including the HMCR project) must implement Stormwater Pollution Prevention Plans (SWPPPs), which specify BMPs to reduce the contribution of sediments, spilled and leaked liquids from construction equipment, and other construction-related pollutants to stormwater runoff. In addition, following completion of demolition, the site's stormwater BMPs would continue to be maintained and managed under a SWPPP until the next phase of 2019 LRDP redevelopment. Compliance with the regulations would provide adequate protection from stormwater contamination and water quality protection from construction activities on campus.

   As described in the 2019 LRDP EIR, the Hillcrest Campus generally drains into three distinct drainage discharge points: (1) the western portion of the campus discharges to the canyon west of the existing Arbor Parking Structure, ultimately discharging toward the Legacy Center in Mission Valley; (2) a small southern portion of the campus discharged into public City of San Diego streets via Front Street and Montecito Way; and (3) the eastern portion of the campus discharges to the existing concrete swale located north of Bachman Place that connects to an existing City of San Diego 48-inch RCP storm drain at its northern terminus. The HMCR project area is located entirely within the eastern drainage basin, as discussed below.

   The eastern drainage basin consists of three major sub-basins: northwestern, southern, and northeastern. The northwestern sub-basin included all the buildings north of Dickinson Street and east of the existing CUP access road, which collects within a canyon drainage that routes north and beneath Bachman Place within two, 25-inch culverts.

   The southern sub-basin includes the existing Medical Center and greater MOP areas, including the MOP parking structure and CUP buildings, as well as off-site drainage from City of San Diego public streets (portions of 1ST Avenue, Montecito Way, Bachman Place, and Third Avenue) and private properties adjacent to these streets. A portion of the HMCR project site is included within this southern sub-basin boundary.

   The northeastern sub-basin includes the majority of the HMCR project site, the canyon slopes to the north and outside the HMCR project boundary, Bachman Place, and the existing drainage channel north of Bachman Place.

Existing and proposed hydrologic conditions were modeled for the affected sub basins and their associated points of connection (POC). Under proposed conditions, runoff along the southern edge of the project site would be reduced and routed to underground treatment facilities prior to discharging into the storm drain system at the Dickinson and Front Street intersection, identified as POC 1. Similarly, runoff to the northern slope would be reduced at POCs 3, 4, and 5.

The majority of site runoff would be redirected east to underground treatment and detention facilities located within the loading dock area and would discharge to the existing storm drain in Bachman Place at POC 2.

Peak flow rates at POCs 1, 3, 4, and 5 would be lower under proposed conditions compared to existing conditions. Although peak flow at POC 2 would increase under proposed conditions due to the redistribution of runoff, the HMCR project would install an underground detention vault with outlet control designed to regulate discharge rates. The detention system would be sized to attenuate post-construction peak flows so that discharge rates would not exceed existing conditions for the applicable design storm events.

Therefore, while the HMCR project would modify internal drainage patterns and consolidate discharge at POC 2, the controlled release from the detention system would prevent increases in downstream peak flows and would not result in flooding, erosion, or exceedance of storm drain capacity. Accordingly, the HMCR project would not result in any new significant environmental effects or a substantial increase in the severity of previously identified significant effects regarding the alteration of existing drainage patterns.

d) No potential for tsunamis or seiches exists on the Hillcrest Campus given its location approximately 5 miles from the Pacific Ocean on a mesa top not near any large, enclosed body of water. The HMCR project would not result in the release of pollutants due to project inundation because it is not located by any river or creek. Therefore, the HMCR project would not result in any new significant environmental effects or a substantial increase in the severity of previously identified significant effects regarding tsunamis and seiches.

e) As indicated in the 2019 LRDP EIR, construction activities could result in significant short-term water quality impacts from uncontrolled sediment and pollutants in stormwater runoff that could conflict with the policies of the San Diego Basin Plan. The HMCR project would be required to comply with the UC San Diego Design Guidelines, SWMP, and other regulatory requirements related to stormwater runoff to minimize the potential for pollutants to enter receiving waters.

   As previously discussed, the HMCR project would incorporate compact, underground biofiltration devices to treat the required flow rates. These devices would remove

pollutants and sedimentation from stormwater runoff and meet or exceed all City of San Diego and UC San Diego requirements for post-construction BMP design. Furthermore, these devices are TAPE certified and therefore would remove the 303(d) impairment of indicator bacteria for the San Diego River watershed. Consistent with the 2019 LRDP EIR, these devices treat proposed stormwater flows to meet or exceed the pollutant and sediment removal requirements as set forth by the UC San Diego Storm Water Management Plan.

With the incorporation of the proposed site design, source control, and treatment control BMPs and the continued implementation of UC San Diego Design Guidelines, SWMP, and other regulatory requirements, water quality impacts associated with changes in stormwater runoff would be minimized and would not conflict with or obstruct implementation of the Basin Plan. Therefore, the HMCR project would not result in any new significant environmental effects or a substantial increase in the severity of previously identified significant effects regarding conflict with a Water Quality Basin Plan.

4.1.10 Land Use and Planning

Section 3.10 of the 2019 LRDP EIR evaluated the potential for impacts to land use and planning from implementation of the 2019 LRDP. It concluded that implementation of the 2019 LRDP would not result in inconsistencies with applicable land use plans, policies, and regulations (Section 3.10.3.1). In addition, there is no potential for significant impacts related to physically dividing an established community (Section 3.10.5). No mitigation measures were identified for land use and planning impacts as described in the 2019 LRDP EIR.

LAND USE AND PLANNING Would the HMCR project…	Impact Examined in 2019 LRDP EIR	Impact Not Examined in 2019 LRDP EIR		
		No Impact	Less than Significant Impact	Potentially New or More Severe Significant Impact
a) Physically divide an established community?	☒	☐	☐	☐
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	☒	☐	☐	☐

a) The HMCR project would be constructed entirely within the boundary of the Hillcrest Campus and would not physically affect any surrounding land uses. The HMCR project would not require off-site roadway realignments, utility extensions beyond the campus boundary, or acquisition of adjacent properties. Consistent with the 2019 LRDP EIR, the HMCR project would require utility connections and circulation improvements that would occur entirely within or immediately adjacent to the project boundary and would

not extend into surrounding neighborhoods. Furthermore, the HMCR project would not cause incursion into, or division of, the surrounding communities because it would not introduce new roadways, barriers, walls, or other infrastructure that would obstruct existing circulation patterns or pedestrian access between neighborhoods. Thus, the HMCR project would not physically divide an established community, and impacts would be less than significant. Therefore, the HMCR project would not result in any new significant environmental effects or a substantial increase in the severity of previously identified significant effects regarding physical division of an established community.

b) As described in Section 3 of this document, the HMCR project is consistent with the objectives, population forecasts, and building space projections in the 2019 LRDP, which is the applicable land use plan for the UC San Diego Hillcrest Campus. Thus, the HMCR project would not conflict with a land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect, and impacts would be less than significant. Therefore, the HMCR project would not result in any new significant environmental effects or a substantial increase in the severity of previously identified significant effects regarding conflicts with a land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.

4.1.11 Noise

Section 3.11 evaluated the potential for impacts from noise associated with implementation of the 2019 LRDP. It concluded that implementation of the 2019 LRDP would result in a significant temporary impact from construction equipment noise, excessive noise levels, and exposure of sensitive interior uses to stationary noise sources (Section 3.11.3.1). Implementation of the 2019 LRDP would also result in temporary significant groundborne vibration impacts from construction activities (Section 3.11.3.2). Impacts related to aircraft noise would be less than significant (Section 3.11.3.3).

Mitigation Measure NOI-1A requires construction noise reduction measures to be implemented by the construction contractor. Due to uncertainties related to future construction activities, such as nighttime work and construction fleet composition, construction noise impacts were determined to remain significant and unavoidable. Mitigation Measure NOI-1B requires mechanical equipment noise shielding while Mitigation Measure NOI-1C requires special event noise measures. Mitigation Measure NOI-1C requires site-specific acoustical analysis for future development projects. Implementation of Mitigation Measures NOI-1B, NOI-1C, and NOI-1D would reduce impacts related to stationary noise sources, special event noise, and interior noise exposure to a less than significant.

Mitigation Measure NOI-2A requires construction notification while NOI-2B required the preparation of construction vibration mitigation programs for future development projects. Due to uncertainties related to future 2019 LRDP construction activities, such as equipment

required for individual component implementation, it could not be demonstrated that future ground construction activities would be reduced to vibration levels that would not exceed the applicable thresholds on- or off-campus receptors. Therefore, impacts would remain significant and unavoidable.

NOISE Would the HMCR project…	Impact Examined in 2019 LRDP EIR	Impact Not Examined in 2019 LRDP EIR: No Impact	Impact Not Examined in 2019 LRDP EIR: Less than Significant Impact	Impact Not Examined in 2019 LRDP EIR: Potentially New or More Severe Significant Impact
a) Generation of a substantial temporary or permanent increase in ambient noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☒	☐	☐	☐
b) Generation of excessive groundborne vibration or groundborne noise levels?	☒	☐	☐	☐
c) For a project located within the vicinity of a private airstrip or within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☒	☐	☐	☐

Consistent with the 2019 LRDP EIR, the HMCR project could result in temporary or permanent increase in ambient noise levels. Potential temporary or permanent increase in ambient noise levels from construction and operation of the HMCR project are addressed separately below.

a) **Construction**

<u>Construction Traffic Noise</u>

The hospital replacement would be located on the same site that was assumed in the 2019 LRDP. The 2019 LRDP EIR construction traffic noise analysis was based on conservative assumptions regarding the intensity, duration, and phasing of construction activities associated with full buildout under the LRDP. The maximum number of daily construction vehicle trips was assumed for hospital construction in the 2019 LRDP EIR. The 2019 LRDP EIR assumed 156,000 cubic yards of export during Phase 3 while the HMCR project would require the export of 228,000 cubic yards. However, as maximum feasible number of hauling trips per day (up to 150 trips per day) were

assumed in the 2019 LRDP EIR, the same daily noise generation would occur. Likewise, the maximum feasible number of delivery trips required to bring building materials to the project site was modeled. Construction activity levels, peak construction traffic volumes, and related noise levels would not exceed those previously evaluated. Thus, construction traffic noise impacts would remain less than significant, consistent with the conclusions of the 2019 LRDP EIR. Therefore, the HMCR project would not result in new significant environmental effects or a substantial increase in the severity of previously identified significant effects related to construction traffic noise.

Construction Equipment Noise

Construction equipment utilized under the HMCR project would be similar to what was assumed under Phases 1A, 1B, 2B, and 3 in the 2019 LRDP EIR, with the exception of a pile driver and a vibratory roller. Construction of the HMCR project would not require this equipment. The existing Inpatient Tower on-site would be located adjacent to the construction area of the HMCR project and would be exposed to typical construction noise, consistent with the 2019 LRDP EIR. Typical construction activities would have the potential to exceed 75 A-weighted decibel (dBA) equivalent energy level (L_{eq}) up to 210 feet from active construction. The 2019 LRDP EIR also determined that pile driving noise would have the potential to exceed 75 dBA L_{eq} at 500 feet, however, the HMCR does not propose any pile driving.

Consistent with the 2019 LRDP EIR, a significant impact would occur to on- and off-campus receptors during typical construction activities and nighttime construction, if necessary. The HMCR project would implement Mitigation Measure NOI-1A, requiring construction noise BMPs. Daytime construction would be reduced to a less than significant level with implementation of Mitigation Measure NOI-1A. Consistent with the 2019 LRDP EIR, if nighttime construction is necessary to avoid road closures or other daytime conflicts, nighttime construction could cause a significant disturbance to noise sensitive land uses. Therefore, impacts would remain significant and unavoidable, consistent with the 2019 LRDP EIR. Therefore, the HMCR project would not result in any new significant environmental effects or a substantial increase in the severity of previously identified significant effects regarding construction equipment.

Operation

The HMCR project would be consistent with the uses identified for the site in the 2019 LRDP EIR. It does not include new components that would result in additional operational vehicle trips, since project trip generation for the hospital replacement is based on the number of beds. Consistent with the 2019 LRDP EIR, noise levels from operation of the CUP and HVAC equipment and exposure of sensitive interior uses to stationary noise sources would result in a significant impact. The HMCR project would implement Mitigation Measures NOI-1B through NOI-1D, which would reduce operational noise impacts to a less than significant level. Therefore, the HMCR project

would not result in any new significant environmental effects or a substantial increase in the severity of previously identified significant effects regarding operational noise.

b) Potential groundborne vibration impacts from construction and operation of the HMCR project are addressed separately below.

Construction

Construction equipment utilized under the HMCR project would be similar to what was assumed under Phases 1A, 1B, 2B, and 3 in the 2019 LRDP EIR with the exception of a pile driver and a vibratory roller. Construction of the HMCR project would not require this equipment. Although the building footprints and locations would be slightly different than analyzed in the 2019 LRDP EIR, they are still within the overall scope of the 2019 LRDP. Therefore, construction vibration in the area of the HMCR project was previously addressed.

The 2019 LRDP EIR analyzed construction vibration impacts at residential receptors, institutional buildings that do not use vibration-sensitive equipment, and institutional buildings that do use vibration-sensitive equipment. It was found that vibration levels from normal construction equipment (i.e., all equipment except pile drivers) would be potentially significant at 75 feet from residences, 60 feet from institutional buildings that do not use vibration-sensitive equipment, and 210 feet from institutional buildings that do use vibration-sensitive equipment. Similar to the 2019 LRDP, the HMCR project would result in temporary groundborne vibration impacts from construction activities to both on-campus (existing hospital) and off-campus (residences on Arbor Drive and Third Avenue, vibration-sensitive uses) receptors. Residences are located more than 75 feet from the HMCR project footprint; therefore, vibration impacts to residential receptors would be less than significant. The Hillcrest Outpatient MRI building that may include vibration-sensitive equipment is located more than 450 feet from the HMCR project footprint; therefore, impacts at this buildout would also be less than significant.

The McGrath Outpatient Pavilion and the existing Inpatient Tower are located less than 210 feet from the HMCR project footprint. These buildings include medical equipment that may be sensitive to vibration. Therefore, impacts to these buildings would be potentially significant. The HMCR project would be required to implement Mitigation Measures NOI-2A and NOI-2B, coupled with Mitigation Measure NOI-1A, consistent with the 2019 LRDP EIR. The pile driving vibration requirements associated with these measures would not apply because the HMCR project would not include pile driving. However, even with implementation of mitigation, temporary impacts would remain significant and unavoidable and would be the same as those identified in the 2019 LRDP EIR. Therefore, the HMCR project would not result in any new significant environmental effects or a substantial increase in the severity of previously identified significant effects regarding groundborne vibration during construction.

Operation

Similar to existing conditions and the 2019 LRDP, following construction, the uses proposed under the HMCR project would not generate groundborne vibration. Vibration levels from vehicular traffic would not be expected to generate substantial levels of vibration or groundborne noise. Operating vehicles have inflated tires and vibration-dampening suspension systems to help minimize roadway roughness and engine operation vibration transmission to the roadway surface. Stationary noise sources, typified by HVAC and other electromechanical systems, would also not be expected to generate substantial levels of vibration or groundborne noise. Thus, operation of the HMCR project would not generate excessive groundborne vibration or groundborne noise levels, and impacts would be less than significant. Therefore, the HMCR project would not result in any new significant environmental effects or a substantial increase in the severity of previously identified significant effects regarding groundborne vibration during operation.

c) A helicopter landing zone is currently located on the roof of the Medical Offices North building. The helipad would be relocated to the roof of the new replacement hospital in the same general location as analyzed in the 2019 LRDP EIR. The new helipad would be designed to accommodate similarly sized helicopters to those accommodated by the existing helipad. Relocating the helipad to the middle of the Hillcrest Campus and elevating it several stories higher would increase the distance from the helipad to the nearest off-site residences, thereby reducing noise. Thus, the HMCR project would not expose people residing or working in the project area to excessive aircraft noise levels, and impacts would be less than significant. Therefore, the HMCR project would not result in any new significant environmental effects or a substantial increase in the severity of previously identified significant effects regarding aircraft noise.

4.1.12 Population and Housing

Section 3.12 evaluated the potential for impacts to population and housing from the implementation of the 2019 LRDP. It concluded that implementation of the 2019 LRDP would have less than significant impacts on the inducement of substantial population growth and substantial displacement of people or housing (Sections 3.12.3.1 and 3.12.3.2). No mitigation measures were identified for population and housing impacts as described in the 2019 LRDP EIR.

POPULATION AND HOUSING		Impact Not Examined in 2019 LRDP EIR		
Would the HMCR project…	Impact Examined in 2019 LRDP EIR	No Impact	Less than Significant Impact	Potentially New or More Severe Significant Impact
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☒	☐	☐	☐
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☒	☐	☐	☐

a) The HMCR project does not propose any new land uses that would result in a substantial increase in the number of students, faculty and/or staff on the UC San Diego Hillcrest campus, which would contribute to a direct population growth in the region. Rather, the project was included in the overall population projections analyzed by the 2019 LRDP EIR and shown in Table 2-4 of the 2019 LRDP EIR. The majority of the staff that would work in the new hospital would be relocated from the existing hospital, which is slated for removal pursuant to the 2019 LRDP, as well as other UC San Diego Health facilities. In addition, the proposed hospital would support less in-patient beds (300) than the existing hospital (370), and would be consistent with the capacity anticipated by the 2019 LRDP. Therefore, the HMCR project would not result in any new significant environmental effects or a substantial increase in the severity of previously identified significant effects regarding population growth.

b) The HMCR project would not temporarily displace a substantial number of people or housing units, nor would it remove or convert any existing residential uses. The HMCR project would occur entirely within the developed Hillcrest Campus and would not require demolition of off-campus housing, relocation of residential populations, or acquisition of residential properties. The HMCR project does not include the elimination of on-campus residential facilities and would not reduce the local housing supply.

   Because the HMCR project would not displace existing residents or housing units, it would not necessitate the construction of replacement housing elsewhere. Additionally, the project would not induce substantial population growth beyond that previously analyzed in the 2019 LRDP EIR, nor would it create a demand for housing that could not be accommodated within the local and regional housing market. Therefore, the HMCR project would not result in any new significant environmental effects or a substantial increase in the severity of previously identified significant effects regarding the displacement of people or housing.

4.1.13 Public Services

Section 3.13 evaluated the on-campus population increases under the proposed 2019 LRDP and the associated demand for public services, including fire protection, police protection, and schools. It concluded that implementation of the 2019 LRDP would result in less than significant environmental impacts pertaining to fire protection facilities (Section 3.13.3.1), police protection facilities (Section 3.13.3.2), and public school facilities (Section 3.13.3.3). No mitigation measures were identified for public services impacts as described in the 2019 LRDP EIR.

PUBLIC SERVICES		Impact Not Examined in 2019 LRDP EIR		
Would the HMCR project…	Impact Examined in 2019 LRDP EIR	No Impact	Less than Significant Impact	Potentially New or More Severe Significant Impact
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
i) Fire protection?	☒	☐	☐	☐
ii) Police protection?	☒	☐	☐	☐
iii) Schools?	☒	☐	☐	☐
iv) Parks?	☒	☐	☐	☐
v) Other public facilities	☒	☐	☐	☐

a) The HMCR project does not propose any new land uses that would result in the increase of the number of students, faculty, and/or staff on the UC San Diego Hillcrest campus, which would contribute to a direct population growth in the region. As a result, the HMCR project would contribute to the overall need for new fire protection, police protection and school facilities in the Uptown Community area but not at a level that would require new facilities beyond those that exist or are already planned by the various service providers and would not require any new facilities resulting in a significant physical impact to the environment. Therefore, the HMCR project would not result in any new significant environmental effects or a substantial increase in the severity of previously identified significant effects regarding new public service facilities.

4.1.14 Recreation

Section 3.14 evaluated whether implementation of the 2019 LRDP would lead to a physical deterioration of existing recreation facilities and whether development of proposed recreation facilities would result in an adverse physical effect on the environment. It concluded that implementation of the 2019 LRDP would have a less than significant impact related to the deterioration of parks and recreational facilities (Section 3.14.3.1). Implementation of the 2019 LRDP would have potentially significant impact associated with the construction of new recreational facilities on the Hillcrest Campus (Section 3.14.3.2).

Implementation of mitigation measures identified in other 2019 LRDP EIR sections, including Mitigation Measures AES-2A and AES-2B (Section 3.1, Aesthetics); AIR-2 and AIR-3 (Section 3.2, Air Quality); BIO-1A–BIO-1D, BIO-2A–BIO-2D, and BIO-3A–BIO-3O (Section 3.3, Biological Resources); CUL-1 and CUL-2A and CUL-2B (Section 3.4, Cultural and Tribal Cultural Resources); ENE-1 (Section 3.5, Energy); GEO-5 (Section 3.6, Geology and Soils); HAZ-2A–HAZ-2D and HAZ-5 (Section 3.8, Hazards and Hazardous Materials); NOI-1A–1D and NOI-2A and NOI-2B (Section 3.11, Noise); and TRA-1A–TRA-1C (Section 3.15, Transportation), would reduce impacts to a less than significant level.

RECREATION		Impact Not Examined in 2019 LRDP EIR		
Would the HMCR project…	Impact Examined in 2019 LRDP EIR	No Impact	Less than Significant Impact	Potentially New or More Severe Significant Impact
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☒	☐	☐	☐
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☒	☐	☐	☐

a) The HMCR project does not propose any housing or other land uses that would increase campus population or contribute to increased demand for recreation facilities on and off campus. Substantial physical deterioration in recreation facilities would not occur as a result of the HMCR project. Therefore, the HMCR project would not result in any new significant environmental effects or a substantial increase in the severity of previously identified significant effects regarding the increased use of neighborhood and regional parks or other recreational facilities.

b) Implementation of the HMCR project would not include or require construction or expansion of recreational facilities. Therefore, the HMCR project would not result in any new significant environmental effects or a substantial increase in the severity of previously identified significant effects regarding the construction or expansion of recreational facilities.

4.1.15 Transportation and Circulation

Section 3.15 evaluated whether implementation of the 2019 LRDP would result in impacts related to transportation. It concluded that implementation of the 2019 LRDP would result in direct and cumulatively significant impacts due to exceedances of level of service (LOS) criteria in the Year 2025, Year 2030 and Year 2035 scenarios for intersections, street segments, freeway mainline segments, and freeway ramp meters in the area (Section 3.15.3.1). Implementation of the 2019 LRDP would also have a temporary significant impact associated with construction-related road or lane closures (Section 3.15.3.3).

The 2019 LRDP EIR included an analysis of traffic operations using LOS, consistent with the CEQA Guidelines in effect at that time. Since certification of the 2019 LRDP EIR, Senate Bill (SB) 743 and CEQA Guidelines Section 15064.3 have been implemented statewide, which require that transportation impacts be evaluated based on vehicle miles traveled (VMT) rather than LOS. As a result, LOS is no longer considered an environmental impact under CEQA, but instead serves as a measure of roadway operations relevant to local planning and congestion management. Accordingly, the LOS analysis presented in the 2019 LRDP EIR is no longer applicable for determining CEQA transportation impacts, and this Addendum does not include an updated LOS analysis. Transportation impacts are instead evaluated using VMT, consistent with current CEQA requirements.

Section 3.15 also evaluated whether or not implementation of the proposed 2019 LRDP would result in substantial additional VMT and determined that implementation of the 2019 LRDP would not cause substantial additional VMT to exceed the regional averages for campus land uses; therefore, VMT impacts were determined to be less than significant (Section 3.15.3.2). In addition, no significant impacts related to safety hazards due to a design feature or incompatible uses were identified (Section 3.15.5).

As of July 1, 2020, public agencies are required to evaluate transportation impacts under CEQA using VMT. Therefore, this Addendum addresses the HMCR project's transportation impacts based on VMT and its consistency with the 2019 LRDP EIR, pursuant to the current CEQA Guidelines.

TRANSPORTATION/TRAFFIC Would the HMCR project…	Impact Examined in 2019 LRDP EIR	Impact Not Examined in 2019 LRDP EIR: No Impact	Impact Not Examined in 2019 LRDP EIR: Less than Significant Impact	Impact Not Examined in 2019 LRDP EIR: Potentially New or More Severe Significant Impact
a) Conflict with an applicable plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	☒	☐	☐	☐
b) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	☒	☐	☐	☐
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☒	☐	☐	☐
d) Result in inadequate emergency access?	☒	☐	☐	☐

a) As part of previous completed phases of the 2019 LRDP, alternative transportation facilities have been installed or constructed. These facilities would support the HMCR project and include the following:

- Dedicated, buffered bicycle lanes along Bachman Place.
- Raised and widened concrete sidewalk along Bachman Place.
- Widened vehicular lanes along Bachman Place that better accommodate larger vehicles such as buses.
- Local bus stop near the campus.
- Bicycle racks at the McGrath Outpatient Pavilion and 1ST Avenue Parking Structure.

As an operational measure, the project's employees would benefit from UC San Diego's comprehensive Transportation Demand Management program, which offers walk/bike, carpool/vanpool, and transit pass programs. In addition to these existing facilities, the HMCR project would implement circulation improvements, including roadway and pedestrian enhancements, that would serve the replacement hospital north of Dickinson Street and the hospital service dock. As shown in Figure 4, access to the hospital would be provided via Dickinson Street, Front Street, 1ST Avenue, and Bachman Place. Roadway improvements would be designed to accommodate

emergency vehicles, with ambulance entry provided on the northwest side of the hospital. Service docks on the eastern side of the hospital would allow for the efficient delivery of supplies, equipment, and waste handling, separate from public and emergency traffic. Pedestrian pathways would connect the hospital entrances with adjacent campus facilities, ensuring safe and accessible circulation throughout the site.

Consistent with the 2019 LRDP EIR, the HMCR project would not conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities, and impacts would be less than significant. Therefore, the HMCR project would not result in any new significant environmental effects or a substantial increase in the severity of previously identified significant effects regarding a program, plan, ordinance, or policy addressing the circulation system.

b) The CEQA feasibility study (Appendix B) analyzed buildout of a replacement hospital with up to 500 beds. At full buildout, the expanded hospital was calculated to generate 30,326 average daily trips with 2,300 total a.m. peak hour trips (1,605 inbound/695 outbound) and 3,079 total p.m. peak hour trips (1,035 inbound/2,044 outbound). The 500-bed scenario represents a conservative upper-bound condition compared to the HMCR project, which would include up to 300 beds. Accordingly, the CEQA feasibility study results provide a conservative assessment of potential trip generation associated with hospital expansion at the site.

VMT impacts for the 2019 LRDP EIR were determined to not cause substantial additional VMT to exceed the regional averages for campus land uses. The HMCR project does not introduce new land uses beyond those previously analyzed in the LRDP and would develop a replacement hospital within the same overall site. Although the CEQA feasibility study identifies potential trip generation associated with a higher bed count scenario, VMT impacts are not determined solely by trip generation volumes, but rather by the efficiency and location of land uses relative to regional travel patterns. As discussed in the CEQA feasibility study, the *Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity* published by the California Air Pollution Control Officers Association indicates that land use intensity can influence travel behavior, as more compact development patterns may reduce VMT by shortening trip lengths and supporting more efficient trip-making. This relationship is typically described in terms of increased activity density (e.g., jobs, beds, or square footage per acre) relative to baseline conditions. Accordingly, the CEQA feasibility study provided further evidence for the conclusion that the HMCR project would be consistent with the assumptions of the 2019 LRDP EIR and would not result in new or more severe VMT impacts.

The HMCR project would develop a replacement hospital on the same overall site evaluated in the 2019 LRDP EIR and would not introduce new land uses beyond those previously analyzed in the LRDP. The project's development intensity is consistent with

the overall redevelopment framework anticipated for the Hillcrest campus under the 2019 LRDP, which assumes continued intensification of medical uses within an existing urbanized setting. Because the CEQA feasibility study demonstrated that a higher-capacity, 500-bed hospital would not result in new or more severe VMT impacts, the proposed HMCR project, which generates fewer trips and includes fewer beds, would likewise not result in new significant environmental effects or a substantial increase in the severity of previously identified significant effects related to VMT.

c) The HMCR project includes demolition of existing structures, construction of the replacement hospital, construction of the CUP, utility connections, and circulation improvements. Consistent with the 2019 LRDP, all improvements would be designed and constructed according to the City's roadway design standards. These improvements would not result in changes to roadway design that would cause increased hazards. Therefore, the HMCR project would not result in any new significant environmental effects or a substantial increase in the severity of previously identified significant effects regarding traffic hazards.

d) Consistent with the 2019 LRDP EIR, the HMCR project would result in temporary construction-related activities that require partial lane and road closures and/or detours during construction, which would interfere with an emergency response plan or emergency evacuation plan. Construction of the HMCR project would require the temporary closure of the south lane of Bachman Place, which could interfere with emergency responses or evacuation plans. Access to the existing hospital Emergency Department would be maintained throughout construction via other local roadways fronting the medical campus. As required by Mitigation Measure HAZ-5, UC San Diego would require the construction contractor to notify the Campus Fire Marshal and community to prevent conflicts with emergency access or evacuation routes during construction. Implementation of Mitigation Measure HAZ-5 would reduce impacts to a less than significant level. Therefore, the HMCR project would not result in any new significant environmental effects or a substantial increase in the severity of previously identified significant effects regarding inadequate emergency access.

4.1.16 Utilities and Service Systems

Section 3.16 evaluated the potential impacts on utilities and service systems resulting from implementation of the 2019 LRDP. It concluded that implementation of the 2019 LRDP would have a potentially significant impact associated with the construction of new utilities infrastructure (Section 3.16.3.1) and would result in a less than significant impact with regard to insufficient water supplies (Section 3.16.3.2), wastewater treatment capacity (Section 3.16.3.3), and compliance with solid waste regulations (Section 3.16.3.4). In addition, there is no potential for significant impacts related to generation of solid waste in excess of state or local standards or the capacity of local infrastructure (Section 3.16.5).

Mitigation measures identified in other 2019 LRDP EIR sections, including Mitigation Measures AES-2A and AES-2B (Section 3.1, Aesthetics); AIR-2 and AIR-3 (Section 3.2, Air Quality); BIO-1A–BIO-1D, BIO-2A–BIO-2D, and BIO-3A–BIO-3O (Section 3.3, Biological Resources); CUL-1 and CUL-2A and CUL-2B (Section 3.4, Cultural and Tribal Cultural Resources); ENE-1 (Section 3.5, Energy); GEO-5 (Section 3.6, Geology and Soils); HAZ-2A–HAZ-2D (Section 3.8, Hazards and Hazardous Materials); NOI-1A–NOI-1D and NOI-2A and NOI-2B (Section 3.11, Noise); and TRA-1A–TRA-1C (Section 3.15, Transportation), would reduce impacts to a less than significant level with regard to new water, wastewater, stormwater drainage, electric power, natural gas, and telecommunications facilities.

UTILITIES, SERVICE SYSTEMS AND ENERGY		Impact Not Examined in 2019 LRDP EIR		
Would the HMCR project…	Impact Examined in 2019 LRDP EIR	No Impact	Less than Significant Impact	Potentially New or More Severe Significant Impact
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities or expansion of existing facilities, the construction or relocation of which could cause significant environmental effects?	☒	☐	☐	☐
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?	☒	☐	☐	☐
c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the providers existing commitments?	☒	☐	☐	☐
d) Generate solid waste in excess of State or local standards or the capacity of local infrastructure or negatively impact the provision of solid waste services or impair the attainment of solid waste reduction goals?	☒	☐	☐	☐
e) Comply with federal, state, and local management and reduction statues and regulations related to solid waste?	☒	☐	☐	☐

a) Consistent with the 2019 LRDP EIR, the HMCR project would require the construction and relocation of domestic water, fire water, wastewater, storm drainage, electric power, and telecommunications facilities as described in Section 2.3, Project Description and Section 4.1.9, Hydrology and Water Quality that could cause a significant environmental effect.

   The HMCR project would construct a new CUP, a generator yard, cooling tower yard, and an SDG&E yard located on the north and south sides of the CUP building. The CUP would be all-electric and would incorporate both a chilled water and central heating hot water system (HCAI-compliant).

   All utility infrastructure associated with the HMCR project, including the CUP and associated yards would be located within the Hillcrest Campus boundary and within areas designated for development under the 2019 LRDP. The construction, relocation, and expansion of campus utility systems, including water, wastewater, stormwater, electric power, natural gas, and telecommunications facilities, were evaluated in the 2019 LRDP EIR. The HMCR project would implement utilities infrastructure consistent with the scale and capacity assumptions analyzed in the 2019 LRDP EIR and would not require off-campus expansion of utility systems or the development of new regional utility facilities.

   Consistent with the 2019 LRDP EIR, implementation of Mitigation Measures AIR-3; BIO-1A–BIO-1D, BIO-2C and BIO-2D, BIO-3B–BIO-3D, BIO-3F–BIO-3O; CUL-2A and CUL-2B; ENE-1; GEO-5; HAZ-2A and HAZ-5; and NOI-1A, NOI-2A, and NOI-2B would reduce potentially significant impacts associated with the construction of new utilities infrastructure to a less than significant level. While the 2019 LRDP EIR lists all of these measures, only those identified in this addendum as applicable to the HMCR project are required for implementation in each topical section. Therefore, the HMCR project would not result in any new significant environmental effects or a substantial increase in the severity of previously identified significant effects regarding the construction or relocation of utilities.

b) Implementation of the HMCR project would increase potable water usage on the campus; however, not beyond levels anticipated in the City's Water Supply Assessment Report prepared for the 2019 LRDP, as the HMCR project does not introduce new land uses or intensities beyond those evaluated in the 2019 LRDP EIR. As described in Section 2.3.4, the HMCR project would implement a number of sustainability measures and water conservation features to minimize potable water usage, installing water efficient plumbing fixtures in all new developments and replacing aging infrastructure with water-efficient fixtures, installing aerators in laboratory sinks, converting to drought-tolerant and low-water vegetation, replacing irrigation sprinklers with high-efficiency rotating nozzles, capturing and reusing water from the fire-sprinkler and hydrant testing for use in the CUP cooling towers, and collecting condensation from heating and air conditioning units, reverse osmosis system wastewater, and cooling

tower blow down for reuse in toilet flushing and irrigation. Thus, sufficient water supplies would be available to serve the HMCR project, and impacts would be less than significant. Therefore, the HMCR project would not result in any new significant environmental effects or a substantial increase in the severity of previously identified significant effects regarding the potable water usage.

c) The HMCR project would be served by the Point Loma Water Treatment Plant. The 2019 LRDP EIR determined that the Point Loma Water Treatment Plant would have adequate treatment capacity to serve the 2019 LRDP. Implementation of the HMCR project would increase average daily wastewater flow; however, not beyond the 2019 LRDP 2035 future flows calculated in the 2019 LRDP EIR, as the HMCR project does not introduce new land uses or intensities beyond those evaluated in the 2019 LRDP EIR. As such, the Point Loma Water Treatment Plant would have adequate capacity to receive and treat wastewater, and impacts would be less than significant. Therefore, the HMCR project would not result in any new significant environmental effects or a substantial increase in the severity of previously identified significant effects regarding wastewater capacity.

d) Consistent with the 2019 LRDP, implementation of the HMCR project would not result in inadequate capacity of solid waste facilities in the region such that construction of a new landfill or expansion of an existing landfill would be necessary. Solid waste would be generated during both construction and operation of the HMCR project. It is anticipated that the majority of construction phase debris would be diverted due to the campus's commitment to LEED-certified facilities. Waste diversion and disposal from the campus occurs at the Republic Landfill in Yuma, Arizona, and could shift to other permitted solid waste facilities, such as local Miramar Landfill, Sycamore Landfill or Otay Landfill in the future, and impacts would be less than significant. Therefore, the HMCR project would not result in any new significant environmental effects or a substantial increase in the severity of previously identified significant effects regarding generation of solid waste.

e) Consistent with the 2019 LRDP EIR, construction of the HMCR project would require demolition, clearing/grubbing, and grading activities that would produce excavated soils, green waste, asphalt/concrete, and other construction and demolition waste. Operation of the HMCR project would contribute additional nonrecyclable/nonreusable waste which would be deposited at Republic Landfill in Yuma Arizona after accounting for waste reduction and diversion. The HMCR project would comply with applicable waste reduction and diversion programs as part of the campus-wide effort to meet the UC Sustainable Practices Policy's zero waste goal by 2030. The HMCR project proposes to procure regionally-sourced construction materials with high recycled content and certified by credible third parties, where feasible and appropriate, and achieve 75 percent diversion of demolition and construction debris. Thus, the HMCR project would minimize its waste disposal needs and assist the state and local agencies in achieving their applicable solid waste management and diversion goals, and impacts would be

less than significant. Therefore, the HMCR project would not result in any new significant environmental effects or a substantial increase in the severity of previously identified significant effects regarding solid waste management.

4.1.17 Wildfire

Section 3.17 of the 2019 LRDP EIR evaluated potential wildfire impacts that could result from construction and operation of the 2019 LRDP. The analysis concluded that implementation of the 2019 LRDP would result in a temporary significant impact associated with construction-related road or lane closures (Section 3.17.3.1). Impacts related to wildfire risks would be less than significant with compliance with applicable state regulations, implementation of a fuel management strategy, and incorporation of appropriate fire protection measures (Section 3.17.3.2). In addition, impacts related to the construction or maintenance of infrastructure that would exacerbate fire risks (Section 3.17.3.3), and impacts associated with exposing people or structures to significant risks, including downslope or downstream flooding or landslides due to runoff, post-fire slope instability, or drainage changes, were determined to be less than significant (Section 3.17.3.4).

Implementation of Mitigation Measure HAZ-5, which requires notifications of road or lane closures, would reduce temporary impacts associated with construction-related road or lane closures to a less than significant level.

WILDFIRE		Impact Not Examined in 2019 LRDP EIR		
Would the HMCR project…	Impact Examined in 2019 LRDP EIR	No Impact	Less than Significant Impact	Potentially New or More Severe Significant Impact
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	☒	☐	☐	☐
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	☒	☐	☐	☐

WILDFIRE Would the HMCR project…	Impact Examined in 2019 LRDP EIR	Impact Not Examined in 2019 LRDP EIR: No Impact	Less than Significant Impact	Potentially New or More Severe Significant Impact
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	☒	☐	☐	☐
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☒	☐	☐	☐

a) As discussed in Section 4.1.8(f), construction-related activities would require temporary partial lane and road closures and/or detours during construction that would interfere with an emergency response plan or emergency evacuation plan. Construction of the HMCR project would require the temporary and intermittent closure of the southbound lane of Bachman Place, which could interfere with emergency response or evacuation plans. As required by Mitigation Measure HAZ-5, UC San Diego would require the construction contractor to notify the Campus Fire Marshal and community to prevent conflicts with emergency access or evacuation routes during construction. Implementation of Mitigation Measure HAZ-5 would reduce potential impacts to a less than significant level. Therefore, the HMCR project would not result in any new significant environmental effects or a substantial increase in the severity of previously identified significant effects regarding the impairment of an adopted emergency response plan or emergency evacuation plan.

b) The 2019 LRDP EIR determined that a portion of the project site laid within a local responsibility very high Fire Hazard Severity Zone (FHSZ) and evaluated wildfire risk accordingly. The 2019 LRDP EIR concluded that compliance with appropriate state regulations, implementation of a fuel management strategy, and incorporation of appropriate fire protection measures would reduce potential impacts to a less than significant level.

   Since certification of the 2019 LRDP EIR, CAL FIRE has updated the FHSZ maps. Review of the updated CAL FIRE FHSZ maps shows that the entire campus, including the HMCR project, is mapped as a local responsibility area Very High FHSZ. This updated designation does not alter the nature of wildfire risk previously analyzed or the

applicability and effectiveness of the identified regulatory requirements and fire protection measures.

The combustible vegetation located on the project site would be removed prior to building construction which would lessen wildland fire risk during construction. Consistent with the 2019 LRDP EIR, the HMCR project would implement fuel management within two zones totaling 100 feet from the building facade into the adjacent canyon area. Zone 1 would be at minimum 35-feet wide from the building and could be used as a fire access lane. Zone 1 would have a relatively level surface and any combination of hardscape and irrigated landscaping with low-fuel species that would be actively maintained to reduce fuel load. Zone 2 would consist of any remaining area necessary to reach the 100-foot minimum width and contain canyon vegetation that would be managed with selective thinning and pruning to reduce fuel load in accordance with SDMC Section 142.0412 while preserving natural habitat.

In addition, the replacement hospital and CUP would comply with the CBC and California Fire Code as enforced by the Hillcrest Campus Fire Marshal, which would include ignition-resistant construction materials, automatic interior sprinklers, fire apparatus access, and emergency evacuation routes. The project also includes a fire emergency access lane around the hospital building.

Therefore, the HMCR project would not expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire. Impacts would remain less than significant, and the HMCR project would not result in any new significant environmental effects or a substantial increase in the severity of previously identified significant effects regarding wildfire risk.

c) As discussed in Section 2.3.2 of this Addendum, the HMCR project would construct a new all-electric CUP which would support the replacement hospital with heating, cooling, and emergency power connections. Code-required emergency storage systems would be provided for domestic water, fire water, fuel, and waste. Stormwater treatment and detention vaults would be installed to comply with UC San Diego stormwater quality requirements. Utilities would be routed primarily underground to minimize disruption to campus circulation. Proposed utility points of connection are shown in Figure 8.

In addition, the HMCR project would include circulation improvements, including roadway and pedestrian enhancements, serving the replacement hospital north of Dickinson Street and the hospital service dock. Consistent with the 2019 LRDP EIR, new infrastructure and roads would be required to comply with all necessary regulations to minimize any fire risks resulting in a less than significant impact (see Section 4.1.17.b). Thus, project infrastructure would not exacerbate fire risk, and impacts would be less than significant. Therefore, the HMCR project would not result in any new significant

environmental effects or a substantial increase in the severity of previously identified significant effects regarding installation and maintenance of infrastructure.

d) Consistent with the 2019 LRDP, construction activities associated with the HMCR project, including vegetation clearing, grading, and excavation, could temporarily alter localized drainage patterns and increase erosion and sedimentation within the construction area. These temporary alterations could increase erosion or siltation if storm flows were substantially increased or redirected to facilities or channels lacking sufficient capacity. However, all construction activities would be required to comply with UC San Diego's Design Guidelines, Sustainability Policies, and Storm Water Management Requirements for Construction Projects, as well as the State Construction General Permit. Projects disturbing one acre or more must prepare and implement a SWPPP, which specifies BMPs to control erosion, minimize sediment transport, and prevent construction-related pollutants from entering stormwater runoff. In addition, the HMCR project would include storm drain infrastructure improvements to appropriately convey runoff to the existing campus storm drain system. Stormwater BMPs would continue to be implemented and maintained under an active SWPPP through completion of construction activities. Compliance with these regulatory requirements would minimize the potential for erosion, sedimentation, drainage disruptions, and associated downstream or downslope flooding risks during construction.

   During operation, the HMCR project would incorporate compact, underground biofiltration devices designed to treat the required stormwater flow rates. As detailed in the Hydrology and Stormwater Memorandum (Appendix D), the post-condition project would maintain the pre-project peak runoff rate for the 10-year, 6-hour storm event. These devices would remove pollutants and sediment from runoff and would meet or exceed applicable City of San Diego and UC San Diego post-construction BMP design requirements, consistent with the UC San Diego Storm Water Management Plan. By treating and appropriately conveying stormwater flows, the HMCR project would not substantially alter drainage patterns in a manner that would increase runoff volumes or velocities that could expose people or structures to significant risks, including downstream or downslope flooding or slope instability.

   Thus, the HMCR project would not expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes, and impacts would be less than significant. Therefore, the HMCR project would not result in any new significant environmental effects or a substantial increase in the severity of previously identified significant effects regarding downstream or downslope flooding.

4.1.18 Mandatory Findings of Significance

	Impact Examined in 2019 LRDP EIR	Impact Not Examined in 2019 LRDP EIR		
		No Impact	Less than Significant Impact	Potentially New or More Severe Significant Impact
a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☒	☐	☐	☐
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☒	☐	☐	☐
c) Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?	☒	☐	☐	☐

a) All applicable mitigation measures and PDFs identified in the 2019 LRDP EIR to avoid and reduce impacts have been integrated into the HMCR project, and with the integration of these measures, the HMCR project would not substantially degrade the quality of the environment. As described in Section 4.1.3, Biological Resources, the HMCR project has already implemented 2019 LRDP EIR Mitigation Measures BIO-1A, BIO-2A, and BIO-3A. During construction, the HMCR project would be required to implement 2019 LRDP EIR BIO-2C, BIO-2D, and BIO-3F through BIO-3O. In addition, the HMCR project would be required to implement new Mitigation Measure BIO-2E to reduce potential impacts on Crotch's bumble bee to a less than significant level.

As described in Section 4.1.4, Cultural and Tribal Cultural Resources, no historic architectural resources were identified on the HMCR project site. Potential impacts to archaeological and tribal cultural sites would be addressed by 2019 LRDP Mitigation

Measures CUL-2A and CUL-2B. Therefore, the HMCR project would not eliminate any examples of the major periods of California history or prehistory.

b) The 2019 LRDP EIR identified significant and unavoidable cumulative impacts to air quality (toxic air contaminant emissions), cultural resources (historical resources), and transportation/traffic (LOS). As discussed in 4.1.15 of this Addendum, effective July 1, 2020, public agencies are required to evaluate transportation impacts under CEQA using VMT. Accordingly, this Addendum evaluates the HMCR project's transportation impacts based on VMT and its consistency with the 2019 LRDP EIR, pursuant to the current CEQA Guidelines.

   As part of the 2019 LRDP EIR development program, the HMCR project would contribute to some of these significant and unavoidable impacts (air quality) as described in this Addendum. However, the HMCR project is within the scope of campus development evaluated in the 2019 LRDP EIR as noted in Section 4 of this Addendum.

   These impacts were also addressed in the Findings and Statement of Overriding Considerations adopted by The Regents in connection with its approval of the 2019 LRDP. No conditions have changed, and no new information has become available since the certification of the 2019 LRDP EIR that would alter this previous analysis. No additional mitigation is available to reduce the HMCR project's contribution to these previously identified impacts.

c) As described above, the HMCR project would incrementally contribute to cumulative air quality through TACs that were identified as significant and unavoidable as well as cumulatively considerable in the 2019 LRDP EIR. The HMCR project's construction emissions are within the scope of impacts examined in the 2019 LRDP EIR. These impacts were also addressed in the Findings and Statement of Overriding Considerations adopted by The Regents in connection with its approval of the 2019 LRDP.

   Effects of the HMCR project would not result in substantial adverse effects on human beings beyond those analyzed in the 2019 LRDP EIR. No conditions have changed, and no new information has become available since certification of the 2019 LRDP EIR that would alter this analysis. No additional mitigation is available to reduce the HMCR project's contribution to these impacts. Other impacts with the potential to affect human beings were determined to be less than significant.

5 APPLICABLE MITIGATION MEASURES

The following mitigation measures from the certified 2019 LRDP EIR Mitigation Monitoring and Reporting Program (MMRP) would apply to impacts associated with the HMCR project. No new significant impacts or substantial increases in the severity of previously identified impacts have been identified beyond those analyzed in the 2019 LRDP EIR.

As discussed in Section 4.1.3 of this Addendum, since certification of the 2019 LRDP EIR, Crotch's bumble bee was designated as a candidate species for listing as endangered under the CESA by the California Fish and Game Commission in September 2022. The 2019 LRDP EIR determined that impacts to sensitive wildlife species would be potentially significant and would require mitigation to reduce impacts to a less than significant level. In response to this change in regulatory status, new Mitigation Measure BIO-2E would be incorporated to address potential impacts to Crotch's bumble bee, consistent with the existing impact analysis, and would ensure impacts are reduced to a less than significant level. Accordingly, the addition of this mitigation measure does not result in a new significant impact or a substantial increase in the severity of a previously identified impact.

UC San Diego finds that no mitigation measures or alternatives previously determined to be infeasible in the 2019 LRDP EIR have become feasible and would substantially reduce one or more significant effects but that the project proponents decline to adopt. UC San Diego further finds that no new or considerably different mitigation measures or alternatives have been identified that would substantially reduce significant environmental effects and that the project proponents decline to adopt.

Mitigation Measures
Aesthetics
AES-2A: Design Review. Prior to project design approval, any proposed structure or phase that would have the potential to substantially degrade the community character shall undergo design review by the UC San Diego Design Review Board to ensure that the design is consistent with the visual landscape and/or the character of the surrounding development. The design review process shall evaluate and incorporate, where appropriate, factors including but not necessarily limited to building mass and form, building proportion, roof profile, architectural detail and fenestration, texture, color, type and quality of building materials, and landscaping.
AES-2B: Building Design. Proposed structures to be located along the southern and eastern Hillcrest Campus Boundaries shall be reviewed by the UC San Diego Design Review Board, Campus Architect, and other relevant campus committees at the conceptual design stage to ensure structures are designed to incorporate as applicable the following pedestrian-scale features along the facades facing the public realm: • Pedestrian-oriented architectural details and scale • Proportional building mass, form, and roof profiles • Building setbacks, fenestration, and visual reliefs • Use of high-quality building materials

Mitigation Measures
• Welcoming and wayfinding elements • Pedestrian connections and pathways • Pedestrian furniture and signage • Landscape buffers • Limited use of walls or pedestrian barriers
Air Quality
AIR-2: Architectural Coatings. Architectural coating activities in Phases 2A and 2B shall not occur simultaneously with any of the following construction activities: demolition, earthwork and grading, or paving. Architectural coating can occur simultaneously with building construction. In the absence of architectural coating, building construction may occur simultaneously with demolition, earthwork and grading, or paving activities. This measure shall be included on the final grading and construction plans for Phase 2A and 2B and shall be implemented by the construction contractor.
AIR-3: Construction Equipment Performance Standards. UC San Diego, through bid and contract specifications, shall require the construction contractor to implement the following performance standards for the use of heavy-duty construction equipment during all construction activities: • Use off-road construction diesel engines that meet, at a minimum, the Tier 4 interim California Emissions Standards, unless such an engine is not available for a particular item of equipment. Tier 3 engines shall be allowed on a project-by-project basis when the contractor has documented that no Tier 4 interim equipment or emissions equivalent retrofit equipment is available or feasible for the project. • To the extent feasible and available, use high-performance renewable diesel fuel.
Biological Resources
BIO-1A: Sensitive Plant Surveys. During the project planning process, updated sensitive plant surveys shall be conducted for all project areas that support potential habitat for sensitive plant species and have not been surveyed within the preceding year. Sensitive plant surveys shall be conducted by a qualified Biologist retained by UC San Diego during the appropriate season for detecting the species as part of the project design phase. Surveys shall be floristic in nature and include lists of all plants identified in the survey area. Surveys shall be conducted on foot, employing a level of effort sufficient to provide comprehensive coverage. The locations and prevalence (estimated total numbers/percent cover, as applicable) of sensitive plants shall be recorded. If site-specific surveys are not required because a survey was conducted within the last 12 months, impact assessment and minimization/mitigation requirements shall be based on the most recent available survey and shall also include an analysis of the potential for sensitive plant species to occur on the site based on existing site conditions and shall be consistent with the most recent USFWS and CDFW survey protocols (USFWS 2018d; CDFW 2014). If sensitive plant species are observed, they shall be avoided if possible. If species cannot be avoided, impacts to those species must be evaluated and any significant impacts shall be mitigated through conservation of habitat that supports the impacted species in accordance with Mitigation Measures BIO-1B, BIO-1C, and BIO-1D.
BIO-2A: Coastal California Gnatcatcher (CAGN) Surveys. Beginning in 2022, when a construction project is proposed that would directly or indirectly impact Diegan coastal sage scrub, six surveys at least 7 days apart shall be conducted during the peak breeding season, March 15 to June 30, or nine surveys from July 1 to March 14 at least 2 weeks apart in accordance with the current USFWS protocol

Mitigation Measures
(USFWS 1997). The permittee must submit the 15-day pre-survey notification to the USFWS Carlsbad Permits Division, including an explanation that six or nine surveys shall be conducted. Documentation of the survey results shall be provided to USFWS in accordance with current protocol survey guidelines.
BIO-2C: Pre-Construction Raptor Nest Surveys. If project construction is scheduled to commence during the raptor nesting season (generally January 15 through August 31), pre-construction surveys for raptor nests shall be performed by a qualified Biologist within 500 feet of project construction activities no more than 7 days prior to the initiation of construction. Construction activities within 500 feet of an identified active raptor nest shall not commence during the breeding season until a qualified Biologist determines that the nest is no longer active and any young birds in the area have adequately fledged and are no longer reliant on the nest. Trees with inactive nests can be removed outside the breeding season without causing an impact.
BIO-2D: Pre-Construction Nesting Bird Surveys. No grubbing, trimming, or clearing of vegetation (including fuel management) from project areas shall occur during the general avian breeding season (February 15 through August 31). If grubbing, trimming, or clearing cannot feasibly occur outside of the general avian breeding season, a qualified Biologist shall perform a pre-construction nesting bird survey no more than 7 days prior to the commencement of vegetation clearing or grubbing to determine if active bird nests are present in the affected areas. Should an active migratory bird nest be located, the project Biologist shall direct vegetation clearing away from the nest until it has been determined by the project Biologist that the young have fledged, or the nest has failed. If there are no nesting birds (includes nest building or other breeding/nesting behavior) within the survey area, clearing, grubbing, and grading shall be allowed to proceed.
New 2019 LRDP EIR Mitigation Measure BIO-2E: Conduct Habitat Assessment and Focused Surveys and Implement Protective Measures for Crotch's Bumble Bee. Prior to approval of specific projects under the 2019 LRDP, and as long as this species is considered a candidate for listing under the California Endangered Species Act (CESA) or in the event that this species becomes listed under CESA, a desktop analysis and land cover assessment through site visits shall be completed by a qualified biologist to determine whether the project area and immediately surrounding landscape has the potential to contain potential habitat for Crotch's bumble bee. This analysis will identify whether the project area is a developed area with no landscaping (i.e., contains buildings; paved roads, sidewalks or parking lots; other built infrastructure; or mowed and irrigated lawns) or contains open grassland, ornamental landscaping, or scrub habitats that could be potential bumble bee foraging, nesting, or overwintering habitat. 1. If a project area has the potential to contain Crotch's bumble bee habitat, then the following measures will be implemented prior to construction: A. Limited Operating Period. For project areas that contain foraging habitat or nesting habitat, initial ground-disturbing work (e.g., grading, vegetation removal, staging) will take place between September 1 and February 1, if feasible, to avoid impacts on nesting and foraging Crotch's bumble bees. If this limited operating period is determined to be infeasible, or if impacts would occur within overwintering habitat along the northern edge of the project boundary, then focused surveys for Crotch's

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bumble bees will be conducted by a qualified biologist and avoidance measures will be implemented.

B. Focused Surveys and Avoidance Measures. For project areas that contain overwintering habitat as determined during the habitat assessment described above or if the limited operating period described above is infeasible for projects that contain foraging or nesting habitat, focused surveys to determine the presence or absence of Crotch's bumble bees will be conducted following the methods in *Survey Considerations for California Endangered Species Act (CESA) Candidate Bumble Bee Species*, or any subsequent protocol approved by CDFW.

   a. Survey timing will be determined on a project-specific basis by a qualified biologist based on seasonality, when activity or foraging will most likely occur each year, and for which life history stage is being surveyed. Surveys will not be conducted more than one year prior to project activities.

   b. A qualified biologist will conduct focused surveys for Crotch's bumble bee within one year before the start of any ground-disturbing activities. A qualified biologist familiar with Crotch's bumble bee identification and life history shall conduct three visual surveys 2–4 weeks apart during the colony's active period (April through August [CDFW 2023]). If standardized survey protocols are published before surveys are completed, surveys shall follow either these protocols or modified protocols approved by CDFW.

   c. If Crotch's bumble bees are not detected during the focused survey, no additional measures are required.

   d. If Crotch's bumble bees are detected during the focused survey, appropriate avoidance measures will be implemented. Avoidance measures may include, but are not limited to, the following:

      - Protective buffers will be implemented around active nesting colonies until these sites are no longer active, as determined by a qualified biologist. A qualified biologist will determine the appropriate buffer size to protect nesting colonies; however, buffers will typically be at least 50 feet. Protective buffers will be demarcated using a method determined by the qualified biologist, such as flagging, that does not result in adverse effects on the nest or attraction to potential predators.
      - The qualified biologist responsible for implementing Crotch's bumble bee avoidance measures shall be qualified to survey for and identify Crotch's bumble bee based on associated education, experience, and training. The qualified biologist will monitor ground-disturbing or vegetation-removal activities near the protective buffer to prevent inadvertent disturbance of the nest. The qualified biologist may stop all work if it is apparent that Crotch's bumble bees are being disturbed by these activities and may expand the protective buffer.
      - Where activities occur within or adjacent to potential Crotch's bumble bee overwintering habitat, the qualified biologist shall survey for gynes in flight and overwintering queens in hibernacula ahead of ground disturbance.
      - If any Crotch's bumble bee are found during the pre-construction (vegetation removal or ground disturbing activities) surveys, the qualified biologist shall

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immediately stop and prohibit all project activities within 50 feet of the individual and hibernaculum. The qualified biologist will delineate a 50-foot avoidance buffer and notify all workers not to enter the environmentally sensitive area. If an overwintering queen is exposed, the qualified biologist shall cover and protect the queen bumble bee by the substrate it was found in/under and return any materials removed during the surveys (e.g., grass, vegetation, bark, and debris) to re-create pre-disturbed conditions. The qualified biologist shall record the location with a GPS (including datum and horizontal accuracy in feet) and contact CDFW within 24 hours for further consultation. Avoidance buffers will be maintained until further instructions are received from CDFW. e. If impacts on Crotch's bumble bees cannot be avoided, compliance with CESA and consultation with CDFW is required and may involve acquiring an Incidental Take Permit (ITP) from CDFW. UC San Diego will implement all avoidance measures included in the ITP. Compensatory mitigation for permanent direct impacts to Crotch's bumble bee habitat shall be offset through one or a combination of the following as specified in the ITP: preservation of habitat, habitat creation, and/or enhancement on UC San Diego campus or off campus through habitat acquisition and preservation or purchase of suitable habitat credits from an approved conservation bank. Compensatory mitigation sites occurring on campus shall be monitored and maintained per the campuswide Habitat Management Plan. Compensatory mitigation sites occurring off campus shall be monitored and maintained according to a site-specific, long-term management plan. If an incidental take permit is issued for the project that covers Crotch's bumble bee, that document shall supersede any measures and mitigation ratios provided in the 2019 LRDP.
BIO-3A: Vegetation Mapping. In areas proposed for construction that are mapped as supporting a sensitive vegetation community and vegetation community mapping has not been conducted on the site in the preceding 5 years, updated vegetation mapping shall be conducted by a qualified Biologist as part of the project planning and environmental review process.
BIO-3F: Pre-Construction Meeting. Prior to construction, a pre-construction meeting shall be held between the qualified Biologist, UC San Diego Project Manager and Campus Planning staff, and Construction Manager and/or Grading Contractor to ensure the appropriate personnel are informed of the sensitivity of habitats in the open space canyon areas: 1. Prior to commencement of clearing or grading activities, fencing (e.g., silt fencing, orange construction fencing, and/or chain-link fencing as determined by UC San Diego Campus Planning) shall be installed around the approved limits of disturbance to prevent errant disturbance of sensitive biological resources by construction vehicles or personnel. Installation of fencing to demarcate the approved limits of disturbance shall be verified by a qualified Biologist prior to initiation of clearing or grading activities. All movement of construction vehicles, including ingress and egress of equipment and personnel, shall be limited to designated construction zones. The fencing shall be removed upon completion of all construction activities. 2. No temporary storage or stockpiling of construction materials shall be allowed within the open space canyon areas. This prohibition shall not be applied to facilities that are planned to

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traverse the open space canyon areas (e.g., driveways, roads, utilities corridors). Staging areas and construction sites in proximity to the open space canyon areas shall be kept free of trash, refuse, and other waste; no waste dirt, rubble, or trash shall be deposited in these areas.
BIO-3G: Errant Construction Activities. If errant construction activities result in inadvertent impacts to biological resources outside of the approved limits of disturbance, such impacted areas shall be evaluated and quantified by a qualified Biologist and revegetation options coordinated with UC San Diego Campus Planning staff. Errant construction impacts to non-sensitive vegetation communities and non-native grassland shall be revegetated with an appropriate native erosion control seed mix. Errant construction impacts to wetland vegetation communities and native upland vegetation communities shall be restored to the pre-impact vegetation community.
BIO-3H: Fire Prevention during Construction. Equipment to extinguish small brush fires (e.g., from trucks or other vehicles) shall be present on-site during all phases of project construction, along with personnel trained in the use of such equipment. Smoking shall be prohibited in construction areas adjacent to flammable vegetation.
BIO-3I: Construction Monitoring. During project construction, a qualified Biologist shall visit the site at the start of each construction project to conduct a pre-construction environmental meeting with the construction contractor's Construction Manager and other appropriate personnel. The monitor shall conduct regular visits during site preparation, vegetation removal, and grading activities within or adjacent to native vegetation and during the raptor and general avian breeding season (refer to BIO-2C and 2D). During site visits, the monitor shall be responsible for ensuring that the construction activities and staging areas are restricted to the approved limits of work, and protective fencing is adequately maintained. The biological monitor shall be responsible for ensuring that the contractor adheres to the other provisions described in Mitigation Measures BIO-3F through BIO-3J. The monitor, in cooperation within the construction project manager, shall have the authority to halt construction activities in the event that these provisions are not met. The biological monitor shall submit regular reports to UC San Diego Campus Planning during construction documenting the implementation of all grading and construction minimization measures.
BIO-3J: Night Lighting. If temporary night lighting is necessary during construction, lights shall be directed away from sensitive vegetation communities and shielded to minimize temporary lighting of the surrounding habitat and should be of the lowest illumination necessary for human safety.
BIO-3K: Runoff and Water Quality. Irrigation and pest management for the Hillcrest Campus shall be implemented as described below to minimize runoff and impacts to water quality: Irrigation for project landscaping shall be minimized and controlled in areas in and adjacent to the steep slope canyon areas through efforts such as designing irrigation systems to match landscaping water needs, using sensor devices to prevent irrigation during and after precipitation, and using automatic flow reducers/shut-off valves that are triggered by a decrease in water pressure from broken sprinkler heads or pipes. Integrated pest management principles pursuant to the UC Integrated Pest Management Program shall be implemented to the extent practicable for areas in and adjacent to the steep slope canyon areas for chemical pesticides, herbicides, and fertilizers. Examples of such measures may

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include, but are not limited to, alternative weed/pest control measures (e.g., hand removal) and proper application techniques (e.g., conformance to manufacturer specifications and legal requirements).
BIO-3L: Invasive Plant Species Prevention. During construction and landscaping within the Hillcrest Campus the following measures shall be implemented to minimize the spread of invasive plant species: • Construction equipment shall be cleaned before coming to the Hillcrest Campus. • Weed-free straw wattles shall be used for erosion control. • Appropriate landscaping species shall be selected based on the vegetation communities within the steep slope canyon areas adjacent to the project. In areas supporting native (or disturbed native) vegetation communities, revegetation of impacted slopes shall be with appropriate native plant materials. • Landscaping adjacent to the steep slope canyon areas shall comply with the following requirements to prevent the introduction of invasive species: o Appropriate landscaping shall be selected based on the vegetation communities within the portion of the steep slope canyon areas adjacent to the project. In areas supporting native (or disturbed native) vegetation communities, revegetation of impacted slopes shall be with appropriate native plant materials. In particular, where the steep slope canyon areas are disturbed by construction, installation of native plants, including but not limited to California sagebrush, California buckwheat, lemonadeberry, deerweed (*Acmispon glaber*), monkey flower (*Diplacus aurantiacus*), and black sage (*Salvia mellifera*), is recommended to make the steep slope canyon areas more impenetrable to people while reinforcing the boundaries and edges of canyon areas. o Only non-invasive plant species shall be included in the landscape plans for projects within Fuel Management Zone 1 (species not listed on the California Invasive Plant Inventory prepared by the California Invasive Plant Council). A qualified landscape architect and/or qualified Biologist shall review landscape plant palettes prior to implementation to ensure that no invasive species are included. Any planting stock brought onto a project site adjacent to the open space canyon areas for landscaping or habitat restoration shall be inspected to ensure it is free of pest species that may invade natural areas, including but not limited to Argentine ants (*Linepithema humile*) and South American fire ants (*Solenopsis* spp.). Inspections of planting stock for habitat restoration shall be by a qualified Biologist, and inspections of planting stock for landscaping shall be the responsibility of a qualified UC San Diego Project Manager or their designated assignee. Any planting stock found to be infested with such pests shall be quarantined, treated, or disposed of according to best management practices by qualified personnel, in a manner that precludes invasions into natural habitats.
BIO-3M: Wildlife Mortality Avoidance. Roads and driveways along the steep slope canyon areas shall have barriers to discourage wildlife from entering the roads.
BIO-3N: Edge Effects Avoidance. Projects adjacent to the open space canyon areas shall install permanent signage along the boundary, indicating the presence of lands supporting sensitive habitat to discourage access outside of established trails. Projects adjacent to the open space canyon areas shall install other visual/physical barriers (such as appropriate landscaping) to discourage human encroachment into the canyon areas where

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trespass is likely to occur (gradual slopes, areas of low, open vegetation, areas of previous disturbance). Maintenance of storm water facilities shall be conducted in a manner to minimize impacts to adjacent sensitive habitats. Maintenance shall be overseen by a qualified Biologist and would occur outside the general bird-breeding season, which extends from January 15 through August 31.
BIO-3O: Non-Native Insects Avoidance. The following measures shall be implemented for each project or construction phase that would remove or install tree species on the Hillcrest Campus that may be used as host trees by shot hole borer (SHBs): • Trees to be planted on the Hillcrest Campus shall be obtained from a reliable source and be free of sign of SHB infestation. • An education program for on-site workers responsible for tree installation shall be implemented. The program shall describe the signs of SHB infestation (e.g., sugary exudate on trunks or branches, and SHB entry/exit holes [approximately the size of the tip of a ballpoint pen]). • Sign of SHB infestation shall be reported to CDFW and UC's Eskalen Lab (https://ucanr.edu/sites/eskalenlab/) by the UC San Diego Project Manager and/or the project Biologist. • Trees with sign of SHB infestation shall be pruned or removed, as appropriate, and potential host materials shall be chipped to less than one inch prior to composting on site or transfer to a landfill. • Equipment that is used to prune or remove SHB-infected trees shall be disinfected prior to additional use. Biologists monitoring mitigation sites shall be knowledgeable regarding sign of SHB infestation.
Cultural and Tribal Cultural Resources
CUL-2A: On-Campus Review Grading Plans. To address potentially significant impacts to unknown archaeological resources on the Hillcrest Campus mesa within the campus property boundary, the following measures shall be followed prior to the start of construction: 1. Prior grading plans shall be reviewed, if available, to determine if prior grading activity has removed the top 2 or more feet of soil on mesas, cliffs, and other flat areas. A. If 2 or more feet have been previously removed, no further work is required. B. If it cannot be verified that prior grading has removed 2 or more feet of soil, a qualified Archaeologist shall monitor grading activities during the removal of the top 2 to 3 feet of soil or if bedrock is encountered. 2. A qualified Archaeologist shall monitor all grading activities within areas of natural deposition. 3. Monitoring shall cease if grading reaches underlying formational material, regardless of how shallow or in what location it is found. Per this measure, if native soils would be disturbed, then a qualified Archaeologist and Native American Monitor would be required to monitor grading activities in accordance with the procedures outlined in Mitigation Measure CUL-2B. However, regardless the extent of native soils, out of respect for the site's cultural history, the initial grading period of construction would be

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monitored by a Native American Tribal representative from the Kumeyaay Nation, and Mitigation Measure CUL-2B would be applied to the proposed project.
CUL-2B: Construction Monitoring. If construction monitoring is determined to be required on the Hillcrest Campus by Mitigation Measure CUL-2A or construction occurs off campus in Mission Valley, the following measures shall be followed. The following measure shall be implemented during all ground disturbance associated with the off-site portion of Bachman Place widening within 500 feet of the Hotel Circle South intersection: 1. Prior to beginning any work that requires monitoring: A. A pre-construction meeting shall be held that includes the qualified Archaeologist, the UC San Diego Project Manager and Campus Planning staff, Construction Manager and/or Grading Contractor, and other appropriate personnel so the Archaeologist can make comments and/or suggestions concerning the monitoring program to the Construction Manager and/or Grading Contractor. B. The Archaeologist shall (at that meeting or subsequently) submit to the UC San Diego Project Manager a copy of the site/grading plan (reduced to 11 x 17 inches) that identifies areas to be monitored as well as areas that may require delineation of grading limits. C. The Archaeologist shall also coordinate with the UC San Diego Project Manager on the construction schedule to identify when and where monitoring is to begin, including the start date for monitoring. 2. The qualified Archaeologist and a Native American Monitor shall be present during grading/excavation and shall document such activity on a standardized form. A record of activity shall be sent to the UC San Diego Environmental Planner and Project Manager each month. 3. Discoveries A. Discovery Process. In the event of a discovery, and when requested by the Archaeologist or the Archaeological Principal Investigator (PI), the UC San Diego Project Manager shall be contacted and shall divert, direct, or temporarily halt ground-disturbing activities in the area of discovery to allow for preliminary evaluation of potentially significant archaeological resources. The PI shall also immediately notify UC San Diego Campus Planning of such findings at the time of discovery. B. Determination of Significance. The significance of the discovered resources shall be determined by the PI in consultation with UC San Diego Campus Planning and the Native American Community, as appropriate. UC San Diego Campus Planning must concur with the evaluation before grading activities will be allowed to resume. For archaeological resources considered significant by the PI, a Research Design and Data Recovery Program shall be prepared, approved by UC San Diego Campus Planning, and carried out to mitigate impacts before ground-disturbing activities in the area of discovery will be allowed to resume. 4. If human remains are discovered, work shall halt in that area and the procedures detailed in the California Health and Safety Code (Section 7050.5) and the California Public Resources Code (Section 5097.98), if applicable, will be followed. 5. Notification of Completion. The Archaeologist shall notify UC San Diego Campus Planning, as appropriate, in writing of the end date of monitoring.

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A. Handling and Curation of Significant Artifacts and Letter of Acceptance B. The Archaeologist shall ensure that all significant cultural resources or artifacts collected are cleaned, cataloged, and permanently curated with an appropriate institution; that a letter of acceptance from the curation institution has been submitted to UC San Diego Campus Planning; that all artifacts are analyzed to identify function and chronology as they relate to the history of the area; that faunal material is identified as to species; and that specialty studies are completed, as appropriate. C. Curation of artifacts associated with the survey, testing, and/or data recovery for the project shall be completed in consultation with UC San Diego Campus Planning, as applicable. 6. Final Results Reports (Monitoring and Research Design and Data Recovery Program). Prior to completion of the 2019 LRDP, two copies of the Final Results Report (even if no significant resources were found) and/or evaluation report, if applicable, which describe the results, analysis, and conclusions of the Archaeological Monitoring Program (with appropriate graphics) shall be submitted to UC San Diego Campus Planning for approval. For significant archaeological resources encountered during monitoring, the Research Design and Data Recovery Program shall be included as part of the Final Results Report. Recording Sites with State of California Department of Park and Recreation. The qualified Archaeologist shall record (on the appropriate State of California Department of Park and Recreation forms (DPR 523 A/B)) any significant or potentially significant resources encountered during the Archaeological Monitoring Program and submit such forms to the South Coastal Information Center with the Final Results Report.
Energy
ENE-1: Construction Fuel Use. For all construction activities, the construction contractor shall implement the following measures during construction: 1. When more than one piece of construction equipment is available to complete a task, the contractor shall use the most fuel-efficient equipment. 2. Newer or more fuel-efficient models shall be selected from the contractor fleet for use. 3. Workers shall be encouraged to carpool or use public transit to access the campus during construction. Construction contractor shall facilitate carpooling by providing means to organize carpools or request transit center pickups. When haul trucks are available with a haul capacity larger than 15 cubic yards but a fuel efficiency similar to a 15-cubic-yard-capacity truck, the larger capacity trucks shall be used to reduce total truck trips.
Geology and Soils
GEO-5: Paleontological Monitoring during Construction. To address potentially significant impacts to previously undocumented paleontological resources within highly sensitive geologic formations, a monitoring program shall be implemented. Grading and excavation equating to 1,000 cubic yards or more within highly sensitive Mission Valley Formation shall require monitoring by a qualified Paleontologist and shall include the following measures: 1. Prior to beginning any grading/excavation work: A. A pre-construction meeting shall be held that includes the qualified Paleontologist, the UC San Diego Project Manager and Campus Planning staff, Construction Manager and/or Grading Contractor, and other appropriate personnel so the Paleontologist can make

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comments and/or suggestions concerning the monitoring program to the Construction Manager and/or Grading Contractor. B. The Paleontologist shall (at that meeting or subsequently) submit to the UC San Diego Project Manager a copy of the site/grading plan (reduced to 11 x 17 inches) that identifies areas to be monitored as well as areas that may require delineation of grading limits. C. The Paleontologist shall also coordinate with the UC San Diego Project Manager on the construction schedule to identify when and where monitoring is to begin and to specify the start date for monitoring. 2. The Paleontologist shall be present during grading/excavation and shall document such activity on a standardized form. A record of activity shall be sent to UC San Diego Campus Planning and the UC San Diego Project Manager each month. 3. For excavations in geologic units of known high sensitivity for paleontological resources (i.e., Mission Valley Formation), a qualified Paleontologist shall be present initially during 100 percent of the earthmoving activities. After 50 percent of the excavations are complete within the unit, if no significant fossils have been recovered, the level of monitoring may be reduced or suspended entirely at the Paleontologist's discretion and in consultation with UC San Diego Campus Planning. 4. Excavations in formations of low and moderate paleontological sensitivity, such as the Linda Vista Terrace Formation, do not require paleontological monitoring. 5. Discoveries: A. Discovery Process. In the event of a discovery, and when requested by the Paleontologist, the UC San Diego Project Manager shall be contacted and shall divert, direct, or temporarily halt ground-disturbing activities in the area of discovery to allow for preliminary evaluation of potentially significant paleontological resources. The Paleontologist shall also immediately notify UC San Diego Campus Planning of such findings at the time of discovery. B. Determination of Significance. The significance of the discovered resources shall be determined by the Paleontologist in consultation with UC San Diego Campus Planning. UC San Diego Campus Planning must concur with the evaluation before grading activities shall be allowed to resume. C. Documentation and Treatment of Finds. Based on the scientific value and/or uniqueness of the find, the qualified Paleontologist may record the find and allow work to continue, or recommend salvage and recovery of the fossil. If treatment and salvage are required, recommendations shall be consistent with Society of Vertebrate Paleontology 2010 guidelines and currently accepted scientific practice. Work in the affected area may resume once the fossil has been assessed and/or salvaged and a Paleontological Monitor is present. 6. Notification of Completion. The Paleontologist shall notify UC San Diego Campus Planning, as appropriate, in writing of the end date of monitoring. 7. Handling and Curation of Significant Paleontological Specimens and Letter of Acceptance. The Paleontologist shall ensure that all significant fossils collected are appropriately prepared and permanently curated with an appropriate institution, and that a letter of acceptance from the curation institution has been submitted to UC San Diego Campus Planning.

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Final Results Reports (Monitoring and Research Design and Recovery Program). Prior to completion of the 2019 LRDP, two copies of the Final Results Report (even if no significant resources were found) and/or evaluation report, if applicable, which describe the results, analysis, and conclusions of the Paleontological Monitoring Program (with appropriate graphics) shall be submitted to UC San Diego Campus Planning for approval.
Hazards and Hazardous Materials
HAZ-2A: Demolition Procedure. Prior to the initiation of demolition activities, the UC San Diego Project Manager shall consult with University of California, San Diego, Environmental Health and Safety regarding existing aging campus buildings, which shall be sampled and have laboratory tests completed for the presence of asbestos, lead, biohazardous waste, pharmaceutical waste, and radioactive waste. If any lead and/or asbestos is detected in the building material, a Remediation Plan shall be prepared in coordination with University of California, San Diego, Environmental Health and Safety to adhere to the proper agency remediation guidelines (i.e., SDAPCD, Cal/OSHA, USEPA, CDPH, NRC) followed by a clearance report. Prior to demolition of the campus buildings, a third-party consultant shall provide to the UC San Diego Project Manager the clearance report stating that the lead and/or asbestos concentrations are below Cal/OSHA permissible exposure limits.
HAZ-2B: Assessment and Remediation. During project planning, EH&S shall be consulted in order to identify if any past contamination, USTs, ASTs, or other contamination could potentially occur in areas to be impacted. If it is determined that contamination has potential to exist on a project site, the licensed contractor shall screen export soils generated during construction activities in the area of the known contamination to determine if contamination is present. If contamination is encountered and if it poses a risk to human health or the environment, actions shall be taken prior to any construction, pursuant to applicable regulations, to remove or otherwise remediate the contamination through appropriate measures such as natural attenuation, active remediation, and engineering controls. Assessment and remediation activities shall incorporate the following conditions 1. All assessment and remediation activities shall be conducted in accordance with a work plan that is approved by the regulatory agency having oversight of the activities. 2. It may be necessary to excavate existing soil within the project site or to bring fill soils into the site from off-site locations. At sites that have been identified as being contaminated or where soil contamination is suspected, appropriate sampling and classification are required prior to disposal of excavated soil. Contaminated soil shall be properly disposed of at an approved off-site facility. Fill soils also shall be sampled to ensure that imported soil parameters are within acceptable levels. 3. Caution shall be taken during excavation activities near existing groundwater monitoring wells so that they are not damaged. Existing groundwater monitoring wells may have to be abandoned and reinstalled if they are located in an area that is undergoing redevelopment.
HAZ-2C: Contamination, Remediation, and Removal. In the event that USTs not identified in consultation with EH&S or undocumented areas of contamination are encountered during construction or redevelopment activities, work shall be discontinued until appropriate health and safety procedures are implemented. Either the County of San Diego DEH or the SDRWQCB, depending on the nature of the contamination, must be notified regarding the contamination. Each agency and program within the respective agency has its own mechanism for initiating an investigation. The appropriate program (e.g., the DEH Local Oversight Program for tank release cases, the County DEH Voluntary Assistance Program for non-tank release cases, the RWQCB for

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non-tank cases involving groundwater contamination) shall be selected based on the nature of the contamination identified. The contamination remediation and removal activities shall be conducted in accordance with pertinent regulatory guidelines under the oversight of the appropriate regulatory agency.
HAZ-2D: Groundwater Pretreatment. Prior to groundwater dewatering activities, the contractor should consult with EH&S in the area of known contamination. Whenever possible, extracted groundwater should be discharged to surface waters under the current general National Pollutant Discharge Elimination System permit adopted by the SWRCB. However, to protect water quality in the San Diego area, the City recognizes that it may be necessary to accept discharges of extracted contaminated groundwater to the Metropolitan Sewerage System and its tributary systems. Prior to the necessary discharge of groundwater from dewatering activities for construction of the Replacement Hospital and north access driveway, the City would require groundwater sampling analytical results of a representative sample or multiple samples of the groundwater to be discharged. If determined that the discharged groundwater is contaminated, an application would be filed with the City. Prior to the start of construction, necessary pretreatment equipment would be installed, operated, and maintained during the length of dewatering activities in compliance with the terms of the permit and with the General and Specific Prohibitions outlined in the City's program. When discharges originate from sites contaminated with petroleum products (e.g., gasoline, diesel, AvGas, JP) or organic solvents, the permittee must provide pretreatment equivalent to the SWRCB's pretreatment technology standards for organics (carbon adsorption or air stripping). Additionally, if free product is present or expected, the pretreatment system must include a free product recovery system/method to prevent pass through, and the pretreatment equipment must be equipped with a feature, such as an automatic sensor with shut-off, that would cease all discharges to the sewer in the event of breakthrough (free product release from the recovery device). For the purposes of this requirement, free product is defined as an immiscible liquid phase hydrocarbon existing in the subsurface with a positive pressure such that it can flow into a well. Pretreatment equipment may also be necessary to remove silt, sand, or other solid material from the wastewater prior to disposal. All pretreatment equipment must be in place and fully operational prior to commencing discharges to sewer.
HAZ-5: Emergency Services Notification. In the event that the construction of a project requires a lane or roadway closure on campus, prior to construction the contractor and/or Project Manager shall ensure that the Hillcrest Campus Fire Marshal and campus community at large are notified. If determined necessary by the Hillcrest Campus Fire Marshal, local emergency services shall be notified by the Fire Marshal of the closure.
Noise
NOI-1A: Construction Noise. For all construction activities, the construction contractor shall implement the following measures during construction: 1. The construction contractor shall work with proper administrative controls on equipment in order to not exceed a 12-hour average sound level of 75 dBA L_{eq} at any NSLU between 7:00 a.m. and 7:00 p.m. Monday through Saturday. 2. The construction contractor shall provide written notification to the noise-sensitive uses within 210 feet of normal construction activities and 500 feet of pile driving at least 3 weeks prior to the start of construction activities, informing them of the estimated start date and duration of construction activities. 3. Construction activities that could generate high noise levels, such as pile driving, shall be scheduled during times that would have the least impact on sensitive receptor locations. This

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could include restricting the noisiest construction activities in the areas of potential impact to hours when staff and students would most likely be taking lunch and medical procedures and operation of equipment would be least likely to be scheduled or required. Days of activity shall be adjusted to avoid holidays or scheduled exam days. 4. Stationary construction noise sources, such as temporary generators, shall be located as far from nearby noise-sensitive receptors as possible. 5. Trucks shall be prohibited from idling along streets serving the construction site where noise-sensitive receptors are located. 6. Outfit construction equipment with properly maintained, manufacturer-approved or recommended sound abatement means on air intakes, combustion exhausts, heat dissipation vents, and the interior surfaces of engine hoods and power train enclosures. 7. Position (to the extent practical) construction laydown and vehicle staging areas as far from noise-sensitive land uses as feasible. 8. If the hourly average noise level is anticipated to exceed 75 dBA L_{eq} for a particular activity, limit simultaneous operation of construction equipment or limit construction time within another hour to reduce the 12-hour average noise level. If feasible and determined to be an effective option, install temporary noise barriers around the perimeter of the construction area to minimize construction noise.
NOI-2A: Construction Notification. The construction contractor shall provide written notification to the vibration-sensitive uses within the following screening distances at least 3 weeks prior to the start of construction activities informing them of the estimated start date and duration of daytime vibration-generating construction activities: • Existing or new residences within 75 feet of normal construction or 160 feet of pile driving • Institutional buildings with primarily daytime uses that do not require vibration-sensitive equipment within 60 feet of normal construction or 125 feet of pile driving • Uses requiring vibration-sensitive equipment, such as the hospital, within 210 feet of normal construction or 450 feet of pile driving This notification shall include information warning about the potential for impacts related to vibration-sensitive equipment. UC San Diego shall provide a phone number for the affected businesses and residents to call if they have vibration-sensitive equipment on their sites. Notification requirements shall also apply to any new businesses within 450 feet of the Hillcrest Campus potentially containing vibration-sensitive uses for which licenses are issued prior to completion of construction.
NOI-2B: Vibration Best Management Practices. Prior to the commencement of construction projects that would involve heavy earthmoving equipment within the following applicable screening distances, UC San Diego shall retain a qualified acoustician to prepare a construction vibration mitigation program to be implemented by the construction contractor(s): • Existing or new residences within 75 feet of normal construction or 160 feet of pile driving. • Institutional buildings with primarily daytime uses that do not require vibration-sensitive equipment within 60 feet of normal construction or 125 feet of pile driving. • Structures potentially requiring vibration-sensitive equipment within 210 feet of normal construction or 450 feet of pile driving. If, during the notification process outlined in Mitigation Measure NOI-2A, existing receptors are identified that involve activities that are

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vibration sensitive at a level more stringent than VC-A (as defined by the Federal Transit Administration as medium- to high-power optical microscopes (400X), microbalances, optical balances, and similar specialized equipment), vibration shall be estimated at this structure, regardless of distance, and this measure shall apply if a potential impact is identified. • The construction vibration mitigation program shall identify and require measures to reduce vibration, such as maintaining equipment and operating equipment as far from sensitive receptors as possible, resulting from construction activities to the maximum extent practicable, as well as detail construction activity notification and monitoring processes that include, but are not limited to, vibration monitoring. Vibration monitoring shall be performed during construction to establish the level of vibration produced by high impact activities. Baseline vibration levels at specified locations shall be established prior to the construction activity. Monitoring shall be conducted when any construction activity would occur within the above-described screening distances. Monitoring shall be conducted using portable vibration-monitoring instrumentation that provides a calibrated record of local ground movement/accelerations. If construction vibration exceeds the appropriate threshold, work should be stopped and resumed when all feasible alternative work methods and equipment intended to reduce vibration levels have be implemented.

Notes: Mitigation Measures BIO-1A, BIO-2A, and BIO-3A have already been implemented.

6 REFERENCES

The primary sources of information for this project-level Addendum are the 2019 LRDP and its EIR, including all relevant technical studies and references noted in those documents, which are incorporated by reference herein. Additional project-specific information has been added to supplement the information in those primary references.

California Air Resources Board (CARB)

2022 In-Use Off-Road Diesel-Fueled Fleets Regulation (amended November 2022; effective October 1, 2023).

California Department of Fish and Wildlife (CDFW)

2023 Survey Considerations for California Endangered Species Act (CESA) Candidate Bumble Bee Species.

2026 California Sensitive Natural Communities. Accessed March 2026. https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=153609&inline

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2003 San Diego Municipal Code Land Development Code. Trip Generation Manual. Revised May.

2018 Land Development Code Biology Guidelines, as amended by Resolution No. R-307376. June. City of San Diego. Land Development Code. 11th Update. April.

2019 Brush Management Regulations (SDMC Section 142.0412).

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2019a University of California San Diego 2019 Long Range Development Plan, Hillcrest Campus. November.

2019b Environmental Impact Report for the University of California San Diego 2019 Long Range Development Plan, Hillcrest Campus. Final. November.

2021 Addendum No. 1, University of California San Diego Hillcrest Campus 2019 Long Range Development Plan, Outpatient Pavilion and Parking Structure Project. Prepared by Harris & Associates. August.

2024 Addendum No. 2, University of California San Diego Hillcrest Campus 2019 Long Range Development Plan, Revised Phase 1B Project. Prepared by Harris & Associates. March.

Xerces Society for Invertebrate Conservation, Defenders of Wildlife, and Center for Food Safety.

2018 A Petition to the State of California Fish and Game Commission to List the Crotch Bumble Bee (Bombus Crotchii), Franklin's Bumble Bee (Bombus Franklini), Suckley Cuckoo Bumble Bee (Bombus Suckleyi), and Western Bumble Bee (Bombus Occidentalis Occidentalis) as Endangered Under the California Endangered Species Act. October.

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Appendix A GHG Reduction Strategy Screening Table

GREENHOUSE GAS (GHG) EMISSIONS REDUCTION STRATEGY - TABLE 7.A

Project:	UCSD Hillcrest Campus Redevelopment Phase One
Project No.:	5551

Feature	Description	Assigned Point Values	Project Points
Reduction Measure: Hospital/Medical Facility/Lab Energy Efficiency Development			
Overall Energy Rating of Building			
HEA Energy Audits	The Hospital Energy Alliance (HEA) in collaboration with the USEPA has developed an Energy Star efficiency benchmarking system depending upon how efficient the facility is in comparison to other medical facilities within the United States. A subset scoring system was also developed using medical facilities in California. The following scoring system is based on the California subset database:		0
	HEA Energy Star Score of below 60	0 point	
	HEA Energy Star Score between 60 and 65	5 points	
	HEA Energy Star Score between 66 and 70	10 points	
	HEA Energy Star Score between 71 and 75	20 points	
	HEA Energy Star Score between 76 and 80	35 points	
	HEA Energy Star Score between 81 and 85	50 points	
	HEA Energy Star Score between 86 and 90	75 points	
	HEA Energy Star Score between 91 and 100	100 points	
If gaining points with HEA Energy Audits, skip the choices under the titles "Building Envelope" and "Indoor Space Efficiencies" because the HEA Energy Audits already account for these types of features (no double counting).			
Building Envelope			

Feature	Description	Assigned Point Values	Project Points
Insulation	2017 baseline (walls R-13; roof/attic R-30) Modestly Enhanced Insulation (walls R-15, roof/attic R-38) Enhanced Insulation (rigid wall insulation R-15, roof/attic R-38) Greatly Enhanced Insulation (spray foam insulated walls R-18 or higher, roof/attic R-38 or higher)	0 point 20 points 22 points 24 points	20
Windows	2017 Baseline Windows (0.57 U-factor, 0.4 SHGC) Modestly Enhanced Window Insulation (0.4 U-factor, 0.32 SHGC) Enhanced Window Insulation (0.32 U-factor, 0.25 SHGC) Greatly Enhanced Window Insulation (0.28 or less U-factor, 0.22 or less SHGC)	0 point 3 points 6 points 8 points	0

Feature	Description	Assigned Point Values	Project Points
Cool Roof	Modest Cool Roof (CRRC Rated 0.15 aged solar reflectance, 0.75 thermal emittance) Enhanced Cool Roof (CRRC Rated 0.2 aged solar reflectance, 0.75 thermal emittance) Greatly Enhanced Cool Roof (CRRC Rated 0.35 aged solar reflectance, 0.75 thermal emittance)	11 points 12 points 14 points	14
Air Infiltration	Minimizing leaks in the building envelope is as important as the insulation properties of the building. Insulation does not work effectively if there is excess air leakage. Air barrier applied to exterior walls, caulking, and visual inspection such as the HERS Verified Quality Insulation Installation (QII or equivalent) Blower Door HERS Verified Envelope Leakage or equivalent	 12 points 9 points	12
Thermal Storage of Building	Thermal storage is a design characteristic that helps keep a constant temperature in the building. Common thermal storage devices include strategically placed water-filled columns, water storage tanks, and thick masonry walls. Modest Thermal Mass (10 percent of floor or 10 percent of walls 12” or more thick exposed concrete or masonry with no permanently installed floor covering such as carpet, linoleum, wood or other insulating materials) Enhanced Thermal Mass (20 percent of floor or 20 percent of walls 12” or more thick exposed concrete or masonry with no permanently installed floor covering such as carpet, linoleum, wood or other insulating materials)	 4 points 6 points	0
Indoor Space Efficiencies			
Heating/Cooling Distribution System	Minimum Duct Insulation (R-4.2 required) Modest Duct insulation (R-6) Enhanced Duct Insulation (R-8) Distribution loss reduction with inspection (HERS Verified Duct Leakage)	0 point 8 points 9 points 12 points	0

Feature	Description	Assigned Point Values	Project Points
Medical Facility Heat Recovery Systems	Heat recovery strategies employed with laundry, cooking equipment, and other commercial heat sources for reuse in HVAC air intake or other appropriate heat recovery technology. Point values for these types of systems would be determined based upon design and engineering data documenting the energy savings. Use the GHG emission reduction per point value shown in Appendix B to calculate the points based upon the specific design.	Points for this option must be calculated at the time that the heat recovery system is designed based upon expected energy savings.	0
Water Heaters	2017 Minimum Efficiency (0.57 Energy Factor) Improved Efficiency Water Heater (0.675 Energy Factor) High Efficiency Water Heater (0.72 Energy Factor) Very High Efficiency Water Heater (0.92 Energy Factor) Solar Pre-heat System (0.2 Net Solar Fraction) Enhanced Solar Pre-heat System (0.35 Net Solar Fraction)	0 point 11 points 12 points 15 points 3 points 6 points	12
Daylighting	Daylighting is the ability of each room within the building to provide outside light during the day, reducing the need for artificial lighting during daylight hours. All peripheral rooms within the building have at least one window or skylight All rooms within the building have daylight (through use of windows, solar tubes, skylights, etc.) All rooms daylighted	 1 point 4 points 5 points	0
Artificial Lighting (generic lighting throughout the buildings)	2017 Minimum Efficiency (required) Efficient Lights (25 percent of in-unit fixtures considered high efficacy. High efficacy is defined as 40 lumens/watt for 15 watt or less fixtures, 50 lumens/watt for 15-40 watt fixtures, 60 lumens/watt for fixtures >40 watt) High Efficiency Lights (50 percent of in-unit fixtures are high efficacy) Very High Efficiency Lights (100 percent of in-unit fixtures are high efficacy)	0 point 7 points 9 points 11 point	9
Examination and Surgical Lighting	LED Exam room portable lighting (60 lumens/watt) <30,000 lux/M LED Surgical lighting (60 lumens/watt) 31,000-80,000 lux/M LED Surgical lighting (60 lumens/watt) 81,000-100,000 lux/M LED Surgical lighting (60 lumens/watt) >100,000 lux/M with multi-stage dimming switch	7 points 12 points 18 points 25 points	12

Feature	Description	Assigned Point Values	Project Points
Appliances	Energy Star Commercial Refrigerator (new) Energy Star Commercial Dishwasher (new) Energy Star Commercial Clothes Washer Energy Star Commercial Fan	1 point 1 point 1 point 1 point	3
Misc. Hospital/Medical Facility and Lab Building Efficiencies			
Building Placement	North/south alignment of building or other building placement such that the orientation of the buildings optimizes conditions for natural heating, cooling, and lighting.	4 points	4
Shading	At least 90 percent of south-facing glazing would be shaded by vegetation or overhangs at noon on June 21.	4 points	0
Other	This allows innovation by the applicant to provide design features that increase the energy efficiency of the project that are not provided in the table. Note that engineering data would be required documenting the energy efficiency of innovative designs and point values given based on the proven efficiency beyond the Title 24 Energy Efficiency Standards.	Points for this option must be calculated at the time that the energy efficiency feature is designed based upon expected energy savings.	0
Reduction Measure: Hospital/Medical Facility/Lab Renewable Energy			
Photovoltaic	Solar photovoltaic panels installed on commercial buildings or in collective arrangements within a commercial development such that the total power provided augments: Solar Ready Roofs (sturdy roof and electric hookups) 400 kW Capacity 600 kW Capacity 800 kW Capacity 1.2 MW Capacity 1.6 MW Capacity 2.4 MW Capacity 2.8 MW Capacity 3.2 MW Capacity 3.6 MW Capacity 4 MW Capacity	 2 points 8 points 14 points 20 points 26 points 32 points 38 points 44 points 50 points 56 points 60 points	0

Feature	Description	Assigned Point Values	Project Points
Offsite Renewable Power	Electricity purchases by UC San Diego used to meet this menu option must include acquisition/retentions of sufficient environmental attributes to ensure zero GHG emissions: 1 MWh annually 2 MWh annually 4 MWh annually 8 MWh annually 12 MWh annually 26 MWh annually 32 MWh annually 36 MWh annually All electricity purchased as 100 percent zero emission renewable energy	 2 points 5 points 11 points 22 points 33 points 72 points 88 points 99 points 112 points	112
Other Renewable Energy Generation	The applicant may have innovative designs or unique site circumstances (such as geothermal) that allow the project to generate electricity from renewable energy not provided in the table. The point values allowed would be decided based upon engineering data showing the generation capacity.	Points for this option must be calculated at the time that the system is designed.	0
Reduction Measure: Hospital/Medical Facility/Lab Water Conservation			
Irrigation and Landscaping			
Water Efficient Landscaping	Eliminate conventional turf from landscaping Only moderate water using plants Only low water using plants Only California native landscape that requires no or only supplemental irrigation	0 point 2 points 3 points 6 points	0
Trees	Increase tree planting in parking areas 50 percent beyond City Code	Points for this option must be calculated at the time that the system is designed.	0
Water Efficient Irrigation Systems	Low precipitation spray heads <0.75”/hour or drip irrigation Weather-based irrigation control systems combined with drip irrigation (demonstrate 20 percent reduced water use)	1 point 4 points	4
Recycled Water	Recycled water connection (purple pipe) to irrigation system on site	5 points	0

Feature	Description	Assigned Point Values	Project Points
Storm Water Reuse Systems	Innovative on-site storm water collection, filtration, and reuse systems are being developed that provide supplemental irrigation water and provide vector control. These systems can greatly reduce the irrigation needs of a project. Point values for these types of systems would be determined based on design and engineering data documenting the water savings.	Points for this option must be calculated at the time that the system is designed.	0
Potable Water			
Showers	Water efficient showerheads (2.0 gpm)	2 points	2
Toilets	Water efficient toilets/urinals (1.5 gpm) Waterless urinals (note that commercial buildings having both waterless urinals and high-efficiency toilets would have a combined point value of 6 points)	2 points 3 points	2
Faucets	Water efficient faucets (1.28 gpm)	2 points	2
Commercial Dishwashers	Water efficient dishwashers (20 percent water savings)	3 points	3
Commercial Laundry Washers	Water efficient laundry (15 percent water savings) High efficiency laundry equipment that captures and reuses rinse water (30 percent water savings)	2 points 4 points	0
Commercial Water Operations Program	Establish an operational program to reduce water loss from pools, water features, etc., by covering pools, adjusting fountain operational hours, and using water treatment to reduce drawdown and replacement of water. Point values for these types of plans would be determined based on design and engineering data documenting the water savings.	Points for this option must be calculated at the time that the water operations program is designed based upon expected water savings.	0
Reduction Measure Transportation: Bicycle Infrastructure			
Bicycle Infrastructure	Campus mobility includes Class I, Class II, and Class III bikeways to build on the current bikeways. Provide bicycle paths within project boundaries. Provide bicycle path linkages between project site and other land uses. Provide bicycle path linkages between project site and transit.	 1 point 2 points 6 points	0
Reduction Measure Transportation: Electric Vehicle Infrastructure			

Feature	Description	Assigned Point Values	Project Points
Neighborhood Electric Vehicles	Provide safe NEV routes within the facility Provide safe NEV routes between the facility and other land uses	5 points 10 points	0
Electrical Vehicles	Provide staff-only charging station for use by facility-owned electric vehicle Provide public charging station for use by an electric vehicle	5 points 7 points	0
Reduction Measure Transportation: Employee Based Trip & VMT Reduction Policy			
Compressed Work Week	Reducing the number of days per week that employees need to be on site would reduce the number of vehicle trips associated with commercial/industrial development. A compressed work week such that full-time employees are on site: 4 days per week 3 days per week	3 points 6 points	0
Car/Vanpools	Car/vanpool program Car/vanpool program with preferred parking Car/vanpool with guaranteed ride home program Subsidized employee incentive car/vanpool program Combination of all the above	3 points 4 points 4 points 5 points 7 points	0
Employee Bicycle/ Pedestrian Programs	Complete sidewalk to residential within 0.5 mile Complete bike path to residential within 3 miles Bike lockers and secure racks Showers and changing facilities Subsidized employee walk/bike program (Note: Combine all applicable points for total value.)	3 points 3 points 1 point 2 points 2 points	0
Shuttle/Transit Programs	Local bus stop at the medical facility Light rail transit within 0.25 mile Light rail transit within 0.5 mile Shuttle service to light rail transit station Guaranteed ride home program Subsidized transit passes (Note: Combine all applicable points for total value.)	3 points 7 points 3 points 3 points 3 points 4 points	0
Commute Trip Reduction	Employer-based CTR. CTRs apply to commercial, offices, or industrial projects that include a reduction of vehicle trip or VMT goal using a variety of employee CTR methods. Incentive-based CRT programs Mandatory CRT programs	5 points 11 points	0

Feature	Description	Assigned Point Values	Project Points
Other Trip Reductions	Other trip or VMT reduction measures not listed above with a TIA and/or other traffic data supporting the trip and/or VMT for the project.	Point values for this option must be calculated at the time the VMT reduction measure is designed based on the reduction of VMT.	0
			211

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Appendix B Hillcrest Hospital Expansion [CEQA] Feasibility Study

UC San Diego

Hillcrest Hospital Expansion Feasibility Study

Prepared by:

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January 2024

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1 INTRODUCTION

1.1 PROJECT SUMMARY

The following project is evaluated for consistency with the 2019 Long Range Development Plan (LRDP) for the Hillcrest Campus and the certified Program Environmental Impact Report (EIR) assessing the environmental impacts of implementing the plan (SCH No. 2018031003).

Project name: Hillcrest Hospital Expansion Feasibility Study

Project location: University of California, San Diego

Lead agency's name and address: The Regents of the University of California
1111 Franklin Street
Oakland, California 94607

Contact person: Lauren Lievers, Principal Environmental Planner
UC San Diego Campus Planning Office

Project sponsor's name and address: UC San Diego
9500 Gilman Drive, MC 0074
La Jolla, California 92093-0074

Location of administrative record: UC San Diego Campus Planning Office
10280 North Torrey Pines Road, Suite 460
La Jolla, California 92037-0074

Previously Certified 2019 LRDP Program EIR: The 2019 LRDP is a comprehensive land use plan that guides the redevelopment of the Hillcrest Campus to achieve its academic, clinical research, and community health goals, and ultimately guide the physical transformation of the campus toward a more efficient, environmentally sensitive, and socially minded result. The 2019 LRDP and its EIR are available for viewing online at https://plandesignbuild.ucsd.edu/planning/lrdp/hillcrest.html#Environmental-Impact-Report or at the following location:

UC San Diego Campus Planning Office
10280 North Torrey Pines Road, Suite 460
La Jolla, California 92037-0074

1.2 PURPOSE OF CONSISTENCY REVIEW

This document evaluates whether the Hillcrest Hospital Expansion Project (project) is within the scope of the 2019 LRDP EIR and whether it would trigger subsequent or supplemental environmental review under California Environmental Quality Act (CEQA). This evaluation includes but is not limited to determining whether the project would result in new or substantially more severe environmental impacts in comparison to those disclosed in the 2019 LRDP EIR. This document will also serve as a Feasibility Study, examining the possibility of increasing the hospital bed count from what was evaluated in the 2019 LRDP EIR.

The 2019 LRDP is a comprehensive land use plan that guides the redevelopment of the Hillcrest Campus to achieve its academic, clinical research, and community health goals, and ultimately guide the physical transformation of the campus toward a more efficient, environmentally sensitive, and socially minded result (UC San Diego 2019a). The 2019 LRDP EIR was prepared in accordance with Section 15168 of the CEQA Guidelines and California Public Resources Code, Section 21094 (UC San Diego 2019b). It analyzed the environmental impacts of the 2019 LRDP. The 2019 LRDP EIR (Volume I) analyzes the full implementation of uses and physical development proposed under the 2019 LRDP and identifies measures to mitigate the significant adverse program-level and cumulative impacts.

This Feasibility Study addresses whether the increase in hospital beds proposed by the project is within the scope of the 2019 LRDP EIR pursuant to Section 15168(c) of the CEQA Guidelines, which states, “subsequent activities in the program must be examined in the light of the program EIR to determine whether an additional environmental document must be prepared.” Pursuant to CEQA Guidelines, Section 15168(c)(4), an agency should use “. . . a written checklist or similar device to document the evaluation of the site and the activity to determine whether the environmental effects of the operation were covered in the program EIR.”

2 PROJECT DESCRIPTION

2.1 REGIONAL LOCATION AND SETTING

The University of California, San Diego (UC San Diego), Hillcrest Campus is in the central part of the City of San Diego (City), California (Figure 1, Regional Location). More specifically, the Hillcrest Campus is in the City's Uptown Community in the Medical Complex neighborhood, atop a mesa that overlooks Interstate 8 and Mission Valley to the north (Figure 2, Project Location). The Hillcrest Campus occupies 62 acres along the northern edge of the Uptown Community, approximately 2.5 miles north of Downtown San Diego and approximately 13 miles south of the UC San Diego La Jolla Campus. The property boundaries are generally defined on the northern, western, and most of the eastern sides of the campus by undeveloped, steep-sloped canyons, with slopes east of Bachman Place generally composing the remainder of the eastern property line. The southern boundary is generally defined by West Arbor Drive except for a portion of one City block bounded by First Avenue, Front Street, Montecito Way, and West Arbor Drive and a parcel in the southwestern corner of Front Street and Albatross Drive.

2.2 PROJECT SITE AND SETTING

The expanded hospital would be within the Health Care District on the Hillcrest Campus. The expanded hospital would be situated slightly north of the existing hospital between the future north access driveway to the west and First Avenue extension to the east.

2.3 2019 LRDP BACKGROUND

The 2019 LRDP was approved and the Program EIR was certified in November 2019 by the UC Board of Regents. The 2019 LRDP allows for the redevelopment of approximately 34 acres of the 62-acre property, resulting in the removal of all but two of the existing buildings. The total development anticipated by the 2019 LRDP is up to 300 hospital beds, health care and research facilities (including 1,440,000 gross square feet [gsf] of outpatient services), up to 1,000 multi-family residential units (979 net new units), approximately 40,000 gsf of Wellbeing Center facilities, approximately 4,000 gsf of freestanding retail, up to 3,900 parking spaces, a new Central Utility Plant (CUP), and additional amenities encompassing approximately 2.7 million gsf. Overall redevelopment of the Hillcrest Campus would be divided into five phases (1A/1B, 2A/2B, 3, 4, and 5) and would require demolition, including the export of demolition materials for recycling or disposal, grading activities, building construction, and installation of underground utilities.

The strategic redevelopment of the Hillcrest Campus called for by the 2019 LRDP requires a multi-phase construction effort spanning over approximately 15 years, including construction of replacement space for hospital/inpatient services and consolidation of fragmented outpatient services, offices, and support activities. This Feasibility Study focuses on the expansion of the Replacement Hospital contemplated in the 2019 LRDP to up to 500 beds and additional modifications to the 2019 LRDP land use plan that have occurred since 2019 LRDP EIR certification, as described in detail below.

2.4 PROJECT DESCRIPTION

As part of the 2019 LRDP EIR, a 300-bed Replacement Hospital was analyzed in Phase 3 of the project. Currently, UC San Diego is exploring the possibility of expanding the Replacement Hospital to more than those 300 beds and wants to understand the maximum number of beds that could be constructed without triggering a new or increased impact compared to the 2019 LRDP EIR.

UC San Diego is considering the addition of up to 200 additional hospital beds, for a total of up to 500 beds. The expanded hospital would be located on the same site that was assumed in the 2019 LRDP. Table 1, Comparison of 2019 Long Range Development Plan Environmental Impact Report Buildout with 2024 Feasibility Study Components, provides a comparison between the buildout land use mix analyzed in the 2019 LRDP EIR and the land use mix at buildout with a maximum of 500 hospital beds including additional modifications to the 2019 LRDP land use plan that have occurred since 2019 LRDP EIR certification.

Table 1
Comparison of 2019 Long Range Development Plan Environmental Impact Report Buildout with 2024 Feasibility Study Components

Land Use Category	2019 LRDP EIR with 300-Bed Hospital	2024 Land Use Changes with 500-Bed Hospital
New Land Uses to Be Constructed		
Outpatient Pavilion	272,000 sf	—
Outpatient Pavilion Annex	25,000 sf	—
Outpatient	20,000 sf	381,000 sf
Multi-Use Building (Office)	136,000 sf	—
Multi-Use Building (Research)	160,000 sf	—
Wellness Center	40,000 sf	38,000 sf
Residential	1,000 Units	1,000 Units
Hospital	300 Beds	500 Beds
Science Research	34,000 sf	55,000 sf

Table 1
Comparison of 2019 Long Range Development Plan Environmental Impact Report Buildout with 2024 Feasibility Study Components

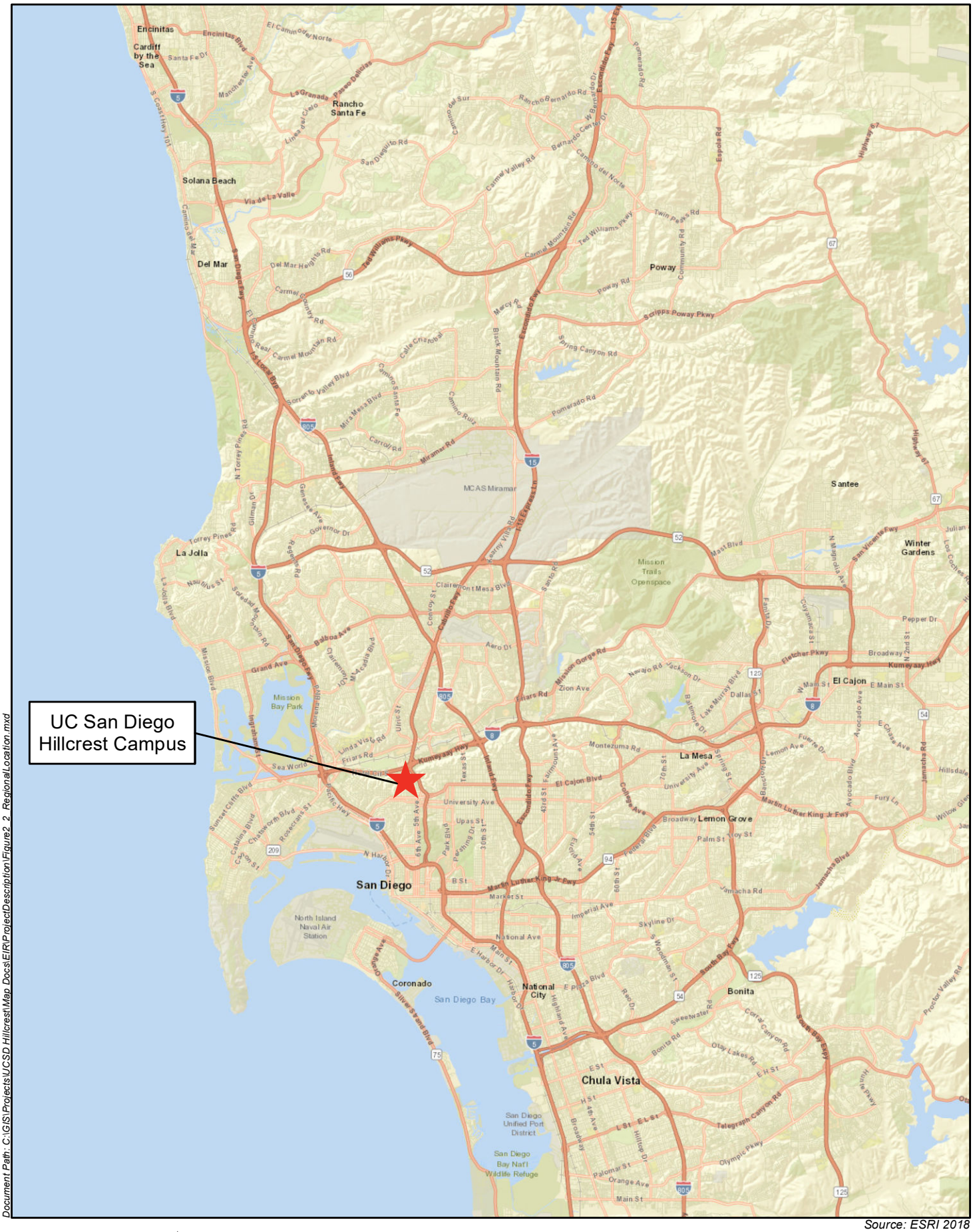
Land Use Category	2019 LRDP EIR with 300-Bed Hospital	2024 Land Use Changes with 500-Bed Hospital
Campus Retail	4,000 sf	4,000 sf
Office and Support	—	151,200 sf
Existing Land Uses to Be Demolished		
Commercial Office	130,550 sf	130,550 sf
Science Research	20,800 sf	20,800 sf
Medical Office	69,350 sf	69,350 sf
Residential	21 Units	21 Units
Commercial Office	49,100 sf	11,100 sf
Science Research	168,900 sf	168,900 sf
Hospital	370 Beds	370 Beds
Commercial Office	37,100 sf	37,100 sf
Medical Office	131,100 sf	131,100 sf

Notes: EIR= Environmental Impact Report; LRDP = Long Range Development Plan; sf = square feet

Since the 2019 LRDP EIR was certified, additional land use changes have occurred, as shown in Table 1. However, the overall development square footage has decreased from what was originally assumed in the 2019 LRDP due to commercial office land uses no longer being demolished and some land uses no longer being considered for development (Outpatient Pavilion, Outpatient Pavilion Annex, Multi-Use Building [office and research]). Because the overall development square footage is less, the subsequent land use changes are covered within the development footprint of 2019 LRDP EIR, and no further analysis is provided in this Feasibility Study.

The intent of this Feasibility Study is to identify the number of additional hospital beds above 300 that could be constructed without resulting in greater impacts than those identified in the 2019 LRDP EIR. The maximum number of beds under consideration is 500 beds.

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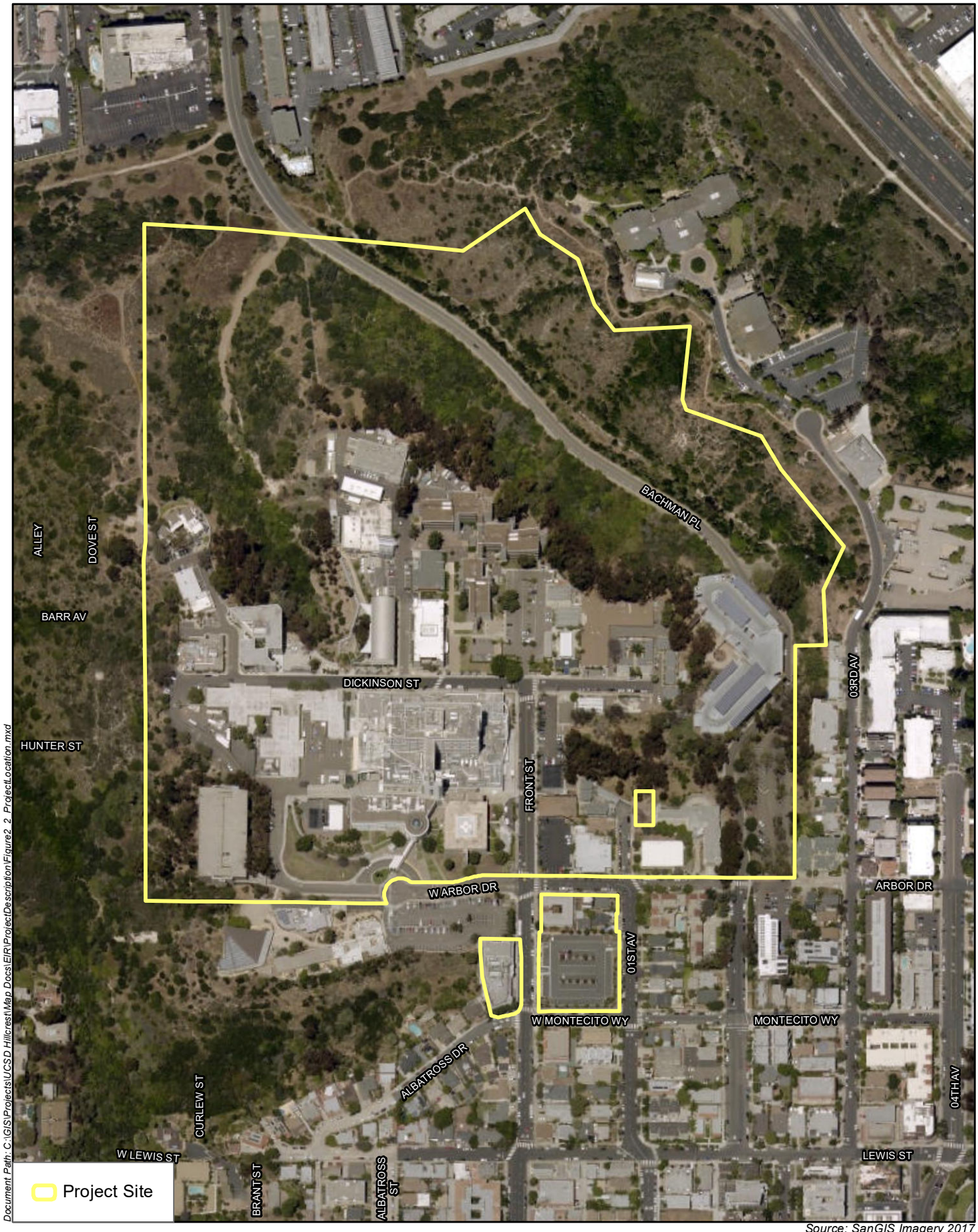


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Source: ESRI 2018

Figure 1
Regional Location Map

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Source: SanGIS Imagery 2017

0 160 320
Feet

N

Figure 2
Project Location

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3 CONSISTENCY WITH 2019 LRDP EIR

The evaluation contained in this consistency review was conducted in accordance with Section 21094 of the California Public Resources Code. Pursuant to Sections 15162, 15164, and 15168 of the CEQA Guidelines, this Feasibility Study documents that the project's effects have been adequately addressed in a prior (or earlier) programmatic analysis. The 2019 LRDP EIR is a Program EIR that comprehensively addressed the potential environmental effects of campus growth and development due to implementation of future projects and activities proposed under the 2019 LRDP EIR. This Feasibility Study explores the potential for the project to result in impacts greater than those identified in the 2019 LRDP EIR.

3.1 EVALUATION OF PROJECT ENVIRONMENTAL IMPACTS

Environmental Topics Addressed

All environmental resources are evaluated for potential environmental effects in comparison with those identified in the 2019 LRDP EIR, as discussed in Sections 3.1.1 through 3.1.17 of this Feasibility Study. Agriculture and Forestry and Mineral Resources are discussed in Section 4.1 of the 2019 LRDP EIR under Effects Not Found to be Significant. As noted in those discussions, no potential for significant impacts to those topics would occur due to the lack of such resources on the UC San Diego Hillcrest Campus. As such, those topics are not discussed in this Feasibility Study.

3.1.1 Aesthetics

Section 3.1 of the 2019 LRDP EIR evaluates potential impacts as a result of implementing the proposed 2019 LRDP at the Hillcrest Campus. The 2019 LRDP EIR concluded that implementation of the 2019 LRDP would result in less than significant impacts to scenic vistas and lighting and glare (Sections 3.1.3.1 and 3.1.3.3) and no impact to scenic resources (Section 3.1.5). Implementation of the 2019 LRDP could result in a potentially significant impact to community character (Section 3.1.5). Mitigation Measure AES-2A (design review) required any proposed structure or phase that would have the potential to substantially degrade community character to undergo design review by the UC San Diego Design Review Board to ensure that the design is consistent with the visual landscape and/or the character of the surrounding development. Mitigation Measure AES-2B (building design) required proposed structures located along the southern and eastern Hillcrest Campus Boundaries to be reviewed by the UC San Diego Design Review Board, Campus Architect, and other relevant campus committees at the conceptual design stage to ensure structures are designed to incorporate pedestrian-scale features along facades facing the

public realm. Implementation of Mitigation Measures AES-2A and AES-2B would reduce impacts to less than significant.

UC San Diego is considering the addition of up to 200 additional hospital beds, for a total of up to 500 beds. The expanded hospital would be located on the same site that was assumed in the 2019 LRDP. The 2019 LRDP stated that the Replacement Hospital would be up to 200 feet tall and no taller than the height of the existing hospital. The expanded hospital building, including an additional 200 beds, would be limited to 200 feet. Views from the key vantage points would be similar to those analyzed in the 2019 LRDP EIR due to the similar building height and mass. Impacts related to scenic vistas would be less than significant, consistent with the conclusions of the 2019 LRDP EIR. However, the addition of up to 200 additional hospital beds could have the potential to degrade community character due to development of new higher density on-campus structures within proximity to existing lower density off-campus development along the southern and eastern Hillcrest Campus Boundaries. Implementation of Mitigation Measures AES-2A and AES-2B would reduce these impacts to less than significant.

Therefore, the campus could feasibly increase the maximum count to 500 hospital beds without resulting in a new aesthetics impact.

3.1.2 Air Quality

Section 3.2 of the 2019 LRDP EIR evaluates the air quality effects from the implementation of the 2019 LRDP for the Hillcrest Campus. The 2019 LRDP EIR concluded that implementation of the 2019 LRDP would not conflict with or obstruct implementation of the applicable air quality plan (Section 3.2.3.1). Cumulative construction significant impacts were identified due to the exceedance of the significance thresholds for volatile organic compound emissions during simultaneous construction of Phases 2A and 2B (Section 3.2.3.2). Potentially significant construction-related emissions would cause exposure of sensitive receptors to substantial pollutant concentrations above the San Diego County Air Pollution Control District thresholds (Section 3.2.3.3). Less than significant impacts were identified related to consistency with the Regional Air Quality Strategy and State Implementation Plan and odors (Sections 3.2.3.1 and 3.2.3.4).

Mitigation Measure AIR-2 (architectural coating) and AIR-3 (construction equipment performance standards) are required for projects that would contribute to these impacts. Implementation of Mitigation Measure AIR-2 would reduce cumulative impacts to less than significant. However, the 2019 LRDP EIR acknowledges that the likely effective amount of reduction from implementation of Mitigation Measure AIR-3 could not be quantified and that impacts would remain significant and unavoidable.

UC San Diego is considering the addition of up to 200 additional hospital beds, for a total of up to 500 beds. The expanded hospital would be located on the same site that was assumed in the 2019 LRDP. The maximum number of daily construction vehicle trips was

assumed for hospital construction in the 2019 LRDP EIR. If additional excavation is required for the expanded hospital, the duration of construction (number of days) would be extended rather than increasing the operations per day (number of truck trips). Therefore, maximum daily construction operations under the expanded hospital project would be similar to those identified in the 2019 LRDP EIR. Additionally, no increase in odors would occur from additional hospital beds.

Campus buildout was modeled using California Emissions Estimator Model (CalEEMod), Version 20.4.0, based on the land use mix modifications shown in Table 1 and assuming a maximum 500-bed hospital. Traffic information (LLG 2019) from the 2019 LRDP was increased proportionally to represent the increase in beds. Maximum daily buildout operational air emissions from the proposed hospital expansion, considering the amendments to the 2019 LRDP that have occurred since EIR certification, compared to existing conditions are presented in Table 2, Buildout Operational Daily Maximum Air Pollutant Emissions (500 Beds). Model outputs are provided in Appendix A, Air Quality Impacts Memorandum.

Table 2
Buildout Operational Daily Maximum Air Pollutant Emissions (500 Beds)

Emissions Source	Maximum Daily Emissions (pounds/day)					
	VOC	**NO_x**	**CO**	**SO_2**	**PM_{10}**	**$PM_{2.5}$**
CUP Operation	6	160	96	1	9	9
Landscape	3	1	83	<1	<1	<1
Consumer Products	43	0	0	0	0	0
Architectural Coatings	15	0	0	0	0	0
Vehicular Sources	91	88	861	2	243	65
Total Future Operational Emissions (2024 Feasibility Study w/500-Bed Hospital)	158	249	1,040	3	252	74
Total Future Operational Emissions (2019 LRDP EIR w/300-Bed Hospital)	133	381	642	3	214	64
Total Existing	**167**	**363**	**1,001**	**3**	**189**	**61**
Net Change in Emissions (2024 Feasibility Study)	**(−9)**	**(−114)**	**39**	**0**	**63**	**13**
Net Change in Emissions (2019 LRDP EIR)	**(−34)**	**18**	**(−359)**	**0**	**25**	**3**
Significance Threshold	137	250	550	250	100	55
Significant Impact? (2024 Feasibility Study and 2019 LRDP EIR)	*No*	*No*	*No*	*No*	*No*	*No*

Notes: CO = carbon monoxide; CUP = Central Utility Plant; EIR = Environmental Impact Report; LRDP = Long Range Development Plan; NO_x = oxides of nitrogen; PM_{10} = particulate matter measuring no more than 10 microns in diameter; $PM_{2.5}$ = particulate matter measuring no more than 2.5 microns in diameter; SO_2 = sulfur dioxide; VOC = volatile organic compounds

As shown in Table 2, increasing the hospital size to 500 beds would not cause campus buildout to exceed the City of San Diego's significance thresholds for any pollutant.

In addition, it is anticipated that the increase in building size to accommodate additional hospital beds may require new generators or an increase in utility plant operations that would have the potential to result in toxic air contaminant (TAC) emissions. However, health risks from a combination of all sources of TACs at campus buildout would be less than half the significance threshold for cancer or non-cancer risks. Even a doubling of generator operations and associated health risk at the hospital, which represents only a portion of total campus TAC emissions, would not cause the calculated campus health risk to exceed 10.0 in a million for cancer risk or a health hazard index of 1.0 for non-cancer risk. Therefore, a 500-bed hospital is not anticipated to result in a new significant impact related to health risk from TACs during operation.

Potentially significant cancer risks were identified for construction under the 2019 LRDP. This impact was identified as significant and unavoidable in the 2019 LRDP EIR and would continue to be significant and unavoidable with a 500-bed hospital. Construction of the new hospital and demolition of the existing hospital were modeled together and calculated to result in an average of 0.034 tons per year of diesel particulate matter, which accounts for approximately 28 percent of the total 0.121 average tons per year from all construction phases. The hospital expansion would result in an incremental increase in these emissions and may incrementally increase potential cancer health risk. Similar to the 2019 LRDP EIR, Mitigation Measure AIR-3 would be required to reduce impacts; however, impacts would be significant and unavoidable even after mitigation. Therefore, the proposed hospital expansion of up to 500 hospital beds would not result in a new impact compared to the 2019 LRDP EIR.

Similar to project operation, the highest non-cancer risk from its construction is a health hazard index of 0.02, which is less than half of the 1.0 health hazard index significance threshold. The incremental increase in construction from the hospital expansion would not cause this threshold to be exceeded. Similarly, construction of a 500-bed hospital would involve construction activities that may emit odors that include exhaust from diesel construction equipment. However, because of the temporary nature of these emissions and the highly diffusive properties of diesel exhaust, odors from construction equipment would not result in a new significant impact.

Therefore, the campus could feasibly increase the maximum count to 500 hospital beds without resulting in a new air quality impact.

3.1.3 Biological Resources

Section 3.3 of the 2019 LRDP EIR evaluates the potential for biological resources impacts associated with implementation of the 2019 LRDP for the Hillcrest Campus and concludes that implementation would result in potentially significant impacts to sensitive plant species (Section 3.3.3.1), sensitive animal species (Section 3.3.3.2), sensitive upland habitats and riparian habitats (Section 3.3.3.3), and federally protected wetlands (Section 3.3.3.4).

No potential for significant impacts to wildlife corridors or linkages and conflicts with local policies or ordinances, including any adopted habitat conservation plans, were identified (Section 3.3.5).

For impacts to sensitive plants, the site would be surveyed for sensitive plants in accordance with Mitigation Measure BIO-1A and, if applicable, San Diego barrel cactus (*Ferocactus viridescens*) would be relocated in accordance with Mitigation Measure BIO-1B, San Diego goldenstar (*Bloomeria clevelandii*) would be relocated in accordance with Mitigation Measure BIO-1C, and seeding of wart-stemmed ceanothus (*Ceanothus verrucosus*) in accordance with Mitigation Measure BIO-1D would be undertaken. For impacts to sensitive animal species, surveys for the species and agency consultation are required by Mitigation Measures BIO-2A and BIO-2B, and raptor and bird nest surveys and avoidance measures are required by Mitigation Measures BIO-2C and BIO-2D. Mitigation Measures BIO-3A and BIO-3E require vegetation survey and jurisdictional delineation, while compensatory mitigation is required by Mitigation Measures BIO 3C and BIO-3D. General construction impacts are addressed through the implementation of Mitigation Measures BIO-3F through BIO-3J, and indirect operational impacts require compliance with Mitigation Measures BIO-K through BIO-3O. Implementation of these measures would reduce impacts to less than significant.

UC San Diego is considering the addition of up to 200 hospital beds, for a total of up to 500 beds. The expanded hospital would be located on the same site that was assumed in the 2019 LRDP and would not expand the development footprint of the 2019 LRDP. Consistent with the 2019 LRDP EIR, construction activities for the expansion of the hospital up to 500 beds would include grading and vegetation removal that could result in permanent and temporary impacts to non-sensitive eucalyptus woodland and sensitive Diegan coastal sage scrub that may support coastal California gnatcatcher (*Polioptila californica californica*) and Cooper's hawk (*Accipiter cooperii*). To minimize potential impacts to California gnatcatcher to less than significant, Mitigation Measures BIO-2A, BIO-2B, BIO-2C, and BIO-2D would be required to reduce impacts to California gnatcatchers and nesting raptors and birds. In addition, construction would be required to comply with Mitigation Measures BIO-3F, BIO-3G, BIO-3H, BIO-3I, BIO-3K, and BIO-3L, as well as any required regulatory measures to control dust and protect water quality, consistent with the 2019 LRDP EIR.

Therefore, the campus could feasibly increase the hospital to 500 beds without resulting in a new biological resources impact.

3.1.4 Cultural and Tribal Cultural Resources

Section 3.4 of the 2019 LRDP EIR evaluates the potential for impacts to archaeological and historical resources, including tribal cultural resources (TCRs), from the implementation of the 2019 LRDP. The 2019 LRDP EIR concludes that implementation would result in potentially significant impacts due to potential alterations of historical (built environment)

resources that would cause a substantial adverse change in their significance (Section 3.4.3.1); disturbance of unknown or known archaeological resources during construction (Section 3.4.3.2); disturbance of human remains and of potential human remains in unrecorded subsurface sites (Section 3.4.3.3); and disturbance of TCRs (Section 3.4.3.4).

For impacts to historical resources, Mitigation Measure CUL-1 requires the preparation of a Historic American Building Survey Level 1 documentation prior to the demolition of the single-family residence located at 102 Dickinson Street. The building was incorrectly identified at 101 Dickinson Street in the 2019 LRDP EIR. Demolition of this historical resource would be a significant and unavoidable impact associated with the implementation of the 2019 LRDP. Demolition of this resource and implementation of Mitigation Measure CUL-1 were accomplished under a separate CEQA document in the summer of 2020.

Mitigation Measure CUL-2A would require the review of project-specific grading plans to determine whether prior grading activity had removed the top 2 feet of native soils. If 2 feet or more of native soils had been removed, then no further cultural resource mitigation would be required. If native soils are present, then a qualified Archaeologist shall monitor grading activities. The construction monitoring procedures that may be required by Mitigation Measure CUL-2A are described in Mitigation Measure CUL-2B. The identification of human remains during construction activities would be addressed through implementation of Mitigation Measure CUL-2B along with their treatment in accordance with the California Public Resources Code and California Health and Safety Code. In addition, the identification of TCRs during construction activities would occur through implementation of Mitigation Measure CUL-2A, and treatments are specified under Mitigation Measure CUL-2B. Implementation of these measures would reduce future project-level impacts to archaeological resources, including human remains and TCRs, to less than significant.

UC San Diego is considering the addition of up to 200 hospital beds, for a total of up to 500 beds. The expanded hospital would be located on the same site that was assumed in the 2019 LRDP and would not expand the development footprint of the 2019 LRDP. Consistent with the 2019 LRDP, the project would involve construction activities that could disturb native terrain, including excavation, grading, and soil removal, which could result in impacts to known or unknown archaeological resources, human remains, and TCRs. Implementation of Mitigation Measures CUL-2A and CUL-2B would reduce impacts to less than significant. Therefore, the campus could feasibly increase to the maximum count to 500 hospital beds without resulting in a new cultural and TCRs impact.

3.1.5 Energy

Section 3.5 of the 2019 LRDP EIR evaluates the potential for impacts to energy, from the implementation of the 2019 LRDP. The EIR concludes that a significant impact would occur

related to the use of diesel and gasoline fuel during construction (Section 3.5.3.1). In addition, the 2019 LRDP EIR indicated that the 2019 LRDP would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency (Section 3.5.3.2). Mitigation Measure ENE-1 requires construction practices that encourage efficient use of fuel beyond typical demand. Implementation of Mitigation Measure ENE-1 would reduce impacts to less than significant.

UC San Diego is considering the addition of up to 200 hospital beds, for a total of up to 500 beds. The expanded hospital would be located on the same site that was assumed in the 2019 LRDP. Similar to the 2019 LRDP, during construction, the project would result in an increase in energy consumption through the combustion of fossil fuels in construction vehicles, worker commute vehicles, and construction equipment, and the use of electricity for temporary buildings, lighting, and other sources. Implementation of Mitigation Measure ENE-1 would be required to reduce fossil fuel use during construction beyond typical demand through the use of the most fuel-efficient construction equipment and models, the encouragement of workers to carpool or use public transit to access the campus during construction, and the use of larger capacity trucks to reduce total truck trips.

The project would also consume energy for building heating and cooling, refrigeration, lighting, electricity, commercial equipment, and vehicle trips. The increase from 300 beds to 500 beds would result in additional student, visitor, and faculty vehicle trips and fleet vehicle trips associated with the project compared to the 2019 LRDP. However, similar to the 2019 LRDP, the hospital expansion would comply with the energy conservation strategies expressed in the UC Sustainable Practices Policy. The project would use electricity purchased from the UC Energy Services Unit Direct Access Program (100 percent renewable). Furthermore, since the 2019 LRDP EIR analysis was prepared, the vehicular fleet has become more efficient as older passenger and light-duty vehicles have been retired and replaced with modern, more fuel-efficient fossil fuel-powered vehicles and electric vehicles.

Therefore, the campus could feasibly increase the maximum count to 500 hospital beds without resulting in a new energy impact.

3.1.6 Geology and Soils

Section 3.6 of the 2019 LRDP EIR evaluates the potential for impacts to geology and soils from the implementation of the 2019 LRDP for the Hillcrest Campus. The EIR concludes that compliance with applicable regulations for future development projects would result in less than significant impacts related to exposure to seismic-related hazards (Section 3.6.3.1), soil erosion and topsoil loss associated with ground disturbance (Section 3.6.3.2), unstable geologic or soil conditions (Section 3.6.3.3), and expansive soils (Section 3.6.3.4). Implementation of the 2019 LRDP would result in potentially significant impacts due to the disturbance of geological formations containing paleontological (fossil) resources (Section

3.6.3.5). In addition, the analysis determined that there is no potential for a significant geology or soils impact related to use of septic tanks or alternative wastewater disposal systems (Section 3.6.5).

Mitigation Measure GEO-5 would require paleontological monitoring during construction and would mitigate any direct or indirect impacts to paleontological resources to less than significant.

UC San Diego is considering the addition of up to 200 hospital beds, for a total of up to 500 beds. The expanded hospital would be located on the same site that was assumed in the 2019 LRDP and would not expand the development footprint of the 2019 LRDP. Therefore, the project would not be subject to surface fault rupture but could be subject to strong seismic ground shaking, similar to the 2019 LRDP. In addition, the materials on site are typically considered to be stable and are not expected to fail, and the potential for slope failure is low. In addition, the potential for seismic-related liquefaction is considered very low on campus due to the types of soil and depths to groundwater. Loose or compressible soil may be found within the Hillcrest Campus.

Consistent with the 2019 LRDP, the project would comply with appropriate measures consistent with San Diego County Air Pollution Control District regulations and the UC San Diego Design Guidelines, which would provide adequate protection against soil erosion during and after site construction. In addition, the proposed project would comply with both the UC Seismic Safety Policy and the California Building Code, which would reduce hazards to less than significant with regard to seismic-related hazards such as fault rupture, strong seismic ground shaking, seismic-related ground failure, liquefaction, and landslides.

Since the expanded hospital would be located on the same site and footprint assumed in the 2019 LRDP, excavation and grading activities are anticipated in the Mission Valley Formation and Linda Vista Terrance Formation, which could result in the disturbance of fossil resources in highly sensitive geologic formations. Implementation of Mitigation Measure GEO-5 would reduce impacts to less than significant, consistent with the 2019 LRDP EIR.

Therefore, the campus could feasibly increase the maximum count to 500 hospital beds without resulting in a new geology and soils impact.

3.1.7 Greenhouse Gas Emissions

Section 3.7 of the 2019 LRDP EIR assesses the greenhouse gas (GHG) emissions that would be generated under implementation of the 2019 LRDP for the Hillcrest Campus. The EIR concluded that implementation of the 2019 LRDP would not generate GHG emissions that would have a significant impact on the environment (Section 3.7.3.1) and would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions (Section 3.7.3.2). No mitigation measures were required for GHG emissions for the 2019 LRDP.

GHG emissions from operation of campus buildout, assuming the maximum of 500 hospital beds and other land use changes since 2019 LRDP EIR certification, were estimated using CalEEMod Version 2020.4.0. Consistent with the 2019 LRDP assumptions, CalEEMod default assumptions were used to estimate water, solid waste, and area source emissions. Vehicle miles traveled, energy use, and construction emissions were adjusted proportionally to the increase in hospital beds. An increase from 300 to 500 hospital beds represents an approximately 67 percent increase in beds. As such, an increase of 67 percent in vehicle miles traveled, energy use emissions attributable to the hospital, and Phase 3 construction emissions were added to total buildout emissions. Consistent with the 2019 LRDP EIR, mobile emissions were calculated using CalEEMod. The hospital's proportion of energy use emissions was calculated based on 2019 LRDP EIR data, and construction emissions were obtained from the GHG Reduction Strategy. This estimate is conservative because a 67 percent increase in beds would not necessarily increase hospital operations or construction requirements by the same amount. Future modeling with project-specific energy or construction estimates would be expected to be reduced compared to these calculations. Conservative total long-term annual operational GHG emissions from the project are provided in Table 3, Long-Term Annual Operational Greenhouse Gas Emissions – 2024 Feasibility Study.

Table 3
Long-Term Annual Operational Greenhouse Gas Emissions – 2024 Feasibility Study

Sector	Emissions without GHG Reduction Strategy (MT CO_2e)	Percent Reduction Achieved from GHG Reduction Strategy	Emissions with GHG Reduction Strategy Implementation (MT CO_2e)
Energy	38,463	39.8	23,155
Mobile	24,897	13.0	21,660
Waste	3,223	90.0	322
Water	292	36.0	187
Area Sources	1,527	99.4	9
Amortized Construction	1,742	—	1,742
Total Buildout Emissions	**70,144**	—	**47,075**
Total Net Change from 2019 LRDP	**+12,030**	—	—
Reduction Target/Threshold	—	—	**47,486**

Source: Appendix B.
Notes: GHG = greenhouse gas; LRDP = Long Range Development Plan; MT CO_2e = metric tons of carbon dioxide equivalent
Amortization period for construction is 30 years.
Numbers in table may not appear to add up correctly due to rounding of all numbers to two decimal places.
Assumes no greenhouse gas reduction measures implemented.

As shown in Table 3, estimated GHG emissions under the worst-case buildout are approximately 12,030 metric tons of carbon dioxide equivalent (MT CO_2e) greater than estimated for the 2019 LRDP. Similar to the 2019 LRDP EIR, the GHG Reduction Strategy would continue to be implemented, and similar emissions reductions would be achieved in each sector because land uses and operation would be similar under the two projects. As shown in Table 3, assuming the same GHG Reduction Strategy proportions as in the 2019 LRDP, worst-case buildout with 500 hospital beds and the cogeneration facility would be below the reduction target. The project would result in increased GHG emissions compared to the 2019 LRDP EIR project but is not anticipated to result in a new significant impact.

Therefore, the campus could feasibly increase the maximum count to 500 hospital beds without resulting in a new GHG emissions impact.

3.1.8 Hazards and Hazardous Materials

Section 3.8 of the 2019 LRDP EIR evaluates the potential for impacts to hazards and hazardous materials from the implementation of the 2019 LRDP for the Hillcrest Campus. The 2019 LRDP EIR concluded that implementation of the 2019 LRDP would not result in a potentially significant impact related to the transport, use, and disposal of hazardous materials (Section 3.8.3.1) or pose a health risk to occupants of nearby schools (Section 3.8.3.3). The potential for significant hazards related accidental release of hazardous materials could occur as part of demolition activities and contaminated soil and groundwater (Section 3.8.3.2). Aircraft operations and activities would not pose significant safety hazards (Section 3.8.3.4). Construction-related road closures or detours on the campus could impair or intervene with emergency response and result in potentially significant impacts (Section 3.8.3.5). The 2019 LRDP would have less than significant wildland fires through implementation of fire protection measures, fuel management guidelines, and compliance with associated regulations (Section 3.8.3.6). The 2019 LRDP would not result in activities located on a listed hazardous materials site compiled pursuant to Government Code, Section 65962.5 (Section 3.8.5).

Mitigation Measure HAZ-2A requires the review and remediation of buildings prior to their demolition. Mitigation Measure HAZ-2B requires the assessment and remediation of known contaminated sites. Mitigation Measures HAZ-2C and HAZ-2D require construction activities to be halted and remedial or treatment activities implemented if unknown contamination is encountered. Implementation of Mitigation Measure HAZ-2A would reduce the potential for the accidental release of hazardous materials associated with demolition activities to less than significant, and Mitigation Measures HAZ-2B through HAZ-2D would reduce potential construction-related impacts from the release of hazardous substances from soil and groundwater during construction activities to less than significant. Mitigation Measure HAZ-5 would require the Hillcrest Campus Fire Marshal and the campus community to be notified of any required road closures to reduce emergency access/response impacts to less than significant.

UC San Diego is considering the addition of up to 200 hospital beds, for a total of up to 500 beds. The expanded hospital would be located on the same site that was assumed in the 2019 LRDP and would not expand the development footprint of the 2019 LRDP. The expanded hospital would continue to result in transport, use, and disposal of hazardous materials that could pose a hazard to the public and environment. Adherence to existing regulations and compliance with campus safety standards mandated by applicable federal, state, University, and local laws and regulations would minimize the risks.

In addition, since the expanded hospital would be constructed on the same site that was assumed in the 2019 LRDP, it would be built on portions of the delineated contaminated area associated with the 1991 spill and leaking underground storage tanks as identified in the 2019 LRDP. Mitigation Measures HAZ-2B through HAZ-2D would be required to reduce potential construction-related impacts from the release of hazardous substances to soil and groundwater during construction activities.

The Hillcrest Campus is located within the designated Airport Influence Area of the San Diego International Airport (San Diego Regional Airport Authority 2014), which requires specific protection measures for noise, overflight, safety, and/or airspace protection. The Hillcrest Campus is also located in the San Diego International Airport Airspace Protection Boundary (San Diego Regional Airport Authority 2014). This boundary ensures that new development will not impact flight safety by limiting the height of new structures and objects, preserving the operational capability of San Diego International Airport, and preventing further reduction of available runway landing distance. The maximum building height for the expanded hospital cannot exceed 200 feet in order to ensure it does not surpass the obstruction standards of Part 77 for objects in navigable airspace, as determined by the Federal Aviation Administration. If the expansion of up to 500 beds were to exceed 200 feet in height, it would trigger a new significant impact related to hazards from nearby airports.

Therefore, impacts related to hazards and hazardous materials from construction and operation of up to 500 beds would be similar to those identified in the 2019 LRDP EIR, with the exception of airport hazards. The extension of the proposed Replacement Hospital above 200 feet in height would require additional CEQA analysis. In accordance with Sections 15162 and 15163 of the CEQA Guidelines, a Subsequent or Supplemental EIR is required when a project will have one or more significant effects not discussed in the previous EIR.

3.1.9 Hydrology and Water Quality

Section 3.9 of the 2019 LRDP EIR evaluates the potential for impacts to hydrology and water quality from the implementation of the 2019 LRDP for the Hillcrest Campus. The 2019 LRDP EIR concluded that implementation of the 2019 LRDP would result in less than significant impacts related to the potential water quality effects due to generation of pollutants or project compliance with applicable policies and regulations, alteration of site drainage and hydrology, and conflict or obstruction of the implementation of a water

quality control plan or sustainable groundwater management plan (Sections 3.9.3.1, 3.9.3.2, and 3.9.3.3). No potential for tsunamis or seiches exists on the Hillcrest Campus, and no potential exists for significant impacts related to the depletion of groundwater supplies and flooding (Section 3.9.5).

No mitigation is required for hydrology and water quality impacts as described in the 2019 LRDP EIR.

UC San Diego is considering the addition of up to 200 hospital beds, for a total of up to 500 beds. The expanded hospital would be located on the same site that was assumed in the 2019 LRDP and would not expand the development footprint of the 2019 LRDP. Consistent with the 2019 LRDP EIR, construction activities associated with the hospital expansion could result in an increase in potential discharge of pollutants to receiving waters. However, adherence with UC San Diego guidelines and policies, including the Storm Water Management Program and other regulatory requirements related to storm water runoff, would minimize the potential for pollutants to enter receiving waters during construction. Furthermore, consistent with the 2019 LRDP, construction activities associated with the hospital expansion could result in localized alteration of drainage patterns and temporarily increase erosion and sedimentation in the construction area and would be required to comply with UC San Diego Design Guidelines, Storm Water Management Requirements for Construction Projects, and the National Pollution Discharge Elimination System Construction General Permit requirements to minimize any short-term impacts resulting from alterations of drainage and hydrology during construction.

Therefore, the campus could feasibly increase the maximum count to 500 hospital beds without resulting in a new hydrology and water quality impact.

3.1.10 Land Use and Planning

Section 3.10 in the 2019 LRDP EIR evaluates the potential for impacts to land use and planning from the implementation of the 2019 LRDP for the Hillcrest Campus. It concluded that implementation of the 2019 LRDP would not result in inconsistencies with applicable land use plans, policies, and regulation (Section 3.10.3.1). In addition, there is no potential for significant impacts related to physically dividing an established community (Section 3.10.5). No mitigation is required for land use and planning impacts as described in the 2019 LRDP EIR.

UC San Diego is considering the addition of up to 200 hospital beds, for a total of up to 500 beds. The expanded hospital would be located on the same site that was assumed in the 2019 LRDP. The project does not involve any development outside the Hillcrest Campus Boundary. In addition, the expanded hospital would not conflict with the applicable land use plan, the campus' 2019 LRDP. Therefore, since the expanded hospital would be located on the same site that was assumed in the 2019 LRDP, the expansion of up to 500 beds would not result in new significant impacts related to land use.

3.1.11 Noise

Section 3.11 of the 2019 LRDP EIR evaluates the potential for impacts from noise associated with the implementation of the 2019 LRDP for the Hillcrest Campus. It concluded that implementation of the 2019 LRDP would result in a significant temporary impact from construction equipment noise, excessive noise levels, and exposure of sensitive interior uses to stationary noise sources (Section 3.11.3.1). Implementation of the 2019 LRDP would also result in temporary significant groundborne vibration impacts from construction activities (Section 3.11.3.2). Impacts related to aircraft noise would be less than significant (Section 3.11.3.3).

Mitigation Measure NOI-1A requires construction noise reduction measures to be implemented by the construction contractor. Due to uncertainties related to future construction activities, construction noise impacts would remain significant and unavoidable. Mitigation Measure NOI-1B requires mechanical equipment noise shielding, while Mitigation Measure NOI-1C requires special event noise measures. Mitigation Measure NOI-1C requires site-specific acoustical analysis for future development projects. Implementation of Mitigation Measures NOI-1B, NOI-1C, and NOI-1D would reduce impacts related to stationary noise sources, special event noise, and interior noise exposure to less than significant.

Mitigation Measure NOI-2A requires construction notification, while NOI-2B requires the preparation of construction vibration mitigation program for future development projects. Due to uncertainties related to future 2019 LRDP construction activities, it cannot be demonstrated that future ground construction activities would be reduced to vibration levels that would not exceed the applicable thresholds at on- or off-campus receptors. Therefore, impacts would remain significant and unavoidable.

UC San Diego is considering the addition of up to 200 hospital beds, for a total of up to 500 beds. The expanded hospital would be located on the same site that was assumed in the 2019 LRDP. Maximum daily construction operations under the expanded hospital project would be similar to those identified in the 2019 LRDP EIR and would result in a significant impact to on-campus receptors during normal construction activities. Impacts would be reduced with the implementation of Mitigation Measure NOI-1A. In addition, it is assumed that operation of the expanded hospital would be similar to the 300-bed hospital evaluated in the 2019 LRDP EIR. Similar to existing and proposed 2019 LRDP conditions, internal hospital operations would not be a substantial noise source.

The expanded hospital could result in additional buildout vehicle trips compared to the 2019 LRDP EIR buildout. Traffic noise levels were calculated assuming a 500-bed hospital and amendments to 2019 LRDP land use mix since EIR certification. Traffic volumes were provided by Linscott, Law & Greenspan, Engineers (Appendix C, Transportation Analysis). As shown in Table 4, Buildout Year 2035 Traffic Noise Levels, with the exception of First Avenue from University Avenue to Robinson Avenue, the increase in noise level would not cause a segment to exceed 65 A-weighted decibel (dBA) Community Noise Equivalent Level

(CNEL) or result in a more than 3 dBA increase compared to conditions without the project. The additional vehicle trips on First Avenue from University Avenue to Robinson Avenue would cause the segment to exceed 65 dBA CNEL and result in a new significant impact that was not identified in the 2019 LRDP.

Table 4
Buildout Year 2035 Traffic Noise Levels

Roadway	Segment	Year 2035 (dBA CNEL)	Year 2035 + 2019 LRDP Project (dBA CNEL)	Year 2035 + 2024 Feasibility Study (dBA CNEL)	2024 Significant Impact?
Hotel Circle South	Interstate 8 Eastbound Ramps to Bachman Place	68	68	68	No
	East of Bachman Place	69	69	69	No
Bachman Place	Hotel Circle to North Access Driveway (future)	69	69	69	No
	North Access Driveway (future) to Arbor Drive	68	69	69	No
Washington Street	India Street to University Avenue	76	76	76	No
	University Avenue to First Avenue	70	70	70	No
	First Avenue to Fourth Avenue	70	70	71	No
	Fourth Avenue to Fifth Avenue	71	71	72	No
	Fifth Avenue to Sixth Avenue	72	72	72	No
	Sixth Avenue to Richmond Street	72	72	72	No
	Richmond Street to Normal Street	74	74	74	No
Front Street	Arbor Drive to Washington Street	62	63	64	No
First Avenue	Arbor Drive to Washington Street	62	63	64	No
	Washington Street to University Avenue	63	63	63	No
	University Avenue to Robinson Avenue	**65**	**65**	**66**	**Yes**
Fourth Avenue	Washington Street to Robinson Avenue	64	64	64	No
Fifth Avenue	Washington Street to Robinson Avenue	65	65	65	No

Source: Appendix D.
Notes: CNEL = Community Noise Equivalent Level; dBA = A-weighted decibel; LRDP = Long Range Development Plan
Bold indicates a significant impact.
Noise levels are calculated at 50 feet from roadway centerline. 2024 project noise levels are based on traffic data provided by Linscott, Law & Greenspan, Engineers (Appendix C). Existing and 2019 LRDP noise levels were calculated for the 2019 LRDP EIR (UC San Diego 2019b). Traffic levels for each roadway are included in 2019 LRDP EIR Appendix I. Decibel levels are rounded to the nearest whole number.

Because a potential new impact was identified for the buildout of the campus with 500 hospital beds, Harris coordinated with traffic consultant Linscott, Law & Greenspan, Engineers, to determine what traffic volume and associated maximum number of hospital beds could be accommodated before a new significant impact would occur on First Avenue from University Avenue to Robinson Avenue. With 500 hospital beds (an increase of 200 beds) and assuming amendments to the 2019 LRDP since EIR certification, the campus's contribution along this street segment increased to 568 trips. Based on the Federal Highway Administration's modeling equations used to calculate project traffic noise levels, vehicle traffic could increase up to 364 trips on First Avenue from University Avenue to Robinson Avenue under Year 2035 conditions before the projected traffic noise would exceed the impact significance threshold. Assuming the same project trip distribution, this means that the project could result in a net increase of 4,544 total average daily trips before a new significant impact would occur. Linscott, Law & Greenspan, Engineers, determined that the maximum number of hospital beds that could be accommodated from a net increase of 4,544 average daily trips is 340 beds. Therefore, a maximum of 40 additional hospital beds could be added to the hospital, for a total of 340 beds, without triggering a new significant impact compared to the 2019 LRDP EIR.

In addition, it is anticipated that the increase in building size to accommodate additional hospital rooms may require additional heating, ventilation, and air conditioning or other stationary equipment. It is likely that additional mechanical equipment would be necessary to operate a 500-bed hospital compared to a 300-bed hospital. Similar to the 2019 LRDP EIR, new mechanical equipment for a 500-bed hospital could exceed the exterior noise level threshold of 65 dBA CNEL, although specifications for the exact equipment to be installed are not yet available. Noise impacts related to new stationary sources from operation of a 500-bed hospital would be potentially significant. Similar to the 2019 LRDP EIR, implementation of Mitigation Measure NOI-1B would be required to reduce impacts to below a level of significance. Therefore, operation of a 500-bed hospital would not result in greater stationary noise impacts than those identified in the 2019 LRDP EIR.

An increase in hospital size up to 500 beds would not change the helipad relocation, which is proposed in the 2019 LRDP. Expanding the number of hospital beds would increase inpatient capacity but would not necessarily result in a change to emergency services. Additionally, frequency of helicopter landings would continue to be determined by occurrence of emergencies pursuant to the Federal Aviation Administration's and California Department of Transportation's required approvals, which are beyond the control of the campus. An increase in hospital beds up to 500 beds is not anticipated to result in a new significant impact related to this issue.

Therefore, impacts related to noise and vibration from construction and operation of up to 500 beds would be similar to those identified in the 2019 LRDP EIR, with the exception of vehicle traffic noise. The operation of a hospital with more than 340 beds would result in a new significant noise impact to the segment of First Avenue from University Avenue to

Robinson Avenue, and additional CEQA analysis would be required. In accordance with Sections 15162 and 15163 of the CEQA Guidelines, a Subsequent or Supplemental EIR is required when a project will have one or more significant effects not discussed in the previous EIR.

3.1.12 Population and Housing

Section 3.12 of the 2019 LRDP EIR evaluates the potential for impacts to population and housing from the implementation of the 2019 LRDP for the Hillcrest Campus. It concluded that the implementation would have less than significant impacts on the inducement of substantial population growth and substantial displacement of people or housing (Sections 3.12.3.1 and 3.12.3.2). No mitigation is required for population and housing impacts as described in the 2019 LRDP EIR.

UC San Diego is considering the addition of up to 200 additional hospital beds for a total of up to 500 beds. The expanded hospital would be located on the same site that was assumed in the 2019 LRDP and would not expand the development footprint of the 2019 LRDP. The expanded hospital would not add any new on-campus housing units to the Hillcrest Campus. Expanding the number of hospital beds would increase inpatient capacity, which could add to the total non-residential campus population, including medical faculty and staff, identified in the 2019 LRDP. The 2019 LRDP EIR identified the total non-residential campus population increase of approximately 750 people (students, staff, and faculty) to equate to less than 0.01 percent of the projected 2035 regional population. Any increase would be negligent compared to the total projected 2035 regional population identified in the 2019 LRDP. Therefore, the addition of up to 500 beds would not result in new significant impacts related to population and housing.

3.1.13 Public Services

Section 3.13 of the 2019 LRDP EIR evaluates the on-campus population increases under the proposed 2019 LRDP for the Hillcrest Campus and the associated demand for public services, including fire protection, police protection, and schools. It concluded that the implementation of the 2019 LRDP would have less than significant environmental impacts pertaining to additional fire protection facilities (Section 3.13.3.1), police protection facilities (Section 3.13.3.2), and public-school facilities (Section 3.13.3.3). No mitigation measures were identified for public services impacts as described in the 2019 LRDP EIR.

UC San Diego is considering the addition of up to 200 additional hospital beds, for a total of up to 500 beds. The expanded hospital would be located on the same site that was assumed in the 2019 LRDP. As stated in the 2019 LRDP, the majority of the new campus development would replace and upgrade existing facilities on the Hillcrest Campus, including the existing hospital. Consistent with the 2019 LRDP EIR, the expanded hospital would be constructed of ignition-resistant materials and built to current building codes with state-of-the-art fire

suppression infrastructure to lessen fire risk. UC San Diego would continue to implement its campus-wide Emergency Operations Plan and employ fuel management techniques. The Hillcrest Campus Fire Marshal and his staff would also continue to implement campus-wide fire prevention programs. These actions, mandated by state law, would limit the number of incidents requiring the San Diego Fire Department to respond to on-campus calls, further minimizing additional demand for fire protection services. In addition, the expanded hospital would not introduce any on-campus residents and would not impact demand for police services or public-school facilities. Therefore, the addition of up to 500 beds would not result in new significant impacts related to public services.

3.1.14 Recreation

Section 3.14 of the 2019 LRDP EIR addresses whether the implementation of the 2019 LRDP for the Hillcrest Campus would lead to a physical deterioration of existing recreation facilities and whether development of additional recreation facilities would result in an adverse physical effect on the environment. It concluded that implementation of the 2019 LRDP would have a less than significant impact related to the deterioration of parks and recreational facilities (Section 3.14.3.1). Implementation of the 2019 LRDP would have potentially significant impacts associated with the construction of new recreational facilities on the Hillcrest Campus (Section 3.14.3.2). Implementation of mitigation measures identified in other 2019 LRDP EIR sections, including Mitigation Measures AES-2A and AES-2B (Section 3.1, Aesthetics); AIR-2 and AIR-3 (Section 3.2, Air Quality); BIO-1A–1D, BIO-2A–2D, and BIO-3A–3O (Section 3.3, Biological Resources); CUL-1 and CUL-2A and CUL-2B (Section 3.4, Cultural and Tribal Cultural Resources); ENE-1 (Section 3.5, Energy); GEO-5 (Section 3.6, Geology and Soils); HAZ-2A–HAZ-2D and HAZ-5 (Section 3.8, Hazards and Hazardous Materials); NOI-1A–1D, NOI-2A, and NOI-2B (Section 3.11, Noise); and TRA-1A–1C (Section 3.15, Transportation), would reduce impacts to less than significant.

UC San Diego is considering the addition of up to 200 hospital beds, for a total of up to 500 beds. The expanded hospital would be located on the same site that was assumed in the 2019 LRDP and would not expand the development footprint of the 2019 LRDP. The expanded hospital would not introduce any on-campus residents and would, therefore, not lead to the physical deterioration of existing recreation facilities and would not require the development of additional recreational facilities. In addition, the expanded hospital does not involve the construction of recreational facilities. Therefore, the addition of up to 500 beds would not result in new significant impacts related to recreation.

3.1.15 Transportation and Circulation

Section 3.15 of the 2019 LRDP EIR evaluates whether implementation of the proposed 2019 LRDP would result in impacts related to transportation. It concluded that implementation of the 2019 LRDP would result in direct and cumulatively significant impacts due to exceedances of level of service criteria in the Year 2025, Year 2030, and Year 2035 Scenarios

for intersections, street segments, freeway mainline segments, and freeway ramp meters in the area (Section 3.15.3.1). Implementation of the 2019 LRDP would also have a temporary significant impact associated with construction-related road or lane closures (Section 3.15.3.3). Section 3.15 also evaluates whether implementation of the proposed 2019 LRDP would result in substantial additional vehicle miles traveled (VMT) and determines that implementation of the 2019 LRDP would not cause substantial additional VMT to exceed the regional averages for applicable campus land uses and therefore identifies less than significant VMT impacts (Section 3.15.3.2). There is no potential for significant impacts related to safety hazards due to a design feature or incompatible uses (Section 3.15.5).

Buildout of the expanded hospital up to 500 beds, including land use modifications that occurred since the 2019 LRDP certification, was calculated to generate 30,326 average daily trips with 2,300 total AM peak hour trips (1,605 inbound/ 695 outbound) and 3,079 total PM peak hour trips (1,035 inbound/ 2,044 outbound). To determine how the expanded hospital would affect traffic operations within the immediate vicinity of the project site, the expanded hospital average daily trips and peak hour trips were added to the Year 2035 without project traffic volumes from the 2019 LRDP EIR within the following focused study area. The expanded hospital up to 500 beds would continue to result in acceptable level of service D or better operations. Therefore, the expanded hospital up to 500 beds is not expected to cause substantial congestion in the study area.

In addition, the expanded hospital up to 500 beds would be located on the same site that was assumed in the 2019 LRDP. According to the Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity published by the California Air Pollution Control Officers Association, designing a project with increased density affects the trips and distances that people travel. By increasing a project's density (i.e., increasing the jobs per acre), the VMT is expected to *decrease*. Therefore, no VMT impact associated with the expanded hospital would occur. The campus could feasibly increase the maximum count to 500 hospital beds without resulting in new transportation and circulation impacts.

3.1.16 Utilities and Service Systems

Section 3.16 of the 2019 LRDP EIR evaluates the potential impacts on utilities and service systems resulting from implementation of the proposed 2019 LRDP. It concluded that implementation of the 2019 LRDP would have a potentially significant impact associated with the construction of new utilities infrastructure (Section 3.16.3.1) and would result in less than significant impacts with regard to insufficient water supplies (Section 3.16.3.2), wastewater treatment capacity (Section 3.16.3.3), and compliance with solid waste regulations (Section 3.16.3.4). In addition, there is no potential for significant impacts related to generation of solid waste in excess of state or local standards, or the capacity of local infrastructure (Section 3.16.5).

Mitigation measures identified in other 2019 LRDP EIR sections, including Mitigation Measures AES-2A and AES-2B (Section 3.1, Aesthetics); AIR-2 and AIR-3 (Section 3.2, Air Quality); BIO-1A–1D, BIO-2A–2D, and BIO-3A–3O (Section 3.3, Biological Resources); CUL-1, CUL-2A, and CUL-2B (Section 3.4, Cultural and Tribal Cultural Resources); ENE-1 (Section 3.5, Energy); GEO-5 (Section 3.6, Geology and Soils); HAZ-2A–HAZ-2D (Section 3.8, Hazards and Hazardous Materials); NOI-1A–1D and NOI-2A and NOI-2B (Section 3.11, Noise); and TRA-1A–1C (Section 3.15, Transportation), would reduce impacts to less than significant with regard to new water, wastewater, storm water drainage, electric power, natural gas, and telecommunications facilities.

UC San Diego is considering the addition of up to 200 additional hospital beds, for a total of up to 500 beds. The expanded hospital would be located on the same site that was assumed in the 2019 LRDP. New infrastructure improvements would be required, and an increase in water and wastewater demand would occur to accommodate future development under the 2019 LRDP. However, no new water, wastewater, storm water infrastructure facilities or electric power, natural gas, and telecommunications facilities would be required beyond those identified in the 2019 LRDP. Consistent with the 2019 LRDP, the expanded hospital would be required to comply with the UC Sustainable Practices Policy, which establishes goals for green building design, clean energy, sustainable water systems, and waste reduction. Therefore, the campus could feasibly increase the maximum count to 500 hospital beds without resulting in new utilities impacts.

3.1.17 Wildfire

Section 3.17 of the 2019 LRDP EIR evaluates the potential impacts of wildfires that may result from the construction and/or operation of the proposed 2019 LRDP for the Hillcrest Campus. It concluded that implementation of the 2019 LRDP would have a temporary significant impact associated with construction-related road or lane closures (Section 3.17.3.1), while it would have a less than significant impact to wildfire risks in compliance with appropriate state regulations, execution of a fuel management strategy, and appropriate fire protection measures (Section 3.17.3.2), and building or maintaining infrastructure that would not exacerbate fire risks (Section 3.17.3.3). In addition, no significant impact would occur to exposing people or structures to significant risks, including downslope or downstream flooding or landslides due to runoff, post-fire slope instability, or drainage changes (Section 3.17.3.4). Implementation of Mitigation Measure HAZ-5 as described in Section 3.8, which requires notifications in the case of road or lane closures, would reduce impacts to less than significant.

UC San Diego is considering the addition of up to 200 additional hospital beds, for a total of up to 500 beds. The expanded hospital would be located on the same site that was assumed in the 2019 LRDP and would not expand the development footprint of the 2019 LRDP. Consistent with the 2019 LRDP, the expanded hospital would be required to comply with the City's Brush Management Regulations (San Diego Municipal Code, Section 142.0412) for building fuel management and would implement the key fire protection measures. Therefore, the campus could feasibly increase the maximum count to 500 hospital beds without resulting in new wildfire impacts.

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4 SUMMARY

UC San Diego is considering the addition of up to 200 hospital beds for a total of up to 500 bed hospital. It is assumed that the expanded hospital would be located on the same site assumed in the 2019 LRDP and would not expand the development footprint of the 2019 LRDP. Based on the above analysis, operation of a hospital with more than 340 beds would result in a new significant noise impact to the segment of First Avenue from University Avenue to Robinson Avenue, and additional CEQA analysis would be required. The maximum building height for the expanded hospital cannot exceed 200 feet to ensure it does not surpass the obstruction standards of Part 77 for objects in navigable airspace as determined by the Federal Aviation Administration. Assuming the expanded hospital adheres to these constraints, the 2019 LRDP EIR is adequate to address the expanded hospital.

Since the 2019 LRDP EIR was certified, additional land use changes have occurred, as shown in Table 1 (excluding expansion of the hospital). However, the overall development square footage has decreased from what was originally assumed in the 2019 LRDP. Therefore, the subsequent land use changes are covered within the development footprint of the 2019 LRDP EIR.

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5 REFERENCES

The primary sources of information for the project-level Feasibility Study are the 2019 LRDP and its EIR, including all relevant technical studies and references noted in those documents, which are incorporated by reference herein. Additional project-specific information has been added to supplement the information in those primary references.

LLG (Linscott, Law & Greenspan, Engineers). 2019. UC San Diego Hillcrest Campus 2019 Long Range Development Plan – Transportation Impact Analysis. June.

San Diego Regional Airport Authority. 2014. San Diego International Airport, Airport Land Use Compatibility Plan. May 1.

UC San Diego (University of California, San Diego). 2019a. University of California San Diego 2019 Long Range Development Plan, Hillcrest Campus. November.

UC San Diego. 2019b. Environmental Impact Report for the University of California San Diego 2019 Long Range Development Plan, Hillcrest Campus. Final. November.

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Appendix A. Air Quality Impacts Memorandum

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Harris & Associates

MEMORANDUM

To: Lauren Lievers, Principal Environmental Planner, University of California, San Diego
From: Sharon Toland, Project Manager, Harris & Associates
RE: Hillcrest Hospital Expansion Feasibility Study – Air Quality Impacts
Date: January 17, 2024
CC: Diane Sandman, Vice President, Environmental + Planning Consulting, and Kelsey Hawkins, Project Manager, Harris & Associates
Att: 1, Model Outputs

The University of California, San Diego (UC San Diego) Hillcrest Campus 2019 Long Range Development Plan (2019 LRDP) Environmental Impact Report (2019 LRDP EIR) was certified in November 2019 (SCH No. 2018031003). As part of the 2019 LRDP EIR, Harris analyzed a 300-bed replacement hospital in Phase 3 of the project. Currently, UC San Diego is exploring the possibility of expanding the replacement hospital to more than 300 beds and wants to determine the maximum number of beds that could be constructed without triggering a new or increased impact compared to those identified in the 2019 LRDP EIR.

The expanded hospital would be on its current site, and the maximum number of daily construction vehicle trips was assumed for hospital construction in the 2019 LRDP EIR. If additional excavation is required for the expanded hospital, the duration of construction (number of days) would be extended rather than increasing the operations per day (number of truck trips). Therefore, maximum daily construction operations under the expanded hospital project would be similar to those identified in the 2019 LRDP EIR, and criteria pollutant impacts from construction equipment and vehicles are not addressed in this report. Additionally, no increase in odors would occur from additional hospital beds. Therefore, air quality impacts addressed in the 2019 LRDP EIR Issue 1 (Consistency with the Regional Air Quality Strategy), Issue 2 (Cumulative Increase in Criteria Pollutant Emissions – Construction), and Issue 4 (Odors) are anticipated to remain the same and are not evaluated in this report.

The following analysis focuses on the potential for vehicle trips from the expanded hospital, placement of additional generators or utility plant operations (if required), and incremental construction pollutant exposure to result in additional criteria pollutants or toxic air contaminants (TACs) compared to the impacts identified in the 2019 LRDP EIR for Issue 2 (Cumulative Increase in Criteria Pollutant Emissions – Operation) and Issue 3 (Sensitive Receptors).

Project Description

San Diego is considering the addition of up to 200 hospital beds for a total of up to 500 hospital beds. Table 1, Comparison of 2019 LRDP EIR Buildout with 2024 Feasibility Study Components, provides a comparison between the buildout land use mix analyzed in the 2019 LRDP EIR and the land use mix at buildout with a maximum of 500 hospital beds. The table also reflects other modifications to the 2019 LRDP land use plan that have occurred since 2019 LRDP EIR certification.

Table 1. Comparison of 2019 LRDP EIR Buildout with 2024 Feasibility Study Components

Land Use Category	2019 LRDP EIR	2024 Land Use Changes with 500-Bed Hospital
New Land Uses to Be Constructed		
Outpatient Pavilion	272,000 sf	—
Outpatient Pavilion Annex	25,000 sf	—
Outpatient	20,000 sf	381,000 sf
Multi-Use Building (Office)	136,000 sf	—
Multi-Use Building (Research)	160,000 sf	—
Wellness Center	40,000 sf	38,000 sf
Residential	1,000 Units	1,000 Units
Hospital	300 Beds	500 Beds
Science Research	34,000 sf	55,000 sf
Campus Retail	4,000 sf	4,000 sf
Office and Support	—	151,200 sf
Existing Land Uses to Be Demolished		
Commercial Office	130,550 sf	130,550 sf
Science Research	20,800 sf	20,800 sf
Medical Office	69,350 sf	69,350 sf
Residential	21 Units	21 Units
Commercial Office	49,100 sf	11,100 sf
Science Research	168,900 sf	168,900 sf
Hospital	370 Beds	370 Beds
Commercial Office	37,100 sf	37,100 sf
Medical Office	131,100 sf	131,100 sf

Notes: 2019 LRDP EIR = 2019 Long Range Development Plan Environmental Impact Report; sf = square feet

The intent of this Feasibility Study is to identify the number of additional hospital beds above 300 that could be constructed without resulting in greater impacts than those identified in the 2019 LRDP EIR. The maximum number of beds under consideration is 500 beds.

Issue 1: Cumulative Increases in Criteria Pollutant Emissions

Significance Criteria

Based on Appendix G of the California Environmental Quality Act (CEQA) Guidelines, a project would have a significant impact if it results in a cumulatively considerable net increase of any criteria air quality pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard. A project would result in a significant increase in criteria pollutant emissions if it exceeds the thresholds adopted by the City of San Diego during construction or operation.

2019 LRDP Impacts (300-Bed Hospital)

Operational emissions for the 2019 LRDP were estimated using California Emissions Estimator Model (CalEEMod), version 2016.3.2, as part of the project-specific Greenhouse Gas Reduction Strategy prepared by LSA (LSA 2019a), which is based on project-specific energy use data provided by UC San Diego and traffic data from the project-specific Transportation Impact Analysis (LLG 2019). The 2019 LRDP would replace existing campus operations,

which are an existing source of criteria pollutant emissions. Total long-term operational emissions were estimated for the existing campus and buildout of the 2019 LRDP. The existing campus emissions are part of existing ambient air quality. As such, the net change in emissions was used in the 2019 LRDP EIR analysis.

2024 Feasibility Study Impacts (500-Bed Hospital)

For the purposes of this feasibility analysis, campus buildout was modeled using CalEEMod, version 20.4.0, based on the land use mix modifications shown in Table 1 and assuming the maximum 500-bed hospital. Traffic information (LLG 2019) from the 2019 LRDP was increased proportionally to represent the increase in beds. Maximum daily buildout operational air emissions from the proposed hospital expansion, taking into account amendments to the 2019 LRDP that have occurred since EIR certification, compared to existing conditions are presented in Table 2, Buildout Operational Daily Maximum Air Pollutant Emissions (500 Beds). Model outputs are provided in Attachment 1, Model Outputs.

Table 2. Buildout Operational Daily Maximum Air Pollutant Emissions (500 Beds)

Emissions Source	Maximum Daily Emissions (pounds/day)					
	VOC	**NO_x**	**CO**	**SO_2**	**PM_{10}**	**$PM_{2.5}$**
Central Utility Plant Operation	6	160	96	1	9	9
Landscape	3	1	83	<1	<1	<1
Consumer Products	43	0	0	0	0	0
Architectural Coatings	15	0	0	0	0	0
Vehicular Sources	91	88	861	2	243	65
Total Future Operational Emissions (2024 Feasibility Study w/500-bed Hospital)	158	249	1,040	3	252	74
Total Future Operational Emissions (2019 LRDP EIR w/300-bed Hospital)	133	381	642	3	214	64
Total Existing	**167**	**363**	**1,001**	**3**	**189**	**61**
Net Change in Emissions (2024 Feasibility Study)	**(−9)**	**(−114)**	**39**	**0**	**63**	**13**
Net Change in Emissions (2019 LRDP EIR)	**(-34)**	**18**	**(-359)**	**0**	**25**	**3**
Significance Threshold	137	250	550	250	100	55
Significant Impact? (2024 Feasibility Study and 2019 LRDP EIR)	*No*	*No*	*No*	*No*	*No*	*No*

Notes: CO = carbon monoxide; NO_x = oxides of nitrogen; PM_{10} = particulate matter measuring no more than 10 microns in diameter; $PM_{2.5}$ = particulate matter measuring no more than 2.5 microns in diameter; SO_2 = sulfur dioxide; VOC = volatile organic compounds

As shown in Table 2, increasing the hospital size to 500 beds would not cause campus buildout to exceed the City of San Diego's significance thresholds for any pollutant. Therefore, an increase in hospital beds up to 500 is not anticipated to result in a new significant impact related to cumulative increases in criteria pollutants during operation.

Issue 2: Toxic Air Contaminants

Significance Criteria

Based on Appendix G of the CEQA Guidelines, a project would have a significant impact on the environment if it exposes sensitive receptors to substantial pollutant concentrations. According to County of San Diego Air Pollution Control District, a project's impact on health risk would be considered significant under CEQA if the project-related increase in risks exceeds the thresholds shown in Table 3, Significant Health Risk Levels.

Table 3. Significant Health Risk Levels

	Significant Risk Threshold
Maximum Incremental Cancer Risk	10.0 in a million
Total Chronic Non-Cancer Health Hazard Index	**1.0**
Total Acute Non-Cancer Health Hazard Index	**1.0**

2019 LRDP Impacts (300-Bed Hospital)

A Health Risk Assessment (HRA) (LSA 2019b) was prepared for the 2019 LRDP EIR, which evaluated the potential health risks associated with construction activities and operational campus facilities. Operational sources of TACs included laboratories; generators, including four emergency generators for the 300-bed hospital; the central utility plan; and boilers. The HRA concluded that operation under campus buildout of the 2019 LRDP would not result in an incremental increase in cancer or non-cancer risk that exceeds the County of San Diego Air Pollution Control District's threshold of 10.0 in a million for cancer risk or a hazard index of 1.0 or greater for non-cancer risk. The hazard index risk from campus operation ranged from 0.02 to 0.05, and maximum cancer risk at a residential receptor was 4.8 in a million. A significant impact related to cancer risk was identified for 2019 LRDP construction. The worst-case cancer risk was calculated to be 134.6 in a million at the point of maximum impact. The highest non-cancer risk from construction was a health hazard index of 0.02, which is below the 1.0 health hazard index threshold, and a significant impact was not identified for non-cancer risk from construction. Mitigation Measure AIR-3 was identified to reduce cancer risk, but the impact would continue to be significant and unavoidable.

AIR-3: Construction Equipment Performance Standards. UC San Diego, through bid and contract specifications, shall require the construction contractor to implement the following performance standards for the use of heavy-duty construction equipment during all construction activities:

- Use off-road construction diesel engines that meet, at a minimum, the Tier 4 interim California Emissions Standards, unless such an engine is not available for a particular item of equipment. Tier 3 engines shall be allowed on a project-by-project basis when the contractor has documented that no Tier 4 interim equipment or emissions equivalent retrofit equipment is available or feasible for the project.
- To the extent feasible and available, use high-performance renewable diesel fuel.

2024 Feasibility Study Impacts (500-Bed Hospital)

It is anticipated that the increase in building size to accommodate additional hospital beds may require new generators or an increase in utility plant operations that would have the potential to result in TAC emissions. However, as discussed above, health risks from a combination of all sources of TACs at campus buildout would be less than half the significance threshold for cancer or non-cancer risks. Even a doubling of generator operations and associated health risk at the hospital, which represents only a portion of total campus TAC emissions, would not cause the calculated campus health risk to exceed 10.0 in a million for cancer risk or a health hazard index of 1.0 for non-cancer risk. Therefore, an increase up to 500 hospital beds is not anticipated to result in a new significant impact related to health risk from TACs during operation.

Potentially significant cancer risks were identified for construction under the 2019 LRDP. This impact was identified as significant and unavoidable in the 2019 LRDP EIR and would continue to be significant and unavoidable with expansion of the hospital to accommodate up to 500 beds. Construction of the new hospital and demolition of the existing hospital were modeled together and calculated to result in an average of 0.034 tons per year of diesel particulate matter, which accounts for approximately 28 percent of the total 0.121 average tons per year from all construction phases. The hospital expansion would result in an incremental increase in these emissions and may incrementally increase potential cancer health risk. Similar to the 2019 LRDP EIR, Mitigation Measure AIR-3 would be required to reduce impacts; however, impacts would be significant and unavoidable even

after mitigation. Therefore, the proposed hospital expansion of up to 500 hospital beds would not result in a new impact compared to the 2019 LRDP EIR.

Similar to project operation, the highest non-cancer risk from construction is a health hazard index of 0.02, which is less than half of the 1.0 health hazard index significance threshold. The incremental increase in construction from the hospital expansion would not cause this threshold to be exceeded. Therefore, additional construction required for buildout up to 500 hospital beds would not result in a new significant impact.

Summary of Air Quality Impacts

Impacts related to cumulative increases in criteria pollutants and health risks from TACs would be similar to those identified in the 2019 LRDP EIR and are not anticipated to result in a new significant impact. Therefore, the campus could feasibly increase the maximum count to 500 hospital beds without resulting in a new air quality impact.

References

LLG (Linscott, Law & Greenspan, Engineers). 2019. UC San Diego Hillcrest Campus 2019 Long Range Development Plan – Transportation Impact Analysis. June.

LSA (LSA Associates, Inc.). 2019a. Greenhouse Gas Emissions Reduction Strategy – University of California San Diego Hillcrest Campus Long Range Development Plan EIR. June.

LSA. 2019b. Health Risk Assessment – University of California San Diego Hillcrest Campus Long Range Development Plan EIR. June.

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Attachment 1. Model Outputs

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2023 Hospital Update - San Diego County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2023 Hospital Update

San Diego County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	151.20	1000sqft	6.27	151,200.00	0
Hospital	500.00	Bed	16.53	357,878.79	0
Medical Office Building	381.00	1000sqft	6.89	381,000.00	0
Research & Development	55.00	1000sqft	4.45	55,000.00	0
Parking Lot	3,700.00	Space	33.30	1,480,000.00	0
Health Club	38.00	1000sqft	0.83	38,000.00	0
Apartments Low Rise	1,000.00	Dwelling Unit	62.50	1,000,000.00	2860
Convenience Market (24 hour)	4.00	1000sqft	1.01	4,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	40
Climate Zone	13			**Operational Year**	2035
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	0	**CH4 Intensity (lb/MWhr)**	0	**N2O Intensity (lb/MWhr)**	0

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Rates would be zero per GHG Reduction strategy assumptions

Land Use - Revised to acreages consistent with GHG Reduction Strategy

Vehicle Trips - Revised for VMT calculated from GHG Reduction Strategy

2023 Hospital Update - San Diego County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Table Name	Column Name	Default Value	New Value
tblLandUse	LotAcreage	3.47	6.27
tblLandUse	LotAcreage	8.22	16.53
tblLandUse	LotAcreage	8.75	6.89
tblLandUse	LotAcreage	1.26	4.45
tblLandUse	LotAcreage	0.87	0.83
tblLandUse	LotAcreage	0.09	1.01
tblProjectCharacteristics	CH4IntensityFactor	0.033	0
tblProjectCharacteristics	CO2IntensityFactor	539.98	0
tblProjectCharacteristics	N2OIntensityFactor	0.004	0
tblVehicleTrips	ST_TR	8.14	10.70
tblVehicleTrips	ST_TR	1,084.17	1,420.30
tblVehicleTrips	ST_TR	2.21	2.90
tblVehicleTrips	ST_TR	20.87	27.30
tblVehicleTrips	ST_TR	13.76	18.00
tblVehicleTrips	ST_TR	8.57	11.20
tblVehicleTrips	ST_TR	1.90	2.50
tblVehicleTrips	SU_TR	6.28	8.20
tblVehicleTrips	SU_TR	901.17	1,180.50
tblVehicleTrips	SU_TR	0.70	0.90
tblVehicleTrips	SU_TR	26.73	35.00
tblVehicleTrips	SU_TR	12.88	16.90
tblVehicleTrips	SU_TR	1.42	1.90
tblVehicleTrips	SU_TR	1.11	1.50
tblVehicleTrips	WD_TR	7.32	9.60
tblVehicleTrips	WD_TR	762.28	988.60
tblVehicleTrips	WD_TR	9.74	12.80
tblVehicleTrips	WD_TR	32.93	43.10
tblVehicleTrips	WD_TR	22.32	29.20

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblVehicleTrips	WD_TR	34.80	45.60
tblVehicleTrips	WD_TR	11.26	14.80

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

2023 Hospital Update - San Diego County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	2.7128	27.5585	19.9854	0.0399	19.8049	1.2668	21.0717	10.1417	1.1655	11.3071	0.0000	3,850.9849	3,850.9849	1.1964	3.5600e-003	3,878.1827
2024	3.2739	32.4113	28.1491	0.0634	19.8049	1.3362	21.0350	10.1417	1.2293	11.2734	0.0000	6,143.8781	6,143.8781	1.9475	3.7000e-003	6,193.6680
2025	6.2910	37.5025	57.0974	0.2341	17.1056	1.1317	17.8340	4.6156	1.0412	5.3015	0.0000	24,220.3601	24,220.3601	1.9467	1.8672	24,808.0605
2026	6.0430	37.0390	55.1125	0.2287	17.1056	0.7240	17.8296	4.6156	0.6818	5.2974	0.0000	23,676.3083	23,676.3083	1.2355	1.8206	24,249.7296
2027	5.8108	36.6121	53.4006	0.2236	17.1057	0.7191	17.8248	4.6156	0.6773	5.2929	0.0000	23,151.8784	23,151.8784	1.2221	1.7749	23,711.3443
2028	5.5924	36.2564	51.9713	0.2188	17.1057	0.7141	17.8197	4.6156	0.6726	5.2882	0.0000	22,670.6450	22,670.6450	1.2118	1.7325	23,217.2202
2029	5.3768	35.8812	50.6964	0.2144	17.1057	0.7090	17.8147	4.6156	0.6679	5.2835	0.0000	22,216.5647	22,216.5647	1.2031	1.6914	22,750.6876
2030	5.1073	31.0613	49.6662	0.2144	17.1057	0.3252	17.4309	4.6156	0.3157	4.9313	0.0000	22,155.1088	22,155.1088	0.7110	1.6556	22,666.2382
2031	4.8997	30.8517	48.6897	0.2110	17.1058	0.3212	17.4270	4.6156	0.3120	4.9277	0.0000	21,801.4069	21,801.4069	0.7032	1.6250	22,303.2229
2032	4.7115	30.6838	47.8516	0.2079	17.1058	0.3177	17.4234	4.6156	0.3087	4.9244	0.0000	21,490.2525	21,490.2525	0.6965	1.5986	21,984.0502
2033	4.5446	30.5440	47.1358	0.2052	17.1058	0.3144	17.4202	4.6156	0.3057	4.9214	0.0000	21,214.9640	21,214.9640	0.6909	1.5757	21,701.7922
2034	4.3945	30.4159	46.4922	0.2028	17.1058	0.3113	17.4171	4.6156	0.3029	4.9185	0.0000	20,969.8464	20,969.8464	0.6857	1.5554	21,450.4809
2035	4.1683	29.5311	45.9051	0.2007	17.1059	0.2508	17.3566	4.6157	0.2425	4.8582	0.0000	20,754.2747	20,754.2747	0.6723	1.5377	21,229.3109
2036	4.1683	29.5311	45.9051	0.2007	17.1059	0.2508	17.3566	4.6157	0.2425	4.8582	0.0000	20,754.2747	20,754.2747	0.6723	1.5377	21,229.3109
2037	4.1683	29.5311	45.9051	0.2007	17.1059	0.2508	17.3566	4.6157	0.2425	4.8582	0.0000	20,754.2747	20,754.2747	0.6723	1.5377	21,229.3109
2038	251.4801	4.8880	16.0211	0.0288	2.7273	0.1877	2.7442	0.7234	0.1877	0.7397	0.0000	2,734.4651	2,734.4651	0.1035	0.0405	2,737.5987
2039	251.4801	1.0212	6.2378	0.0200	2.7273	0.0169	2.7442	0.7234	0.0163	0.7397	0.0000	2,006.7034	2,006.7034	0.0387	0.0405	2,019.7501
Maximum	**251.4801**	**37.5025**	**57.0974**	**0.2341**	**19.8049**	**1.3362**	**21.0717**	**10.1417**	**1.2293**	**11.3071**	**0.0000**	**24,220.3601**	**24,220.3601**	**1.9475**	**1.8672**	**24,808.0605**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.1 Overall Construction (Maximum Daily Emission)

Mitigated Construction

2023 Hospital Update - San Diego County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	2.7128	27.5585	19.9854	0.0399	19.8049	1.2668	21.0717	10.1417	1.1655	11.3071	0.0000	3,850.9848	3,850.9848	1.1964	3.5600e-003	3,878.1827
2024	3.2739	32.4113	28.1491	0.0634	19.8049	1.3362	21.0350	10.1417	1.2293	11.2734	0.0000	6,143.8781	6,143.8781	1.9475	3.7000e-003	6,193.6680
2025	6.2910	37.5025	57.0974	0.2341	17.1056	1.1317	17.8340	4.6156	1.0412	5.3015	0.0000	24,220.3601	24,220.3601	1.9467	1.8672	24,808.0605
2026	6.0430	37.0390	55.1125	0.2287	17.1056	0.7240	17.8296	4.6156	0.6818	5.2974	0.0000	23,676.3083	23,676.3083	1.2355	1.8206	24,249.7296
2027	5.8108	36.6121	53.4006	0.2236	17.1057	0.7191	17.8248	4.6156	0.6773	5.2929	0.0000	23,151.8784	23,151.8784	1.2221	1.7749	23,711.3443
2028	5.5924	36.2564	51.9713	0.2188	17.1057	0.7141	17.8197	4.6156	0.6726	5.2882	0.0000	22,670.6450	22,670.6450	1.2118	1.7325	23,217.2202
2029	5.3768	35.8812	50.6964	0.2144	17.1057	0.7090	17.8147	4.6156	0.6679	5.2835	0.0000	22,216.5647	22,216.5647	1.2031	1.6914	22,750.6876
2030	5.1073	31.0613	49.6662	0.2144	17.1057	0.3252	17.4309	4.6156	0.3157	4.9313	0.0000	22,155.1088	22,155.1088	0.7110	1.6556	22,666.2382
2031	4.8997	30.8517	48.6897	0.2110	17.1058	0.3212	17.4270	4.6156	0.3120	4.9277	0.0000	21,801.4069	21,801.4069	0.7032	1.6250	22,303.2229
2032	4.7115	30.6838	47.8516	0.2079	17.1058	0.3177	17.4234	4.6156	0.3087	4.9244	0.0000	21,490.2525	21,490.2525	0.6965	1.5986	21,984.0502
2033	4.5446	30.5440	47.1358	0.2052	17.1058	0.3144	17.4202	4.6156	0.3057	4.9214	0.0000	21,214.9640	21,214.9640	0.6909	1.5757	21,701.7922
2034	4.3945	30.4159	46.4922	0.2028	17.1058	0.3113	17.4171	4.6156	0.3029	4.9185	0.0000	20,969.8464	20,969.8464	0.6857	1.5554	21,450.4809
2035	4.1683	29.5311	45.9051	0.2007	17.1059	0.2508	17.3566	4.6157	0.2425	4.8582	0.0000	20,754.2747	20,754.2747	0.6723	1.5377	21,229.3109
2036	4.1683	29.5311	45.9051	0.2007	17.1059	0.2508	17.3566	4.6157	0.2425	4.8582	0.0000	20,754.2747	20,754.2747	0.6723	1.5377	21,229.3109
2037	4.1683	29.5311	45.9051	0.2007	17.1059	0.2508	17.3566	4.6157	0.2425	4.8582	0.0000	20,754.2747	20,754.2747	0.6723	1.5377	21,229.3109
2038	251.4801	4.8880	16.0211	0.0288	2.7273	0.1877	2.7442	0.7234	0.1877	0.7397	0.0000	2,734.4650	2,734.4650	0.1035	0.0405	2,737.5986
2039	251.4801	1.0212	6.2378	0.0200	2.7273	0.0169	2.7442	0.7234	0.0163	0.7397	0.0000	2,006.7034	2,006.7034	0.0387	0.0405	2,019.7501
Maximum	**251.4801**	**37.5025**	**57.0974**	**0.2341**	**19.8049**	**1.3362**	**21.0717**	**10.1417**	**1.2293**	**11.3071**	**0.0000**	**24,220.3601**	**24,220.3601**	**1.9475**	**1.8672**	**24,808.0605**

2023 Hospital Update - San Diego County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

2023 Hospital Update - San Diego County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1,591.0664	30.8397	1,971.8079	3.4269		265.3300	265.3300		265.3300	265.3300	27,771.7307	11,796.6680	39,568.3987	25.7728	2.1845	40,863.6876
Energy	1.2763	11.4275	8.4591	0.0696		0.8818	0.8818		0.8818	0.8818		13,923.6974	13,923.6974	0.2669	0.2553	14,006.4390
Mobile	91.7217	87.8221	861.4897	1.7256	242.3178	1.0301	243.3479	64.5355	0.9618	65.4973		176,301.9288	176,301.9288	13.7371	8.6494	179,222.8813
Total	**1,684.0644**	**130.0893**	**2,841.7566**	**5.2221**	**242.3178**	**267.2419**	**509.5597**	**64.5355**	**267.1736**	**331.7091**	**27,771.7307**	**202,022.2942**	**229,794.0249**	**39.7768**	**11.0891**	**234,093.0079**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1,591.0664	30.8397	1,971.8079	3.4269		265.3300	265.3300		265.3300	265.3300	27,771.7307	11,796.6680	39,568.3987	25.7728	2.1845	40,863.6876
Energy	1.2763	11.4275	8.4591	0.0696		0.8818	0.8818		0.8818	0.8818		13,923.6974	13,923.6974	0.2669	0.2553	14,006.4390
Mobile	91.7217	87.8221	861.4897	1.7256	242.3178	1.0301	243.3479	64.5355	0.9618	65.4973		176,301.9288	176,301.9288	13.7371	8.6494	179,222.8813
Total	**1,684.0644**	**130.0893**	**2,841.7566**	**5.2221**	**242.3178**	**267.2419**	**509.5597**	**64.5355**	**267.1736**	**331.7091**	**27,771.7307**	**202,022.2942**	**229,794.0249**	**39.7768**	**11.0891**	**234,093.0079**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	3/9/2023	12/13/2023	5	200	
2	Site Preparation	Site Preparation	12/14/2023	5/29/2024	5	120	
3	Grading	Grading	5/30/2024	8/6/2025	5	310	
4	Building Construction	Building Construction	8/7/2025	6/24/2037	5	3100	
5	Paving	Paving	6/25/2037	4/28/2038	5	220	
6	Architectural Coating	Architectural Coating	4/29/2038	3/2/2039	5	220	

Acres of Grading (Site Preparation Phase): 180

Acres of Grading (Grading Phase): 930

Acres of Paving: 33.3

Residential Indoor: 2,025,000; Residential Outdoor: 675,000; Non-Residential Indoor: 1,480,618; Non-Residential Outdoor: 493,539; Striped Parking Area: 88,800 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Cranes	1	7.00	231	0.29
Demolition	Excavators	3	8.00	158	0.38
Grading	Excavators	2	8.00	158	0.38

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Grading	Graders	1	8.00	187	0.41
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	1,661.00	511.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	332.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

2023 Hospital Update - San Diego County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Demolition - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.2691	21.4844	19.6434	0.0388		0.9975	0.9975		0.9280	0.9280		3,746.9840	3,746.9840	1.0494		3,773.2183
Total	**2.2691**	**21.4844**	**19.6434**	**0.0388**		**0.9975**	**0.9975**		**0.9280**	**0.9280**		**3,746.9840**	**3,746.9840**	**1.0494**		**3,773.2183**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0445	0.0286	0.3421	1.0300e-003	0.1232	6.6000e-004	0.1239	0.0327	6.1000e-004	0.0333		104.0008	104.0008	3.1800e-003	2.9700e-003	104.9644
Total	**0.0445**	**0.0286**	**0.3421**	**1.0300e-003**	**0.1232**	**6.6000e-004**	**0.1239**	**0.0327**	**6.1000e-004**	**0.0333**		**104.0008**	**104.0008**	**3.1800e-003**	**2.9700e-003**	**104.9644**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Demolition - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.2691	21.4844	19.6434	0.0388		0.9975	0.9975		0.9280	0.9280	0.0000	3,746.9840	3,746.9840	1.0494		3,773.2183
Total	**2.2691**	**21.4844**	**19.6434**	**0.0388**		**0.9975**	**0.9975**		**0.9280**	**0.9280**	**0.0000**	**3,746.9840**	**3,746.9840**	**1.0494**		**3,773.2183**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0445	0.0286	0.3421	1.0300e-003	0.1232	6.6000e-004	0.1239	0.0327	6.1000e-004	0.0333		104.0008	104.0008	3.1800e-003	2.9700e-003	104.9644
Total	**0.0445**	**0.0286**	**0.3421**	**1.0300e-003**	**0.1232**	**6.6000e-004**	**0.1239**	**0.0327**	**6.1000e-004**	**0.0333**		**104.0008**	**104.0008**	**3.1800e-003**	**2.9700e-003**	**104.9644**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.3 Site Preparation - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					19.6570	0.0000	19.6570	10.1025	0.0000	10.1025			0.0000			0.0000
Off-Road	2.6595	27.5242	18.2443	0.0381		1.2660	1.2660		1.1647	1.1647		3,687.3081	3,687.3081	1.1926		3,717.1219
Total	**2.6595**	**27.5242**	**18.2443**	**0.0381**	**19.6570**	**1.2660**	**20.9230**	**10.1025**	**1.1647**	**11.2672**		**3,687.3081**	**3,687.3081**	**1.1926**		**3,717.1219**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0533	0.0344	0.4105	1.2300e-003	0.1479	7.9000e-004	0.1487	0.0392	7.3000e-004	0.0400		124.8010	124.8010	3.8100e-003	3.5600e-003	125.9573
Total	**0.0533**	**0.0344**	**0.4105**	**1.2300e-003**	**0.1479**	**7.9000e-004**	**0.1487**	**0.0392**	**7.3000e-004**	**0.0400**		**124.8010**	**124.8010**	**3.8100e-003**	**3.5600e-003**	**125.9573**

2023 Hospital Update - San Diego County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.3 Site Preparation - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					19.6570	0.0000	19.6570	10.1025	0.0000	10.1025			0.0000			0.0000
Off-Road	2.6595	27.5242	18.2443	0.0381		1.2660	1.2660		1.1647	1.1647	0.0000	3,687.3081	3,687.3081	1.1926		3,717.1219
Total	**2.6595**	**27.5242**	**18.2443**	**0.0381**	**19.6570**	**1.2660**	**20.9230**	**10.1025**	**1.1647**	**11.2672**	**0.0000**	**3,687.3081**	**3,687.3081**	**1.1926**		**3,717.1219**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0533	0.0344	0.4105	1.2300e-003	0.1479	7.9000e-004	0.1487	0.0392	7.3000e-004	0.0400		124.8010	124.8010	3.8100e-003	3.5600e-003	125.9573
Total	**0.0533**	**0.0344**	**0.4105**	**1.2300e-003**	**0.1479**	**7.9000e-004**	**0.1487**	**0.0392**	**7.3000e-004**	**0.0400**		**124.8010**	**124.8010**	**3.8100e-003**	**3.5600e-003**	**125.9573**

2023 Hospital Update - San Diego County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.3 Site Preparation - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					19.6570	0.0000	19.6570	10.1025	0.0000	10.1025			0.0000			0.0000
Off-Road	2.6609	27.1760	18.3356	0.0381		1.2294	1.2294		1.1310	1.1310		3,688.0100	3,688.0100	1.1928		3,717.8294
Total	**2.6609**	**27.1760**	**18.3356**	**0.0381**	**19.6570**	**1.2294**	**20.8864**	**10.1025**	**1.1310**	**11.2335**		**3,688.0100**	**3,688.0100**	**1.1928**		**3,717.8294**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0502	0.0309	0.3837	1.1900e-003	0.1479	7.5000e-004	0.1486	0.0392	6.9000e-004	0.0399		120.7165	120.7165	3.4800e-003	3.3300e-003	121.7947
Total	**0.0502**	**0.0309**	**0.3837**	**1.1900e-003**	**0.1479**	**7.5000e-004**	**0.1486**	**0.0392**	**6.9000e-004**	**0.0399**		**120.7165**	**120.7165**	**3.4800e-003**	**3.3300e-003**	**121.7947**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.3 Site Preparation - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					19.6570	0.0000	19.6570	10.1025	0.0000	10.1025			0.0000			0.0000
Off-Road	2.6609	27.1760	18.3356	0.0381		1.2294	1.2294		1.1310	1.1310	0.0000	3,688.0100	3,688.0100	1.1928		3,717.8294
Total	**2.6609**	**27.1760**	**18.3356**	**0.0381**	**19.6570**	**1.2294**	**20.8864**	**10.1025**	**1.1310**	**11.2335**	**0.0000**	**3,688.0100**	**3,688.0100**	**1.1928**		**3,717.8294**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0502	0.0309	0.3837	1.1900e-003	0.1479	7.5000e-004	0.1486	0.0392	6.9000e-004	0.0399		120.7165	120.7165	3.4800e-003	3.3300e-003	121.7947
Total	**0.0502**	**0.0309**	**0.3837**	**1.1900e-003**	**0.1479**	**7.5000e-004**	**0.1486**	**0.0392**	**6.9000e-004**	**0.0399**		**120.7165**	**120.7165**	**3.4800e-003**	**3.3300e-003**	**121.7947**

2023 Hospital Update - San Diego County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Grading - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					9.2036	0.0000	9.2036	3.6538	0.0000	3.6538			0.0000			0.0000
Off-Road	3.2181	32.3770	27.7228	0.0621		1.3354	1.3354		1.2286	1.2286		6,009.7487	6,009.7487	1.9437		6,058.3405
Total	**3.2181**	**32.3770**	**27.7228**	**0.0621**	**9.2036**	**1.3354**	**10.5390**	**3.6538**	**1.2286**	**4.8823**		**6,009.7487**	**6,009.7487**	**1.9437**		**6,058.3405**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0558	0.0343	0.4263	1.3300e-003	0.1643	8.4000e-004	0.1651	0.0436	7.7000e-004	0.0444		134.1294	134.1294	3.8600e-003	3.7000e-003	135.3275
Total	**0.0558**	**0.0343**	**0.4263**	**1.3300e-003**	**0.1643**	**8.4000e-004**	**0.1651**	**0.0436**	**7.7000e-004**	**0.0444**		**134.1294**	**134.1294**	**3.8600e-003**	**3.7000e-003**	**135.3275**

2023 Hospital Update - San Diego County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Grading - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					9.2036	0.0000	9.2036	3.6538	0.0000	3.6538			0.0000			0.0000
Off-Road	3.2181	32.3770	27.7228	0.0621		1.3354	1.3354		1.2286	1.2286	0.0000	6,009.7487	6,009.7487	1.9437		6,058.3405
Total	**3.2181**	**32.3770**	**27.7228**	**0.0621**	**9.2036**	**1.3354**	**10.5390**	**3.6538**	**1.2286**	**4.8823**	**0.0000**	**6,009.7487**	**6,009.7487**	**1.9437**		**6,058.3405**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0558	0.0343	0.4263	1.3300e-003	0.1643	8.4000e-004	0.1651	0.0436	7.7000e-004	0.0444		134.1294	134.1294	3.8600e-003	3.7000e-003	135.3275
Total	**0.0558**	**0.0343**	**0.4263**	**1.3300e-003**	**0.1643**	**8.4000e-004**	**0.1651**	**0.0436**	**7.7000e-004**	**0.0444**		**134.1294**	**134.1294**	**3.8600e-003**	**3.7000e-003**	**135.3275**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Grading - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					9.2036	0.0000	9.2036	3.6538	0.0000	3.6538			0.0000			0.0000
Off-Road	2.9012	27.9429	26.3311	0.0621		1.1309	1.1309		1.0404	1.0404		6,008.2814	6,008.2814	1.9432		6,056.8614
Total	**2.9012**	**27.9429**	**26.3311**	**0.0621**	**9.2036**	**1.1309**	**10.3345**	**3.6538**	**1.0404**	**4.6942**		**6,008.2814**	**6,008.2814**	**1.9432**		**6,056.8614**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0527	0.0311	0.3997	1.2800e-003	0.1643	8.0000e-004	0.1651	0.0436	7.4000e-004	0.0443		129.5694	129.5694	3.5300e-003	3.4700e-003	130.6913
Total	**0.0527**	**0.0311**	**0.3997**	**1.2800e-003**	**0.1643**	**8.0000e-004**	**0.1651**	**0.0436**	**7.4000e-004**	**0.0443**		**129.5694**	**129.5694**	**3.5300e-003**	**3.4700e-003**	**130.6913**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Grading - 2025

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					9.2036	0.0000	9.2036	3.6538	0.0000	3.6538			0.0000			0.0000
Off-Road	2.9012	27.9429	26.3311	0.0621		1.1309	1.1309		1.0404	1.0404	0.0000	6,008.2814	6,008.2814	1.9432		6,056.8614
Total	**2.9012**	**27.9429**	**26.3311**	**0.0621**	**9.2036**	**1.1309**	**10.3345**	**3.6538**	**1.0404**	**4.6942**	**0.0000**	**6,008.2814**	**6,008.2814**	**1.9432**		**6,056.8614**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0527	0.0311	0.3997	1.2800e-003	0.1643	8.0000e-004	0.1651	0.0436	7.4000e-004	0.0443		129.5694	129.5694	3.5300e-003	3.4700e-003	130.6913
Total	**0.0527**	**0.0311**	**0.3997**	**1.2800e-003**	**0.1643**	**8.0000e-004**	**0.1651**	**0.0436**	**7.4000e-004**	**0.0443**		**129.5694**	**129.5694**	**3.5300e-003**	**3.4700e-003**	**130.6913**

2023 Hospital Update - San Diego County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Building Construction - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.4744	2,556.4744	0.6010		2,571.4981
Total	**1.3674**	**12.4697**	**16.0847**	**0.0270**		**0.5276**	**0.5276**		**0.4963**	**0.4963**		**2,556.4744**	**2,556.4744**	**0.6010**		**2,571.4981**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.5508	22.4533	7.8159	0.1007	3.4609	0.1343	3.5952	0.9963	0.1284	1.1248		10,903.1463	10,903.1463	0.3574	1.5791	11,382.6476
Worker	4.3728	2.5796	33.1969	0.1065	13.6447	0.0665	13.7112	3.6192	0.0612	3.6804		10,760.7394	10,760.7394	0.2928	0.2881	10,853.9148
Total	**4.9236**	**25.0329**	**41.0128**	**0.2072**	**17.1056**	**0.2008**	**17.3064**	**4.6156**	**0.1897**	**4.8052**		**21,663.8857**	**21,663.8857**	**0.6502**	**1.8672**	**22,236.5624**

2023 Hospital Update - San Diego County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Building Construction - 2025

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963	0.0000	2,556.4744	2,556.4744	0.6010		2,571.4981
Total	**1.3674**	**12.4697**	**16.0847**	**0.0270**		**0.5276**	**0.5276**		**0.4963**	**0.4963**	**0.0000**	**2,556.4744**	**2,556.4744**	**0.6010**		**2,571.4981**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.5508	22.4533	7.8159	0.1007	3.4609	0.1343	3.5952	0.9963	0.1284	1.1248		10,903.1463	10,903.1463	0.3574	1.5791	11,382.6476
Worker	4.3728	2.5796	33.1969	0.1065	13.6447	0.0665	13.7112	3.6192	0.0612	3.6804		10,760.7394	10,760.7394	0.2928	0.2881	10,853.9148
Total	**4.9236**	**25.0329**	**41.0128**	**0.2072**	**17.1056**	**0.2008**	**17.3064**	**4.6156**	**0.1897**	**4.8052**		**21,663.8857**	**21,663.8857**	**0.6502**	**1.8672**	**22,236.5624**

2023 Hospital Update - San Diego County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Building Construction - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.4744	2,556.4744	0.6010		2,571.4981
Total	**1.3674**	**12.4697**	**16.0847**	**0.0270**		**0.5276**	**0.5276**		**0.4963**	**0.4963**		**2,556.4744**	**2,556.4744**	**0.6010**		**2,571.4981**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.5346	22.2151	7.7204	0.0987	3.4609	0.1332	3.5941	0.9964	0.1274	1.1237		10,695.1904	10,695.1904	0.3663	1.5483	11,165.7301
Worker	4.1410	2.3541	31.3074	0.1031	13.6447	0.0632	13.7080	3.6192	0.0582	3.6774		10,424.6435	10,424.6435	0.2683	0.2723	10,512.5015
Total	**4.6756**	**24.5693**	**39.0278**	**0.2018**	**17.1056**	**0.1964**	**17.3020**	**4.6156**	**0.1856**	**4.8012**		**21,119.8339**	**21,119.8339**	**0.6346**	**1.8206**	**21,678.2315**

2023 Hospital Update - San Diego County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Building Construction - 2026

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963	0.0000	2,556.4744	2,556.4744	0.6010		2,571.4981
Total	**1.3674**	**12.4697**	**16.0847**	**0.0270**		**0.5276**	**0.5276**		**0.4963**	**0.4963**	**0.0000**	**2,556.4744**	**2,556.4744**	**0.6010**		**2,571.4981**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.5346	22.2151	7.7204	0.0987	3.4609	0.1332	3.5941	0.9964	0.1274	1.1237		10,695.1904	10,695.1904	0.3663	1.5483	11,165.7301
Worker	4.1410	2.3541	31.3074	0.1031	13.6447	0.0632	13.7080	3.6192	0.0582	3.6774		10,424.6435	10,424.6435	0.2683	0.2723	10,512.5015
Total	**4.6756**	**24.5693**	**39.0278**	**0.2018**	**17.1056**	**0.1964**	**17.3020**	**4.6156**	**0.1856**	**4.8012**		**21,119.8339**	**21,119.8339**	**0.6346**	**1.8206**	**21,678.2315**

2023 Hospital Update - San Diego County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Building Construction - 2027

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.4744	2,556.4744	0.6010		2,571.4981
Total	**1.3674**	**12.4697**	**16.0847**	**0.0270**		**0.5276**	**0.5276**		**0.4963**	**0.4963**		**2,556.4744**	**2,556.4744**	**0.6010**		**2,571.4981**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.5211	21.9814	7.6432	0.0965	3.4609	0.1320	3.5930	0.9964	0.1263	1.1226		10,474.2473	10,474.2473	0.3744	1.5160	10,935.3689
Worker	3.9222	2.1610	29.6728	0.1001	13.6447	0.0595	13.7042	3.6192	0.0548	3.6740		10,121.1567	10,121.1567	0.2468	0.2589	10,204.4773
Total	**4.4434**	**24.1424**	**37.3160**	**0.1966**	**17.1057**	**0.1915**	**17.2972**	**4.6156**	**0.1810**	**4.7966**		**20,595.4040**	**20,595.4040**	**0.6212**	**1.7749**	**21,139.8462**

2023 Hospital Update - San Diego County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Building Construction - 2027

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963	0.0000	2,556.4744	2,556.4744	0.6010		2,571.4981
Total	**1.3674**	**12.4697**	**16.0847**	**0.0270**		**0.5276**	**0.5276**		**0.4963**	**0.4963**	**0.0000**	**2,556.4744**	**2,556.4744**	**0.6010**		**2,571.4981**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.5211	21.9814	7.6432	0.0965	3.4609	0.1320	3.5930	0.9964	0.1263	1.1226		10,474.2473	10,474.2473	0.3744	1.5160	10,935.3689
Worker	3.9222	2.1610	29.6728	0.1001	13.6447	0.0595	13.7042	3.6192	0.0548	3.6740		10,121.1567	10,121.1567	0.2468	0.2589	10,204.4773
Total	**4.4434**	**24.1424**	**37.3160**	**0.1966**	**17.1057**	**0.1915**	**17.2972**	**4.6156**	**0.1810**	**4.7966**		**20,595.4040**	**20,595.4040**	**0.6212**	**1.7749**	**21,139.8462**

2023 Hospital Update - San Diego County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Building Construction - 2028

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.4744	2,556.4744	0.6010		2,571.4981
Total	**1.3674**	**12.4697**	**16.0847**	**0.0270**		**0.5276**	**0.5276**		**0.4963**	**0.4963**		**2,556.4744**	**2,556.4744**	**0.6010**		**2,571.4981**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.5104	21.7900	7.5953	0.0944	3.4610	0.1309	3.5919	0.9964	0.1252	1.1216		10,264.7345	10,264.7345	0.3829	1.4850	10,716.8215
Worker	3.7147	1.9967	28.2913	0.0974	13.6447	0.0556	13.7003	3.6192	0.0511	3.6703		9,849.4361	9,849.4361	0.2280	0.2475	9,928.9006
Total	**4.2250**	**23.7867**	**35.8866**	**0.1919**	**17.1057**	**0.1865**	**17.2922**	**4.6156**	**0.1764**	**4.7920**		**20,114.1706**	**20,114.1706**	**0.6109**	**1.7325**	**20,645.7222**

2023 Hospital Update - San Diego County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Building Construction - 2028

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963	0.0000	2,556.4744	2,556.4744	0.6010		2,571.4981
Total	**1.3674**	**12.4697**	**16.0847**	**0.0270**		**0.5276**	**0.5276**		**0.4963**	**0.4963**	**0.0000**	**2,556.4744**	**2,556.4744**	**0.6010**		**2,571.4981**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.5104	21.7900	7.5953	0.0944	3.4610	0.1309	3.5919	0.9964	0.1252	1.1216		10,264.7345	10,264.7345	0.3829	1.4850	10,716.8215
Worker	3.7147	1.9967	28.2913	0.0974	13.6447	0.0556	13.7003	3.6192	0.0511	3.6703		9,849.4361	9,849.4361	0.2280	0.2475	9,928.9006
Total	**4.2250**	**23.7867**	**35.8866**	**0.1919**	**17.1057**	**0.1865**	**17.2922**	**4.6156**	**0.1764**	**4.7920**		**20,114.1706**	**20,114.1706**	**0.6109**	**1.7325**	**20,645.7222**

2023 Hospital Update - San Diego County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Building Construction - 2029

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.4744	2,556.4744	0.6010		2,571.4981
Total	**1.3674**	**12.4697**	**16.0847**	**0.0270**		**0.5276**	**0.5276**		**0.4963**	**0.4963**		**2,556.4744**	**2,556.4744**	**0.6010**		**2,571.4981**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.5005	21.5585	7.5514	0.0924	3.4610	0.1296	3.5906	0.9964	0.1239	1.1203		10,054.0547	10,054.0547	0.3910	1.4537	10,497.0320
Worker	3.5089	1.8530	27.0604	0.0950	13.6447	0.0518	13.6966	3.6192	0.0477	3.6669		9,606.0356	9,606.0356	0.2112	0.2377	9,682.1575
Total	**4.0094**	**23.4115**	**34.6117**	**0.1874**	**17.1057**	**0.1814**	**17.2871**	**4.6156**	**0.1716**	**4.7872**		**19,660.0904**	**19,660.0904**	**0.6022**	**1.6914**	**20,179.1895**

2023 Hospital Update - San Diego County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Building Construction - 2029

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963	0.0000	2,556.4744	2,556.4744	0.6010		2,571.4981
Total	**1.3674**	**12.4697**	**16.0847**	**0.0270**		**0.5276**	**0.5276**		**0.4963**	**0.4963**	**0.0000**	**2,556.4744**	**2,556.4744**	**0.6010**		**2,571.4981**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.5005	21.5585	7.5514	0.0924	3.4610	0.1296	3.5906	0.9964	0.1239	1.1203		10,054.0547	10,054.0547	0.3910	1.4537	10,497.0320
Worker	3.5089	1.8530	27.0604	0.0950	13.6447	0.0518	13.6966	3.6192	0.0477	3.6669		9,606.0356	9,606.0356	0.2112	0.2377	9,682.1575
Total	**4.0094**	**23.4115**	**34.6117**	**0.1874**	**17.1057**	**0.1814**	**17.2871**	**4.6156**	**0.1716**	**4.7872**		**19,660.0904**	**19,660.0904**	**0.6022**	**1.6914**	**20,179.1895**

2023 Hospital Update - San Diego County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Building Construction - 2030

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3091	7.9346	16.1570	0.0310		0.1481	0.1481		0.1481	0.1481		2,897.5468	2,897.5468	0.1162		2,900.4529
Total	**1.3091**	**7.9346**	**16.1570**	**0.0310**		**0.1481**	**0.1481**		**0.1481**	**0.1481**		**2,897.5468**	**2,897.5468**	**0.1162**		**2,900.4529**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.4927	21.4014	7.5258	0.0906	3.4610	0.1287	3.5897	0.9964	0.1231	1.1194		9,868.7450	9,868.7450	0.3987	1.4264	10,303.7634
Worker	3.3055	1.7252	25.9835	0.0929	13.6447	0.0484	13.6931	3.6192	0.0445	3.6637		9,388.8170	9,388.8170	0.1960	0.2292	9,462.0220
Total	**3.7982**	**23.1267**	**33.5093**	**0.1835**	**17.1057**	**0.1770**	**17.2827**	**4.6156**	**0.1676**	**4.7832**		**19,257.5620**	**19,257.5620**	**0.5947**	**1.6556**	**19,765.7854**

2023 Hospital Update - San Diego County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Building Construction - 2030

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3091	7.9346	16.1570	0.0310		0.1481	0.1481		0.1481	0.1481	0.0000	2,897.5468	2,897.5468	0.1162		2,900.4529
Total	**1.3091**	**7.9346**	**16.1570**	**0.0310**		**0.1481**	**0.1481**		**0.1481**	**0.1481**	**0.0000**	**2,897.5468**	**2,897.5468**	**0.1162**		**2,900.4529**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.4927	21.4014	7.5258	0.0906	3.4610	0.1287	3.5897	0.9964	0.1231	1.1194		9,868.7450	9,868.7450	0.3987	1.4264	10,303.7634
Worker	3.3055	1.7252	25.9835	0.0929	13.6447	0.0484	13.6931	3.6192	0.0445	3.6637		9,388.8170	9,388.8170	0.1960	0.2292	9,462.0220
Total	**3.7982**	**23.1267**	**33.5093**	**0.1835**	**17.1057**	**0.1770**	**17.2827**	**4.6156**	**0.1676**	**4.7832**		**19,257.5620**	**19,257.5620**	**0.5947**	**1.6556**	**19,765.7854**

2023 Hospital Update - San Diego County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Building Construction - 2031

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3091	7.9346	16.1570	0.0310		0.1481	0.1481		0.1481	0.1481		2,897.5468	2,897.5468	0.1162		2,900.4529
Total	**1.3091**	**7.9346**	**16.1570**	**0.0310**		**0.1481**	**0.1481**		**0.1481**	**0.1481**		**2,897.5468**	**2,897.5468**	**0.1162**		**2,900.4529**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.4867	21.3063	7.5145	0.0890	3.4610	0.1279	3.5890	0.9964	0.1224	1.1187		9,708.1126	9,708.1126	0.4046	1.4032	10,136.3765
Worker	3.1039	1.6108	25.0182	0.0910	13.6447	0.0452	13.6899	3.6192	0.0416	3.6608		9,195.7475	9,195.7475	0.1823	0.2218	9,266.3935
Total	**3.5906**	**22.9171**	**32.5327**	**0.1800**	**17.1058**	**0.1731**	**17.2788**	**4.6156**	**0.1639**	**4.7795**		**18,903.8601**	**18,903.8601**	**0.5870**	**1.6250**	**19,402.7700**

2023 Hospital Update - San Diego County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Building Construction - 2031

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3091	7.9346	16.1570	0.0310		0.1481	0.1481		0.1481	0.1481	0.0000	2,897.5468	2,897.5468	0.1162		2,900.4529
Total	**1.3091**	**7.9346**	**16.1570**	**0.0310**		**0.1481**	**0.1481**		**0.1481**	**0.1481**	**0.0000**	**2,897.5468**	**2,897.5468**	**0.1162**		**2,900.4529**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.4867	21.3063	7.5145	0.0890	3.4610	0.1279	3.5890	0.9964	0.1224	1.1187		9,708.1126	9,708.1126	0.4046	1.4032	10,136.3765
Worker	3.1039	1.6108	25.0182	0.0910	13.6447	0.0452	13.6899	3.6192	0.0416	3.6608		9,195.7475	9,195.7475	0.1823	0.2218	9,266.3935
Total	**3.5906**	**22.9171**	**32.5327**	**0.1800**	**17.1058**	**0.1731**	**17.2788**	**4.6156**	**0.1639**	**4.7795**		**18,903.8601**	**18,903.8601**	**0.5870**	**1.6250**	**19,402.7700**

2023 Hospital Update - San Diego County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Building Construction - 2032

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3091	7.9346	16.1570	0.0310		0.1481	0.1481		0.1481	0.1481		2,897.5468	2,897.5468	0.1162		2,900.4529
Total	**1.3091**	**7.9346**	**16.1570**	**0.0310**		**0.1481**	**0.1481**		**0.1481**	**0.1481**		**2,897.5468**	**2,897.5468**	**0.1162**		**2,900.4529**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.4821	21.2345	7.5171	0.0877	3.4611	0.1273	3.5883	0.9964	0.1217	1.1181		9,567.4195	9,567.4195	0.4101	1.3831	9,989.8199
Worker	2.9203	1.5146	24.1776	0.0893	13.6447	0.0422	13.6870	3.6192	0.0389	3.6581		9,025.2862	9,025.2862	0.1702	0.2156	9,093.7775
Total	**3.4024**	**22.7492**	**31.6947**	**0.1769**	**17.1058**	**0.1695**	**17.2753**	**4.6156**	**0.1606**	**4.7762**		**18,592.7058**	**18,592.7058**	**0.5803**	**1.5986**	**19,083.5973**

2023 Hospital Update - San Diego County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Building Construction - 2032

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3091	7.9346	16.1570	0.0310		0.1481	0.1481		0.1481	0.1481	0.0000	2,897.5468	2,897.5468	0.1162		2,900.4529
Total	**1.3091**	**7.9346**	**16.1570**	**0.0310**		**0.1481**	**0.1481**		**0.1481**	**0.1481**	**0.0000**	**2,897.5468**	**2,897.5468**	**0.1162**		**2,900.4529**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.4821	21.2345	7.5171	0.0877	3.4611	0.1273	3.5883	0.9964	0.1217	1.1181		9,567.4195	9,567.4195	0.4101	1.3831	9,989.8199
Worker	2.9203	1.5146	24.1776	0.0893	13.6447	0.0422	13.6870	3.6192	0.0389	3.6581		9,025.2862	9,025.2862	0.1702	0.2156	9,093.7775
Total	**3.4024**	**22.7492**	**31.6947**	**0.1769**	**17.1058**	**0.1695**	**17.2753**	**4.6156**	**0.1606**	**4.7762**		**18,592.7058**	**18,592.7058**	**0.5803**	**1.5986**	**19,083.5973**

2023 Hospital Update - San Diego County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Building Construction - 2033

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3091	7.9346	16.1570	0.0310		0.1481	0.1481		0.1481	0.1481		2,897.5468	2,897.5468	0.1162		2,900.4529
Total	**1.3091**	**7.9346**	**16.1570**	**0.0310**		**0.1481**	**0.1481**		**0.1481**	**0.1481**		**2,897.5468**	**2,897.5468**	**0.1162**		**2,900.4529**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.4789	21.1740	7.5295	0.0865	3.4611	0.1267	3.5878	0.9964	0.1212	1.1176		9,441.7335	9,441.7335	0.4151	1.3653	9,858.9577
Worker	2.7566	1.4354	23.4493	0.0878	13.6447	0.0396	13.6843	3.6192	0.0364	3.6556		8,875.6838	8,875.6838	0.1596	0.2104	8,942.3817
Total	**3.2355**	**22.6094**	**30.9788**	**0.1743**	**17.1058**	**0.1663**	**17.2721**	**4.6156**	**0.1576**	**4.7732**		**18,317.4173**	**18,317.4173**	**0.5747**	**1.5757**	**18,801.3394**

2023 Hospital Update - San Diego County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Building Construction - 2033

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3091	7.9346	16.1570	0.0310		0.1481	0.1481		0.1481	0.1481	0.0000	2,897.5468	2,897.5468	0.1162		2,900.4529
Total	**1.3091**	**7.9346**	**16.1570**	**0.0310**		**0.1481**	**0.1481**		**0.1481**	**0.1481**	**0.0000**	**2,897.5468**	**2,897.5468**	**0.1162**		**2,900.4529**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.4789	21.1740	7.5295	0.0865	3.4611	0.1267	3.5878	0.9964	0.1212	1.1176		9,441.7335	9,441.7335	0.4151	1.3653	9,858.9577
Worker	2.7566	1.4354	23.4493	0.0878	13.6447	0.0396	13.6843	3.6192	0.0364	3.6556		8,875.6838	8,875.6838	0.1596	0.2104	8,942.3817
Total	**3.2355**	**22.6094**	**30.9788**	**0.1743**	**17.1058**	**0.1663**	**17.2721**	**4.6156**	**0.1576**	**4.7732**		**18,317.4173**	**18,317.4173**	**0.5747**	**1.5757**	**18,801.3394**

2023 Hospital Update - San Diego County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Building Construction - 2034

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3091	7.9346	16.1570	0.0310		0.1481	0.1481		0.1481	0.1481		2,897.5468	2,897.5468	0.1162		2,900.4529
Total	**1.3091**	**7.9346**	**16.1570**	**0.0310**		**0.1481**	**0.1481**		**0.1481**	**0.1481**		**2,897.5468**	**2,897.5468**	**0.1162**		**2,900.4529**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.4766	21.1121	7.5443	0.0854	3.4611	0.1260	3.5871	0.9964	0.1205	1.1170		9,327.5937	9,327.5937	0.4195	1.3492	9,740.1422
Worker	2.6088	1.3692	22.7910	0.0865	13.6447	0.0371	13.6819	3.6192	0.0342	3.6534		8,744.7059	8,744.7059	0.1499	0.2062	8,809.8859
Total	**3.0853**	**22.4813**	**30.3353**	**0.1719**	**17.1058**	**0.1632**	**17.2690**	**4.6156**	**0.1547**	**4.7704**		**18,072.2996**	**18,072.2996**	**0.5694**	**1.5554**	**18,550.0281**

2023 Hospital Update - San Diego County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Building Construction - 2034

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3091	7.9346	16.1570	0.0310		0.1481	0.1481		0.1481	0.1481	0.0000	2,897.5468	2,897.5468	0.1162		2,900.4529
Total	**1.3091**	**7.9346**	**16.1570**	**0.0310**		**0.1481**	**0.1481**		**0.1481**	**0.1481**	**0.0000**	**2,897.5468**	**2,897.5468**	**0.1162**		**2,900.4529**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.4766	21.1121	7.5443	0.0854	3.4611	0.1260	3.5871	0.9964	0.1205	1.1170		9,327.5937	9,327.5937	0.4195	1.3492	9,740.1422
Worker	2.6088	1.3692	22.7910	0.0865	13.6447	0.0371	13.6819	3.6192	0.0342	3.6534		8,744.7059	8,744.7059	0.1499	0.2062	8,809.8859
Total	**3.0853**	**22.4813**	**30.3353**	**0.1719**	**17.1058**	**0.1632**	**17.2690**	**4.6156**	**0.1547**	**4.7704**		**18,072.2996**	**18,072.2996**	**0.5694**	**1.5554**	**18,550.0281**

2023 Hospital Update - San Diego County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Building Construction - 2035

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.2168	7.1613	16.1178	0.0310		0.0904	0.0904		0.0904	0.0904		2,897.5468	2,897.5468	0.1079		2,900.2448
Total	**1.2168**	**7.1613**	**16.1178**	**0.0310**		**0.0904**	**0.0904**		**0.0904**	**0.0904**		**2,897.5468**	**2,897.5468**	**0.1079**		**2,900.2448**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.4744	21.0516	7.5566	0.0844	3.4611	0.1254	3.5865	0.9964	0.1199	1.1164		9,225.2548	9,225.2548	0.4228	1.3349	9,633.6207
Worker	2.4771	1.3182	22.2307	0.0854	13.6447	0.0350	13.6797	3.6192	0.0322	3.6514		8,631.4731	8,631.4731	0.1416	0.2028	8,695.4454
Total	**2.9515**	**22.3698**	**29.7874**	**0.1698**	**17.1059**	**0.1603**	**17.2662**	**4.6157**	**0.1521**	**4.7678**		**17,856.7280**	**17,856.7280**	**0.5644**	**1.5377**	**18,329.0661**

2023 Hospital Update - San Diego County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Building Construction - 2035

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.2168	7.1613	16.1178	0.0310		0.0904	0.0904		0.0904	0.0904	0.0000	2,897.5468	2,897.5468	0.1079		2,900.2448
Total	**1.2168**	**7.1613**	**16.1178**	**0.0310**		**0.0904**	**0.0904**		**0.0904**	**0.0904**	**0.0000**	**2,897.5468**	**2,897.5468**	**0.1079**		**2,900.2448**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.4744	21.0516	7.5566	0.0844	3.4611	0.1254	3.5865	0.9964	0.1199	1.1164		9,225.2548	9,225.2548	0.4228	1.3349	9,633.6207
Worker	2.4771	1.3182	22.2307	0.0854	13.6447	0.0350	13.6797	3.6192	0.0322	3.6514		8,631.4731	8,631.4731	0.1416	0.2028	8,695.4454
Total	**2.9515**	**22.3698**	**29.7874**	**0.1698**	**17.1059**	**0.1603**	**17.2662**	**4.6157**	**0.1521**	**4.7678**		**17,856.7280**	**17,856.7280**	**0.5644**	**1.5377**	**18,329.0661**

2023 Hospital Update - San Diego County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Building Construction - 2036

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.2168	7.1613	16.1178	0.0310		0.0904	0.0904		0.0904	0.0904		2,897.5468	2,897.5468	0.1079		2,900.2448
Total	**1.2168**	**7.1613**	**16.1178**	**0.0310**		**0.0904**	**0.0904**		**0.0904**	**0.0904**		**2,897.5468**	**2,897.5468**	**0.1079**		**2,900.2448**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.4744	21.0516	7.5566	0.0844	3.4611	0.1254	3.5865	0.9964	0.1199	1.1164		9,225.2548	9,225.2548	0.4228	1.3349	9,633.6207
Worker	2.4771	1.3182	22.2307	0.0854	13.6447	0.0350	13.6797	3.6192	0.0322	3.6514		8,631.4731	8,631.4731	0.1416	0.2028	8,695.4454
Total	**2.9515**	**22.3698**	**29.7874**	**0.1698**	**17.1059**	**0.1603**	**17.2662**	**4.6157**	**0.1521**	**4.7678**		**17,856.7280**	**17,856.7280**	**0.5644**	**1.5377**	**18,329.0661**

2023 Hospital Update - San Diego County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Building Construction - 2036

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.2168	7.1613	16.1178	0.0310		0.0904	0.0904		0.0904	0.0904	0.0000	2,897.5468	2,897.5468	0.1079		2,900.2448
Total	**1.2168**	**7.1613**	**16.1178**	**0.0310**		**0.0904**	**0.0904**		**0.0904**	**0.0904**	**0.0000**	**2,897.5468**	**2,897.5468**	**0.1079**		**2,900.2448**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.4744	21.0516	7.5566	0.0844	3.4611	0.1254	3.5865	0.9964	0.1199	1.1164		9,225.2548	9,225.2548	0.4228	1.3349	9,633.6207
Worker	2.4771	1.3182	22.2307	0.0854	13.6447	0.0350	13.6797	3.6192	0.0322	3.6514		8,631.4731	8,631.4731	0.1416	0.2028	8,695.4454
Total	**2.9515**	**22.3698**	**29.7874**	**0.1698**	**17.1059**	**0.1603**	**17.2662**	**4.6157**	**0.1521**	**4.7678**		**17,856.7280**	**17,856.7280**	**0.5644**	**1.5377**	**18,329.0661**

2023 Hospital Update - San Diego County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Building Construction - 2037

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.2168	7.1613	16.1178	0.0310		0.0904	0.0904		0.0904	0.0904		2,897.5468	2,897.5468	0.1079		2,900.2448
Total	**1.2168**	**7.1613**	**16.1178**	**0.0310**		**0.0904**	**0.0904**		**0.0904**	**0.0904**		**2,897.5468**	**2,897.5468**	**0.1079**		**2,900.2448**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.4744	21.0516	7.5566	0.0844	3.4611	0.1254	3.5865	0.9964	0.1199	1.1164		9,225.2548	9,225.2548	0.4228	1.3349	9,633.6207
Worker	2.4771	1.3182	22.2307	0.0854	13.6447	0.0350	13.6797	3.6192	0.0322	3.6514		8,631.4731	8,631.4731	0.1416	0.2028	8,695.4454
Total	**2.9515**	**22.3698**	**29.7874**	**0.1698**	**17.1059**	**0.1603**	**17.2662**	**4.6157**	**0.1521**	**4.7678**		**17,856.7280**	**17,856.7280**	**0.5644**	**1.5377**	**18,329.0661**

2023 Hospital Update - San Diego County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Building Construction - 2037

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.2168	7.1613	16.1178	0.0310		0.0904	0.0904		0.0904	0.0904	0.0000	2,897.5468	2,897.5468	0.1079		2,900.2448
Total	**1.2168**	**7.1613**	**16.1178**	**0.0310**		**0.0904**	**0.0904**		**0.0904**	**0.0904**	**0.0000**	**2,897.5468**	**2,897.5468**	**0.1079**		**2,900.2448**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.4744	21.0516	7.5566	0.0844	3.4611	0.1254	3.5865	0.9964	0.1199	1.1164		9,225.2548	9,225.2548	0.4228	1.3349	9,633.6207
Worker	2.4771	1.3182	22.2307	0.0854	13.6447	0.0350	13.6797	3.6192	0.0322	3.6514		8,631.4731	8,631.4731	0.1416	0.2028	8,695.4454
Total	**2.9515**	**22.3698**	**29.7874**	**0.1698**	**17.1059**	**0.1603**	**17.2662**	**4.6157**	**0.1521**	**4.7678**		**17,856.7280**	**17,856.7280**	**0.5644**	**1.5377**	**18,329.0661**

2023 Hospital Update - San Diego County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.6 Paving - 2037

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1405	4.8761	15.8203	0.0281		0.1874	0.1874		0.1874	0.1874		2,656.5168	2,656.5168	0.1022		2,659.0727
Paving	0.3966					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.5371**	**4.8761**	**15.8203**	**0.0281**		**0.1874**	**0.1874**		**0.1874**	**0.1874**		**2,656.5168**	**2,656.5168**	**0.1022**		**2,659.0727**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0224	0.0119	0.2008	7.7000e-004	0.1232	3.2000e-004	0.1235	0.0327	2.9000e-004	0.0330		77.9483	77.9483	1.2800e-003	1.8300e-003	78.5260
Total	**0.0224**	**0.0119**	**0.2008**	**7.7000e-004**	**0.1232**	**3.2000e-004**	**0.1235**	**0.0327**	**2.9000e-004**	**0.0330**		**77.9483**	**77.9483**	**1.2800e-003**	**1.8300e-003**	**78.5260**

2023 Hospital Update - San Diego County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.6 Paving - 2037

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1405	4.8761	15.8203	0.0281		0.1874	0.1874		0.1874	0.1874	0.0000	2,656.5168	2,656.5168	0.1022		2,659.0726
Paving	0.3966					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.5371**	**4.8761**	**15.8203**	**0.0281**		**0.1874**	**0.1874**		**0.1874**	**0.1874**	**0.0000**	**2,656.5168**	**2,656.5168**	**0.1022**		**2,659.0726**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0224	0.0119	0.2008	7.7000e-004	0.1232	3.2000e-004	0.1235	0.0327	2.9000e-004	0.0330		77.9483	77.9483	1.2800e-003	1.8300e-003	78.5260
Total	**0.0224**	**0.0119**	**0.2008**	**7.7000e-004**	**0.1232**	**3.2000e-004**	**0.1235**	**0.0327**	**2.9000e-004**	**0.0330**		**77.9483**	**77.9483**	**1.2800e-003**	**1.8300e-003**	**78.5260**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.6 Paving - 2038

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1405	4.8761	15.8203	0.0281		0.1874	0.1874		0.1874	0.1874		2,656.5168	2,656.5168	0.1022		2,659.0727
Paving	0.3966					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.5371**	**4.8761**	**15.8203**	**0.0281**		**0.1874**	**0.1874**		**0.1874**	**0.1874**		**2,656.5168**	**2,656.5168**	**0.1022**		**2,659.0727**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0224	0.0119	0.2008	7.7000e-004	0.1232	3.2000e-004	0.1235	0.0327	2.9000e-004	0.0330		77.9483	77.9483	1.2800e-003	1.8300e-003	78.5260
Total	**0.0224**	**0.0119**	**0.2008**	**7.7000e-004**	**0.1232**	**3.2000e-004**	**0.1235**	**0.0327**	**2.9000e-004**	**0.0330**		**77.9483**	**77.9483**	**1.2800e-003**	**1.8300e-003**	**78.5260**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.6 Paving - 2038

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1405	4.8761	15.8203	0.0281		0.1874	0.1874		0.1874	0.1874	0.0000	2,656.5168	2,656.5168	0.1022		2,659.0726
Paving	0.3966					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.5371**	**4.8761**	**15.8203**	**0.0281**		**0.1874**	**0.1874**		**0.1874**	**0.1874**	**0.0000**	**2,656.5168**	**2,656.5168**	**0.1022**		**2,659.0726**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0224	0.0119	0.2008	7.7000e-004	0.1232	3.2000e-004	0.1235	0.0327	2.9000e-004	0.0330		77.9483	77.9483	1.2800e-003	1.8300e-003	78.5260
Total	**0.0224**	**0.0119**	**0.2008**	**7.7000e-004**	**0.1232**	**3.2000e-004**	**0.1235**	**0.0327**	**2.9000e-004**	**0.0330**		**77.9483**	**77.9483**	**1.2800e-003**	**1.8300e-003**	**78.5260**

2023 Hospital Update - San Diego County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.7 Architectural Coating - 2038

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	250.8671					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1179	0.7577	1.7943	2.9700e-003		9.9000e-003	9.9000e-003		9.9000e-003	9.9000e-003		281.4481	281.4481	0.0104		281.7081
Total	**250.9850**	**0.7577**	**1.7943**	**2.9700e-003**		**9.9000e-003**	**9.9000e-003**		**9.9000e-003**	**9.9000e-003**		**281.4481**	**281.4481**	**0.0104**		**281.7081**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.4951	0.2635	4.4435	0.0171	2.7273	6.9900e-003	2.7343	0.7234	6.4300e-003	0.7298		1,725.2553	1,725.2553	0.0283	0.0405	1,738.0421
Total	**0.4951**	**0.2635**	**4.4435**	**0.0171**	**2.7273**	**6.9900e-003**	**2.7343**	**0.7234**	**6.4300e-003**	**0.7298**		**1,725.2553**	**1,725.2553**	**0.0283**	**0.0405**	**1,738.0421**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.7 Architectural Coating - 2038

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	250.8671					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1179	0.7577	1.7943	2.9700e-003		9.9000e-003	9.9000e-003		9.9000e-003	9.9000e-003	0.0000	281.4481	281.4481	0.0104		281.7081
Total	**250.9850**	**0.7577**	**1.7943**	**2.9700e-003**		**9.9000e-003**	**9.9000e-003**		**9.9000e-003**	**9.9000e-003**	**0.0000**	**281.4481**	**281.4481**	**0.0104**		**281.7081**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.4951	0.2635	4.4435	0.0171	2.7273	6.9900e-003	2.7343	0.7234	6.4300e-003	0.7298		1,725.2553	1,725.2553	0.0283	0.0405	1,738.0421
Total	**0.4951**	**0.2635**	**4.4435**	**0.0171**	**2.7273**	**6.9900e-003**	**2.7343**	**0.7234**	**6.4300e-003**	**0.7298**		**1,725.2553**	**1,725.2553**	**0.0283**	**0.0405**	**1,738.0421**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.7 Architectural Coating - 2039

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	250.8671					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1179	0.7577	1.7943	2.9700e-003		9.9000e-003	9.9000e-003		9.9000e-003	9.9000e-003		281.4481	281.4481	0.0104		281.7081
Total	**250.9850**	**0.7577**	**1.7943**	**2.9700e-003**		**9.9000e-003**	**9.9000e-003**		**9.9000e-003**	**9.9000e-003**		**281.4481**	**281.4481**	**0.0104**		**281.7081**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.4951	0.2635	4.4435	0.0171	2.7273	6.9900e-003	2.7343	0.7234	6.4300e-003	0.7298		1,725.2553	1,725.2553	0.0283	0.0405	1,738.0421
Total	**0.4951**	**0.2635**	**4.4435**	**0.0171**	**2.7273**	**6.9900e-003**	**2.7343**	**0.7234**	**6.4300e-003**	**0.7298**		**1,725.2553**	**1,725.2553**	**0.0283**	**0.0405**	**1,738.0421**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.7 Architectural Coating - 2039

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	250.8671					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1179	0.7577	1.7943	2.9700e-003		9.9000e-003	9.9000e-003		9.9000e-003	9.9000e-003	0.0000	281.4481	281.4481	0.0104		281.7081
Total	**250.9850**	**0.7577**	**1.7943**	**2.9700e-003**		**9.9000e-003**	**9.9000e-003**		**9.9000e-003**	**9.9000e-003**	**0.0000**	**281.4481**	**281.4481**	**0.0104**		**281.7081**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.4951	0.2635	4.4435	0.0171	2.7273	6.9900e-003	2.7343	0.7234	6.4300e-003	0.7298		1,725.2553	1,725.2553	0.0283	0.0405	1,738.0421
Total	**0.4951**	**0.2635**	**4.4435**	**0.0171**	**2.7273**	**6.9900e-003**	**2.7343**	**0.7234**	**6.4300e-003**	**0.7298**		**1,725.2553**	**1,725.2553**	**0.0283**	**0.0405**	**1,738.0421**

2023 Hospital Update - San Diego County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	91.7217	87.8221	861.4897	1.7256	242.3178	1.0301	243.3479	64.5355	0.9618	65.4973		176,301.9288	176,301.9288	13.7371	8.6494	179,222.8813
Unmitigated	91.7217	87.8221	861.4897	1.7256	242.3178	1.0301	243.3479	64.5355	0.9618	65.4973		176,301.9288	176,301.9288	13.7371	8.6494	179,222.8813

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	9,600.00	10,700.00	8200.00	27,288,542	27,288,542
Convenience Market (24 hour)	3,954.40	5,681.20	4722.00	3,282,963	3,282,963
General Office Building	1,935.36	438.48	136.08	3,499,745	3,499,745
Health Club	1,637.80	1,037.40	1330.00	2,605,420	2,605,420
Hospital	14,600.00	9,000.00	8450.00	32,541,797	32,541,797
Medical Office Building	17,373.60	4,267.20	723.90	25,684,458	25,684,458
Parking Lot	0.00	0.00	0.00		
Research & Development	814.00	137.50	82.50	1,535,972	1,535,972
Total	49,915.16	31,261.78	23,644.48	96,438,897	96,438,897

4.3 Trip Type Information

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	10.80	7.30	7.50	41.60	18.80	39.60	86	11	3
Convenience Market (24 hour)	9.50	7.30	7.30	0.90	80.10	19.00	24	15	61
General Office Building	9.50	7.30	7.30	33.00	48.00	19.00	77	19	4
Health Club	9.50	7.30	7.30	16.90	64.10	19.00	52	39	9
Hospital	9.50	7.30	7.30	64.90	16.10	19.00	73	25	2
Medical Office Building	9.50	7.30	7.30	29.60	51.40	19.00	60	30	10
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Research & Development	9.50	7.30	7.30	33.00	48.00	19.00	82	15	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.581445	0.061322	0.168269	0.110400	0.022610	0.006703	0.010268	0.006246	0.000647	0.000667	0.027159	0.000784	0.003479
Convenience Market (24 hour)	0.581445	0.061322	0.168269	0.110400	0.022610	0.006703	0.010268	0.006246	0.000647	0.000667	0.027159	0.000784	0.003479
General Office Building	0.581445	0.061322	0.168269	0.110400	0.022610	0.006703	0.010268	0.006246	0.000647	0.000667	0.027159	0.000784	0.003479
Health Club	0.581445	0.061322	0.168269	0.110400	0.022610	0.006703	0.010268	0.006246	0.000647	0.000667	0.027159	0.000784	0.003479
Hospital	0.581445	0.061322	0.168269	0.110400	0.022610	0.006703	0.010268	0.006246	0.000647	0.000667	0.027159	0.000784	0.003479
Medical Office Building	0.581445	0.061322	0.168269	0.110400	0.022610	0.006703	0.010268	0.006246	0.000647	0.000667	0.027159	0.000784	0.003479
Parking Lot	0.581445	0.061322	0.168269	0.110400	0.022610	0.006703	0.010268	0.006246	0.000647	0.000667	0.027159	0.000784	0.003479
Research & Development	0.581445	0.061322	0.168269	0.110400	0.022610	0.006703	0.010268	0.006246	0.000647	0.000667	0.027159	0.000784	0.003479

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

2023 Hospital Update - San Diego County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	1.2763	11.4275	8.4591	0.0696		0.8818	0.8818		0.8818	0.8818		13,923.6974	13,923.6974	0.2669	0.2553	14,006.4390
NaturalGas Unmitigated	1.2763	11.4275	8.4591	0.0696		0.8818	0.8818		0.8818	0.8818		13,923.6974	13,923.6974	0.2669	0.2553	14,006.4390

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	29847.5	0.3219	2.7507	1.1705	0.0176		0.2224	0.2224		0.2224	0.2224		3,511.4746	3,511.4746	0.0673	0.0644	3,532.3416
Convenience Market (24 hour)	24.3288	2.6000e-004	2.3900e-003	2.0000e-003	1.0000e-005		1.8000e-004	1.8000e-004		1.8000e-004	1.8000e-004		2.8622	2.8622	5.0000e-005	5.0000e-005	2.8792
General Office Building	8297.36	0.0895	0.8135	0.6833	4.8800e-003		0.0618	0.0618		0.0618	0.0618		976.1599	976.1599	0.0187	0.0179	981.9607
Health Club	1199.34	0.0129	0.1176	0.0988	7.1000e-004		8.9400e-003	8.9400e-003		8.9400e-003	8.9400e-003		141.0991	141.0991	2.7000e-003	2.5900e-003	141.9376
Hospital	56338.9	0.6076	5.5234	4.6397	0.0331		0.4198	0.4198		0.4198	0.4198		6,628.1113	6,628.1113	0.1270	0.1215	6,667.4988
Medical Office Building	20908	0.2255	2.0498	1.7218	0.0123		0.1558	0.1558		0.1558	0.1558		2,459.7679	2,459.7679	0.0472	0.0451	2,474.3851
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Research & Development	1735.89	0.0187	0.1702	0.1430	1.0200e-003		0.0129	0.0129		0.0129	0.0129		204.2224	204.2224	3.9100e-003	3.7400e-003	205.4360
Total		**1.2763**	**11.4275**	**8.4591**	**0.0696**		**0.8818**	**0.8818**		**0.8818**	**0.8818**		**13,923.6974**	**13,923.6974**	**0.2669**	**0.2553**	**14,006.4390**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	29.8475	0.3219	2.7507	1.1705	0.0176		0.2224	0.2224		0.2224	0.2224		3,511.4746	3,511.4746	0.0673	0.0644	3,532.3416
Convenience Market (24 hour)	0.0243288	2.6000e-004	2.3900e-003	2.0000e-003	1.0000e-005		1.8000e-004	1.8000e-004		1.8000e-004	1.8000e-004		2.8622	2.8622	5.0000e-005	5.0000e-005	2.8792
General Office Building	8.29736	0.0895	0.8135	0.6833	4.8800e-003		0.0618	0.0618		0.0618	0.0618		976.1599	976.1599	0.0187	0.0179	981.9607
Health Club	1.19934	0.0129	0.1176	0.0988	7.1000e-004		8.9400e-003	8.9400e-003		8.9400e-003	8.9400e-003		141.0991	141.0991	2.7000e-003	2.5900e-003	141.9376
Hospital	56.3389	0.6076	5.5234	4.6397	0.0331		0.4198	0.4198		0.4198	0.4198		6,628.1113	6,628.1113	0.1270	0.1215	6,667.4988
Medical Office Building	20.908	0.2255	2.0498	1.7218	0.0123		0.1558	0.1558		0.1558	0.1558		2,459.7679	2,459.7679	0.0472	0.0451	2,474.3851
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Research & Development	1.73589	0.0187	0.1702	0.1430	1.0200e-003		0.0129	0.0129		0.0129	0.0129		204.2224	204.2224	3.9100e-003	3.7400e-003	205.4360
Total		**1.2763**	**11.4275**	**8.4591**	**0.0696**		**0.8818**	**0.8818**		**0.8818**	**0.8818**		**13,923.6974**	**13,923.6974**	**0.2669**	**0.2553**	**14,006.4390**

6.0 Area Detail

6.1 Mitigation Measures Area

2023 Hospital Update - San Diego County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1,591.0664	30.8397	1,971.8079	3.4269		265.3300	265.3300		265.3300	265.3300	27,771.7307	11,796.6680	39,568.3987	25.7728	2.1845	40,863.6876
Unmitigated	1,591.0664	30.8397	1,971.8079	3.4269		265.3300	265.3300		265.3300	265.3300	27,771.7307	11,796.6680	39,568.3987	25.7728	2.1845	40,863.6876

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	15.1208					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	43.0477					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	1,530.3950	29.8869	1,889.1064	3.4225		264.8707	264.8707		264.8707	264.8707	27,771.7307	11,647.0588	39,418.7896	25.6287	2.1845	40,710.4750
Landscaping	2.5029	0.9529	82.7015	4.3900e-003		0.4593	0.4593		0.4593	0.4593		149.6092	149.6092	0.1441		153.2126
Total	**1,591.0664**	**30.8397**	**1,971.8079**	**3.4269**		**265.3300**	**265.3300**		**265.3300**	**265.3300**	**27,771.7307**	**11,796.6680**	**39,568.3987**	**25.7728**	**2.1845**	**40,863.6876**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	15.1208					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	43.0477					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	1,530.3950	29.8869	1,889.1064	3.4225		264.8707	264.8707		264.8707	264.8707	27,771.7307	11,647.0588	39,418.7896	25.6287	2.1845	40,710.4750
Landscaping	2.5029	0.9529	82.7015	4.3900e-003		0.4593	0.4593		0.4593	0.4593		149.6092	149.6092	0.1441		153.2126
Total	**1,591.0664**	**30.8397**	**1,971.8079**	**3.4269**		**265.3300**	**265.3300**		**265.3300**	**265.3300**	**27,771.7307**	**11,796.6680**	**39,568.3987**	**25.7728**	**2.1845**	**40,863.6876**

7.0 Water Detail

7.1 Mitigation Measures Water

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Appendix B. Greenhouse Gas Emissions Impacts Memorandum

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Harris & Associates

MEMORANDUM

To: Lauren Lievers, Principal Environmental Planner, University of California, San Diego
From: Sharon Toland, Project Manager, Harris & Associates
RE: Hillcrest Hospital Expansion Feasibility Study – Greenhouse Gas Emissions Impacts
Date: January 17, 2024
CC: Diane Sandman, Vice President, Environmental + Planning Consulting, and Kelsey Hawkins, Air Quality and Greenhouse Gas Analyst, Harris & Associates
Att: 1, Model Outputs

The University of California, San Diego (UC San Diego) Hillcrest Campus 2019 Long Range Development Plan (2019 LRDP) Environmental Impact Report (2019 LRDP EIR) was certified in November 2019 (SCH No. 2018031003). As part of the 2019 LRDP EIR, Harris analyzed a 300-bed replacement hospital in Phase 3 of the project. Currently, UC San Diego is exploring the possibility of expanding the replacement hospital to more than 300 beds and wants to determine the maximum number of beds that could be constructed without triggering a new or increased impact compared to those identified in the 2019 LRDP EIR. The 2019 LRDP addressed two issues related to GHG emissions, Issue 1: Generation of Greenhouse Gas Emissions, and Issue 2: Conflict with Applicable Plans. Because implementation of the Greenhouse Gas Emissions (GHG) Reduction Strategy was determined to be sufficient to achieve a less than significant impact under Issue 2 if the 2024 Hillcrest Hospital Expansion Feasibility Study would generate emissions consistent with the GHG Reduction Strategy, it would also be consistent with applicable plans. Therefore, this analysis focuses on Issue 1, Generation of Greenhouse Gas Emissions.

Project Description

UC San Diego is considering the addition of up to 200 hospital beds for a total of up to 500 hospital beds. Table 1, Comparison of 2019 LRDP EIR Buildout with 2024 Feasibility Study Components, provides a comparison of the buildout land use mix analyzed in the 2019 LRDP EIR compared to the land use mix at buildout with a maximum of 500 hospital beds. The table also reflects other modifications to the 2019 LRDP land use plan that have occurred since 2019 LRDP EIR certification.

Table 1. Comparison of 2019 LRDP EIR Buildout with 2024 Feasibility Study Components

Land Use Category	2019 LRDP EIR	2024 Land Use Changes with 500-Bed Hospital
New Land Uses to Be Constructed		
Outpatient Pavilion	272,000 sf	—
Outpatient Pavilion Annex	25,000 sf	—
Outpatient	20,000 sf	381,000 sf
Multi-Use Building (Office)	136,000 sf	—
Multi-Use Building (Research)	160,000 sf	—
Wellness Center	40,000 sf	38,000 sf
Residential	1,000 Units	1,000 Units

Table 1. Comparison of 2019 LRDP EIR Buildout with 2024 Feasibility Study Components

Land Use Category	2019 LRDP EIR	2024 Land Use Changes with 500-Bed Hospital
Hospital	300 Beds	500 Beds
Science Research	34,000 sf	55,000 sf
Campus Retail	4,000 sf	4,000 sf
Office and Support	—	151,200 sf
Existing Land Uses to Be Demolished		
Commercial Office	130,550 sf	130,550 sf
Science Research	20,800 sf	20,800 sf
Medical Office	69,350 sf	69,350 sf
Residential	21 Units	21 Units
Commercial Office	49,100 sf	11,100 sf
Science Research	168,900 sf	168,900 sf
Hospital	370 Beds	370 Beds
Commercial Office	37,100 sf	37,100 sf
Medical Office	131,100 sf	131,100 sf

Notes: 2019 LRDP EIR = 2019 Long Range Development Plan Environmental Impact Report; sf = square feet

The intent of this feasibility study is to identify the number of additional hospital beds above 300 that could be constructed without resulting in greater impacts than those identified in the 2019 LRDP EIR. The maximum number of beds under consideration is 500 beds.

Issue 1: Generation of Greenhouse Gas Emissions

Significance Criteria

In accordance with Appendix G of the California Environmental Quality Act (CEQA) Guidelines, the 2019 LRDP EIR defined a significant impact related to GHG emissions as construction and operation emissions that exceed a threshold of net zero additional GHG emissions compared to the existing conditions. The applicable baseline for comparison to determine whether a net increase would occur was existing annual campus emissions of 47,486 metric tons carbon dioxide equivalent (MT CO_2e) (LSA 2019).

2019 LRDP Impacts (300-Bed Hospital)

Long-term annual GHG emissions of the 2019 LRDP, with and without GHG Reduction Strategy implementation, are summarized in Table 2, Long-Term Annual Greenhouse Gas Emissions – 2019 LRDP EIR. The summary in Table 2 represents the worst-case scenario identified in the 2019 LRDP EIR, which included use of a cogeneration facility rather than traditional boilers or fuel cells. The analysis of GHG emissions is based on the GHG Reduction Strategy prepared for the 2019 LRDP by LSA Associates, Inc. (LSA 2019). As shown in Table 2, implementation of the GHG Reduction Strategy would reduce emissions from buildout of the 2019 LRDP to below the reduction target, and impacts would be less than significant.

Table 2. Long-Term Annual Greenhouse Gas Emissions – 2019 LRDP EIR

Sector	Emissions without GHG Reduction Strategy (MT CO_2e)	Percent Emissions Reduction from GHG Reduction Strategy	Emissions with GHG Reduction Strategy (MT CO_2e)
Energy	22,576.24	39.8	13,589.30
Mobile	26,059.85	13	22,668.58
Waste	6,044.72	90	604.47
Water	449.52	36	287.69
Area Sources	1,545.05	99.4	8.80
Amortized Construction	1,438.15	—	1,438.15
Total Buildout Emissions	**58,113.52**	—	**38,596.99**
Reduction Target/Threshold	**47,486**		

Source: LSA 2019.
Note: MT CO_2e = metric tons of carbon dioxide equivalent. Amortization period for construction is 30 years.
Numbers in table may not appear to add up correctly due to rounding of all numbers to two decimal places. Assumes no GHG reduction measures implemented.

2024 Feasibility Study Impacts (500-Bed Hospital)

GHG emissions from operation of campus buildout, assuming the maximum of 500 hospital beds and other land use changes since 2019 LRDP EIR certification, were estimated using California Emissions Estimator Model (CalEEMod) version 2020.4.0. Consistent with the 2019 LRDP assumptions, CalEEMod default assumptions were used to estimate water, solid waste, and area source emissions. Vehicle miles traveled, energy use, and construction emissions were adjusted proportionally to the increase in hospital beds. An increase from 300 to 500 hospital beds represents an approximately 67 percent increase in beds. As such, an increase of 67 percent in vehicle miles traveled, energy use emissions attributable to the hospital, and Phase 3 construction emissions was added to total buildout emissions. Consistent with the 2019 LRDP EIR, mobile emissions were calculated using CalEEMod. The hospital's proportion of energy use emissions was calculated based on 2019 LRDP EIR data, and construction emissions were obtained from the GHG Reduction Strategy. This estimate is conservative because a 67 percent increase in beds would not necessarily increase hospital operations or construction requirements by the same amount. Future modeling with project-specific energy or construction estimates would be expected to be reduced compared to these calculations. Conservative total long-term annual operational GHG emissions from the project are provided in Table 3, Long-Term Annual Operational Greenhouse Gas Emissions – 2024 Feasibility Study. Model outputs are provided in Attachment 1, Model Outputs. Mobile emissions decrease from the 2019 LRDP even though vehicle miles traveled would increase because the 2019 LRDP was modeled using CalEEMod version 2016.3.2, whereas the proposed project was modeled using CalEEMod version 2020.4.0, which uses updated vehicle emissions factors that better reflect current emissions standards. Additionally, the total floor surface area decreased between the 2019 LRDP and current buildout assumptions, which reduced waste, water, and area sources emissions under the proposed scenario.

Table 3. Long-Term Annual Operational Greenhouse Gas Emissions – 2024 Feasibility Study

Sector	Emissions without GHG Reduction Strategy (MT CO_2e)	Percent Reduction Achieved from GHG Reduction Strategy	Emissions with GHG Reduction Strategy Implementation (MT CO_2e)
Energy	38,463	39.8	23,155
Mobile	24,897	13.0	21,660
Waste	3,223	90.0	322
Water	292	36.0	187

Table 3. Long-Term Annual Operational Greenhouse Gas Emissions – 2024 Feasibility Study

Sector	Emissions without GHG Reduction Strategy (MT CO_2e)	Percent Reduction Achieved from GHG Reduction Strategy	Emissions with GHG Reduction Strategy Implementation (MT CO_2e)
Area Sources	1,527	99.4	9
Amortized Construction	1,742	—	1,742
Total Buildout Emissions	**70,144**	—	**47,075**
Total Net Change from 2019 LRDP	**+12,030**	—	—
Reduction Target/Threshold	—	—	**47,486**

Source: LSA 2019.
Note: MT CO_2e = metric tons of carbon dioxide equivalent. Amortization period for construction is 30 years.
Numbers in table may not appear to add up correctly due to rounding of all numbers to two decimal places. Assumes no GHG reduction measures implemented.

As shown in Table 3, estimated GHG emissions under the worst-case buildout are approximately 12,030 MT CO_2e greater than estimated for the 2019 LRDP. Similar to the 2019 LRDP EIR, the GHG Reduction Strategy would continue to be implemented, and similar emissions reductions would be achieved in each sector because land uses and operation would be similar under the two projects. As shown in Table 3, assuming the same GHG Reduction Strategy proportions as in the 2019 LRDP, worst-case buildout with 500 hospital beds and the cogeneration facility would be below the reduction target. Therefore, an increase in hospital beds up to 500 is not anticipated to result in a new or increased significant impact related to GHG emissions with continued implementation of the GHG Reduction Strategy.

Summary of Greenhouse Gas Emissions Impacts

Impacts related to GHG emissions would be similar to those identified in the 2019 LRDP EIR. The Hillcrest Hospital Expansion Feasibility Study would result in increased GHG emissions compared to the 2019 LRDP EIR project but is not anticipated to result in a new significant impact. Therefore, the campus could feasibly increase the maximum count to 500 hospital beds without resulting in a new GHG emissions impact.

References

LSA (LSA Associates, Inc.). 2019. Greenhouse Gas Emissions Reduction Strategy – University of California, San Diego, Hillcrest Campus Long Range Development Plan EIR. June.

Attachment 1. Model Outputs

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2023 Hospital Update - San Diego County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2023 Hospital Update

San Diego County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	151.20	1000sqft	6.27	151,200.00	0
Hospital	500.00	Bed	16.53	357,878.79	0
Medical Office Building	381.00	1000sqft	6.89	381,000.00	0
Research & Development	55.00	1000sqft	4.45	55,000.00	0
Parking Lot	3,700.00	Space	33.30	1,480,000.00	0
Health Club	38.00	1000sqft	0.83	38,000.00	0
Apartments Low Rise	1,000.00	Dwelling Unit	62.50	1,000,000.00	2860
Convenience Market (24 hour)	4.00	1000sqft	1.01	4,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	40
Climate Zone	13			**Operational Year**	2035
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	0	**CH4 Intensity (lb/MWhr)**	0	**N2O Intensity (lb/MWhr)**	0

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Rates would be zero per GHG Reduction strategy assumptions

Land Use - Revised to acreages consistent with GHG Reduction Strategy

Vehicle Trips - Revised for VMT calculated from GHG Reduction Strategy

2023 Hospital Update - San Diego County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Table Name	Column Name	Default Value	New Value
tblLandUse	LotAcreage	3.47	6.27
tblLandUse	LotAcreage	8.22	16.53
tblLandUse	LotAcreage	8.75	6.89
tblLandUse	LotAcreage	1.26	4.45
tblLandUse	LotAcreage	0.87	0.83
tblLandUse	LotAcreage	0.09	1.01
tblProjectCharacteristics	CH4IntensityFactor	0.033	0
tblProjectCharacteristics	CO2IntensityFactor	539.98	0
tblProjectCharacteristics	N2OIntensityFactor	0.004	0
tblVehicleTrips	ST_TR	8.14	10.70
tblVehicleTrips	ST_TR	1,084.17	1,420.30
tblVehicleTrips	ST_TR	2.21	2.90
tblVehicleTrips	ST_TR	20.87	27.30
tblVehicleTrips	ST_TR	13.76	18.00
tblVehicleTrips	ST_TR	8.57	11.20
tblVehicleTrips	ST_TR	1.90	2.50
tblVehicleTrips	SU_TR	6.28	8.20
tblVehicleTrips	SU_TR	901.17	1,180.50
tblVehicleTrips	SU_TR	0.70	0.90
tblVehicleTrips	SU_TR	26.73	35.00
tblVehicleTrips	SU_TR	12.88	16.90
tblVehicleTrips	SU_TR	1.42	1.90
tblVehicleTrips	SU_TR	1.11	1.50
tblVehicleTrips	WD_TR	7.32	9.60
tblVehicleTrips	WD_TR	762.28	988.60
tblVehicleTrips	WD_TR	9.74	12.80
tblVehicleTrips	WD_TR	32.93	43.10
tblVehicleTrips	WD_TR	22.32	29.20

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblVehicleTrips	WD_TR	34.80	45.60
tblVehicleTrips	WD_TR	11.26	14.80

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

2023 Hospital Update - San Diego County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.2472	2.3166	2.1105	4.2200e-003	0.2167	0.1074	0.3242	0.0733	0.0999	0.1732	0.0000	370.1948	370.1948	0.1020	2.8000e-004	372.8294
2024	0.3979	3.9648	3.1783	7.0000e-003	2.0480	0.1693	2.2173	0.8601	0.1558	1.0158	0.0000	615.8866	615.8866	0.1946	4.2000e-004	620.8763
2025	0.5399	4.1406	5.0730	0.0173	1.8528	0.1265	1.9793	0.5520	0.1172	0.6692	0.0000	1,592.0170	1,592.0170	0.1971	0.0889	1,623.4386
2026	0.7399	4.8085	7.1678	0.0300	2.1811	0.0944	2.2755	0.5898	0.0889	0.6787	0.0000	2,812.7338	2,812.7338	0.1457	0.2149	2,880.4181
2027	0.7116	4.7530	6.9440	0.0293	2.1811	0.0938	2.2749	0.5898	0.0884	0.6781	0.0000	2,750.3241	2,750.3241	0.1442	0.2095	2,816.3641
2028	0.6825	4.6888	6.7312	0.0286	2.1727	0.0928	2.2655	0.5875	0.0874	0.6749	0.0000	2,682.7507	2,682.7507	0.1424	0.2037	2,747.0242
2029	0.6591	4.6580	6.5907	0.0281	2.1811	0.0925	2.2736	0.5898	0.0871	0.6769	0.0000	2,639.0646	2,639.0646	0.1420	0.1997	2,702.1172
2030	0.6261	4.0292	6.4561	0.0281	2.1811	0.0424	2.2235	0.5898	0.0412	0.6309	0.0000	2,631.5719	2,631.5719	0.0838	0.1954	2,691.9076
2031	0.6013	4.0020	6.3286	0.0276	2.1811	0.0419	2.2230	0.5898	0.0407	0.6305	0.0000	2,589.5068	2,589.5068	0.0829	0.1918	2,648.7446
2032	0.5810	3.9954	6.2430	0.0273	2.1895	0.0416	2.2310	0.5920	0.0404	0.6324	0.0000	2,562.2819	2,562.2819	0.0824	0.1895	2,620.7978
2033	0.5567	3.9467	6.1023	0.0268	2.1727	0.0408	2.2136	0.5875	0.0397	0.6272	0.0000	2,510.1086	2,510.1086	0.0812	0.1853	2,567.3591
2034	0.5389	3.9300	6.0186	0.0265	2.1727	0.0404	2.2132	0.5875	0.0394	0.6269	0.0000	2,481.0713	2,481.0713	0.0806	0.1829	2,537.5940
2035	0.5129	3.8296	5.9652	0.0263	2.1811	0.0327	2.2138	0.5898	0.0316	0.6214	0.0000	2,464.9806	2,464.9806	0.0793	0.1815	2,521.0601
2036	0.5149	3.8443	5.9881	0.0264	2.1895	0.0328	2.2223	0.5920	0.0317	0.6238	0.0000	2,474.4249	2,474.4249	0.0796	0.1822	2,530.7194
2037	0.3515	2.1665	3.9463	0.0146	1.0528	0.0284	1.0812	0.2846	0.0279	0.3125	0.0000	1,349.2739	1,349.2739	0.0444	0.0871	1,376.3247
2038	22.3170	0.2952	1.2236	3.0000e-003	0.2407	9.3800e-003	0.2501	0.0640	9.3300e-003	0.0733	0.0000	266.5459	266.5459	7.0000e-003	3.2800e-003	267.6979
2039	5.4058	0.0218	0.1338	4.3000e-004	0.0572	3.6000e-004	0.0576	0.0152	3.5000e-004	0.0156	0.0000	39.4365	39.4365	7.4000e-004	7.8000e-004	39.6875
Maximum	**22.3170**	**4.8085**	**7.1678**	**0.0300**	**2.1895**	**0.1693**	**2.2755**	**0.8601**	**0.1558**	**1.0158**	**0.0000**	**2,812.7338**	**2,812.7338**	**0.1971**	**0.2149**	**2,880.4181**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.1 Overall Construction

Mitigated Construction

2023 Hospital Update - San Diego County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.2472	2.3166	2.1104	4.2200e-003	0.2167	0.1074	0.3242	0.0733	0.0999	0.1732	0.0000	370.1944	370.1944	0.1020	2.8000e-004	372.8290
2024	0.3979	3.9648	3.1783	7.0000e-003	2.0480	0.1693	2.2173	0.8601	0.1558	1.0158	0.0000	615.8859	615.8859	0.1946	4.2000e-004	620.8756
2025	0.5399	4.1406	5.0730	0.0173	1.8528	0.1265	1.9793	0.5520	0.1172	0.6692	0.0000	1,592.0163	1,592.0163	0.1971	0.0889	1,623.4380
2026	0.7399	4.8085	7.1678	0.0300	2.1811	0.0944	2.2755	0.5898	0.0889	0.6787	0.0000	2,812.7334	2,812.7334	0.1457	0.2149	2,880.4178
2027	0.7116	4.7530	6.9440	0.0293	2.1811	0.0938	2.2749	0.5898	0.0884	0.6781	0.0000	2,750.3237	2,750.3237	0.1442	0.2095	2,816.3637
2028	0.6825	4.6888	6.7312	0.0286	2.1727	0.0928	2.2655	0.5875	0.0874	0.6749	0.0000	2,682.7503	2,682.7503	0.1424	0.2037	2,747.0238
2029	0.6591	4.6580	6.5907	0.0281	2.1811	0.0925	2.2736	0.5898	0.0871	0.6769	0.0000	2,639.0643	2,639.0643	0.1420	0.1997	2,702.1168
2030	0.6261	4.0292	6.4561	0.0281	2.1811	0.0424	2.2235	0.5898	0.0412	0.6309	0.0000	2,631.5715	2,631.5715	0.0838	0.1954	2,691.9072
2031	0.6013	4.0020	6.3286	0.0276	2.1811	0.0419	2.2230	0.5898	0.0407	0.6305	0.0000	2,589.5064	2,589.5064	0.0829	0.1918	2,648.7442
2032	0.5810	3.9954	6.2430	0.0273	2.1895	0.0416	2.2310	0.5920	0.0404	0.6324	0.0000	2,562.2815	2,562.2815	0.0824	0.1895	2,620.7973
2033	0.5567	3.9467	6.1023	0.0268	2.1727	0.0408	2.2136	0.5875	0.0397	0.6272	0.0000	2,510.1082	2,510.1082	0.0812	0.1853	2,567.3586
2034	0.5389	3.9300	6.0186	0.0265	2.1727	0.0404	2.2132	0.5875	0.0394	0.6269	0.0000	2,481.0709	2,481.0709	0.0806	0.1829	2,537.5936
2035	0.5129	3.8296	5.9652	0.0263	2.1811	0.0327	2.2138	0.5898	0.0316	0.6214	0.0000	2,464.9802	2,464.9802	0.0793	0.1815	2,521.0597
2036	0.5149	3.8443	5.9881	0.0264	2.1895	0.0328	2.2223	0.5920	0.0317	0.6238	0.0000	2,474.4245	2,474.4245	0.0796	0.1822	2,530.7189
2037	0.3515	2.1665	3.9463	0.0146	1.0528	0.0284	1.0812	0.2846	0.0279	0.3125	0.0000	1,349.2735	1,349.2735	0.0444	0.0871	1,376.3243
2038	22.3170	0.2952	1.2236	3.0000e-003	0.2407	9.3800e-003	0.2501	0.0640	9.3300e-003	0.0733	0.0000	266.5457	266.5457	7.0000e-003	3.2800e-003	267.6978
2039	5.4058	0.0218	0.1338	4.3000e-004	0.0572	3.6000e-004	0.0576	0.0152	3.5000e-004	0.0156	0.0000	39.4365	39.4365	7.4000e-004	7.8000e-004	39.6875
Maximum	**22.3170**	**4.8085**	**7.1678**	**0.0300**	**2.1895**	**0.1693**	**2.2755**	**0.8601**	**0.1558**	**1.0158**	**0.0000**	**2,812.7334**	**2,812.7334**	**0.1971**	**0.2149**	**2,880.4178**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	**3-9-2023**	**6-8-2023**	0.7827	0.7827
2	**6-9-2023**	**9-8-2023**	0.7827	0.7827
3	**9-9-2023**	**12-8-2023**	0.7743	0.7743
4	**12-9-2023**	**3-8-2024**	0.9637	0.9637
5	**3-9-2024**	**6-8-2024**	1.0034	1.0034
6	**6-9-2024**	**9-8-2024**	1.1722	1.1722
7	**9-9-2024**	**12-8-2024**	1.1597	1.1597
8	**12-9-2024**	**3-8-2025**	1.0332	1.0332
9	**3-9-2025**	**6-8-2025**	1.0160	1.0160
10	**6-9-2025**	**9-8-2025**	1.1496	1.1496
11	**9-9-2025**	**12-8-2025**	1.4112	1.4112
12	**12-9-2025**	**3-8-2026**	1.3906	1.3906
13	**3-9-2026**	**6-8-2026**	1.3787	1.3787
14	**6-9-2026**	**9-8-2026**	1.3664	1.3664
15	**9-9-2026**	**12-8-2026**	1.3884	1.3884
16	**12-9-2026**	**3-8-2027**	1.3690	1.3690
17	**3-9-2027**	**6-8-2027**	1.3580	1.3580
18	**6-9-2027**	**9-8-2027**	1.3461	1.3461
19	**9-9-2027**	**12-8-2027**	1.3673	1.3673
20	**12-9-2027**	**3-8-2028**	1.3648	1.3648
21	**3-9-2028**	**6-8-2028**	1.3400	1.3400
22	**6-9-2028**	**9-8-2028**	1.3284	1.3284
23	**9-9-2028**	**12-8-2028**	1.3489	1.3489
24	**12-9-2028**	**3-8-2029**	1.3310	1.3310

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

25	**3-9-2029**	**6-8-2029**	1.3215	1.3215
26	**6-9-2029**	**9-8-2029**	1.3102	1.3102
27	**9-9-2029**	**12-8-2029**	1.3300	1.3300
28	**12-9-2029**	**3-8-2030**	1.2044	1.2044
29	**3-9-2030**	**6-8-2030**	1.1551	1.1551
30	**6-9-2030**	**9-8-2030**	1.1440	1.1440
31	**9-9-2030**	**12-8-2030**	1.1649	1.1649
32	**12-9-2030**	**3-8-2031**	1.1526	1.1526
33	**3-9-2031**	**6-8-2031**	1.1421	1.1421
34	**6-9-2031**	**9-8-2031**	1.1313	1.1313
35	**9-9-2031**	**12-8-2031**	1.1515	1.1515
36	**12-9-2031**	**3-8-2032**	1.1533	1.1533
37	**3-9-2032**	**6-8-2032**	1.1310	1.1310
38	**6-9-2032**	**9-8-2032**	1.1204	1.1204
39	**9-9-2032**	**12-8-2032**	1.1402	1.1402
40	**12-9-2032**	**3-8-2033**	1.1304	1.1304
41	**3-9-2033**	**6-8-2033**	1.1215	1.1215
42	**6-9-2033**	**9-8-2033**	1.1110	1.1110
43	**9-9-2033**	**12-8-2033**	1.1304	1.1304
44	**12-9-2033**	**3-8-2034**	1.1212	1.1212
45	**3-9-2034**	**6-8-2034**	1.1127	1.1127
46	**6-9-2034**	**9-8-2034**	1.1024	1.1024
47	**9-9-2034**	**12-8-2034**	1.1214	1.1214
48	**12-9-2034**	**3-8-2035**	1.0923	1.0923
49	**3-9-2035**	**6-8-2035**	1.0766	1.0766
50	**6-9-2035**	**9-8-2035**	1.0664	1.0664
51	**9-9-2035**	**12-8-2035**	1.0855	1.0855
52	**12-9-2035**	**3-8-2036**	1.0952	1.0952
53	**3-9-2036**	**6-8-2036**	1.0766	1.0766

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

54	**6-9-2036**	**9-8-2036**	1.0664	1.0664
55	**9-9-2036**	**12-8-2036**	1.0855	1.0855
56	**12-9-2036**	**3-8-2037**	1.0832	1.0832
57	**3-9-2037**	**6-8-2037**	1.0766	1.0766
58	**6-9-2037**	**9-8-2037**	0.3604	0.3604
59	**9-9-2037**	**12-8-2037**	0.2095	0.2095
60	**12-9-2037**	**3-8-2038**	0.2072	0.2072
61	**3-9-2038**	**6-8-2038**	3.8136	3.8136
62	**6-9-2038**	**9-8-2038**	8.2939	8.2939
63	**9-9-2038**	**12-8-2038**	8.2057	8.2057
64	**12-9-2038**	**3-8-2039**	7.5750	7.5750
		Highest	8.2939	8.2939

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	73.5872	1.3111	84.8965	0.1407		10.9010	10.9010		10.9010	10.9010	1,032.9577	445.4225	1,478.3802	0.9650	0.0813	1,526.7181
Energy	0.2329	2.0855	1.5438	0.0127		0.1609	0.1609		0.1609	0.1609	0.0000	2,305.2243	2,305.2243	0.0442	0.0423	2,318.9231
Mobile	13.6638	13.1542	127.7708	0.2643	36.0633	0.1565	36.2198	9.6228	0.1461	9.7690	0.0000	24,499.3598	24,499.3598	1.8599	1.1788	24,897.1273
Waste						0.0000	0.0000		0.0000	0.0000	1,300.8108	0.0000	1,300.8108	76.8757	0.0000	3,222.7036
Water						0.0000	0.0000		0.0000	0.0000	67.9968	0.0000	67.9968	6.9839	0.1649	291.7366
Total	**87.4839**	**16.5509**	**214.2111**	**0.4178**	**36.0633**	**11.2185**	**47.2818**	**9.6228**	**11.2081**	**20.8309**	**2,401.7652**	**27,250.0065**	**29,651.7717**	**86.7287**	**1.4672**	**32,257.2086**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	73.5872	1.3111	84.8965	0.1407		10.9010	10.9010		10.9010	10.9010	1,032.9577	445.4225	1,478.3802	0.9650	0.0813	1,526.7181
Energy	0.2329	2.0855	1.5438	0.0127		0.1609	0.1609		0.1609	0.1609	0.0000	2,305.2243	2,305.2243	0.0442	0.0423	2,318.9231
Mobile	13.6638	13.1542	127.7708	0.2643	36.0633	0.1565	36.2198	9.6228	0.1461	9.7690	0.0000	24,499.3598	24,499.3598	1.8599	1.1788	24,897.1273
Waste						0.0000	0.0000		0.0000	0.0000	1,300.8108	0.0000	1,300.8108	76.8757	0.0000	3,222.7036
Water						0.0000	0.0000		0.0000	0.0000	67.9968	0.0000	67.9968	6.9839	0.1649	291.7366
Total	**87.4839**	**16.5509**	**214.2111**	**0.4178**	**36.0633**	**11.2185**	**47.2818**	**9.6228**	**11.2081**	**20.8309**	**2,401.7652**	**27,250.0065**	**29,651.7717**	**86.7287**	**1.4672**	**32,257.2086**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	3/9/2023	12/13/2023	5	200	
2	Site Preparation	Site Preparation	12/14/2023	5/29/2024	5	120	
3	Grading	Grading	5/30/2024	8/6/2025	5	310	

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

4	Building Construction	Building Construction	8/7/2025	6/24/2037	5	3100	
5	Paving	Paving	6/25/2037	4/28/2038	5	220	
6	Architectural Coating	Architectural Coating	4/29/2038	3/2/2039	5	220	

Acres of Grading (Site Preparation Phase): 180

Acres of Grading (Grading Phase): 930

Acres of Paving: 33.3

Residential Indoor: 2,025,000; Residential Outdoor: 675,000; Non-Residential Indoor: 1,480,618; Non-Residential Outdoor: 493,539; Striped Parking Area: 88,800 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Cranes	1	7.00	231	0.29
Demolition	Excavators	3	8.00	158	0.38
Grading	Excavators	2	8.00	158	0.38
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Grading	Graders	1	8.00	187	0.41
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	1,661.00	511.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	332.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2269	2.1484	1.9643	3.8800e-003		0.0998	0.0998		0.0928	0.0928	0.0000	339.9207	339.9207	0.0952	0.0000	342.3006
Total	**0.2269**	**2.1484**	**1.9643**	**3.8800e-003**		**0.0998**	**0.0998**		**0.0928**	**0.0928**	**0.0000**	**339.9207**	**339.9207**	**0.0952**	**0.0000**	**342.3006**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Demolition - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0600e-003	2.8100e-003	0.0342	1.0000e-004	0.0120	7.0000e-005	0.0121	3.2000e-003	6.0000e-005	3.2600e-003	0.0000	9.5184	9.5184	2.8000e-004	2.7000e-004	9.6046
Total	**4.0600e-003**	**2.8100e-003**	**0.0342**	**1.0000e-004**	**0.0120**	**7.0000e-005**	**0.0121**	**3.2000e-003**	**6.0000e-005**	**3.2600e-003**	**0.0000**	**9.5184**	**9.5184**	**2.8000e-004**	**2.7000e-004**	**9.6046**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2269	2.1484	1.9643	3.8800e-003		0.0998	0.0998		0.0928	0.0928	0.0000	339.9203	339.9203	0.0952	0.0000	342.3002
Total	**0.2269**	**2.1484**	**1.9643**	**3.8800e-003**		**0.0998**	**0.0998**		**0.0928**	**0.0928**	**0.0000**	**339.9203**	**339.9203**	**0.0952**	**0.0000**	**342.3002**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Demolition - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0600e-003	2.8100e-003	0.0342	1.0000e-004	0.0120	7.0000e-005	0.0121	3.2000e-003	6.0000e-005	3.2600e-003	0.0000	9.5184	9.5184	2.8000e-004	2.7000e-004	9.6046
Total	**4.0600e-003**	**2.8100e-003**	**0.0342**	**1.0000e-004**	**0.0120**	**7.0000e-005**	**0.0121**	**3.2000e-003**	**6.0000e-005**	**3.2600e-003**	**0.0000**	**9.5184**	**9.5184**	**2.8000e-004**	**2.7000e-004**	**9.6046**

3.3 Site Preparation - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.2038	0.0000	0.2038	0.0699	0.0000	0.0699	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0160	0.1652	0.1095	2.3000e-004		7.6000e-003	7.6000e-003		6.9900e-003	6.9900e-003	0.0000	20.0704	20.0704	6.4900e-003	0.0000	20.2327
Total	**0.0160**	**0.1652**	**0.1095**	**2.3000e-004**	**0.2038**	**7.6000e-003**	**0.2114**	**0.0699**	**6.9900e-003**	**0.0769**	**0.0000**	**20.0704**	**20.0704**	**6.4900e-003**	**0.0000**	**20.2327**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.3 Site Preparation - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.9000e-004	2.0000e-004	2.4600e-003	1.0000e-005	8.7000e-004	0.0000	8.7000e-004	2.3000e-004	0.0000	2.3000e-004	0.0000	0.6853	0.6853	2.0000e-005	2.0000e-005	0.6915
Total	**2.9000e-004**	**2.0000e-004**	**2.4600e-003**	**1.0000e-005**	**8.7000e-004**	**0.0000**	**8.7000e-004**	**2.3000e-004**	**0.0000**	**2.3000e-004**	**0.0000**	**0.6853**	**0.6853**	**2.0000e-005**	**2.0000e-005**	**0.6915**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.2038	0.0000	0.2038	0.0699	0.0000	0.0699	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0160	0.1651	0.1095	2.3000e-004		7.6000e-003	7.6000e-003		6.9900e-003	6.9900e-003	0.0000	20.0704	20.0704	6.4900e-003	0.0000	20.2327
Total	**0.0160**	**0.1651**	**0.1095**	**2.3000e-004**	**0.2038**	**7.6000e-003**	**0.2114**	**0.0699**	**6.9900e-003**	**0.0769**	**0.0000**	**20.0704**	**20.0704**	**6.4900e-003**	**0.0000**	**20.2327**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.3 Site Preparation - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.9000e-004	2.0000e-004	2.4600e-003	1.0000e-005	8.7000e-004	0.0000	8.7000e-004	2.3000e-004	0.0000	2.3000e-004	0.0000	0.6853	0.6853	2.0000e-005	2.0000e-005	0.6915
Total	**2.9000e-004**	**2.0000e-004**	**2.4600e-003**	**1.0000e-005**	**8.7000e-004**	**0.0000**	**8.7000e-004**	**2.3000e-004**	**0.0000**	**2.3000e-004**	**0.0000**	**0.6853**	**0.6853**	**2.0000e-005**	**2.0000e-005**	**0.6915**

3.3 Site Preparation - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.0710	0.0000	1.0710	0.5466	0.0000	0.5466	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1437	1.4675	0.9901	2.0600e-003		0.0664	0.0664		0.0611	0.0611	0.0000	180.6681	180.6681	0.0584	0.0000	182.1289
Total	**0.1437**	**1.4675**	**0.9901**	**2.0600e-003**	**1.0710**	**0.0664**	**1.1374**	**0.5466**	**0.0611**	**0.6076**	**0.0000**	**180.6681**	**180.6681**	**0.0584**	**0.0000**	**182.1289**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.3 Site Preparation - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.4700e-003	1.6400e-003	0.0207	7.0000e-005	7.7900e-003	4.0000e-005	7.8400e-003	2.0700e-003	4.0000e-005	2.1100e-003	0.0000	5.9659	5.9659	1.7000e-004	1.6000e-004	6.0180
Total	**2.4700e-003**	**1.6400e-003**	**0.0207**	**7.0000e-005**	**7.7900e-003**	**4.0000e-005**	**7.8400e-003**	**2.0700e-003**	**4.0000e-005**	**2.1100e-003**	**0.0000**	**5.9659**	**5.9659**	**1.7000e-004**	**1.6000e-004**	**6.0180**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.0710	0.0000	1.0710	0.5466	0.0000	0.5466	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1437	1.4675	0.9901	2.0600e-003		0.0664	0.0664		0.0611	0.0611	0.0000	180.6679	180.6679	0.0584	0.0000	182.1287
Total	**0.1437**	**1.4675**	**0.9901**	**2.0600e-003**	**1.0710**	**0.0664**	**1.1374**	**0.5466**	**0.0611**	**0.6076**	**0.0000**	**180.6679**	**180.6679**	**0.0584**	**0.0000**	**182.1287**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.3 Site Preparation - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.4700e-003	1.6400e-003	0.0207	7.0000e-005	7.7900e-003	4.0000e-005	7.8400e-003	2.0700e-003	4.0000e-005	2.1100e-003	0.0000	5.9659	5.9659	1.7000e-004	1.6000e-004	6.0180
Total	**2.4700e-003**	**1.6400e-003**	**0.0207**	**7.0000e-005**	**7.7900e-003**	**4.0000e-005**	**7.8400e-003**	**2.0700e-003**	**4.0000e-005**	**2.1100e-003**	**0.0000**	**5.9659**	**5.9659**	**1.7000e-004**	**1.6000e-004**	**6.0180**

3.4 Grading - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.9568	0.0000	0.9568	0.3081	0.0000	0.3081	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.2478	2.4930	2.1347	4.7800e-003		0.1028	0.1028		0.0946	0.0946	0.0000	419.8003	419.8003	0.1358	0.0000	423.1946
Total	**0.2478**	**2.4930**	**2.1347**	**4.7800e-003**	**0.9568**	**0.1028**	**1.0597**	**0.3081**	**0.0946**	**0.4027**	**0.0000**	**419.8003**	**419.8003**	**0.1358**	**0.0000**	**423.1946**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Grading - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.9100e-003	2.5900e-003	0.0328	1.0000e-004	0.0124	6.0000e-005	0.0124	3.2800e-003	6.0000e-005	3.3400e-003	0.0000	9.4522	9.4522	2.6000e-004	2.5000e-004	9.5347
Total	**3.9100e-003**	**2.5900e-003**	**0.0328**	**1.0000e-004**	**0.0124**	**6.0000e-005**	**0.0124**	**3.2800e-003**	**6.0000e-005**	**3.3400e-003**	**0.0000**	**9.4522**	**9.4522**	**2.6000e-004**	**2.5000e-004**	**9.5347**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.9568	0.0000	0.9568	0.3081	0.0000	0.3081	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.2478	2.4930	2.1347	4.7800e-003		0.1028	0.1028		0.0946	0.0946	0.0000	419.7998	419.7998	0.1358	0.0000	423.1941
Total	**0.2478**	**2.4930**	**2.1347**	**4.7800e-003**	**0.9568**	**0.1028**	**1.0597**	**0.3081**	**0.0946**	**0.4027**	**0.0000**	**419.7998**	**419.7998**	**0.1358**	**0.0000**	**423.1941**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Grading - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.9100e-003	2.5900e-003	0.0328	1.0000e-004	0.0124	6.0000e-005	0.0124	3.2800e-003	6.0000e-005	3.3400e-003	0.0000	9.4522	9.4522	2.6000e-004	2.5000e-004	9.5347
Total	**3.9100e-003**	**2.5900e-003**	**0.0328**	**1.0000e-004**	**0.0124**	**6.0000e-005**	**0.0124**	**3.2800e-003**	**6.0000e-005**	**3.3400e-003**	**0.0000**	**9.4522**	**9.4522**	**2.6000e-004**	**2.5000e-004**	**9.5347**

3.4 Grading - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.9629	0.0000	0.9629	0.3114	0.0000	0.3114	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.2263	2.1796	2.0538	4.8400e-003		0.0882	0.0882		0.0812	0.0812	0.0000	425.1485	425.1485	0.1375	0.0000	428.5860
Total	**0.2263**	**2.1796**	**2.0538**	**4.8400e-003**	**0.9629**	**0.0882**	**1.0511**	**0.3114**	**0.0812**	**0.3926**	**0.0000**	**425.1485**	**425.1485**	**0.1375**	**0.0000**	**428.5860**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Grading - 2025

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.7300e-003	2.3700e-003	0.0311	1.0000e-004	0.0125	6.0000e-005	0.0126	3.3200e-003	6.0000e-005	3.3800e-003	0.0000	9.2493	9.2493	2.4000e-004	2.4000e-004	9.3275
Total	**3.7300e-003**	**2.3700e-003**	**0.0311**	**1.0000e-004**	**0.0125**	**6.0000e-005**	**0.0126**	**3.3200e-003**	**6.0000e-005**	**3.3800e-003**	**0.0000**	**9.2493**	**9.2493**	**2.4000e-004**	**2.4000e-004**	**9.3275**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.9629	0.0000	0.9629	0.3114	0.0000	0.3114	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.2263	2.1795	2.0538	4.8400e-003		0.0882	0.0882		0.0812	0.0812	0.0000	425.1480	425.1480	0.1375	0.0000	428.5855
Total	**0.2263**	**2.1795**	**2.0538**	**4.8400e-003**	**0.9629**	**0.0882**	**1.0511**	**0.3114**	**0.0812**	**0.3926**	**0.0000**	**425.1480**	**425.1480**	**0.1375**	**0.0000**	**428.5855**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Grading - 2025

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.7300e-003	2.3700e-003	0.0311	1.0000e-004	0.0125	6.0000e-005	0.0126	3.3200e-003	6.0000e-005	3.3800e-003	0.0000	9.2493	9.2493	2.4000e-004	2.4000e-004	9.3275
Total	**3.7300e-003**	**2.3700e-003**	**0.0311**	**1.0000e-004**	**0.0125**	**6.0000e-005**	**0.0126**	**3.3200e-003**	**6.0000e-005**	**3.3800e-003**	**0.0000**	**9.2493**	**9.2493**	**2.4000e-004**	**2.4000e-004**	**9.3275**

3.5 Building Construction - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0718	0.6547	0.8444	1.4200e-003		0.0277	0.0277		0.0261	0.0261	0.0000	121.7577	121.7577	0.0286	0.0000	122.4733
Total	**0.0718**	**0.6547**	**0.8444**	**1.4200e-003**		**0.0277**	**0.0277**		**0.0261**	**0.0261**	**0.0000**	**121.7577**	**121.7577**	**0.0286**	**0.0000**	**122.4733**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Building Construction - 2025

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0294	1.1712	0.4036	5.2800e-003	0.1782	7.0300e-003	0.1852	0.0514	6.7300e-003	0.0582	0.0000	518.8367	518.8367	0.0171	0.0751	541.6518
Worker	0.2088	0.1328	1.7401	5.6400e-003	0.6993	3.4900e-003	0.7028	0.1858	3.2100e-003	0.1890	0.0000	517.0248	517.0248	0.0137	0.0135	521.4001
Total	**0.2381**	**1.3040**	**2.1436**	**0.0109**	**0.8774**	**0.0105**	**0.8880**	**0.2373**	**9.9400e-003**	**0.2472**	**0.0000**	**1,035.8616**	**1,035.8616**	**0.0307**	**0.0887**	**1,063.0519**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0718	0.6547	0.8444	1.4200e-003		0.0277	0.0277		0.0261	0.0261	0.0000	121.7576	121.7576	0.0286	0.0000	122.4731
Total	**0.0718**	**0.6547**	**0.8444**	**1.4200e-003**		**0.0277**	**0.0277**		**0.0261**	**0.0261**	**0.0000**	**121.7576**	**121.7576**	**0.0286**	**0.0000**	**122.4731**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Building Construction - 2025

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0294	1.1712	0.4036	5.2800e-003	0.1782	7.0300e-003	0.1852	0.0514	6.7300e-003	0.0582	0.0000	518.8367	518.8367	0.0171	0.0751	541.6518
Worker	0.2088	0.1328	1.7401	5.6400e-003	0.6993	3.4900e-003	0.7028	0.1858	3.2100e-003	0.1890	0.0000	517.0248	517.0248	0.0137	0.0135	521.4001
Total	**0.2381**	**1.3040**	**2.1436**	**0.0109**	**0.8774**	**0.0105**	**0.8880**	**0.2373**	**9.9400e-003**	**0.2472**	**0.0000**	**1,035.8616**	**1,035.8616**	**0.0307**	**0.0887**	**1,063.0519**

3.5 Building Construction - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1785	1.6273	2.0991	3.5200e-003		0.0689	0.0689		0.0648	0.0648	0.0000	302.6549	302.6549	0.0711	0.0000	304.4335
Total	**0.1785**	**1.6273**	**2.0991**	**3.5200e-003**		**0.0689**	**0.0689**		**0.0648**	**0.0648**	**0.0000**	**302.6549**	**302.6549**	**0.0711**	**0.0000**	**304.4335**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Building Construction - 2026

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0709	2.8801	0.9909	0.0129	0.4428	0.0173	0.4602	0.1279	0.0166	0.1444	0.0000	1,265.0586	1,265.0586	0.0435	0.1831	1,320.7096
Worker	0.4905	0.3011	4.0779	0.0136	1.7382	8.2500e-003	1.7465	0.4619	7.6000e-003	0.4695	0.0000	1,245.0203	1,245.0203	0.0311	0.0318	1,255.2750
Total	**0.5614**	**3.1812**	**5.0688**	**0.0264**	**2.1811**	**0.0256**	**2.2067**	**0.5898**	**0.0242**	**0.6139**	**0.0000**	**2,510.0789**	**2,510.0789**	**0.0746**	**0.2149**	**2,575.9846**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1784	1.6273	2.0991	3.5200e-003		0.0689	0.0689		0.0648	0.0648	0.0000	302.6545	302.6545	0.0711	0.0000	304.4331
Total	**0.1784**	**1.6273**	**2.0991**	**3.5200e-003**		**0.0689**	**0.0689**		**0.0648**	**0.0648**	**0.0000**	**302.6545**	**302.6545**	**0.0711**	**0.0000**	**304.4331**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Building Construction - 2026

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0709	2.8801	0.9909	0.0129	0.4428	0.0173	0.4602	0.1279	0.0166	0.1444	0.0000	1,265.0586	1,265.0586	0.0435	0.1831	1,320.7096
Worker	0.4905	0.3011	4.0779	0.0136	1.7382	8.2500e-003	1.7465	0.4619	7.6000e-003	0.4695	0.0000	1,245.0203	1,245.0203	0.0311	0.0318	1,255.2750
Total	**0.5614**	**3.1812**	**5.0688**	**0.0264**	**2.1811**	**0.0256**	**2.2067**	**0.5898**	**0.0242**	**0.6139**	**0.0000**	**2,510.0789**	**2,510.0789**	**0.0746**	**0.2149**	**2,575.9846**

3.5 Building Construction - 2027

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1785	1.6273	2.0991	3.5200e-003		0.0689	0.0689		0.0648	0.0648	0.0000	302.6549	302.6549	0.0711	0.0000	304.4335
Total	**0.1785**	**1.6273**	**2.0991**	**3.5200e-003**		**0.0689**	**0.0689**		**0.0648**	**0.0648**	**0.0000**	**302.6549**	**302.6549**	**0.0711**	**0.0000**	**304.4335**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Building Construction - 2027

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0693	2.8494	0.9810	0.0126	0.4428	0.0172	0.4600	0.1279	0.0164	0.1443	0.0000	1,238.9036	1,238.9036	0.0445	0.1793	1,293.4400
Worker	0.4639	0.2764	3.8640	0.0132	1.7382	7.7700e-003	1.7460	0.4619	7.1500e-003	0.4691	0.0000	1,208.7656	1,208.7656	0.0286	0.0302	1,218.4905
Total	**0.5331**	**3.1257**	**4.8449**	**0.0258**	**2.1811**	**0.0250**	**2.2060**	**0.5898**	**0.0236**	**0.6134**	**0.0000**	**2,447.6692**	**2,447.6692**	**0.0730**	**0.2095**	**2,511.9306**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1784	1.6273	2.0991	3.5200e-003		0.0689	0.0689		0.0648	0.0648	0.0000	302.6545	302.6545	0.0711	0.0000	304.4331
Total	**0.1784**	**1.6273**	**2.0991**	**3.5200e-003**		**0.0689**	**0.0689**		**0.0648**	**0.0648**	**0.0000**	**302.6545**	**302.6545**	**0.0711**	**0.0000**	**304.4331**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Building Construction - 2027

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0693	2.8494	0.9810	0.0126	0.4428	0.0172	0.4600	0.1279	0.0164	0.1443	0.0000	1,238.9036	1,238.9036	0.0445	0.1793	1,293.4400
Worker	0.4639	0.2764	3.8640	0.0132	1.7382	7.7700e-003	1.7460	0.4619	7.1500e-003	0.4691	0.0000	1,208.7656	1,208.7656	0.0286	0.0302	1,218.4905
Total	**0.5331**	**3.1257**	**4.8449**	**0.0258**	**2.1811**	**0.0250**	**2.2060**	**0.5898**	**0.0236**	**0.6134**	**0.0000**	**2,447.6692**	**2,447.6692**	**0.0730**	**0.2095**	**2,511.9306**

3.5 Building Construction - 2028

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1778	1.6211	2.0910	3.5000e-003		0.0686	0.0686		0.0645	0.0645	0.0000	301.4953	301.4953	0.0709	0.0000	303.2671
Total	**0.1778**	**1.6211**	**2.0910**	**3.5000e-003**		**0.0686**	**0.0686**		**0.0645**	**0.0645**	**0.0000**	**301.4953**	**301.4953**	**0.0709**	**0.0000**	**303.2671**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Building Construction - 2028

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0677	2.8134	0.9711	0.0123	0.4411	0.0170	0.4581	0.1274	0.0163	0.1436	0.0000	1,209.4531	1,209.4531	0.0453	0.1749	1,262.7155
Worker	0.4371	0.2544	3.6691	0.0128	1.7316	7.2200e-003	1.7388	0.4601	6.6500e-003	0.4668	0.0000	1,171.8023	1,171.8023	0.0263	0.0288	1,181.0416
Total	**0.5047**	**3.0677**	**4.6402**	**0.0250**	**2.1727**	**0.0242**	**2.1969**	**0.5875**	**0.0229**	**0.6104**	**0.0000**	**2,381.2554**	**2,381.2554**	**0.0716**	**0.2037**	**2,443.7571**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1778	1.6211	2.0910	3.5000e-003		0.0686	0.0686		0.0645	0.0645	0.0000	301.4949	301.4949	0.0709	0.0000	303.2667
Total	**0.1778**	**1.6211**	**2.0910**	**3.5000e-003**		**0.0686**	**0.0686**		**0.0645**	**0.0645**	**0.0000**	**301.4949**	**301.4949**	**0.0709**	**0.0000**	**303.2667**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Building Construction - 2028

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0677	2.8134	0.9711	0.0123	0.4411	0.0170	0.4581	0.1274	0.0163	0.1436	0.0000	1,209.4531	1,209.4531	0.0453	0.1749	1,262.7155
Worker	0.4371	0.2544	3.6691	0.0128	1.7316	7.2200e-003	1.7388	0.4601	6.6500e-003	0.4668	0.0000	1,171.8023	1,171.8023	0.0263	0.0288	1,181.0416
Total	**0.5047**	**3.0677**	**4.6402**	**0.0250**	**2.1727**	**0.0242**	**2.1969**	**0.5875**	**0.0229**	**0.6104**	**0.0000**	**2,381.2554**	**2,381.2554**	**0.0716**	**0.2037**	**2,443.7571**

3.5 Building Construction - 2029

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1785	1.6273	2.0991	3.5200e-003		0.0689	0.0689		0.0648	0.0648	0.0000	302.6549	302.6549	0.0711	0.0000	304.4335
Total	**0.1785**	**1.6273**	**2.0991**	**3.5200e-003**		**0.0689**	**0.0689**		**0.0648**	**0.0648**	**0.0000**	**302.6549**	**302.6549**	**0.0711**	**0.0000**	**304.4335**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Building Construction - 2029

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0667	2.7938	0.9693	0.0120	0.4428	0.0169	0.4597	0.1279	0.0161	0.1440	0.0000	1,189.1702	1,189.1702	0.0464	0.1719	1,241.5595
Worker	0.4139	0.2369	3.5224	0.0125	1.7382	6.7600e-003	1.7450	0.4619	6.2200e-003	0.4681	0.0000	1,147.2395	1,147.2395	0.0244	0.0278	1,156.1241
Total	**0.4806**	**3.0307**	**4.4916**	**0.0246**	**2.1811**	**0.0236**	**2.2047**	**0.5898**	**0.0224**	**0.6121**	**0.0000**	**2,336.4098**	**2,336.4098**	**0.0709**	**0.1997**	**2,397.6837**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1784	1.6273	2.0991	3.5200e-003		0.0689	0.0689		0.0648	0.0648	0.0000	302.6545	302.6545	0.0711	0.0000	304.4331
Total	**0.1784**	**1.6273**	**2.0991**	**3.5200e-003**		**0.0689**	**0.0689**		**0.0648**	**0.0648**	**0.0000**	**302.6545**	**302.6545**	**0.0711**	**0.0000**	**304.4331**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Building Construction - 2029

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0667	2.7938	0.9693	0.0120	0.4428	0.0169	0.4597	0.1279	0.0161	0.1440	0.0000	1,189.1702	1,189.1702	0.0464	0.1719	1,241.5595
Worker	0.4139	0.2369	3.5224	0.0125	1.7382	6.7600e-003	1.7450	0.4619	6.2200e-003	0.4681	0.0000	1,147.2395	1,147.2395	0.0244	0.0278	1,156.1241
Total	**0.4806**	**3.0307**	**4.4916**	**0.0246**	**2.1811**	**0.0236**	**2.2047**	**0.5898**	**0.0224**	**0.6121**	**0.0000**	**2,336.4098**	**2,336.4098**	**0.0709**	**0.1997**	**2,397.6837**

3.5 Building Construction - 2030

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1708	1.0355	2.1085	4.0400e-003		0.0193	0.0193		0.0193	0.0193	0.0000	343.0336	343.0336	0.0138	0.0000	343.3777
Total	**0.1708**	**1.0355**	**2.1085**	**4.0400e-003**		**0.0193**	**0.0193**		**0.0193**	**0.0193**	**0.0000**	**343.0336**	**343.0336**	**0.0138**	**0.0000**	**343.3777**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Building Construction - 2030

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0657	2.7731	0.9661	0.0118	0.4428	0.0168	0.4596	0.1279	0.0160	0.1439	0.0000	1,167.2388	1,167.2388	0.0473	0.1687	1,218.6863
Worker	0.3896	0.2206	3.3816	0.0122	1.7382	6.3100e-003	1.7446	0.4619	5.8100e-003	0.4677	0.0000	1,121.2995	1,121.2995	0.0227	0.0268	1,129.8437
Total	**0.4553**	**2.9937**	**4.3476**	**0.0240**	**2.1811**	**0.0231**	**2.2042**	**0.5898**	**0.0218**	**0.6116**	**0.0000**	**2,288.5383**	**2,288.5383**	**0.0700**	**0.1954**	**2,348.5300**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1708	1.0355	2.1085	4.0400e-003		0.0193	0.0193		0.0193	0.0193	0.0000	343.0332	343.0332	0.0138	0.0000	343.3773
Total	**0.1708**	**1.0355**	**2.1085**	**4.0400e-003**		**0.0193**	**0.0193**		**0.0193**	**0.0193**	**0.0000**	**343.0332**	**343.0332**	**0.0138**	**0.0000**	**343.3773**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Building Construction - 2030

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0657	2.7731	0.9661	0.0118	0.4428	0.0168	0.4596	0.1279	0.0160	0.1439	0.0000	1,167.2388	1,167.2388	0.0473	0.1687	1,218.6863
Worker	0.3896	0.2206	3.3816	0.0122	1.7382	6.3100e-003	1.7446	0.4619	5.8100e-003	0.4677	0.0000	1,121.2995	1,121.2995	0.0227	0.0268	1,129.8437
Total	**0.4553**	**2.9937**	**4.3476**	**0.0240**	**2.1811**	**0.0231**	**2.2042**	**0.5898**	**0.0218**	**0.6116**	**0.0000**	**2,288.5383**	**2,288.5383**	**0.0700**	**0.1954**	**2,348.5300**

3.5 Building Construction - 2031

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1708	1.0355	2.1085	4.0400e-003		0.0193	0.0193		0.0193	0.0193	0.0000	343.0336	343.0336	0.0138	0.0000	343.3777
Total	**0.1708**	**1.0355**	**2.1085**	**4.0400e-003**		**0.0193**	**0.0193**		**0.0193**	**0.0193**	**0.0000**	**343.0336**	**343.0336**	**0.0138**	**0.0000**	**343.3777**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Building Construction - 2031

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0650	2.7606	0.9647	0.0116	0.4429	0.0167	0.4595	0.1279	0.0159	0.1438	0.0000	1,148.2275	1,148.2275	0.0480	0.1659	1,198.8758
Worker	0.3655	0.2059	3.2554	0.0120	1.7382	5.8900e-003	1.7441	0.4619	5.4200e-003	0.4673	0.0000	1,098.2456	1,098.2456	0.0211	0.0259	1,106.4912
Total	**0.4304**	**2.9665**	**4.2201**	**0.0236**	**2.1811**	**0.0226**	**2.2036**	**0.5898**	**0.0214**	**0.6111**	**0.0000**	**2,246.4732**	**2,246.4732**	**0.0691**	**0.1918**	**2,305.3669**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1708	1.0355	2.1085	4.0400e-003		0.0193	0.0193		0.0193	0.0193	0.0000	343.0332	343.0332	0.0138	0.0000	343.3773
Total	**0.1708**	**1.0355**	**2.1085**	**4.0400e-003**		**0.0193**	**0.0193**		**0.0193**	**0.0193**	**0.0000**	**343.0332**	**343.0332**	**0.0138**	**0.0000**	**343.3773**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Building Construction - 2031

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0650	2.7606	0.9647	0.0116	0.4429	0.0167	0.4595	0.1279	0.0159	0.1438	0.0000	1,148.2275	1,148.2275	0.0480	0.1659	1,198.8758
Worker	0.3655	0.2059	3.2554	0.0120	1.7382	5.8900e-003	1.7441	0.4619	5.4200e-003	0.4673	0.0000	1,098.2456	1,098.2456	0.0211	0.0259	1,106.4912
Total	**0.4304**	**2.9665**	**4.2201**	**0.0236**	**2.1811**	**0.0226**	**2.2036**	**0.5898**	**0.0214**	**0.6111**	**0.0000**	**2,246.4732**	**2,246.4732**	**0.0691**	**0.1918**	**2,305.3669**

3.5 Building Construction - 2032

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1715	1.0394	2.1166	4.0600e-003		0.0194	0.0194		0.0194	0.0194	0.0000	344.3479	344.3479	0.0138	0.0000	344.6933
Total	**0.1715**	**1.0394**	**2.1166**	**4.0600e-003**		**0.0194**	**0.0194**		**0.0194**	**0.0194**	**0.0000**	**344.3479**	**344.3479**	**0.0138**	**0.0000**	**344.6933**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Building Construction - 2032

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0647	2.7616	0.9688	0.0115	0.4446	0.0166	0.4612	0.1284	0.0159	0.1443	0.0000	1,135.9116	1,135.9116	0.0489	0.1642	1,186.0573
Worker	0.3449	0.1944	3.1577	0.0118	1.7449	5.5300e-003	1.7504	0.4637	5.0900e-003	0.4688	0.0000	1,082.0224	1,082.0224	0.0198	0.0253	1,090.0471
Total	**0.4095**	**2.9559**	**4.1264**	**0.0233**	**2.1895**	**0.0222**	**2.2116**	**0.5920**	**0.0210**	**0.6130**	**0.0000**	**2,217.9340**	**2,217.9340**	**0.0686**	**0.1894**	**2,276.1045**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1715	1.0394	2.1166	4.0600e-003		0.0194	0.0194		0.0194	0.0194	0.0000	344.3475	344.3475	0.0138	0.0000	344.6929
Total	**0.1715**	**1.0394**	**2.1166**	**4.0600e-003**		**0.0194**	**0.0194**		**0.0194**	**0.0194**	**0.0000**	**344.3475**	**344.3475**	**0.0138**	**0.0000**	**344.6929**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Building Construction - 2032

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0647	2.7616	0.9688	0.0115	0.4446	0.0166	0.4612	0.1284	0.0159	0.1443	0.0000	1,135.9116	1,135.9116	0.0489	0.1642	1,186.0573
Worker	0.3449	0.1944	3.1577	0.0118	1.7449	5.5300e-003	1.7504	0.4637	5.0900e-003	0.4688	0.0000	1,082.0224	1,082.0224	0.0198	0.0253	1,090.0471
Total	**0.4095**	**2.9559**	**4.1264**	**0.0233**	**2.1895**	**0.0222**	**2.2116**	**0.5920**	**0.0210**	**0.6130**	**0.0000**	**2,217.9340**	**2,217.9340**	**0.0686**	**0.1894**	**2,276.1045**

3.5 Building Construction - 2033

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1702	1.0315	2.1004	4.0200e-003		0.0193	0.0193		0.0193	0.0193	0.0000	341.7193	341.7193	0.0137	0.0000	342.0621
Total	**0.1702**	**1.0315**	**2.1004**	**4.0200e-003**		**0.0193**	**0.0193**		**0.0193**	**0.0193**	**0.0000**	**341.7193**	**341.7193**	**0.0137**	**0.0000**	**342.0621**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Building Construction - 2033

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0638	2.7324	0.9630	0.0112	0.4412	0.0164	0.4576	0.1274	0.0157	0.1431	0.0000	1,112.4201	1,112.4201	0.0491	0.1608	1,161.5728
Worker	0.3228	0.1828	3.0389	0.0115	1.7316	5.1400e-003	1.7367	0.4601	4.7300e-003	0.4649	0.0000	1,055.9692	1,055.9692	0.0184	0.0245	1,063.7242
Total	**0.3865**	**2.9152**	**4.0019**	**0.0228**	**2.1727**	**0.0216**	**2.1943**	**0.5875**	**0.0205**	**0.6080**	**0.0000**	**2,168.3893**	**2,168.3893**	**0.0675**	**0.1853**	**2,225.2970**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1702	1.0315	2.1004	4.0200e-003		0.0193	0.0193		0.0193	0.0193	0.0000	341.7189	341.7189	0.0137	0.0000	342.0617
Total	**0.1702**	**1.0315**	**2.1004**	**4.0200e-003**		**0.0193**	**0.0193**		**0.0193**	**0.0193**	**0.0000**	**341.7189**	**341.7189**	**0.0137**	**0.0000**	**342.0617**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Building Construction - 2033

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0638	2.7324	0.9630	0.0112	0.4412	0.0164	0.4576	0.1274	0.0157	0.1431	0.0000	1,112.4201	1,112.4201	0.0491	0.1608	1,161.5728
Worker	0.3228	0.1828	3.0389	0.0115	1.7316	5.1400e-003	1.7367	0.4601	4.7300e-003	0.4649	0.0000	1,055.9692	1,055.9692	0.0184	0.0245	1,063.7242
Total	**0.3865**	**2.9152**	**4.0019**	**0.0228**	**2.1727**	**0.0216**	**2.1943**	**0.5875**	**0.0205**	**0.6080**	**0.0000**	**2,168.3893**	**2,168.3893**	**0.0675**	**0.1853**	**2,225.2970**

3.5 Building Construction - 2034

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1702	1.0315	2.1004	4.0200e-003		0.0193	0.0193		0.0193	0.0193	0.0000	341.7193	341.7193	0.0137	0.0000	342.0621
Total	**0.1702**	**1.0315**	**2.1004**	**4.0200e-003**		**0.0193**	**0.0193**		**0.0193**	**0.0193**	**0.0000**	**341.7193**	**341.7193**	**0.0137**	**0.0000**	**342.0621**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Building Construction - 2034

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0635	2.7242	0.9650	0.0111	0.4412	0.0164	0.4575	0.1274	0.0157	0.1430	0.0000	1,098.9609	1,098.9609	0.0496	0.1589	1,147.5623
Worker	0.3052	0.1743	2.9533	0.0114	1.7316	4.8300e-003	1.7364	0.4601	4.4400e-003	0.4646	0.0000	1,040.3911	1,040.3911	0.0173	0.0240	1,047.9697
Total	**0.3687**	**2.8985**	**3.9182**	**0.0224**	**2.1727**	**0.0212**	**2.1939**	**0.5875**	**0.0201**	**0.6076**	**0.0000**	**2,139.3520**	**2,139.3520**	**0.0669**	**0.1829**	**2,195.5320**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1702	1.0315	2.1004	4.0200e-003		0.0193	0.0193		0.0193	0.0193	0.0000	341.7189	341.7189	0.0137	0.0000	342.0617
Total	**0.1702**	**1.0315**	**2.1004**	**4.0200e-003**		**0.0193**	**0.0193**		**0.0193**	**0.0193**	**0.0000**	**341.7189**	**341.7189**	**0.0137**	**0.0000**	**342.0617**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Building Construction - 2034

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0635	2.7242	0.9650	0.0111	0.4412	0.0164	0.4575	0.1274	0.0157	0.1430	0.0000	1,098.9609	1,098.9609	0.0496	0.1589	1,147.5623
Worker	0.3052	0.1743	2.9533	0.0114	1.7316	4.8300e-003	1.7364	0.4601	4.4400e-003	0.4646	0.0000	1,040.3911	1,040.3911	0.0173	0.0240	1,047.9697
Total	**0.3687**	**2.8985**	**3.9182**	**0.0224**	**2.1727**	**0.0212**	**2.1939**	**0.5875**	**0.0201**	**0.6076**	**0.0000**	**2,139.3520**	**2,139.3520**	**0.0669**	**0.1829**	**2,195.5320**

3.5 Building Construction - 2035

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1588	0.9346	2.1034	4.0400e-003		0.0118	0.0118		0.0118	0.0118	0.0000	343.0336	343.0336	0.0128	0.0000	343.3530
Total	**0.1588**	**0.9346**	**2.1034**	**4.0400e-003**		**0.0118**	**0.0118**		**0.0118**	**0.0118**	**0.0000**	**343.0336**	**343.0336**	**0.0128**	**0.0000**	**343.3530**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Building Construction - 2035

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0635	2.7266	0.9703	0.0110	0.4429	0.0163	0.4592	0.1279	0.0156	0.1435	0.0000	1,091.0735	1,091.0735	0.0502	0.1579	1,139.3669
Worker	0.2906	0.1685	2.8915	0.0112	1.7382	4.5600e-003	1.7428	0.4619	4.2000e-003	0.4661	0.0000	1,030.8734	1,030.8734	0.0164	0.0237	1,038.3402
Total	**0.3541**	**2.8950**	**3.8618**	**0.0222**	**2.1811**	**0.0209**	**2.2020**	**0.5898**	**0.0198**	**0.6096**	**0.0000**	**2,121.9469**	**2,121.9469**	**0.0666**	**0.1815**	**2,177.7071**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1588	0.9346	2.1034	4.0400e-003		0.0118	0.0118		0.0118	0.0118	0.0000	343.0332	343.0332	0.0128	0.0000	343.3526
Total	**0.1588**	**0.9346**	**2.1034**	**4.0400e-003**		**0.0118**	**0.0118**		**0.0118**	**0.0118**	**0.0000**	**343.0332**	**343.0332**	**0.0128**	**0.0000**	**343.3526**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Building Construction - 2035

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0635	2.7266	0.9703	0.0110	0.4429	0.0163	0.4592	0.1279	0.0156	0.1435	0.0000	1,091.0735	1,091.0735	0.0502	0.1579	1,139.3669
Worker	0.2906	0.1685	2.8915	0.0112	1.7382	4.5600e-003	1.7428	0.4619	4.2000e-003	0.4661	0.0000	1,030.8734	1,030.8734	0.0164	0.0237	1,038.3402
Total	**0.3541**	**2.8950**	**3.8618**	**0.0222**	**2.1811**	**0.0209**	**2.2020**	**0.5898**	**0.0198**	**0.6096**	**0.0000**	**2,121.9469**	**2,121.9469**	**0.0666**	**0.1815**	**2,177.7071**

3.5 Building Construction - 2036

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1594	0.9381	2.1114	4.0600e-003		0.0118	0.0118		0.0118	0.0118	0.0000	344.3479	344.3479	0.0128	0.0000	344.6686
Total	**0.1594**	**0.9381**	**2.1114**	**4.0600e-003**		**0.0118**	**0.0118**		**0.0118**	**0.0118**	**0.0000**	**344.3479**	**344.3479**	**0.0128**	**0.0000**	**344.6686**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Building Construction - 2036

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0638	2.7370	0.9740	0.0110	0.4446	0.0164	0.4610	0.1284	0.0157	0.1441	0.0000	1,095.2539	1,095.2539	0.0504	0.1585	1,143.7323
Worker	0.2917	0.1691	2.9026	0.0113	1.7449	4.5800e-003	1.7495	0.4637	4.2100e-003	0.4679	0.0000	1,034.8231	1,034.8231	0.0164	0.0238	1,042.3185
Total	**0.3555**	**2.9061**	**3.8766**	**0.0223**	**2.1895**	**0.0210**	**2.2104**	**0.5920**	**0.0199**	**0.6119**	**0.0000**	**2,130.0770**	**2,130.0770**	**0.0668**	**0.1822**	**2,186.0508**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1594	0.9381	2.1114	4.0600e-003		0.0118	0.0118		0.0118	0.0118	0.0000	344.3475	344.3475	0.0128	0.0000	344.6682
Total	**0.1594**	**0.9381**	**2.1114**	**4.0600e-003**		**0.0118**	**0.0118**		**0.0118**	**0.0118**	**0.0000**	**344.3475**	**344.3475**	**0.0128**	**0.0000**	**344.6682**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Building Construction - 2036

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0638	2.7370	0.9740	0.0110	0.4446	0.0164	0.4610	0.1284	0.0157	0.1441	0.0000	1,095.2539	1,095.2539	0.0504	0.1585	1,143.7323
Worker	0.2917	0.1691	2.9026	0.0113	1.7449	4.5800e-003	1.7495	0.4637	4.2100e-003	0.4679	0.0000	1,034.8231	1,034.8231	0.0164	0.0238	1,042.3185
Total	**0.3555**	**2.9061**	**3.8766**	**0.0223**	**2.1895**	**0.0210**	**2.2104**	**0.5920**	**0.0199**	**0.6119**	**0.0000**	**2,130.0770**	**2,130.0770**	**0.0668**	**0.1822**	**2,186.0508**

3.5 Building Construction - 2037

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0761	0.4476	1.0074	1.9300e-003		5.6500e-003	5.6500e-003		5.6500e-003	5.6500e-003	0.0000	164.2881	164.2881	6.1200e-003	0.0000	164.4411
Total	**0.0761**	**0.4476**	**1.0074**	**1.9300e-003**		**5.6500e-003**	**5.6500e-003**		**5.6500e-003**	**5.6500e-003**	**0.0000**	**164.2881**	**164.2881**	**6.1200e-003**	**0.0000**	**164.4411**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Building Construction - 2037

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0304	1.3058	0.4647	5.2700e-003	0.2121	7.8200e-003	0.2199	0.0612	7.4800e-003	0.0687	0.0000	522.5448	522.5448	0.0240	0.0756	545.6738
Worker	0.1392	0.0807	1.3848	5.3800e-003	0.8325	2.1800e-003	0.8347	0.2212	2.0100e-003	0.2232	0.0000	493.7133	493.7133	7.8300e-003	0.0113	497.2894
Total	**0.1696**	**1.3865**	**1.8495**	**0.0107**	**1.0446**	**0.0100**	**1.0546**	**0.2825**	**9.4900e-003**	**0.2920**	**0.0000**	**1,016.2581**	**1,016.2581**	**0.0319**	**0.0869**	**1,042.9632**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0761	0.4476	1.0074	1.9300e-003		5.6500e-003	5.6500e-003		5.6500e-003	5.6500e-003	0.0000	164.2879	164.2879	6.1200e-003	0.0000	164.4409
Total	**0.0761**	**0.4476**	**1.0074**	**1.9300e-003**		**5.6500e-003**	**5.6500e-003**		**5.6500e-003**	**5.6500e-003**	**0.0000**	**164.2879**	**164.2879**	**6.1200e-003**	**0.0000**	**164.4409**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Building Construction - 2037

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0304	1.3058	0.4647	5.2700e-003	0.2121	7.8200e-003	0.2199	0.0612	7.4800e-003	0.0687	0.0000	522.5448	522.5448	0.0240	0.0756	545.6738
Worker	0.1392	0.0807	1.3848	5.3800e-003	0.8325	2.1800e-003	0.8347	0.2212	2.0100e-003	0.2232	0.0000	493.7133	493.7133	7.8300e-003	0.0113	497.2894
Total	**0.1696**	**1.3865**	**1.8495**	**0.0107**	**1.0446**	**0.0100**	**1.0546**	**0.2825**	**9.4900e-003**	**0.2920**	**0.0000**	**1,016.2581**	**1,016.2581**	**0.0319**	**0.0869**	**1,042.9632**

3.6 Paving - 2037

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0776	0.3316	1.0758	1.9100e-003		0.0127	0.0127		0.0127	0.0127	0.0000	163.8767	163.8767	6.3100e-003	0.0000	164.0344
Paving	0.0270					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.1045**	**0.3316**	**1.0758**	**1.9100e-003**		**0.0127**	**0.0127**		**0.0127**	**0.0127**	**0.0000**	**163.8767**	**163.8767**	**6.3100e-003**	**0.0000**	**164.0344**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.6 Paving - 2037

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.3700e-003	7.9000e-004	0.0136	5.0000e-005	8.1800e-003	2.0000e-005	8.2000e-003	2.1700e-003	2.0000e-005	2.1900e-003	0.0000	4.8509	4.8509	8.0000e-005	1.1000e-004	4.8861
Total	**1.3700e-003**	**7.9000e-004**	**0.0136**	**5.0000e-005**	**8.1800e-003**	**2.0000e-005**	**8.2000e-003**	**2.1700e-003**	**2.0000e-005**	**2.1900e-003**	**0.0000**	**4.8509**	**4.8509**	**8.0000e-005**	**1.1000e-004**	**4.8861**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0776	0.3316	1.0758	1.9100e-003		0.0127	0.0127		0.0127	0.0127	0.0000	163.8765	163.8765	6.3100e-003	0.0000	164.0342
Paving	0.0270					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.1045**	**0.3316**	**1.0758**	**1.9100e-003**		**0.0127**	**0.0127**		**0.0127**	**0.0127**	**0.0000**	**163.8765**	**163.8765**	**6.3100e-003**	**0.0000**	**164.0342**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.6 Paving - 2037

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.3700e-003	7.9000e-004	0.0136	5.0000e-005	8.1800e-003	2.0000e-005	8.2000e-003	2.1700e-003	2.0000e-005	2.1900e-003	0.0000	4.8509	4.8509	8.0000e-005	1.1000e-004	4.8861
Total	**1.3700e-003**	**7.9000e-004**	**0.0136**	**5.0000e-005**	**8.1800e-003**	**2.0000e-005**	**8.2000e-003**	**2.1700e-003**	**2.0000e-005**	**2.1900e-003**	**0.0000**	**4.8509**	**4.8509**	**8.0000e-005**	**1.1000e-004**	**4.8861**

3.6 Paving - 2038

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0479	0.2048	0.6645	1.1800e-003		7.8700e-003	7.8700e-003		7.8700e-003	7.8700e-003	0.0000	101.2180	101.2180	3.9000e-003	0.0000	101.3154
Paving	0.0167					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0646**	**0.2048**	**0.6645**	**1.1800e-003**		**7.8700e-003**	**7.8700e-003**		**7.8700e-003**	**7.8700e-003**	**0.0000**	**101.2180**	**101.2180**	**3.9000e-003**	**0.0000**	**101.3154**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.6 Paving - 2038

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.4000e-004	4.9000e-004	8.4000e-003	3.0000e-005	5.0500e-003	1.0000e-005	5.0700e-003	1.3400e-003	1.0000e-005	1.3500e-003	0.0000	2.9962	2.9962	5.0000e-005	7.0000e-005	3.0179
Total	**8.4000e-004**	**4.9000e-004**	**8.4000e-003**	**3.0000e-005**	**5.0500e-003**	**1.0000e-005**	**5.0700e-003**	**1.3400e-003**	**1.0000e-005**	**1.3500e-003**	**0.0000**	**2.9962**	**2.9962**	**5.0000e-005**	**7.0000e-005**	**3.0179**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0479	0.2048	0.6645	1.1800e-003		7.8700e-003	7.8700e-003		7.8700e-003	7.8700e-003	0.0000	101.2178	101.2178	3.9000e-003	0.0000	101.3152
Paving	0.0167					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0646**	**0.2048**	**0.6645**	**1.1800e-003**		**7.8700e-003**	**7.8700e-003**		**7.8700e-003**	**7.8700e-003**	**0.0000**	**101.2178**	**101.2178**	**3.9000e-003**	**0.0000**	**101.3152**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.6 Paving - 2038

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.4000e-004	4.9000e-004	8.4000e-003	3.0000e-005	5.0500e-003	1.0000e-005	5.0700e-003	1.3400e-003	1.0000e-005	1.3500e-003	0.0000	2.9962	2.9962	5.0000e-005	7.0000e-005	3.0179
Total	**8.4000e-004**	**4.9000e-004**	**8.4000e-003**	**3.0000e-005**	**5.0500e-003**	**1.0000e-005**	**5.0700e-003**	**1.3400e-003**	**1.0000e-005**	**1.3500e-003**	**0.0000**	**2.9962**	**2.9962**	**5.0000e-005**	**7.0000e-005**	**3.0179**

3.7 Architectural Coating - 2038

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	22.2017					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0104	0.0671	0.1588	2.6000e-004		8.8000e-004	8.8000e-004		8.8000e-004	8.8000e-004	0.0000	22.5963	22.5963	8.3000e-004	0.0000	22.6172
Total	**22.2122**	**0.0671**	**0.1588**	**2.6000e-004**		**8.8000e-004**	**8.8000e-004**		**8.8000e-004**	**8.8000e-004**	**0.0000**	**22.5963**	**22.5963**	**8.3000e-004**	**0.0000**	**22.6172**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.7 Architectural Coating - 2038

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0394	0.0228	0.3920	1.5200e-003	0.2356	6.2000e-004	0.2362	0.0626	5.7000e-004	0.0632	0.0000	139.7354	139.7354	2.2200e-003	3.2100e-003	140.7476
Total	**0.0394**	**0.0228**	**0.3920**	**1.5200e-003**	**0.2356**	**6.2000e-004**	**0.2362**	**0.0626**	**5.7000e-004**	**0.0632**	**0.0000**	**139.7354**	**139.7354**	**2.2200e-003**	**3.2100e-003**	**140.7476**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	22.2017					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0104	0.0671	0.1588	2.6000e-004		8.8000e-004	8.8000e-004		8.8000e-004	8.8000e-004	0.0000	22.5963	22.5963	8.3000e-004	0.0000	22.6171
Total	**22.2122**	**0.0671**	**0.1588**	**2.6000e-004**		**8.8000e-004**	**8.8000e-004**		**8.8000e-004**	**8.8000e-004**	**0.0000**	**22.5963**	**22.5963**	**8.3000e-004**	**0.0000**	**22.6171**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.7 Architectural Coating - 2038

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0394	0.0228	0.3920	1.5200e-003	0.2356	6.2000e-004	0.2362	0.0626	5.7000e-004	0.0632	0.0000	139.7354	139.7354	2.2200e-003	3.2100e-003	140.7476
Total	**0.0394**	**0.0228**	**0.3920**	**1.5200e-003**	**0.2356**	**6.2000e-004**	**0.2362**	**0.0626**	**5.7000e-004**	**0.0632**	**0.0000**	**139.7354**	**139.7354**	**2.2200e-003**	**3.2100e-003**	**140.7476**

3.7 Architectural Coating - 2039

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	5.3936					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.5300e-003	0.0163	0.0386	6.0000e-005		2.1000e-004	2.1000e-004		2.1000e-004	2.1000e-004	0.0000	5.4895	5.4895	2.0000e-004	0.0000	5.4946
Total	**5.3962**	**0.0163**	**0.0386**	**6.0000e-005**		**2.1000e-004**	**2.1000e-004**		**2.1000e-004**	**2.1000e-004**	**0.0000**	**5.4895**	**5.4895**	**2.0000e-004**	**0.0000**	**5.4946**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.7 Architectural Coating - 2039

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.5700e-003	5.5500e-003	0.0952	3.7000e-004	0.0572	1.5000e-004	0.0574	0.0152	1.4000e-004	0.0154	0.0000	33.9470	33.9470	5.4000e-004	7.8000e-004	34.1929
Total	**9.5700e-003**	**5.5500e-003**	**0.0952**	**3.7000e-004**	**0.0572**	**1.5000e-004**	**0.0574**	**0.0152**	**1.4000e-004**	**0.0154**	**0.0000**	**33.9470**	**33.9470**	**5.4000e-004**	**7.8000e-004**	**34.1929**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	5.3936					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.5300e-003	0.0163	0.0386	6.0000e-005		2.1000e-004	2.1000e-004		2.1000e-004	2.1000e-004	0.0000	5.4895	5.4895	2.0000e-004	0.0000	5.4946
Total	**5.3962**	**0.0163**	**0.0386**	**6.0000e-005**		**2.1000e-004**	**2.1000e-004**		**2.1000e-004**	**2.1000e-004**	**0.0000**	**5.4895**	**5.4895**	**2.0000e-004**	**0.0000**	**5.4946**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.7 Architectural Coating - 2039

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.5700e-003	5.5500e-003	0.0952	3.7000e-004	0.0572	1.5000e-004	0.0574	0.0152	1.4000e-004	0.0154	0.0000	33.9470	33.9470	5.4000e-004	7.8000e-004	34.1929
Total	**9.5700e-003**	**5.5500e-003**	**0.0952**	**3.7000e-004**	**0.0572**	**1.5000e-004**	**0.0574**	**0.0152**	**1.4000e-004**	**0.0154**	**0.0000**	**33.9470**	**33.9470**	**5.4000e-004**	**7.8000e-004**	**34.1929**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	13.6638	13.1542	127.7708	0.2643	36.0633	0.1565	36.2198	9.6228	0.1461	9.7690	0.0000	24,499.3598	24,499.3598	1.8599	1.1788	24,897.1273
Unmitigated	13.6638	13.1542	127.7708	0.2643	36.0633	0.1565	36.2198	9.6228	0.1461	9.7690	0.0000	24,499.3598	24,499.3598	1.8599	1.1788	24,897.1273

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	9,600.00	10,700.00	8200.00	27,288,542	27,288,542
Convenience Market (24 hour)	3,954.40	5,681.20	4722.00	3,282,963	3,282,963
General Office Building	1,935.36	438.48	136.08	3,499,745	3,499,745
Health Club	1,637.80	1,037.40	1330.00	2,605,420	2,605,420
Hospital	14,600.00	9,000.00	8450.00	32,541,797	32,541,797
Medical Office Building	17,373.60	4,267.20	723.90	25,684,458	25,684,458
Parking Lot	0.00	0.00	0.00		
Research & Development	814.00	137.50	82.50	1,535,972	1,535,972
Total	49,915.16	31,261.78	23,644.48	96,438,897	96,438,897

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	10.80	7.30	7.50	41.60	18.80	39.60	86	11	3
Convenience Market (24 hour)	9.50	7.30	7.30	0.90	80.10	19.00	24	15	61
General Office Building	9.50	7.30	7.30	33.00	48.00	19.00	77	19	4
Health Club	9.50	7.30	7.30	16.90	64.10	19.00	52	39	9

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Hospital	9.50	7.30	7.30	64.90	16.10	19.00	73	25	2
Medical Office Building	9.50	7.30	7.30	29.60	51.40	19.00	60	30	10
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Research & Development	9.50	7.30	7.30	33.00	48.00	19.00	82	15	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.581445	0.061322	0.168269	0.110400	0.022610	0.006703	0.010268	0.006246	0.000647	0.000667	0.027159	0.000784	0.003479
Convenience Market (24 hour)	0.581445	0.061322	0.168269	0.110400	0.022610	0.006703	0.010268	0.006246	0.000647	0.000667	0.027159	0.000784	0.003479
General Office Building	0.581445	0.061322	0.168269	0.110400	0.022610	0.006703	0.010268	0.006246	0.000647	0.000667	0.027159	0.000784	0.003479
Health Club	0.581445	0.061322	0.168269	0.110400	0.022610	0.006703	0.010268	0.006246	0.000647	0.000667	0.027159	0.000784	0.003479
Hospital	0.581445	0.061322	0.168269	0.110400	0.022610	0.006703	0.010268	0.006246	0.000647	0.000667	0.027159	0.000784	0.003479
Medical Office Building	0.581445	0.061322	0.168269	0.110400	0.022610	0.006703	0.010268	0.006246	0.000647	0.000667	0.027159	0.000784	0.003479
Parking Lot	0.581445	0.061322	0.168269	0.110400	0.022610	0.006703	0.010268	0.006246	0.000647	0.000667	0.027159	0.000784	0.003479
Research & Development	0.581445	0.061322	0.168269	0.110400	0.022610	0.006703	0.010268	0.006246	0.000647	0.000667	0.027159	0.000784	0.003479

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Mitigated	0.2329	2.0855	1.5438	0.0127		0.1609	0.1609		0.1609	0.1609	0.0000	2,305.2243	2,305.2243	0.0442	0.0423	2,318.9231
NaturalGas Unmitigated	0.2329	2.0855	1.5438	0.0127		0.1609	0.1609		0.1609	0.1609	0.0000	2,305.2243	2,305.2243	0.0442	0.0423	2,318.9231

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Low Rise	1.08944e+007	0.0587	0.5020	0.2136	3.2000e-003		0.0406	0.0406		0.0406	0.0406	0.0000	581.3640	581.3640	0.0111	0.0107	584.8188
Convenience Market (24 hour)	8880	5.0000e-005	4.4000e-004	3.7000e-004	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.4739	0.4739	1.0000e-005	1.0000e-005	0.4767
General Office Building	3.02854e+006	0.0163	0.1485	0.1247	8.9000e-004		0.0113	0.0113		0.0113	0.0113	0.0000	161.6142	161.6142	3.1000e-003	2.9600e-003	162.5746
Health Club	437760	2.3600e-003	0.0215	0.0180	1.3000e-004		1.6300e-003	1.6300e-003		1.6300e-003	1.6300e-003	0.0000	23.3605	23.3605	4.5000e-004	4.3000e-004	23.4994
Hospital	2.05637e+007	0.1109	1.0080	0.8467	6.0500e-003		0.0766	0.0766		0.0766	0.0766	0.0000	1,097.3582	1,097.3582	0.0210	0.0201	1,103.8792
Medical Office Building	7.63143e+006	0.0412	0.3741	0.3142	2.2400e-003		0.0284	0.0284		0.0284	0.0284	0.0000	407.2422	407.2422	7.8100e-003	7.4700e-003	409.6622
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Research & Development	633600	3.4200e-003	0.0311	0.0261	1.9000e-004		2.3600e-003	2.3600e-003		2.3600e-003	2.3600e-003	0.0000	33.8113	33.8113	6.5000e-004	6.2000e-004	34.0122
Total		**0.2329**	**2.0855**	**1.5438**	**0.0127**		**0.1609**	**0.1609**		**0.1609**	**0.1609**	**0.0000**	**2,305.2243**	**2,305.2243**	**0.0442**	**0.0423**	**2,318.9231**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Low Rise	1.08944e+007	0.0587	0.5020	0.2136	3.2000e-003		0.0406	0.0406		0.0406	0.0406	0.0000	581.3640	581.3640	0.0111	0.0107	584.8188
Convenience Market (24 hour)	8880	5.0000e-005	4.4000e-004	3.7000e-004	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.4739	0.4739	1.0000e-005	1.0000e-005	0.4767
General Office Building	3.02854e+006	0.0163	0.1485	0.1247	8.9000e-004		0.0113	0.0113		0.0113	0.0113	0.0000	161.6142	161.6142	3.1000e-003	2.9600e-003	162.5746
Health Club	437760	2.3600e-003	0.0215	0.0180	1.3000e-004		1.6300e-003	1.6300e-003		1.6300e-003	1.6300e-003	0.0000	23.3605	23.3605	4.5000e-004	4.3000e-004	23.4994
Hospital	2.05637e+007	0.1109	1.0080	0.8467	6.0500e-003		0.0766	0.0766		0.0766	0.0766	0.0000	1,097.3582	1,097.3582	0.0210	0.0201	1,103.8792
Medical Office Building	7.63143e+006	0.0412	0.3741	0.3142	2.2400e-003		0.0284	0.0284		0.0284	0.0284	0.0000	407.2422	407.2422	7.8100e-003	7.4700e-003	409.6622
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Research & Development	633600	3.4200e-003	0.0311	0.0261	1.9000e-004		2.3600e-003	2.3600e-003		2.3600e-003	2.3600e-003	0.0000	33.8113	33.8113	6.5000e-004	6.2000e-004	34.0122
Total		**0.2329**	**2.0855**	**1.5438**	**0.0127**		**0.1609**	**0.1609**		**0.1609**	**0.1609**	**0.0000**	**2,305.2243**	**2,305.2243**	**0.0442**	**0.0423**	**2,318.9231**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	4.03868e+006	0.0000	0.0000	0.0000	0.0000
Convenience Market (24 hour)	48880	0.0000	0.0000	0.0000	0.0000
General Office Building	1.95653e+006	0.0000	0.0000	0.0000	0.0000
Health Club	310840	0.0000	0.0000	0.0000	0.0000
Hospital	5.75469e+006	0.0000	0.0000	0.0000	0.0000
Medical Office Building	4.93014e+006	0.0000	0.0000	0.0000	0.0000
Parking Lot	518000	0.0000	0.0000	0.0000	0.0000
Research & Development	449900	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	4.03868e+006	0.0000	0.0000	0.0000	0.0000
Convenience Market (24 hour)	48880	0.0000	0.0000	0.0000	0.0000
General Office Building	1.95653e+006	0.0000	0.0000	0.0000	0.0000
Health Club	310840	0.0000	0.0000	0.0000	0.0000
Hospital	5.75469e+006	0.0000	0.0000	0.0000	0.0000
Medical Office Building	4.93014e+006	0.0000	0.0000	0.0000	0.0000
Parking Lot	518000	0.0000	0.0000	0.0000	0.0000
Research & Development	449900	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	73.5872	1.3111	84.8965	0.1407		10.9010	10.9010		10.9010	10.9010	1,032.9577	445.4225	1,478.3802	0.9650	0.0813	1,526.7181
Unmitigated	73.5872	1.3111	84.8965	0.1407		10.9010	10.9010		10.9010	10.9010	1,032.9577	445.4225	1,478.3802	0.9650	0.0813	1,526.7181

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	2.7595					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	7.8562					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	62.7462	1.2254	77.4534	0.1403		10.8597	10.8597		10.8597	10.8597	1,032.9577	433.2074	1,466.1651	0.9533	0.0813	1,514.2088
Landscaping	0.2253	0.0858	7.4431	4.0000e-004		0.0413	0.0413		0.0413	0.0413	0.0000	12.2151	12.2151	0.0118	0.0000	12.5093
Total	**73.5872**	**1.3111**	**84.8965**	**0.1407**		**10.9010**	**10.9010**		**10.9010**	**10.9010**	**1,032.9577**	**445.4225**	**1,478.3802**	**0.9650**	**0.0813**	**1,526.7181**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	2.7595					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	7.8562					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	62.7462	1.2254	77.4534	0.1403		10.8597	10.8597		10.8597	10.8597	1,032.9577	433.2074	1,466.1651	0.9533	0.0813	1,514.2088
Landscaping	0.2253	0.0858	7.4431	4.0000e-004		0.0413	0.0413		0.0413	0.0413	0.0000	12.2151	12.2151	0.0118	0.0000	12.5093
Total	**73.5872**	**1.3111**	**84.8965**	**0.1407**		**10.9010**	**10.9010**		**10.9010**	**10.9010**	**1,032.9577**	**445.4225**	**1,478.3802**	**0.9650**	**0.0813**	**1,526.7181**

7.0 Water Detail

7.1 Mitigation Measures Water

2023 Hospital Update - San Diego County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	67.9968	6.9839	0.1649	291.7366
Unmitigated	67.9968	6.9839	0.1649	291.7366

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	65.154 / 41.0754	20.6704	2.1230	0.0501	88.6851
Convenience Market (24 hour)	0.29629 / 0.181597	0.0940	9.6500e-003	2.3000e-004	0.4033
General Office Building	26.8733 / 16.4708	8.5257	0.8757	0.0207	36.5790
Health Club	2.24744 / 1.37746	0.7130	0.0732	1.7300e-003	3.0591
Hospital	44.9068 / 8.55368	14.2469	1.4633	0.0346	61.1254
Medical Office Building	47.8081 / 9.1063	15.1673	1.5578	0.0368	65.0745
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Research & Development	27.0432 / 0	8.5796	0.8812	0.0208	36.8101
Total		**67.9968**	**6.9839**	**0.1649**	**291.7366**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	65.154 / 41.0754	20.6704	2.1230	0.0501	88.6851
Convenience Market (24 hour)	0.29629 / 0.181597	0.0940	9.6500e-003	2.3000e-004	0.4033
General Office Building	26.8733 / 16.4708	8.5257	0.8757	0.0207	36.5790
Health Club	2.24744 / 1.37746	0.7130	0.0732	1.7300e-003	3.0591
Hospital	44.9068 / 8.55368	14.2469	1.4633	0.0346	61.1254
Medical Office Building	47.8081 / 9.1063	15.1673	1.5578	0.0368	65.0745
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Research & Development	27.0432 / 0	8.5796	0.8812	0.0208	36.8101
Total		**67.9968**	**6.9839**	**0.1649**	**291.7366**

8.0 Waste Detail

8.1 Mitigation Measures Waste

2023 Hospital Update - San Diego County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	1,300.8108	76.8757	0.0000	3,222.7036
Unmitigated	1,300.8108	76.8757	0.0000	3,222.7036

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	460	93.3758	5.5184	0.0000	231.3347
Convenience Market (24 hour)	12.02	2.4400	0.1442	0.0000	6.0449
General Office Building	140.62	28.5446	1.6869	0.0000	70.7180
Health Club	216.6	43.9678	2.5984	0.0000	108.9285
Hospital	1460	296.3668	17.5148	0.0000	734.2362
Medical Office Building	4114.8	835.2672	49.3629	0.0000	2,069.3392
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Research & Development	4.18	0.8485	0.0502	0.0000	2.1021
Total		**1,300.8107**	**76.8757**	**0.0000**	**3,222.7036**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	460	93.3758	5.5184	0.0000	231.3347
Convenience Market (24 hour)	12.02	2.4400	0.1442	0.0000	6.0449
General Office Building	140.62	28.5446	1.6869	0.0000	70.7180
Health Club	216.6	43.9678	2.5984	0.0000	108.9285
Hospital	1460	296.3668	17.5148	0.0000	734.2362
Medical Office Building	4114.8	835.2672	49.3629	0.0000	2,069.3392
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Research & Development	4.18	0.8485	0.0502	0.0000	2.1021
Total		**1,300.8107**	**76.8757**	**0.0000**	**3,222.7036**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

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Appendix C. Transportation Analysis

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April 19, 2023

Diane Sandman
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LLG Reference: 3-23-3723

Subject: **Transportation Analysis for the Hillcrest Hospital Expansion Feasibility Study Project**

Dear Diane:

Linscott, Law & Greenspan, Engineers (LLG) has prepared the following technical letter report to provide a focused transportation analysis in relation to a potential change to the project analyzed in the University of California, San Diego (UC San Diego) 2019 Long Range Development Plan (2019 LRDP) Hillcrest Campus Environmental Impact Report (2019 LRDP EIR).

The UC San Diego 2019 LRDP EIR was certified in November 2019 (SCH No. 2018031003). LLG completed a Transportation Impact Analysis (TIA) for the 2019 LRDP EIR in October of 2019. As part of the 2019 LRDP EIR, a 300-bed replacement hospital was analyzed in Phase 4 of the project. Currently, UC San Diego is exploring the possibility of expanding the replacement hospital to more than 300 beds and wants to understand the maximum number of beds that could be constructed without triggering a new or increased impact compared to the 2019 LRDP EIR.

UC San Diego is considering the addition of up to 200 additional hospital beds, for a total of up to 500 beds. The expanded hospital would be located on the same site that was assumed in the 2019 LRDP. ***Table 1*** provides a comparison of the buildout land use mix analyzed in the 2019 LRDP EIR compared to the land use mix at buildout with a maximum of 500 hospital beds including additional modifications to the 2019 LRDP land use plan that have occurred since 2019 LRDP EIR certification. All tables are included at the end of this report.

The intent of this feasibility study is to identify the number of additional hospital beds above 300 that could be constructed without resulting in greater impacts than those identified in the 2019 LRDP EIR. The maximum number of beds under consideration is 500 beds.

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Shankar Ramakrishnan, PE
An LG2WB Company Founded 1966

This memorandum will provide a discussion of both Level of Service (LOS) and Vehicle Miles Traveled (VMT).

Project Trip Generation Comparison

Buildout of the 2019 LRDP was calculated to generate 24,827 driveway vehicular ADT with 1,987 total AM peak hour trips (1,393 inbound/ 594 outbound) and 2,578 total PM peak hour trips (856 inbound/ 1,722 outbound). The driveway trip rate calculations for the 2019 LRDP are summarized in ***Table 2.***

Buildout of the expanded hospital LRDP, assuming a total of 500 beds, was calculated to generate 30,326 driveway vehicular ADT with 2,300 total AM peak hour trips (1,605 inbound/ 695 outbound) and 3,079 total PM peak hour trips (1,035 inbound/ 2,044 outbound). The driveway trip rate calculations for the expanded hospital LRDP are summarized in ***Table 3.***

Therefore, the expanded hospital LRDP would result in 5,499 additional driveway vehicular ADT with 313 additional AM peak hour trips (212 inbound/ 101 outbound) and 501 additional PM peak hour trips (179 inbound/ 322 outbound).

Level of Service (LOS) Analysis

To determine how the expanded hospital LRDP would affect traffic operations in the immediate vicinity of the project site, the expanded hospital LRDP ADT and peak hour trips were added to the Year 2035 without Project traffic volumes from the 2019 LRDP EIR within the following focused study area. These intersections and segments are located closest to the proposed Project and were therefore selected for analysis.

INTERSECTIONS

19. Bachman Place / North Access Driveway (future)
20. Arbor Drive / Front Street
21. Arbor Drive / 1st Avenue

STREET SEGMENTS

12. Front Street, Arbor Drive to Washington Street
13. 1st Avenue, Arbor Drive to Washington Street

In the 2019 LRDP EIR, these study area intersections and segments were calculated to operate acceptably at LOS C or better, as shown on ***Table 4*** and ***Table 5***, respectively. These tables show that the expanded hospital LRDP would continue to result in acceptable LOS D or better operations. Therefore, the expanded hospital LRDP is not expected to cause undue congestion in the study area.

Additionally, a trial-and-error computer analysis was conducted to determine the level of additional development that could be supported by the street system. It was determined that approximately 585 beds could be provided before the focused study area locations, specifically the intersection of Arbor Drive and 1St Avenue, would be calculated to operate at an unacceptable LOS E.

Attachment A contains the Year 2035 + Expanded Hospital (500 beds) Project Buildout peak hour intersection worksheets.

Vehicle Miles Traveled (VMT) Assessment

The 2019 LRPD EIR concluded that the Vehicle Miles Traveled (VMT) transportation impacts associated with the Project would be less than significant and that no mitigation measures would be required.

As previously mentioned, UC San Diego is considering the addition of up to 200 additional hospital beds, for a total of up to 500 beds. The expanded hospital would be located on the same site that was assumed in the 2019 LRDP. According to the *Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity* published by the California Air Pollution Control Officers Association (CAPCOA), designing a project with increased density affects the trips and distances that people travel. By increasing a Project's density (i.e., increasing the jobs per acre), the VMT is expected to *decrease*. Therefore, there would be no VMT impact associated with the expanded hospital LRDP.

Conclusions

Based on the LOS analysis conducted at the intersections and segments located closest to the proposed Project, the expanded hospital LRDP would continue to result in acceptable LOS D or better operations. Therefore, the expanded hospital LRDP is not expected to cause undue congestion in the study area.

Based on the VMT assessment conducted for the expanded hospital LRDP and information from the CAPCOA handbook, increasing a project's density reduces the VMT as it affects the trips and distances that people travel. Therefore, there would be no VMT impact associated with the expanded hospital LRDP since the Project proposes to increase its density (i.e., increase the jobs per acre) beyond what was programmed in the 2019 LRDP EIR.

LINSCOTT LAW & GREENSPAN engineers

Linscott, Law & Greenspan, Engineers

John Boarman, RTE
Principal

Amelia Giacalone
Senior Transportation Planner

cc: File

Attachments: ***Attachment A***: Year 2035 + Expanded Hospital (500 beds) Project Buildout peak hour intersection worksheets

LINSCOTT LAW & GREENSPAN engineers

TABLE 1
COMPARISON OF 2019 LRDP EIR BUILDOUT WITH HOSPITAL FEASIBILITY PROJECT COMPONENTS

Land Use Category	2019 LRDP EIR Proposed Project	2023 Revised LRDP – Maximum Hospital Buildout
New Land Uses to Be Constructed		
Outpatient Pavilion	272,000 SF	--
Outpatient Pavilion Annex	25,000 SF	--
Outpatient	20,000 SF	381,000 SF
Multi-Use Building (Office)	136,000 SF	--
Multi-Use Building (Research)	160,000 SF	--
Wellness Center	40,000 SF	38,000 SF
Residential	570 Units	1,000 Units
Hospital	300 Beds	500 Beds
Science Research	34,000 SF	55,000 SF
Residential	430 Units	--
Campus Retail	4,000 SF	4,000 SF
Office and Support	--	151,200 SF
Existing Land Uses to Be Demolished		
Commercial Office	130,550 SF	130,550 SF
Science Research	20,800 SF	20,800 SF
Medical Office	69,350 SF	69,350 SF
Residential	21 Units	21 Units
Commercial Office	49,100 SF	11,100 SF
Science Research	168,900 SF	168,900 SF
Hospital	370 Beds	370 Beds
Commercial Office	37,100 SF	37,100 SF
Medical Office	131,100 SF	131,100 SF

Notes: 2019 LRDP = 2019 Long Range Development Plan; EIR = Environmental Impact Report; SF = square feet

TABLE 2
2019 LRDP TRIP GENERATION (DRIVEWAY TRIP RATES)

Land Use	Development		Trip Rate	Average Daily Traffic (ADT)[a]	AM Peak Hour					PM Peak Hour				
					% of ADT	In: Out Split	Volume			% of ADT [c]	In: Out Split	Volume		
							In	Out	Total			In	Out	Total
Outpatient Pavilion	272,000	SF	50 /KSF	13,600	6%	80:20	653	163	816	10%	30:70	408	952	1,360
Outpatient Pavilion Annex	25,000	SF	ln Formula[a]	592	13%	90:10	69	8	77	14%	20:80	17	66	83
Outpatient	20,000	SF	50 /KSF	1,000	6%	80:20	48	12	60	10%	30:70	30	70	100
Multi-Use Building (Office)	136,000	SF	ln Formula	2,130	13%	90:10	249	28	277	14%	20:80	60	238	298
Multi-Use Building (Research)	160,000	SF	8 /KSF	1,280	16%	90:10	185	20	205	14%	10:90	18	161	179
Wellness Center	40,000	SF	25 /KSF[c]	1,000	6%	80:20	36	24	60	10%	30:70	30	70	100
Residential	570	Units	5 /DU[b]	2,850	8%	20:80	46	182	228	9%	70:30	180	77	257
Hospital	300	Beds	20 /Bed	6,000	9%	70:30	378	162	540	10%	30:70	180	420	600
Science Research	34,000	SF	8 /KSF	272	16%	90:10	40	4	44	14%	10:90	4	34	38
Residential	430	Units	5 /DU[b]	2,150	8%	20:80	34	138	172	9%	70:30	136	58	194
Campus Retail	4,000	SF	40 /KSF[d]	160	3%	60:40	3	2	5	9%	50:50	7	7	14
			Subtotal	*31,034*			*1,741*	*743*	*2,484*			*1,070*	*2,153*	*3,223*
Proposed Gross Vehicular Trips (80%)[e]				***24,827***			***1,393***	***594***	***1,987***			***856***	***1,722***	***2,578***

Footnotes:

a. $Ln(T) = 0.756\ Ln(x) + 3.95$

b. While the primary tenants of the housing units will be UCSD-affiliated, non-affiliated spouses and/or roommates may reside in the units. Therefore, to account for this, the traffic study conservatively assumes only half of the housing units would be occupied by UCSD affiliates. In general, UCSD affiliates will not drive to or from work and therefore two trips were subtracted from the City's standard rate of 6 ADT per unit for 50% of the total units, for an average rate of 5 ADT per unit.

c. 1/2 City's Medical Office Trip Rate

d. City's Specialty Retail Trip Rate

e. Mode split based on a UC San Diego Survey of Pedestrian and Vehicular Traffic conducted in 2017

TABLE 3
EXPANDED HOSPITAL LRDP TRIP GENERATION (DRIVEWAY TRIP RATES)

Land Use	Development		Trip Rate		Average Daily Traffic (ADT)[a]	AM Peak Hour					PM Peak Hour				
						% of ADT	In: Out Split	Volume			% of ADT [c]	In: Out Split	Volume		
								In	Out	Total			In	Out	Total
Hospital	500	Beds	20	/Bed	10,000	9%	70:30	630	270	900	10%	30:70	300	700	1000
Outpatient	381,000	SF	50	/KSF	19,050	6%	80:20	914	229	1,143	10%	30:70	572	1,333	1,905
Science Research	55,000	SF	8	/KSF	440	16%	90:10	63	7	70	14%	10:90	6	56	62
Office and Support	151,200	SF	ln Formula		2,308	13%	90:10	270	30	300	14%	20:80	65	258	323
Campus Retail	4,000	SF	40	/KSF[d]	160	3%	60:40	3	2	5	9%	50:50	7	7	14
Wellness Center	38,000	SF	25	/KSF[c]	950	6%	80:20	46	11	57	10%	30:70	29	66	95
Residential	1,000	Units	5	/DU[b]	5,000	8%	20:80	80	320	400	9%	70:30	315	135	450
Subtotal					*37,908*			*2,006*	*869*	*2,875*			*1,294*	*2,555*	*3,849*
Proposed Gross Vehicular Trips (80%)[e]					***30,326***			***1,605***	***695***	***2,300***			***1,035***	***2,044***	***3,079***

Footnotes:

a. Ln(T) = 0.756 Ln(x) + 3.95

b. While the primary tenants of the housing units will be UCSD-affiliated, non-affiliated spouses and/or roommates may reside in the units. Therefore, to account for this, the traffic study conservatively assumes only half of the housing units would be occupied by UCSD affiliates. In general, UCSD affiliates will not drive to or from work and therefore two trips were subtracted from the City's standard rate of 6 ADT per unit for 50% of the total units, for an average rate of 5 ADT per unit.

c. 1/2 City's Medical Office Trip Rate

d. City's Specialty Retail Trip Rate

e. Mode split based on a UC San Diego Survey of Pedestrian and Vehicular Traffic conducted in 2017

TABLE 4
INTERSECTION ANALYSIS COMPARISON

Intersection	Control Type	Peak Hour	Year 2035 + 2019 LRDP Buildout		Year 2035 + Expanded Hospital LRDP Buildout	
			Delay[a]	LOS[b]	Delay[a]	LOS[b]
19. Bachman Place / North Access Driveway (future)	Signal	AM	6.0	A	6.8	A
		PM	5.4	A	6.9	A
20. Arbor Drive / Front Street	Signal	AM	9.7	A	10.5	B
		PM	13.7	B	16.5	B
21. Arbor Drive / 1st Avenue	Signal	AM	28.2	C	50.9	D
		PM	27.3	C	49.4	D

Footnotes:

a. Average delay expressed in seconds per vehicle
b. Level of Service

SIGNALIZED

DELAY/LOS THRESHOLDS

Delay	LOS
0.0 < 10.0	A
10.1 to 20.0	B
20.1 to 35.0	C
35.1 to 55.0	D
55.1 to 80.0	E
> 80.1	F

TABLE 5
STREET SEGMENT OPERATIONS

Street Segment	Roadway Classification	Capacity (LOS E)[a]	Year 2035 + 2019 LRDP Buildout			Year 2035 + Expanded Hospital LRDP Buildout		
			ADT [b]	V/C [c]	LOS [d]	ADT [b]	V/C [c]	LOS [d]
Front Street								
Arbor Drive to Washington Street	2-lane collector (one way)	17,500	8,938	0.511	B	10,917	0.624	C
First Avenue								
Arbor Drive to Washington Street	2-lane collector (one way)	17,500	8,938	0.511	B	10,917	0.624	C

LINSCOTT
LAW &
GREENSPAN
engineers

ATTACHMENTS

HILLCREST HOSPITAL EXPANSION

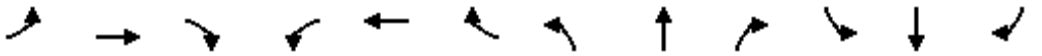
San Diego, California
April 19, 2023

LLG Ref. 3-23-3723

Linscott, Law & Greenspan, Engineers
4542 Ruffner Street
Suite 100
San Diego, CA 92111
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858.300.8810 F
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ATTACHMENT A

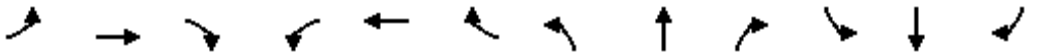
YEAR 2035 + EXPANDED HOSPITAL (500 BEDS)
PROJECT BUILDOUT PEAK HOUR INTERSECTION WORKSHEETS



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	628	10	10	680	0	10	0	10	308	10	211
Future Volume (vph)	0	628	10	10	680	0	10	0	10	308	10	211
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.9			4.9		4.9		4.9	4.9	4.9	4.9
Lane Util. Factor		0.95			0.95		1.00		1.00	0.95	0.95	1.00
Frt		1.00			1.00		1.00		0.85	1.00	1.00	0.85
Flt Protected		1.00			1.00		0.95		1.00	0.95	0.96	1.00
Satd. Flow (prot)		3531			3537		1770		1583	1681	1690	1583
Flt Permitted		1.00			0.94		0.48		1.00	0.95	0.96	1.00
Satd. Flow (perm)		3531			3341		892		1583	1681	1690	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	683	11	11	739	0	11	0	11	335	11	229
RTOR Reduction (vph)	0	1	0	0	0	0	0	0	9	0	0	187
Lane Group Flow (vph)	0	693	0	0	750	0	11	0	2	174	172	42
Turn Type		NA		Perm	NA		Perm		Perm	Perm	NA	Perm
Protected Phases		2			6						4	
Permitted Phases				6			8		8	4		4
Actuated Green, G (s)		73.1			73.1		17.1		17.1	17.1	17.1	17.1
Effective Green, g (s)		73.1			73.1		17.1		17.1	17.1	17.1	17.1
Actuated g/C Ratio		0.73			0.73		0.17		0.17	0.17	0.17	0.17
Clearance Time (s)		4.9			4.9		4.9		4.9	4.9	4.9	4.9
Vehicle Extension (s)		3.0			3.0		3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)		2581			2442		152		270	287	288	270
v/s Ratio Prot		0.20										
v/s Ratio Perm					c0.22		0.01		0.00	c0.10	0.10	0.03
v/c Ratio		0.27			0.31		0.07		0.01	0.61	0.60	0.16
Uniform Delay, d1		4.5			4.7		34.8		34.4	38.3	38.3	35.3
Progression Factor		1.00			0.34		1.00		1.00	1.00	1.00	1.00
Incremental Delay, d2		0.3			0.3		0.2		0.0	3.6	3.3	0.3
Delay (s)		4.8			1.9		35.0		34.4	41.9	41.6	35.6
Level of Service		A			A		C		C	D	D	D
Approach Delay (s)		4.8			1.9			34.7			39.3	
Approach LOS		A			A			C			D	

Intersection Summary			
HCM 2000 Control Delay	13.7	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.36		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	9.8
Intersection Capacity Utilization	49.5%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



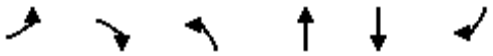
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	168	729	109	80	620	227	70	186	60	0	0	0
Future Volume (veh/h)	168	729	109	80	620	227	70	186	60	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870			
Adj Flow Rate, veh/h	183	792	118	87	674	247	76	202	65			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2			
Cap, veh/h	321	1371	204	601	1416	519	85	225	72			
Arrive On Green	0.18	0.88	0.88	0.20	0.56	0.56	0.21	0.21	0.21			
Sat Flow, veh/h	1781	3102	462	1781	2546	933	397	1054	339			
Grp Volume(v), veh/h	183	454	456	87	470	451	343	0	0			
Grp Sat Flow(s),veh/h/ln	1781	1777	1787	1781	1777	1702	1789	0	0			
Q Serve(g_s), s	6.8	6.1	6.1	0.0	16.0	16.0	18.7	0.0	0.0			
Cycle Q Clear(g_c), s	6.8	6.1	6.1	0.0	16.0	16.0	18.7	0.0	0.0			
Prop In Lane	1.00		0.26	1.00		0.55	0.22		0.19			
Lane Grp Cap(c), veh/h	321	785	790	601	988	947	382	0	0			
V/C Ratio(X)	0.57	0.58	0.58	0.14	0.48	0.48	0.90	0.00	0.00			
Avail Cap(c_a), veh/h	425	785	790	601	988	947	644	0	0			
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.95	0.95	0.95	1.00	1.00	1.00	1.00	0.00	0.00			
Uniform Delay (d), s/veh	19.1	3.6	3.6	15.3	13.4	13.4	38.3	0.0	0.0			
Incr Delay (d2), s/veh	0.6	2.9	2.9	0.0	1.6	1.7	5.2	0.0	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	2.5	1.9	1.9	1.2	6.5	6.2	8.6	0.0	0.0			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	19.6	6.5	6.5	15.4	15.0	15.1	43.5	0.0	0.0			
LnGrp LOS	B	A	A	B	B	B	D	A	A			
Approach Vol, veh/h		1093			1008			343				
Approach Delay, s/veh		8.7			15.1			43.5				
Approach LOS		A			B			D				

Timer - Assigned Phs	1	2		4	5	6			
Phs Duration (G+Y+Rc), s	24.7	49.1		26.2	13.3	60.5			
Change Period (Y+Rc), s	4.9	* 4.9		4.9	4.4	4.9			
Max Green Setting (Gmax), s	5.6	* 44		36.0	14.7	35.1			
Max Q Clear Time (g_c+I1), s	2.0	8.1		20.7	8.8	18.0			
Green Ext Time (p_c), s	0.0	2.2		0.7	0.1	2.1			

Intersection Summary		
HCM 6th Ctrl Delay		16.2
HCM 6th LOS		B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	76	3	1	585	915	33
Future Volume (veh/h)	76	3	1	585	915	33
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	83	3	1	636	995	36
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	124	110	385	1406	1349	49
Arrive On Green	0.07	0.07	0.75	0.75	0.75	0.75
Sat Flow, veh/h	1781	1585	547	1870	1794	65
Grp Volume(v), veh/h	83	3	1	636	0	1031
Grp Sat Flow(s),veh/h/ln	1781	1585	547	1870	0	1859
Q Serve(g_s), s	2.3	0.1	0.1	6.4	0.0	15.6
Cycle Q Clear(g_c), s	2.3	0.1	15.6	6.4	0.0	15.6
Prop In Lane	1.00	1.00	1.00			0.03
Lane Grp Cap(c), veh/h	124	110	385	1406	0	1398
V/C Ratio(X)	0.67	0.03	0.00	0.45	0.00	0.74
Avail Cap(c_a), veh/h	640	569	385	1406	0	1398
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	22.9	21.9	7.8	2.3	0.0	3.5
Incr Delay (d2), s/veh	6.2	0.1	0.0	1.1	0.0	3.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	0.0	0.0	1.0	0.0	2.8
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	29.0	22.0	7.8	3.4	0.0	7.0
LnGrp LOS	C	C	A	A	A	A
Approach Vol, veh/h	86			637	1031	
Approach Delay, s/veh	28.8			3.4	7.0	
Approach LOS	C			A	A	

Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		42.4		8.0		42.4
Change Period (Y+Rc), s		4.5		4.5		4.5
Max Green Setting (Gmax), s		37.9		18.1		37.9
Max Q Clear Time (g_c+I1), s		17.6		4.3		17.6
Green Ext Time (p_c), s		4.4		0.1		8.9

Intersection Summary	
HCM 6th Ctrl Delay	6.8
HCM 6th LOS	A



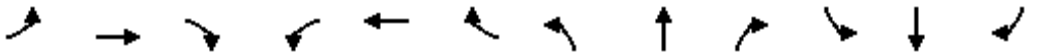
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	3	182	501	46	0	0
Future Volume (veh/h)	3	182	501	46	0	0
Initial Q (Qb), veh	0	0	0	0		
Ped-Bike Adj(A_pbT)		0.71	0.80			
Parking Bus, Adj	1.00	1.00	1.00	1.00		
Work Zone On Approach	No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870		
Adj Flow Rate, veh/h	3	198	581	0		
Peak Hour Factor	0.92	0.92	0.92	0.92		
Percent Heavy Veh, %	2	2	2	2		
Cap, veh/h	635	384	1351	1079		
Arrive On Green	0.34	0.34	0.12	0.00		
Sat Flow, veh/h	1870	1131	3563	1870		
Grp Volume(v), veh/h	3	198	581	0		
Grp Sat Flow(s),veh/h/ln	1870	1131	1781	1870		
Q Serve(g_s), s	0.0	5.6	0.0	0.0		
Cycle Q Clear(g_c), s	0.0	5.6	0.0	0.0		
Prop In Lane		1.00	1.00			
Lane Grp Cap(c), veh/h	635	384	1351	1079		
V/C Ratio(X)	0.00	0.52	0.43	0.00		
Avail Cap(c_a), veh/h	1052	636	1663	1660		
HCM Platoon Ratio	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	1.00	0.91	0.00		
Uniform Delay (d), s/veh	8.7	10.6	9.9	0.0		
Incr Delay (d2), s/veh	0.0	1.1	0.2	0.0		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	0.0	1.2	1.6	0.0		
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	8.7	11.6	10.1	0.0		
LnGrp LOS	A	B	B	A		
Approach Vol, veh/h	201			581		
Approach Delay, s/veh	11.6			10.1		
Approach LOS	B			B		

Timer - Assigned Phs			3	4		8
Phs Duration (G+Y+Rc), s			9.5	18.1		27.6
Change Period (Y+Rc), s			4.5	4.5		4.5
Max Green Setting (Gmax), s			8.5	22.5		35.5
Max Q Clear Time (g_c+I1), s			2.0	7.6		0.0
Green Ext Time (p_c), s			1.3	0.8		0.0

Intersection Summary	
HCM 6th Ctrl Delay	10.5
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	3	0	0	245	225	45	594	497	97	0	257
Future Volume (veh/h)	5	3	0	0	245	225	45	594	497	97	0	257
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.91		1.00	1.00		0.77	1.00		0.95	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	5	3	0	0	266	245	49	646	540	105	130	192
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2	2	2	2
Cap, veh/h	234	117	0	0	586	383	85	606	502	0	736	614
Arrive On Green	0.31	0.31	0.00	0.00	0.31	0.31	0.05	0.34	0.34	0.11	0.39	0.39
Sat Flow, veh/h	408	375	0	0	1870	1222	1781	1801	1492	0	1870	1560
Grp Volume(v), veh/h	8	0	0	0	266	245	49	637	549	0	130	192
Grp Sat Flow(s),veh/h/ln	783	0	0	0	1870	1222	1781	1777	1517	0	1870	1560
Q Serve(g_s), s	0.0	0.0	0.0	0.0	6.3	9.5	1.5	18.5	18.5	0.0	2.5	4.7
Cycle Q Clear(g_c), s	6.3	0.0	0.0	0.0	6.3	9.5	1.5	18.5	18.5	0.0	2.5	4.7
Prop In Lane	0.62		0.00	0.00		1.00	1.00		0.98	0.00		1.00
Lane Grp Cap(c), veh/h	352	0	0	0	586	383	85	598	510	0	736	614
V/C Ratio(X)	0.02	0.00	0.00	0.00	0.45	0.64	0.57	1.07	1.08	0.00	0.18	0.31
Avail Cap(c_a), veh/h	366	0	0	0	612	400	165	598	510	0	736	614
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	13.3	0.0	0.0	0.0	15.1	16.2	25.6	18.3	18.3	0.0	10.9	11.5
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.6	3.2	6.0	55.7	61.8	0.0	0.5	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	0.0	0.0	2.4	6.6	0.7	15.8	14.3	0.0	1.0	1.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	13.3	0.0	0.0	0.0	15.7	19.4	31.6	73.9	80.0	0.0	11.4	12.9
LnGrp LOS	B	A	A	A	B	B	C	F	F	A	B	B
Approach Vol, veh/h		8			511			1235			322	
Approach Delay, s/veh		13.3			17.5			75.0			12.3	
Approach LOS		B			B			E			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	10.3	23.0		21.7	7.1	26.1		21.7				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	5.0	18.5		18.0	5.1	18.4		18.0				
Max Q Clear Time (g_c+I1), s	0.0	20.5		8.3	3.5	6.7		11.5				
Green Ext Time (p_c), s	0.0	0.0		0.0	0.0	1.1		1.5				

Intersection Summary	
HCM 6th Ctrl Delay	50.9
HCM 6th LOS	D

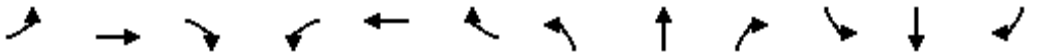
Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	928	10	10	910	0	10	0	10	468	10	370
Future Volume (vph)	0	928	10	10	910	0	10	0	10	468	10	370
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.9			4.9		4.9		4.9	4.9	4.9	4.9
Lane Util. Factor		0.95			0.95		1.00		1.00	0.95	0.95	1.00
Frt		1.00			1.00		1.00		0.85	1.00	1.00	0.85
Flt Protected		1.00			1.00		0.95		1.00	0.95	0.95	1.00
Satd. Flow (prot)		3533			3537		1770		1583	1681	1689	1583
Flt Permitted		1.00			0.94		0.41		1.00	0.95	0.95	1.00
Satd. Flow (perm)		3533			3329		770		1583	1681	1689	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1009	11	11	989	0	11	0	11	509	11	402
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	8	0	0	65
Lane Group Flow (vph)	0	1020	0	0	1000	0	11	0	3	260	260	337
Turn Type		NA		Perm	NA		Perm		Perm	Perm	NA	Perm
Protected Phases		2			6						4	
Permitted Phases				6			8		8	4		4
Actuated Green, G (s)		69.3			69.3		30.9		30.9	30.9	30.9	30.9
Effective Green, g (s)		69.3			69.3		30.9		30.9	30.9	30.9	30.9
Actuated g/C Ratio		0.63			0.63		0.28		0.28	0.28	0.28	0.28
Clearance Time (s)		4.9			4.9		4.9		4.9	4.9	4.9	4.9
Vehicle Extension (s)		3.0			3.0		3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)		2225			2097		216		444	472	474	444
v/s Ratio Prot		0.29										
v/s Ratio Perm					c0.30		0.01		0.00	0.15	0.15	c0.21
v/c Ratio		0.46			0.48		0.05		0.01	0.55	0.55	0.76
Uniform Delay, d1		10.6			10.8		28.9		28.5	33.6	33.6	36.1
Progression Factor		1.00			0.91		1.00		1.00	1.00	1.00	1.00
Incremental Delay, d2		0.7			0.7		0.1		0.0	1.4	1.3	7.3
Delay (s)		11.3			10.5		29.0		28.5	35.0	34.9	43.4
Level of Service		B			B		C		C	D	C	D
Approach Delay (s)		11.3			10.5			28.7			38.7	
Approach LOS		B			B			C			D	

Intersection Summary			
HCM 2000 Control Delay	19.7	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.56		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	9.8
Intersection Capacity Utilization	63.2%	ICU Level of Service	B
Analysis Period (min)	15		

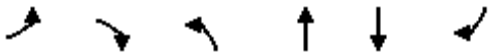
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	138	1026	172	100	710	229	90	223	160	0	0	0
Future Volume (veh/h)	138	1026	172	100	710	229	90	223	160	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870			
Adj Flow Rate, veh/h	150	1115	187	109	772	249	98	242	174			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2			
Cap, veh/h	365	1715	287	274	1459	471	88	218	156			
Arrive On Green	0.05	0.56	0.56	0.04	0.55	0.55	0.26	0.26	0.26			
Sat Flow, veh/h	1781	3046	509	1781	2642	852	333	823	591			
Grp Volume(v), veh/h	150	649	653	109	519	502	514	0	0			
Grp Sat Flow(s),veh/h/ln	1781	1777	1779	1781	1777	1717	1747	0	0			
Q Serve(g_s), s	4.0	27.7	27.9	2.9	20.3	20.3	29.1	0.0	0.0			
Cycle Q Clear(g_c), s	4.0	27.7	27.9	2.9	20.3	20.3	29.1	0.0	0.0			
Prop In Lane	1.00		0.29	1.00		0.50	0.19		0.34			
Lane Grp Cap(c), veh/h	365	1000	1001	274	982	949	462	0	0			
V/C Ratio(X)	0.41	0.65	0.65	0.40	0.53	0.53	1.11	0.00	0.00			
Avail Cap(c_a), veh/h	375	1000	1001	400	982	949	462	0	0			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.88	0.88	0.88	1.00	1.00	1.00	1.00	0.00	0.00			
Uniform Delay (d), s/veh	11.9	16.6	16.6	13.9	15.6	15.6	40.5	0.0	0.0			
Incr Delay (d2), s/veh	0.2	2.9	2.9	0.3	2.0	2.1	76.0	0.0	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	1.5	11.5	11.6	1.1	8.5	8.2	22.1	0.0	0.0			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	12.1	19.4	19.5	14.3	17.6	17.7	116.5	0.0	0.0			
LnGrp LOS	B	B	B	B	B	B	F	A	A			
Approach Vol, veh/h		1452			1130			514				
Approach Delay, s/veh		18.7			17.3			116.5				
Approach LOS		B			B			F				

Timer - Assigned Phs	1	2		4	5	6
Phs Duration (G+Y+Rc), s	9.2	66.8		34.0	10.3	65.7
Change Period (Y+Rc), s	4.4	4.9		4.9	4.4	4.9
Max Green Setting (Gmax), s	12.6	54.1		29.1	6.6	60.1
Max Q Clear Time (g_c+I1), s	4.9	29.9		31.1	6.0	22.3
Green Ext Time (p_c), s	0.1	3.5		0.0	0.0	2.6

Intersection Summary			
HCM 6th Ctrl Delay		34.4	
HCM 6th LOS		C	



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	49	1	3	1127	675	78
Future Volume (veh/h)	49	1	3	1127	675	78
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	53	1	3	1225	734	85
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	85	76	554	1522	1339	155
Arrive On Green	0.05	0.05	0.81	0.81	0.81	0.81
Sat Flow, veh/h	1781	1585	668	1870	1646	191
Grp Volume(v), veh/h	53	1	3	1225	0	819
Grp Sat Flow(s),veh/h/ln	1781	1585	668	1870	0	1836
Q Serve(g_s), s	1.9	0.0	0.1	23.0	0.0	9.8
Cycle Q Clear(g_c), s	1.9	0.0	9.9	23.0	0.0	9.8
Prop In Lane	1.00	1.00	1.00			0.10
Lane Grp Cap(c), veh/h	85	76	554	1522	0	1494
V/C Ratio(X)	0.62	0.01	0.01	0.80	0.00	0.55
Avail Cap(c_a), veh/h	492	438	554	1522	0	1494
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	30.4	29.5	3.7	3.3	0.0	2.0
Incr Delay (d2), s/veh	7.2	0.1	0.0	4.6	0.0	1.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	0.0	0.0	3.7	0.0	1.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	37.6	29.6	3.7	7.9	0.0	3.5
LnGrp LOS	D	C	A	A	A	A
Approach Vol, veh/h	54			1228	819	
Approach Delay, s/veh	37.5			7.9	3.5	
Approach LOS	D			A	A	

Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		57.5		7.6		57.5
Change Period (Y+Rc), s		4.5		4.5		4.5
Max Green Setting (Gmax), s		53.0		18.0		53.0
Max Q Clear Time (g_c+I1), s		25.0		3.9		11.8
Green Ext Time (p_c), s		14.3		0.1		7.7

Intersection Summary	
HCM 6th Ctrl Delay	6.9
HCM 6th LOS	A



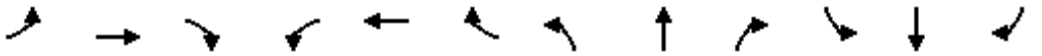
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1	77	1391	181	0	0
Future Volume (veh/h)	1	77	1391	181	0	0
Initial Q (Qb), veh	0	0	0	0		
Ped-Bike Adj(A_pbT)		0.88	0.83			
Parking Bus, Adj	1.00	1.00	1.00	1.00		
Work Zone On Approach	No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870		
Adj Flow Rate, veh/h	1	84	1653	0		
Peak Hour Factor	0.92	0.92	0.92	0.92		
Percent Heavy Veh, %	2	2	2	2		
Cap, veh/h	269	200	1677	1063		
Arrive On Green	0.14	0.14	0.31	0.00		
Sat Flow, veh/h	1870	1392	3563	1870		
Grp Volume(v), veh/h	1	84	1653	0		
Grp Sat Flow(s),veh/h/ln	1870	1392	1781	1870		
Q Serve(g_s), s	0.0	2.2	12.0	0.0		
Cycle Q Clear(g_c), s	0.0	2.2	12.0	0.0		
Prop In Lane		1.00	1.00			
Lane Grp Cap(c), veh/h	269	200	1677	1063		
V/C Ratio(X)	0.00	0.42	0.99	0.00		
Avail Cap(c_a), veh/h	865	644	1677	1660		
HCM Platoon Ratio	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	1.00	0.13	0.00		
Uniform Delay (d), s/veh	14.7	15.6	11.3	0.0		
Incr Delay (d2), s/veh	0.0	1.4	5.2	0.0		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	0.0	0.7	5.8	0.0		
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	14.7	17.0	16.5	0.0		
LnGrp LOS	B	B	B	A		
Approach Vol, veh/h	85			1653		
Approach Delay, s/veh	17.0			16.5		
Approach LOS	B			B		

Timer - Assigned Phs			3	4		8
Phs Duration (G+Y+Rc), s			17.0	10.2		27.2
Change Period (Y+Rc), s			4.5	4.5		4.5
Max Green Setting (Gmax), s			12.5	18.5		35.5
Max Q Clear Time (g_c+I1), s			14.0	4.2		0.0
Green Ext Time (p_c), s			0.0	0.2		0.0

Intersection Summary	
HCM 6th Ctrl Delay	16.5
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	1	0	0	638	145	179	383	355	286	0	756
Future Volume (veh/h)	5	1	0	0	638	145	179	383	355	286	0	756
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.93	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	5	1	0	0	693	158	195	416	386	311	383	566
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2	2	2	2
Cap, veh/h	94	11	0	0	655	515	237	926	806	0	606	509
Arrive On Green	0.35	0.35	0.00	0.00	0.35	0.35	0.13	0.52	0.52	0.00	0.32	0.32
Sat Flow, veh/h	0	31	0	0	1870	1472	1781	1777	1546	0	1870	1569
Grp Volume(v), veh/h	6	0	0	0	693	158	195	416	386	0	383	566
Grp Sat Flow(s),veh/h/ln	31	0	0	0	1870	1472	1781	1777	1546	0	1870	1569
Q Serve(g_s), s	0.0	0.0	0.0	0.0	24.5	5.5	7.5	10.2	11.2	0.0	12.2	22.7
Cycle Q Clear(g_c), s	24.5	0.0	0.0	0.0	24.5	5.5	7.5	10.2	11.2	0.0	12.2	22.7
Prop In Lane	0.83		0.00	0.00		1.00	1.00		1.00	0.00		1.00
Lane Grp Cap(c), veh/h	105	0	0	0	655	515	237	926	806	0	606	509
V/C Ratio(X)	0.06	0.00	0.00	0.00	1.06	0.31	0.82	0.45	0.48	0.00	0.63	1.11
Avail Cap(c_a), veh/h	105	0	0	0	655	515	267	926	806	0	606	509
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	19.0	0.0	0.0	0.0	22.8	16.6	29.5	10.5	10.7	0.0	20.1	23.7
Incr Delay (d2), s/veh	0.2	0.0	0.0	0.0	51.7	0.3	16.9	1.6	2.0	0.0	4.9	74.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	0.0	0.0	19.2	5.1	4.2	3.9	3.8	0.0	5.8	18.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	19.2	0.0	0.0	0.0	74.5	16.9	46.4	12.0	12.7	0.0	25.0	98.1
LnGrp LOS	B	A	A	A	F	B	D	B	B	A	C	F
Approach Vol, veh/h		6			851			997			949	
Approach Delay, s/veh		19.2			63.8			19.0			68.6	
Approach LOS		B			E			B			E	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	0.0	41.0		29.0	13.8	27.2		29.0				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	5.0	27.0		24.5	10.5	21.5		24.5				
Max Q Clear Time (g_c+I1), s	0.0	13.2		26.5	9.5	24.7		26.5				
Green Ext Time (p_c), s	0.0	4.6		0.0	0.1	0.0		0.0				

Intersection Summary												
HCM 6th Ctrl Delay			49.4									
HCM 6th LOS			D									

Notes

User approved volume balancing among the lanes for turning movement.

Appendix D. Noise Impacts Memorandum

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Harris & Associates

MEMORANDUM

To: Lauren Lievers, Principal Environmental Planner, University of California, San Diego
From: Sharon Toland, Project Manager, Harris & Associates
RE: Hillcrest Hospital Expansion Feasibility Study – Noise Impacts
Date: January 17, 2024
CC: Diane Sandman, Vice President, Environmental + Planning Consulting, and Kelsey Hawkins, Air Quality and Greenhouse Gas Analyst, Harris & Associates
Att: 1, Federal Highway Administration Noise Prediction Model Results

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The University of California, San Diego (UC San Diego) Hillcrest Campus 2019 Long Range Development Plan (2019 LRDP) Environmental Impact Report (2019 LRDP EIR) was certified in November 2019 (SCH No. 2018031003). As part of the 2019 LRDP EIR, a 300-bed replacement hospital was analyzed in Phase 3 of the project. Currently, UC San Diego is exploring the possibility of expanding the replacement hospital to more than 300 beds and wants to determine the maximum number of beds that could be constructed without triggering a new or increased impact compared to those identified in the 2019 LRDP EIR.

The expanded hospital would be on its current site, and the maximum number of daily construction vehicle trips was assumed for hospital construction in the 2019 LRDP EIR. If additional excavation is required for the expanded hospital, the duration of construction (number of days) would be extended rather than operations per day (number of truck trips) increased. Therefore, maximum daily construction operations under the expanded hospital project would be similar to those identified in the 2019 LRDP EIR, and noise impacts from revised construction equipment and construction vehicle noise are therefore not addressed in this report.

It is assumed that operation of the expanded hospital would be similar to the 300-bed hospital evaluated in the 2019 LRDP EIR. Similar to existing and proposed 2019 LRDP conditions, internal hospital operations would not be a substantial noise source. Therefore, the following analysis focuses on the potential for the expanded hospital to result in additional buildout vehicle trips compared to the 2019 LRDP EIR buildout and the placement of additional mechanical equipment, if required. Additionally, a discussion of helicopter noise is included due to recent complaints received by the campus.

Project Description

UC San Diego is considering the addition of up to 200 hospital beds for a total of up to 500 beds. The expanded hospital would be located on the same site that was assumed in the 2019 LRDP. Table 1, Comparison of 2019 LRDP EIR Buildout with 2024 Feasibility Study Components, provides a comparison of the buildout land use mix analyzed in the 2019 LRDP EIR compared to the land use mix at buildout with a maximum of 500 hospital beds. The table also reflects other modifications to the 2019 LRDP land use plan that have occurred since 2019 LRDP EIR certification.

Table 1. Comparison of 2019 LRDP EIR Buildout with 2024 Feasibility Study Components

Land Use Category	2019 LRDP EIR	2024 Land Use Changes with 500-Bed Hospital
New Land Uses to Be Constructed		
Outpatient Pavilion	272,000 sf	—
Outpatient Pavilion Annex	25,000 sf	—
Outpatient	20,000 sf	381,000 sf
Multi-Use Building (Office)	136,000 sf	—
Multi-Use Building (Research)	160,000 sf	—
Wellness Center	40,000 sf	38,000 sf
Residential	1,000 Units	1,000 Units
Hospital	300 Beds	500 Beds
Science Research	34,000 sf	55,000 sf
Campus Retail	4,000 sf	4,000 sf
Office and Support	—	151,200 sf
Existing Land Uses to Be Demolished		
Commercial Office	130,550 sf	130,550 sf
Science Research	20,800 sf	20,800 sf
Medical Office	69,350 sf	69,350 sf
Residential	21 Units	21 Units
Commercial Office	49,100 sf	11,100 sf
Science Research	168,900 sf	168,900 sf
Hospital	370 Beds	370 Beds
Commercial Office	37,100 sf	37,100 sf
Medical Office	131,100 sf	131,100 sf

Notes: 2019 LRDP EIR = 2019 Long Range Development Plan Environmental Impact Report; sf = square feet

The intent of this Feasibility Study is to identify the number of additional hospital beds above 300 that could be constructed without resulting in greater impacts than those identified in the 2019 LRDP EIR. The maximum number of beds under consideration is 500 beds.

Issue 1: Vehicle Noise Impacts

Significance Criteria

Based on Appendix G of the California Environmental Quality Act (CEQA) Guidelines, a project would have a significant permanent impact related to vehicle noise if it causes roadway noise levels to exceed standards established in the local City San Diego General Plan. Applicable vehicle noise significance criteria are summarized in Table 2, Summary of Applicable Noise Impact Significance Criteria. Impacts would be significant if the project causes roadway noise levels to exceed 65 A-weighted decibel community noise equivalent level (dBA CNEL) or results in a greater than 3 dBA increase on a roadway that would exceed 65 dBA without project implementation.

Table 2. Summary of Applicable Noise Impact Significance Criteria

Noise or Vibration Source	Exterior and Interior Noise Level Criterion for NSLU	Substantial Increase in Noise Level
On-Campus NSLU		
Transportation/Stationary Noise Sources	Housing, temporary lodging, inpatient medical care facilities, classrooms, child development center, libraries (and related learning spaces) exteriors: 65 dBA CNEL	> 3 dBA CNEL if existing noise level exceeds 65 dBA CNEL
Off-Campus Receptors		
Transportation Noise Sources	Single-family residences, multi-family residences, schools, libraries, hospitals, daycare, hotels, motels, parks, convalescent homes exteriors: 65 dBA CNEL	> 3 dBA CNEL if existing noise level exceeds 65 dBA CNEL
	Offices, churches, business, professional uses exteriors: 70 dBA CNEL	> 3 dBA CNEL if existing noise level exceeds 70 dBA CNEL
	Commercial, retail, industrial, outdoor spectator sports uses exteriors: 75 dBA CNEL	> 3 dBA CNEL if existing noise level exceeds 75 dBA CNEL

Notes: CNEL = Community Noise Equivalent Level; dBA = A-weighted decibel; NSLU = noise-sensitive land use

2019 LRDP Impacts (300-Bed Hospital)

The potential for implementation of the 2019 LRDP to permanently increase ambient noise levels as a result of increased traffic noise was assessed using standard noise modeling equations adapted from the Federal Highway Administration noise prediction model. The modeling calculations took into account the posted vehicle speed, average daily traffic volume, and estimated vehicle mix. Noise levels were estimated at locations 50 feet from the roadway centerline. Noise levels at distances farther from the source than the specific receptor would be lower due to attenuation provided by increased distance from the noise source. The noise model assumed a line-source attenuation rate of approximately 3 dBA for every doubling of distance from the roadway. Traffic data was provided in the project-specific Transportation Impact Analysis prepared by Linscott, Law & Greenspan, Engineers (LLG) (LLG 2019).

The Buildout Year 2035 scenario compared buildout traffic volumes with and without the implementation of the 2019 LRDP. This scenario assumed full buildout of the 2019 LRDP development and circulation network. Buildout Year 2035 traffic noise levels, with and without the 2019 LRDP as analyzed in the 2019 LRDP EIR, are provided in Table 3, Buildout Year 2035 Traffic Noise Levels. No significant impacts were identified for this scenario in the 2019 LRDP EIR.

2024 Feasibility Study Impacts (500-Bed Hospital)

To analyze the noise impacts of a 500-bed hospital, traffic noise levels were calculated assuming a 500-bed hospital and amendments to LRDP land use mix since EIR certification. Traffic volumes were provided by LLG (LLG 2023). As shown in Table 3, buildout of the campus with 500 hospital beds would result in a +1 dBA CNEL increase in noise levels compared to those identified in the 2019 LRDP EIR on five segments:

- Washington Street from First Avenue to Fourth Avenue
- Washington Street from Fourth Avenue to Fifth Avenue
- Front Street from Arbor Drive to Washington Street
- First Avenue from Arbor Drive to Washington Street
- First Avenue from University Avenue to Robinson Avenue

The projected noise levels at all other street segments evaluated in the 2019 LRDP would not increase as a result of an increase in hospital size. With the exception of First Avenue from University Avenue to Robinson Avenue, the increase in noise level would not cause a segment to exceed 65 dBA CNEL or result in a more than 3 dBA increase compared to conditions without the project. Consistent with the 2019 LRDP EIR, a significant impact would not occur to the first four segments in the list above. However, the additional vehicle trips on First Avenue from University Avenue to Robinson Avenue would cause the segment to exceed 65 dBA CNEL and result in a new significant impact that was not identified in the 2019 LRDP EIR (see Attachment 1, Federal Highway Administration Noise Prediction Model Results).

Table 3. Buildout Year 2035 Traffic Noise Levels

Roadway	Segment	Year 2035 (dBA CNEL)	Year 2035 + 2019 LRDP Project (dBA CNEL)	Year 2035 + 2024 Feasibility Study (dBA CNEL)	2024 Significant Impact?
Hotel Circle South	I-8 Eastbound Ramps to Bachman Place	68	68	68	No
	East of Bachman Place	69	69	69	No
Bachman Place	Hotel Circle to North Access Driveway (future)	69	69	69	No
	North Access Driveway (future) to Arbor Drive	68	69	69	No
Washington Street	India Street to University Avenue	76	76	76	No
	University Avenue to First Avenue	70	70	70	No
	First Avenue to Fourth Avenue	70	70	71	No
	Fourth Avenue to Fifth Avenue	71	71	72	No
	Fifth Avenue to Sixth Avenue	72	72	72	No
	Sixth Avenue to Richmond Street	72	72	72	No
	Richmond Street to Normal Street	74	74	74	No
Front Street	Arbor Drive to Washington Street	62	63	64	No
First Avenue	Arbor Drive to Washington Street	62	63	64	No
	Washington Street to University Avenue	63	63	63	No
	University Avenue to Robinson Avenue	**65**	**65**	**66**	**Yes**
Fourth Avenue	Washington Street to Robinson Avenue	64	64	64	No
Fifth Avenue	Washington Street to Robinson Avenue	65	65	65	No

Source: Attachment 1.

Notes: CNEL = Community Noise Equivalent Level; dBA = A-weighted decibel. **Bold** indicates a significant impact.

Noise levels are calculated at 50 feet from roadway centerline. 2024 project noise levels are based on traffic data provided by LLG (LLG 2023). Existing and 2019 LRDP noise levels were calculated for the 2019 LRDP EIR (Harris 2019). Traffic levels for each roadway are included in 2019 LRDP EIR Appendix A. Decibel levels are rounded to the nearest whole number.

Because a potential new impact was identified for the buildout of the campus with 500 hospital beds, Harris coordinated with traffic consultant LLG to determine what traffic volume and associated maximum number of hospital beds could be accommodated before a new significant impact would occur on First Avenue from University Avenue to Robinson Avenue. Buildout of 500 hospital beds would result in a net increase in total campus average daily trips of 12,544 compared to the 2019 analysis. The campus's trip distribution was assumed to be the same as 2019 LRDP EIR conditions.

Under the 2019 LRDP EIR, the campus contributed 277 trips to the segment of First Avenue from University Avenue to Robinson Avenue. With 500 hospital beds (an increase of 200 beds), and assuming amendments to the LRDP since EIR certification, the campus's contribution along this street segment increased to 568 trips. Based on

the Federal Highway Administration's modeling equations used to calculate project traffic noise levels, vehicle traffic could increase up to 364 trips on First Avenue from University Avenue to Robinson Avenue under Year 2035 conditions before the projected traffic noise would exceed the impact significance threshold. Assuming the same project trip distribution, this means that the project could result in a net increase of 4,544 total average daily trips before a new significant impact would occur. LLG determined that the maximum number of hospital beds that could be accommodated from a net increase of 4,544 average daily trips is 340 beds. Therefore, a maximum of 40 additional hospital beds could be added to the hospital, for a total of 340 beds, without triggering a new significant impact compared to the 2019 LRDP EIR.

Mitigation could be considered to offset the new significant impact to the segment of First Avenue from University Avenue to Robinson Avenue to allow more than 340 hospital beds. However, due to the developed nature of this roadway segment and presence of multiple driveways, a noise barrier would not be feasible mitigation to reduce noise impacts and allow more than 340 hospital beds. Additionally, because the segment is located several blocks from campus, changes to campus access to influence trip distribution would be unlikely to affect this segment and may result in changes to noise, safety, or traffic impacts closer to campus. As such, feasible mitigation is not available, and if an impact occurred to this segment, it would likely be significant and unavoidable.

Issue 2: Mechanical Equipment Impacts

Significance Criteria

Based on Appendix G of the CEQA Guidelines, a project would have a significant impact related to noise from mechanical equipment if it caused noise levels to exceed standards established in the local City of San Diego General Plan, as shown in Table 2. Impacts would be significant if the project caused noise levels to exceed 65 dBA CNEL at sensitive receptors or resulted in a greater than 3 dBA increase in an area that would exceed 65 dBA without project implementation.

2019 LRDP Impacts (300-Bed Hospital)

The 2019 LRDP EIR determined that new mechanical equipment could exceed the exterior noise level threshold of 65 dBA CNEL, although specifications for the exact equipment to be installed are not yet available. As such, impacts related to new stationary sources were determined to be potentially significant in the 2019 LRDP EIR. Mitigation Measure NOI-1B was identified to reduce impacts to a less than significant level.

NOI-1B: **Mechanical Equipment Shielding.** Concurrent with design development and prior to construction of the CUP and any new building requiring HVAC equipment, a report prepared by a qualified Acoustical Specialist shall demonstrate that equipment is designed to ensure that noise levels from the equipment shall not exceed an exterior noise level of 65 dBA CNEL at the nearest on- and off-site NSLU. Noise from the CUP or HVAC equipment may be reduced through implementation of any individual measure or a combination of the following measures:

- Locate noisiest equipment, such as cooling towers, as far from sensitive receptors as possible.
- Utilize elevation and/or placement of equipment within the CUP strategically to attenuate noise from larger and noise producing equipment.
- Install a permanent noise barrier or shielding surrounding all equipment, or apply acoustical treatment to building surfaces.
- Install a permanent noise enclosure that completely encompasses equipment when access doors are shut. Install sound attenuation louvers and silencers on exhaust stacks where necessary, or make use of natural ventilation.
- Install noise enclosures, barriers, or acoustical treatment surrounding individual pieces of equipment or exhaust.
- Place equipment below grade in basement space.

- Use technologies to reduce noise, such as Whisper Quiet technology, when equipment is available. Other technology may include low-speed fans, baffles, or mufflers.
- Apply acoustical treatment to cooling tower intake and discharge.

2024 Feasibility Study Impacts (500-Bed Hospital)

It is anticipated that the increase in building size to accommodate additional hospital rooms may require additional heating, ventilation, and air conditioning or other stationary equipment. It is likely that additional mechanical equipment would be necessary to operate a 500-bed hospital compared to a 300-bed hospital. Similar to the 2019 LRDP EIR, new mechanical equipment for a 500-bed hospital could exceed the exterior noise level threshold of 65 dBA CNEL, although specifications for the exact equipment to be installed are not yet available. Noise impacts related to new stationary sources from operation of a 500-bed hospital would be potentially significant. Similar to the 2019 LRDP EIR, implementation of Mitigation Measure NOI-1B would be required to reduce impacts to below a level of significance. Therefore, operation of a 500-bed hospital would not result in greater stationary noise impacts than those identified in the 2019 LRDP EIR.

Issue 3: Helicopter Noise Impacts

Significance Criteria

Based on Appendix G of the CEQA Guidelines, implementation of a project would have a significant permanent impact related to helicopter noise if it exposes people residing or working in the project site to excessive aircraft noise.

2019 LRDP Impacts (300-Bed Hospital)

Under the 2019 LRDP EIR, the existing helipad would be relocated from the Medical Offices North building to the top of the Replacement Hospital building. The relocation would increase the distance from the helipad to the nearest sensitive receptor and reduce helicopter noise exposure for existing off-site residences because helicopters would be at a higher altitude during residential flyovers. The 2019 LRDP EIR stated that implementation of the 2019 LRDP would not be expected to increase exposure to helicopter noise because similar emergency services would be provided at the hospital although the total number of inpatient beds would decrease from existing 350 to proposed 300 beds.

2024 Feasibility Study Impacts (500-Bed Hospital)

An increase in hospital beds up to 500 beds would not change the helipad relocation. Expanding the number of hospital beds would increase inpatient capacity but would not necessarily result in a change to emergency services. Additionally, frequency of helicopter landings would continue to be determined by occurrence of emergencies pursuant to the Federal Aviation Administration's and California Department of Transportation's required approvals, which is beyond the control of the campus. An increase in hospital beds up to 500 beds is not anticipated to result in a new significant impact related to this issue.

Summary of Noise Impacts

Impacts related to noise and vibration from construction and operation of land uses identified in the 2024 Hillcrest Hospital Expansion Feasibility Study would be similar to those identified in the 2019 LRDP EIR, with the exception of vehicle traffic noise. The operation of a hospital with more than 340 beds would result in a new significant noise impact to the segment of First Avenue from University Avenue to Robinson Avenue, and additional CEQA analysis would be required. In accordance with Sections 15162 and 15163 of the CEQA Guidelines, a Subsequent or Supplemental EIR is required when a project will have one or more significant effects not discussed in the previous EIR. A Supplemental EIR, which may be limited to only the information necessary to make the previous EIR adequate for the project as revised, may be prepared when only minor revisions are required to make the previous EIR adequate. The potential additional impact related to noise is limited to one roadway segment. Therefore, it is

anticipated that a Supplemental EIR focused on potential noise impacts would be appropriate documentation for a hospital expansion beyond 340 beds.

References

Harris (Harris & Associates). 2019. Noise Technical Report for the 2019 Long Range Development Plan for the UC San Diego Hillcrest Campus.

LLG (Linscott, Law & Greenspan, Engineers). 2019. UC San Diego Hillcrest Campus 2019 Long Range Development Plan – Transportation Impact Analysis. June.

LLG. 2023. “Hillcrest Hospital Expansion” and “Expanded Hillcrest Hospital Feasibility Study.” Emails between Sharon Toland, Project Manager, Harris & Associates, and Amelia Giacalone, Senior Transportation Planner, LLG. March 8 and March 15.

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Attachment 1. Federal Highway Administration Noise Prediction Model Results

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TRAFFIC NOISE LEVELS AND NOISE CONTOURS

Project Number:
Project Name: 500 Bed Feasibility

Background Information

Model Description: FHWA Highway Noise Prediction Model (FHWA-RD-77-108) with California Vehicle Noise (CALVENO) Emission Levels.
Source of Traffic Volumes: Linscott, Law, and Greenspan, February 2023
Community Noise Descriptor: L_{dn}: ____ CNEL: X

Assumed 24-Hour Traffic Distribution:	Day	Evening	Night
Total ADT Volumes	77.70%	12.70%	9.60%
Medium-Duty Trucks	87.43%	5.05%	7.52%
Heavy-Duty Trucks	89.10%	2.84%	8.06%

"-" = contour is located within the roadway right-of-way.
Distance is from the centerline of the roadway segment to the receptor location.

Analysis Condition / Roadway, Segment	Lanes	Median Width	ADT Volume	Design Speed (mph)	Alpha Factor	Vehicle Mix: Medium Trucks	Vehicle Mix: Heavy Trucks	CNEL at 50 Feet	Distance from Centerline of Roadway to Contour: 70 CNEL	65 CNEL	60 CNEL	55 CNEL
Hotel Circle South												
1-8 Eastbound Ramps to Bachman Place, future (2035)	3	14	18,500	35	0.5	3.0%	2.0%	**68**	-	81	175	377
1-8 Eastbound Ramps to Bachman Place, future + project (Build	3	14	19,352	35	0.5	3.0%	2.0%	**68**	-	84	180	388
Hotel Circle South												
East of Bachman Place, future (2035)	2	14	23,800	35	0.5	3.0%	2.0%	**69**	43	92	198	427
East of Bachman Place, future + project (Buildout)	2	14	24,937	35	0.5	3.0%	2.0%	**69**	44	95	204	440
Bachman Place												
Hotel Circle to North Access Driveway, future (2035)	2	0	19,300	40	0.5	3.0%	2.0%	**69**	43	93	199	430
Hotel Circle to North Access Driveway, future + project (Buildout	2	0	21,289	40	0.5	3.0%	2.0%	**69**	46	99	213	459
Bachman Place												
North Access Driveway to Arbor Drive, future (2035)	2	0	17,000	40	0.5	3.0%	2.0%	**68**	39	85	183	395
North Access Driveway to Arbor Drive, future + project (Buildout	2	0	18,989	40	0.5	3.0%	2.0%	**69**	42	92	197	425
Washington Street												
India St to University Ave, future (2035)	4	14	38,600	55	0.5	3.0%	2.0%	**76**	123	265	570	1,229
India St to University Ave, future + project (Buildout)	4	14	39,737	55	0.5	3.0%	2.0%	**76**	125	270	582	1,253
Washington Street												
University Ave to First Ave, future (2035)	4	14	25,900	35	0.5	3.0%	2.0%	**70**	-	109	234	504
University Ave to First Ave, future + project (Buildout)	4	14	28,457	35	0.5	3.0%	2.0%	**70**	54	116	249	536
Washington Street												
First Ave to Fourth Ave, future (2035)	4	14	27,200	35	0.5	3.0%	2.0%	**70**	52	112	242	520
First Ave to Fourth Ave, future + project (Buildout)	4	14	30,042	35	0.5	3.0%	2.0%	**71**	56	120	258	556
Washington Street												
Fourth Ave to Fifth Ave, future (2035)	4	6	37,300	35	0.5	3.0%	2.0%	**71**	61	132	285	613
Fourth Ave to Fifth Ave, future + project (Buildout)	4	6	40,000	35	0.5	3.0%	2.0%	**72**	64	138	298	642
Washington Street												
Fifth Ave to Sixth Ave, future (2035)	4	6	41,100	35	0.5	3.0%	2.0%	**72**	65	141	304	654
Fifth Ave to Sixth Ave, future + project (Buildout)	4	6	43,586	35	0.5	3.0%	2.0%	**72**	68	147	316	680
Washington Street												
Sixth to Richmond, future (2035)	4	6	41,800	35	0.5	3.0%	2.0%	**72**	66	142	307	661
Sixth to Richmond, future + project (Buildout)	4	6	44,286	35	0.5	3.0%	2.0%	**72**	69	148	319	687
Washington Street												
Richmond to Normal St, future (2035)	4	14	47,100	35	0.5	5.0%	3.0%	**74**	92	198	426	917
Richmond to Normal St, future + project (Buildout)	4	14	47,881	35	0.5	5.0%	3.0%	**74**	93	200	430	927
Front Street												
Arbor Drive to Washington Street, future (2035)	2	0	7,900	25	0.5	3.0%	2.0%	**62**	-	33	71	152
Arbor Drive to Washington Street, future + project (Buildout)	2	0	10,917	25	0.5	3.0%	2.0%	**64**	-	41	88	189
First Avenue												
Arbor Drive to Washington Street, future (2035)	2	0	7,500	25	0.5	3.0%	2.0%	**62**	-	-	68	147
Arbor Drive to Washington Street, future + project (Buildout)	2	0	10,917	25	0.5	3.0%	2.0%	**64**	-	41	88	189
First Avenue												
Washington St to University Ave, future (2035)	2	0	9,100	25	0.5	3.0%	2.0%	**63**	-	36	78	167
Washington St to University Ave, future + project (Buildout)	2	0	10,237	25	0.5	3.0%	2.0%	**63**	-	39	84	181
First Avenue												
University Ave to Robinson Ave, future (2035)	2	0	16,300	25	0.5	3.0%	2.0%	**65**	-	53	115	247
University Ave to Robinson Ave, future + project (Buildout)	2	0	16,868	25	0.5	3.0%	2.0%	**66**	-	54	117	253
Fourth Avenue												
Washington St to Robinson Ave, future (2035)	2	0	12,900	25	0.5	3.0%	2.0%	**64**	-	46	98	211
Washington St to Robinson Ave, future + project (Buildout)	2	0	13,113	25	0.5	3.0%	2.0%	**64**	-	46	99	214
Fifth Avenue												
Washington St to Robinson Ave, future (2035)	3	0	14,000	25	0.5	3.0%	2.0%	**65**	-	49	106	228
Washington St to Robinson Ave, future + project (Buildout)	3	0	14,213	25	0.5	3.0%	2.0%	**65**	-	50	107	230

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Appendix C Biological Resources Comparison of HMCR project to 2019 LRDP EIR

RECON

An Employee-Owned Company

May 27, 2026

Ms. Lauren Lievers
UC San Diego
9500 Gilman Drive #0955
La Jolla, CA 92093

Reference: Biological Resources Comparison of the Hillcrest Medical Center Renewal Project to the 2019 Long Range Development Plan Environmental Impact Report (RECON Number 10496.3)

Dear Ms. Lievers:

The Environmental Impact Report (EIR) for the University of California San Diego (UC San Diego) 2019 Long Range Development Plan (2019 LRDP) for the Hillcrest Campus was certified in November 2019 (SCH No. 2018031003; UC San Diego 2019). Pursuant to CEQA Guidelines, the 2019 LRDP EIR is a Program EIR that evaluates the effects of the entire 2019 LRDP at a program level. The 2019 LRDP EIR has been and will continue to be used to tier subsequent environmental analyses for future 2019 LRDP development projects on the Hillcrest Campus.

The Hillcrest Medical Center Renewal Project (HMCR project) was envisioned within the 2019 LRDP, primarily within Phase 3 of the LRDP. This biological resources letter report analyzes the HMCR project in the context of the 2019 LRDP to determine whether the potential impacts of the HMCR project are adequately addressed in the certified 2019 LRDP EIR. For each of the seven issue areas addressed in Section 3.3, Biological Resources, of the 2019 LRDP EIR, this letter report summarizes the previously disclosed impacts and compares them to the potential impacts of the HMCR project.

The HMCR project includes the following components.

- Demolition of approximately nine structures, as well as the removal of existing utilities. The project would construct a temporary haul road with a security gate providing access from Bachman Place to the HMCR project area, which would be used during demolition.
- Construction of a new replacement hospital and central utilities plant (CUP).
- Utility connections from the new CUP to the new hospital.
- Construction of a generator yard, cooling tower yard, and San Diego Gas & Electric (SDG&E) yard on the north and south sides of the CUP building.
- Circulation improvements to the new hospital (north of Dickinson Street) and to the new hospital service dock.

1.0 Project Description

The Hillcrest Campus is in the City of San Diego (City)'s Uptown Community in the Medical Complex neighborhood, atop a mesa that overlooks Interstate 8 (I-8) and Mission Valley to the north. The Hillcrest Campus occupies 62 acres

along the northern edge of the Uptown Community, approximately 2.5 miles north of Downtown San Diego, and approximately 13 miles south of the UC San Diego La Jolla Campus (Figure 1). The HMCR project is found on the U.S. Geological Survey 7.5-minute topographical map series, La Jolla quadrangle within Pueblo Lands of San Diego Land Grant (U.S. Geological Survey 1996; Figure 2).

The HMCR project area is generally defined to the north and east by undeveloped, steep-sloped canyons. Bachman Place generally composes the eastern edge of the project area. The southern boundary is generally defined by Dickinson Street. The HMCR project is in the northeastern portion of the Hillcrest Campus within the Health Care Land Use District of the 2019 LRDP (Figure 3).

Most of the project area is mapped as urban/developed, with a band of eucalyptus woodland along the northern edge of the project area. Nonsensitive southern mixed chaparral occurs on the north-facing slope just north of the band of eucalyptus woodland (Figure 4).

Grading and vegetation removal would be required throughout the HMCR project to prepare the site for installation of the proposed infrastructure. Construction of the CUP, generator yard, cooling tower yard, and SDG&E yard on the north, east, and south sides of the CUP building will involve grading within and adjacent to eucalyptus woodlands and southern mixed scrub, both of which could provide habitat for sensitive species, as discussed in Section 3.0 below. A perimeter wall along the northern edge of the HMCR project area would also be built, and a temporary impact area of approximately 10 feet would be required to install that perimeter wall.

Fuel management activities would generally comply with the City's Brush Management Regulations (SDMC Section 142.0412) (City of San Diego 2019) by the establishment of two fuel management zones around the new hospital and CUP building:

- Fuel Management Zone 1 would be established within 35 feet of the new hospital and CUP. Areas within this zone require strict, regular maintenance to reduce wildfire hazards. This zone would be permanently maintained by pruning trees, thinning vegetation, removing dead materials, and utilizing irrigation to keep plants green. Impacts within this zone are considered permanent and are included in calculations provided in Section 4.0 below.

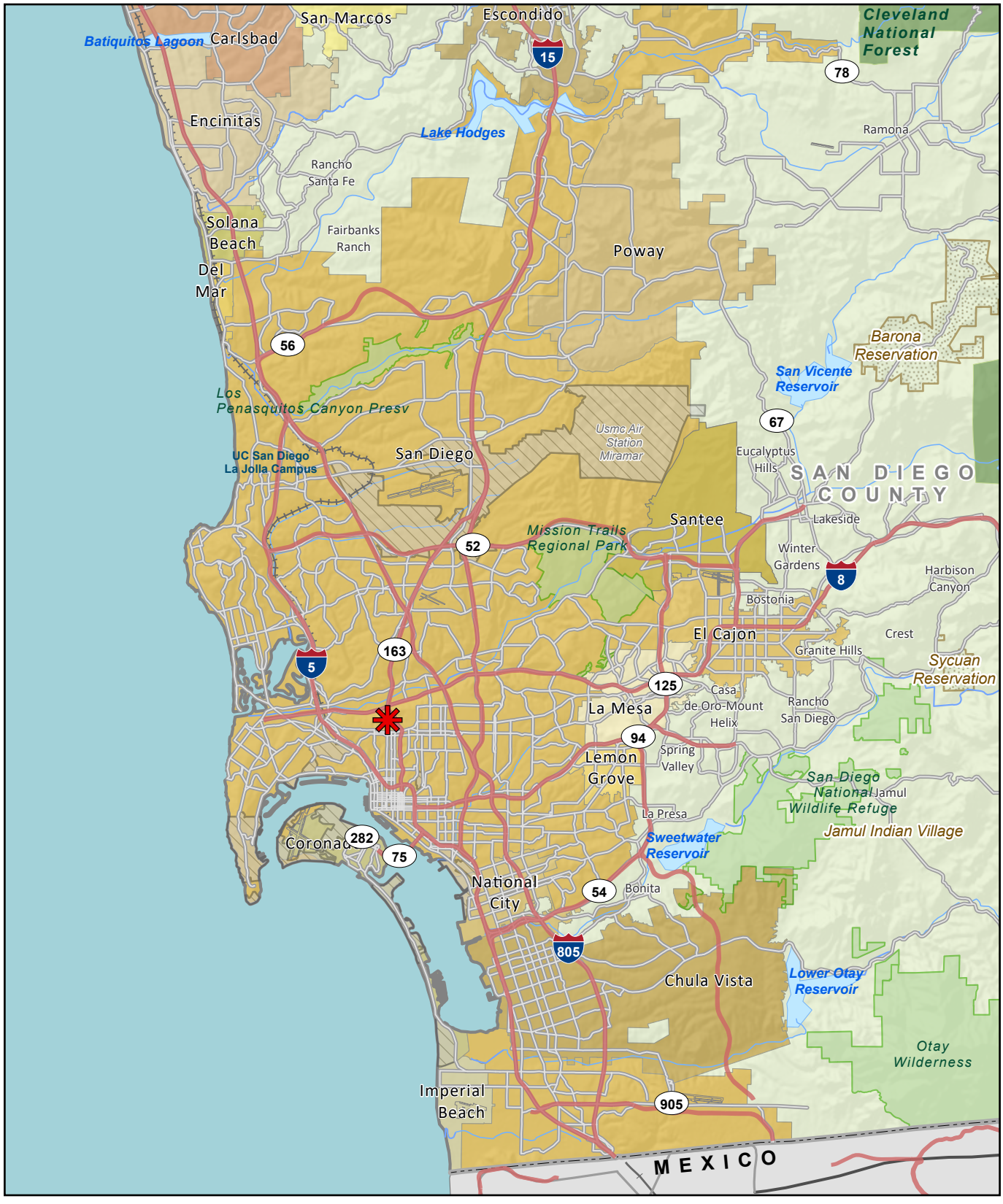
- Fuel Management Zone 2 would be established between 35 feet and 100 feet from the new hospital and CUP. Vegetation management within Zone 2 would include selective thinning and pruning and removal of dead wood, leaving the root structure intact. Impacts within this zone are calculated and reported within Section 4.0 but are considered impact neutral.

2.0 Issue 1: Candidate, Sensitive, or Special-Status Plant Species

Based on Appendix G of the California Environmental Quality Act (CEQA) Guidelines, implementation of the 2019 LRDP would have a significant impact if it resulted in a substantial adverse effect, either directly or through habitat modifications, on any plant species identified as a candidate, sensitive, or special-status species by the California Department of Fish and Wildlife (CDFW) or U.S. Fish and Wildlife Service (USFWS).

2.1 Summary of 2019 Long Range Development Plan Environmental Impact Report Impacts

As disclosed in the EIR, implementation of the 2019 LRDP would have the potential to result in potentially significant direct and indirect impacts to sensitive plant species that were observed or determined to have potential to occur with the HMCR project area. Impacts to sensitive plant species as a result of 2019 LRDP implementation were assessed based on biological surveys conducted in 2017 and 2018. The 2019 LRDP would have



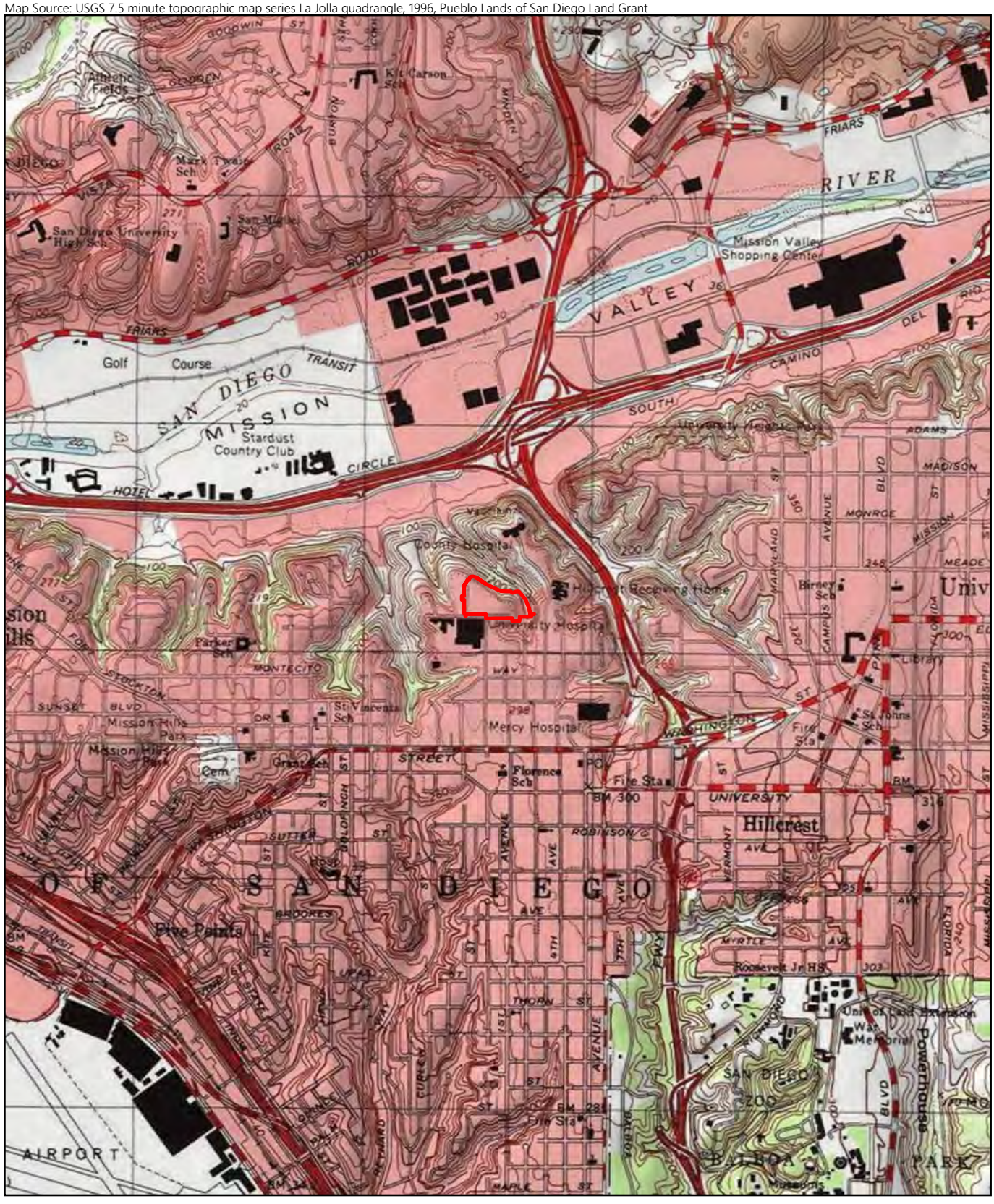
Project Location

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FIGURE 1
Regional Location

Map Source: USGS 7.5 minute topographic map series La Jolla quadrangle, 1996, Pueblo Lands of San Diego Land Grant



Project Boundary

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FIGURE 2
Project Location on USGS Map

Image Source: Nearmap (flown September 2025)



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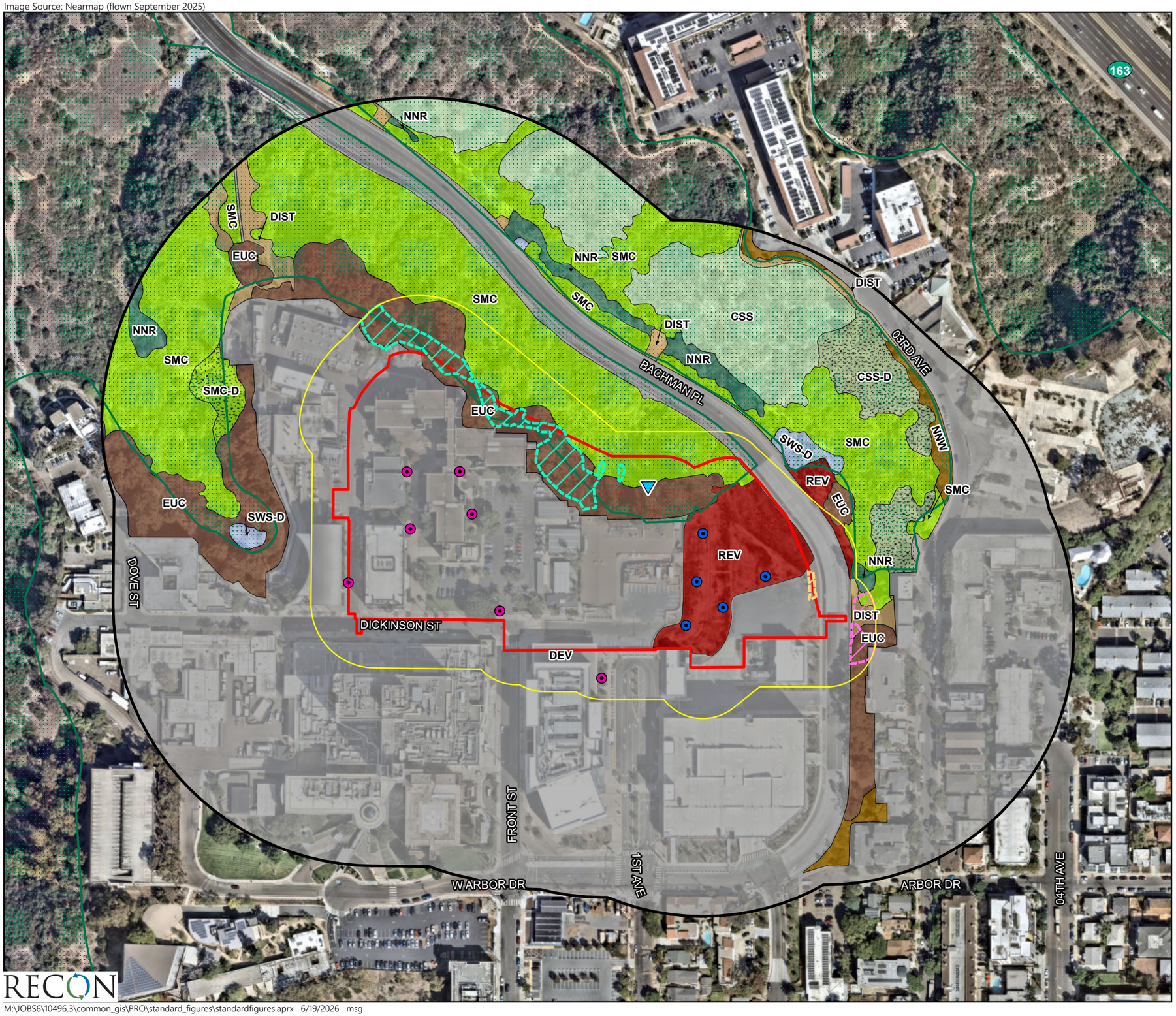
Project Boundary

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FIGURE 3
Survey Area on Aerial Photograph

Image Source: Nearmap (flown September 2025)



- Project Boundary
- Survey Area
- Rare Plant Survey Area / Crotch's Bumble Bee Habitat Assessment Area
- City of San Diego MHPA

Sensitive Wildlife Observation

- Western Bluebird (*Sialia mexicana*)

Vegetation Communities

- CSS — Coastal Sage Scrub
- CSS-D — Coastal Sage Scrub - Disturbed
- DIST — Disturbed Habitat
- EUC — Eucalyptus Woodland
- NNR — Non-Native Riparian
- NNW — Non-Native Woodland
- SMC — Southern Mixed Chaparral
- SMC-D — Southern Mixed Chaparral - Disturbed
- SWS-D — Southern Willow Scrub - Disturbed
- DIST — Urban/Developed
- REV — Urban/Developed - Revegetation Area

Moderate to High Quality CBB Habitat

- Garden nasturtium (50% cover)
- Garden nasturtium in understory (+90% cover)
- Ornamental Sage (+90% cover)

Moderate Quality CBB Habitat

- Hydroseeded flowering plants (sourclover, California poppy, goldfields, beach evening-primrose) at 5-25% cover

Low Quality CBB Habitat

- Ornamental flowering plants (natal plum, natal lily, heavenly bamboo, star jasmine, and iceberg rose)

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FIGURE 4
Existing Biological Resources

the potential to result in direct and indirect impacts to sensitive plant species that were observed or determined to have potential to occur on the Hillcrest Campus.

Direct Impacts

Five plant species ranked by the California Native Plant Society (CNPS) were observed during the 2017 and 2018 biological surveys conducted for the 2019 LRDP: ashy spike moss (*Selaginella cinerascens*), San Diego barrel cactus (*Ferocactus viridescens*), wart-stemmed ceanothus (*Ceanothus verrucosus*), San Diego County sunflower (*Bahiopsis laciniata*), and Torrey pine (*Pinus torreyana* ssp. *torreyana*). A sixth CNPS ranked plant species, San Diego goldenstar (*Bloomeria clevelandii*), was not observed but was determined to have potential to occur within the 2019 LRDP survey area.

Impacts to San Diego barrel cactus, wart-stemmed ceanothus, and San Diego goldenstar would be considered significant. However, the Torrey pines were determined to be planted; therefore, not sensitive under CEQA. Ashy spike moss and San Diego County sunflower also were determined to not be sensitive under CEQA because these are ranked by the CNPS as California Rare Plant Rank 4 species, indicating they are plants of limited distribution and are infrequent throughout a broader area in California.

It was determined that implementation of the 2019 LRDP could impact sensitive plant species observed or potentially occurring (i.e., San Diego barrel cactus, wart-stemmed ceanothus, and San Diego goldenstar) in the 2019 LRDP survey area. Direct impacts to sensitive plant species could result from removal of habitat that supports these species. Direct permanent and temporary impacts to sensitive plant species were determined to be potentially significant. Mitigation Measures BIO-1A, BIO-1B, BIO-1C, and BIO-1D were provided to reduce these impacts to a less than significant level. These measures are as follows:

BIO-1A: Sensitive Plant Surveys. During the project planning process, updated sensitive plant surveys shall be conducted for all project areas that support potential habitat for sensitive plant species and have not been surveyed within the preceding year. Sensitive plant surveys shall be conducted by a qualified Biologist retained by UC San Diego during the appropriate season for detecting the species as part of the project design phase. Surveys shall be floristic in nature and include lists of all plants identified in the survey area. Surveys shall be conducted on foot, employing a level of effort sufficient to provide comprehensive coverage. The locations and prevalence (estimated total numbers/percent cover, as applicable) of sensitive plants shall be recorded. If site-specific surveys are not required because a survey was conducted within the last 12 months, impact assessment and minimization/mitigation requirements shall be based on the most recent available survey and shall also include an analysis of the potential for sensitive plant species to occur on the site based on existing site conditions and shall be consistent with the most recent USFWS and CDFW survey protocols (USFWS 2018d; CDFW 2014).

If sensitive plant species are observed, they shall be avoided if possible. If species cannot be avoided, impacts to those species must be evaluated and any significant impacts shall be mitigated through conservation of habitat that supports the impacted species in accordance with Mitigation Measures BIO-1B, BIO-1C, and BIO-1D.

BIO-1B: San Diego Barrel Cactus. If San Diego barrel cactus is observed during sensitive plant surveys conducted under Mitigation Measure BIO-1A, mitigation for impacts to San Diego barrel cactus shall occur through salvage and translocation of any impacted San Diego barrel cactus within the project area(s) to appropriate open space canyon locations on site where they would not be disturbed.

BIO-1C: San Diego Goldenstar. If San Diego goldenstar is observed during sensitive plant surveys conducted under Mitigation Measure BIO-1A, mitigation for impacts to San Diego goldenstar shall occur through salvage and

translocation of any impacted San Diego goldenstar corms (swollen underground plant stems/storage organs) within the project area(s) to appropriate open space canyon locations on site where they would not be disturbed.

BIO-1D: Wart-Stemmed Ceanothus. If wart-stemmed ceanothus is observed during sensitive plant surveys conducted under Mitigation Measure BIO-1A, mitigation for impacts to wart-stemmed ceanothus shall occur through inclusion of wart-stemmed ceanothus seeds in the native plant landscaping seed mix for application in the Canyon District.

Indirect Impacts

It was determined in the EIR that sensitive plant species observed or with potential to occur could be indirectly affected in the short term and long term by implementation of the 2019 LRDP. Potential indirect impacts included fugitive dust, non-native plants, edge effects, inadvertent encroachment, and implementation of Fuel Management Zone 2 around the proposed structures. Indirect impacts to sensitive plant species were determined to be potentially significant, and Mitigation Measures BIO-3K, BIO-3L, BIO-3N, and BIO-3O were provided to reduce these indirect impacts to a less than significant level. These measures are as follows:

BIO-3K: Runoff and Water Quality. Irrigation and pest management for the Hillcrest Campus shall be implemented as described below to minimize runoff and impacts to water quality:

- Irrigation for project landscaping shall be minimized and controlled in areas in and adjacent to the steep slope canyon areas through efforts such as designing irrigation systems to match landscaping water needs, using sensor devices to prevent irrigation during and after precipitation, and using automatic flow reducers/shut-off valves that are triggered by a decrease in water pressure from broken sprinkler heads or pipes.

- Integrated Pest Management principles pursuant to the UC Integrated Pest Management Program shall be implemented to the extent practicable for areas in and adjacent to the steep slope canyon areas for chemical pesticides, herbicides, and fertilizers. Examples of such measures may include, but are not limited to, alternative weed/pest control measures (e.g., hand removal) and proper application techniques (e.g., conformance to manufacturer specifications and legal requirements).

BIO-3L: Invasive Plant Species Prevention. During construction and landscaping within the Hillcrest Campus, the following measures shall be implemented to minimize the spread of invasive plant species:

- Construction equipment shall be cleaned before coming to the Hillcrest Campus.

- Weed-free straw wattles shall be used for erosion control.

- Appropriate landscaping species shall be selected based on the vegetation communities within the steep slope canyon areas adjacent to the project. In areas supporting native (or disturbed native) vegetation communities, revegetation of impacted slopes shall be with appropriate native plant materials.

- Landscaping adjacent to the steep slope canyon areas shall comply with the following requirements to prevent the introduction of invasive species:

    - Appropriate landscaping shall be selected based on the vegetation communities within the portion of the steep slope canyon areas adjacent to the project. In areas supporting native (or disturbed native) vegetation communities, revegetation of impacted slopes shall be with appropriate native plant materials. In particular, where the steep slope canyon areas are disturbed by construction, installation of native

plants, including but not limited to, California sagebrush (*Artemisia californica*), California buckwheat, lemonade berry, deerweed (*Acmispon glaber*), monkey flower (*Diplacus aurantiacus*), and black sage (*Salvia mellifera*), is recommended to make the steep slope canyon areas more impenetrable to people while reinforcing the boundaries and edges of canyon areas.

- Only noninvasive plant species shall be included in the landscape plans for projects within Fuel Management Zone 1 (species not listed on the California Invasive Plant Inventory prepared by the California Invasive Plant Council). A qualified landscape architect and/or qualified Biologist shall review landscape plant palettes prior to implementation to ensure that no invasive species are included.

- Any planting stock brought onto a project area adjacent to the open space canyon areas for landscaping or habitat restoration shall be inspected to ensure it is free of pest species that may invade natural areas, including but not limited to, Argentine ants (*Linepithema humile*) and South American fire ants (*Solenopsis* spp.). Inspections of planting stock for habitat restoration shall be by a qualified biologist, and inspections of planting stock for landscaping shall be the responsibility of a qualified UC San Diego project manager or their designated assignee. Any planting stock found to be infested with such pests shall be quarantined, treated, or disposed of according to best management practices by qualified personnel, in a manner that precludes invasions into natural habitats.

BIO-3N: Edge Effects Avoidance. Projects adjacent to the open space canyon areas shall install permanent signage along the boundary, indicating the presence of lands supporting sensitive habitat to discourage access outside of established trails.

Projects adjacent to the open space canyon areas shall install other visual/physical barriers (such as appropriate landscaping) to discourage human encroachment into the canyon areas where trespass is likely to occur (e.g., gradual slopes, areas of low, open vegetation, or areas of previous disturbance).

Maintenance of storm water facilities shall be conducted in a manner to minimize impacts to adjacent sensitive habitats. Maintenance shall be overseen by a qualified Biologist and would occur outside the general bird breeding season, which extends from January 15 through August 31.

BIO-3O: Non-Native Insects Avoidance. The following measures shall be implemented for each project or construction phase that would remove or install tree species on the Hillcrest Campus that may be used as host trees by shothole borers (SHBs):

- Trees to be planted on the Hillcrest Campus shall be obtained from a reliable source and be free of sign of SHB infestation.
- An education program for on-site workers responsible for tree installation shall be implemented. The program shall describe the signs of SHB infestation (e.g., sugary exudate on trunks or branches, and SHB entry/exit holes [approximately the size of the tip of a ballpoint pen]).
- Sign of SHB infestation shall be reported to CDFW and UC's Eskalen Lab (https://ucanr.edu/sites/eskalenlab/) by the UC San Diego project manager and/or the project Biologist.
- Trees with sign of SHB infestation shall be pruned or removed, as appropriate, and potential host materials shall be chipped to less than one inch prior to composting on site or transfer to a landfill.
- Equipment that is used to prune or remove SHB-infected trees shall be disinfected prior to additional use.
- Biologists monitoring mitigation sites shall be knowledgeable regarding sign of SHB infestation.

2.2 Consistency Evaluation

In accordance with Mitigation Measure BIO-1A of the 2019 LRDP EIR, a special-status plant survey was conducted within 100 feet of the project footprint on November 7, 2025, and on April 1, 2026. A complete list of plant species observed within the plant survey area is provided in Attachment 1.

No sensitive plants were observed. As a result, the HMCR project would not result in any new significant environmental effects or a substantial increase in the severity of previously identified significant effects regarding sensitive plant species (Table 1). In addition, because no sensitive plant species were identified within 100 feet of the HMCR project area, Mitigation Measures BIO-1B, BIO-1C, and BIO-1D do not apply. Mitigation Measures BIO-3K, BIO-3L, BIO-3N, and BIO-3O are not required to reduce indirect impacts to sensitive plant species, but they would be implemented to reduce impacts to native vegetation communities, as described further in Section 4.0.

Table 1
Issue 1: Candidate, Sensitive, or Special-Status Plant Species Impacts Comparison

Proposed Action	No Impact	Less Than Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Potentially Significant Impact
2019 LRDP EIR Impact Determination	☐	☐	☒	☐
HMCR Project	☒	☐	☐	☐

3.0 Issue 2: Candidate, Sensitive or Special-Status Animal Species

Based on Appendix G of the CEQA Guidelines, implementation of the 2019 LRDP would have a significant impact if it resulted in a substantial adverse effect, either directly or through habitat modifications, on any animal species identified as a candidate, sensitive, or special-status species by the CDFW or USFWS.

As disclosed in the EIR, implementation of the 2019 LRDP would have the potential to result in potentially significant direct and indirect impacts to sensitive animal species that were observed or determined to have potential to occur on the Hillcrest Campus LRDP project area.

3.1 Summary of 2019 Long Range Development Plan Environmental Impact Report Impacts

Impacts to sensitive animal species as a result of 2019 LRDP implementation were assessed based on biological surveys conducted in 2017 and 2018 (UC San Diego 2019; Harris & Associates 2019). The 2019 LRDP has the potential to result in direct and indirect impacts to sensitive animal species that were determined to have potential to occur on the Hillcrest Campus.

Direct Impacts

No sensitive animal species were observed during the 2017 and 2018 surveys conducted for the 2019 LRDP. Four sensitive animal species were determined to have potential to occur in the 2019 LRDP survey area:

- coastal California gnatcatcher (CAGN; *Polioptila californica californica*), a federally threatened species and a California Species of Special Concern
- Cooper's hawk (*Accipiter cooperii*), a California Watch List species

- orange-throated whiptail (*Aspidoscelis hyperythra*), a California Watch List species
- loggerhead shrike (*Lanius ludovicianus*), a California Species of Special Concern

Protocol-level surveys were conducted for CAGN in 2018, 2021, and 2023, but no CAGN were observed using or occupying suitable habitat in the 2019 LRDP survey area.

It was determined that implementation of the 2019 LRDP could directly impact suitable habitat for sensitive animal species potentially occurring in the 2019 LRDP survey area. Direct impacts could result from removal of habitat that supports these species. It was determined that habitat loss for orange-throated whiptail and loggerhead shrike (foraging habitat only) would result in a less than significant impact on these two species due to the presence of large stands of preserved habitat suitable for whiptail and shrike in the canyons to the west, north, and east of the mesa top redevelopment area. It was determined that impacts to Cooper's hawk and CAGN would be potentially significant

In addition, direct impacts to nesting birds (including raptors) were determined to be potentially significant, resulting from implementation of the 2019 LRDP in all phases. Direct impacts to nesting birds and raptors could result from direct removal of nesting habitat and disturbance from indirect impacts from substantial sources of noise during construction.

Direct impacts to sensitive animal species were determined to be potentially significant for all phases, and Mitigation Measures BIO-2A, BIO-2B, BIO-2C, and BIO-2D were provided to reduce these impacts to a less than significant level. These measures are as follows:

BIO-2A: Coastal California Gnatcatcher (CAGN) Surveys. Beginning in 2022, when a construction project is proposed that would directly or indirectly impact Diegan coastal sage scrub, six surveys at least seven days apart shall be conducted during the peak breeding season, March 15 to June 30, or nine surveys from July 1 to March 14 at least 2 weeks apart in accordance with the current USFWS protocol (USFWS 1997). The permittee must submit the 15-day pre-survey notification to the USFWS Carlsbad Permits Division, including an explanation that six or nine surveys shall be conducted. Documentation of the survey results shall be provided to USFWS in accordance with current protocol survey guidelines.

BIO-2B: USFWS Permitting. If Diegan coastal sage scrub within the open space canyon areas is determined to be occupied by the CAGN based on surveys conducted in accordance with Mitigation Measure BIO-2A, UC San Diego shall contact USFWS to discuss project permitting options that could be accomplished through Section 7 or Section 10(a) of FESA [Federal Endangered Species Act]. Impacts to any CAGN and CAGN-occupied habitat shall be avoided/mitigated by the following measures (additional measures could be required as a result of the consultation/permitting process):

1. Diegan coastal sage scrub occupied by CAGN shall not be removed during the CAGN breeding season (February 15 through August 31). If CAGN are not present, then only mitigation for the habitat loss shall be required as described in Mitigation Measures BIO-3B, and habitat clearing can occur at any time of the year following the survey.

2. If construction activities commence during the CAGN breeding season and CAGN are found within 500 feet of the grading limits based on the surveys required in BIO-2A, a qualified acoustician shall be consulted to identify appropriate measures for reducing construction noise levels to 60 decibel hourly L_{eq} (equivalent continuous sound level) or ambient, whichever is higher, during the part of the breeding season when active nests are most likely. If noise reduction measures are determined necessary, the construction contractor shall

implement the measures and the acoustician shall confirm, through field measurements, that noise attenuation measures are effective at maintaining noise at or below the specified threshold.

3. Permanent impacts to Diegan coastal sage scrub (regardless of CAGN occupancy) shall be mitigated at a 2:1 ratio as described in Mitigation Measures BIO-3B.

BIO-2C: Pre-Construction Raptor Nest Surveys. If project construction is scheduled to commence during the raptor nesting season (generally January 15 through August 31), pre-construction surveys for raptor nests shall be performed by a qualified biologist within 500 feet of project construction activities no more than seven days prior to the initiation of construction.

Construction activities within 500 feet of an identified active raptor nest shall not commence during the breeding season until a qualified Biologist determines that the nest is no longer active and any young birds in the area have adequately fledged and are no longer reliant on the nest. Trees with inactive nests can be removed outside the breeding season without causing an impact.

BIO-2D: Pre-Construction Nesting Bird Surveys. No grubbing, trimming, or clearing of vegetation (including fuel management) from project areas shall occur during the general avian breeding season (February 15 through August 31). If grubbing, trimming, or clearing cannot feasibly occur outside of the general avian breeding season, a qualified Biologist shall perform a pre-construction nesting bird survey no more than seven days prior to the commencement of vegetation clearing or grubbing to determine if active bird nests are present in the affected areas. Should an active migratory bird nest be located, the project biologist shall direct vegetation clearing away from the nest until it has been determined by the project biologist that the young have fledged or the nest has failed. If there are no nesting birds (including nest building or other breeding/nesting behavior) within the survey area, clearing, grubbing, and grading shall be allowed to proceed.

Indirect Impacts

It was determined that sensitive animal species with potential to occur could be indirectly affected in the short term and long term by implementation of the 2019 LRDP. Potential indirect impacts included edge effects, noise, wildlife mortality, lighting, and inadvertent encroachment. Indirect impacts to sensitive animal species were determined to be potentially significant, and Mitigation Measures BIO-3F through BIO-3K, BIO-3M, and BIO-3N were provided to reduce these indirect impacts to a less than significant level. These measures are as follows:

BIO-3F: Pre-Construction Meeting. Prior to construction, a pre-construction meeting shall be held between the qualified Biologist, UC San Diego Project Manager and Campus Planning staff, and Construction Manager and/or Grading Contractor to ensure the appropriate personnel are informed of the sensitivity of habitats in the open space canyon areas:

Prior to commencement of clearing or grading activities, fencing (e.g., silt fencing, orange construction fencing, and/or chain-link fencing as determined by UC San Diego Campus Planning) shall be installed around the approved limits of disturbance to prevent errant disturbance of sensitive biological resources by construction vehicles or personnel. Installation of fencing to demarcate the approved limits of disturbance shall be verified by a qualified Biologist prior to initiation of clearing or grading activities. All movement of construction vehicles, including ingress and egress of equipment and personnel, shall be limited to designated construction zones. The fencing shall be removed upon completion of all construction activities.

No temporary storage or stockpiling of construction materials shall be allowed within the open space canyon areas. This prohibition shall not be applied to facilities that are planned to traverse the open space canyon areas (e.g., driveways, roads, utilities corridors). Staging areas and construction sites in proximity to the open space canyon areas shall be kept free of trash, refuse, and other waste; no waste dirt, rubble, or trash shall be deposited in these areas.

BIO-3G: Errant Construction Activities. If errant construction activities result in inadvertent impacts to biological resources outside of the approved limits of disturbance, such impacted areas shall be evaluated and quantified by a qualified Biologist and revegetation options coordinated with UC San Diego Campus Planning staff. Errant construction impacts to non-sensitive vegetation communities and non-native grassland shall be revegetated with an appropriate native erosion control seed mix. Errant construction impacts to wetland vegetation communities and native upland vegetation communities shall be restored to the pre-impact vegetation community.

BIO-3H: Fire Prevention during Construction. Equipment to extinguish small brush fires (e.g., from trucks or other vehicles) shall be present on site during all phases of project construction, along with personnel trained in the use of such equipment. Smoking shall be prohibited in construction areas adjacent to flammable vegetation.

BIO-3I: Construction Monitoring. During project construction, a qualified Biologist shall visit the site at the start of each construction project to conduct a pre-construction environmental meeting with the construction contractor's construction manager and other appropriate personnel. The monitor shall conduct regular visits during site preparation, vegetation removal, and grading activities within or adjacent to native vegetation and during the raptor and general avian breeding season (refer to BIO-2C and 2D). During site visits, the monitor shall be responsible for ensuring that the construction activities and staging areas are restricted to the approved limits of work, and protective fencing is adequately maintained.

The biological monitor shall be responsible for ensuring that the contractor adheres to the other provisions described in Mitigation Measures BIO-3F through BIO-3J. The monitor, in cooperation with the construction project manager, shall have the authority to halt construction activities in the event that these provisions are not met. The biological monitor shall submit regular reports to UC San Diego Campus Planning during construction, documenting the implementation of all grading and construction minimization measures.

BIO-3J: Night Lighting. If temporary night lighting is necessary during construction, lights shall be directed away from sensitive vegetation communities and shielded to minimize temporary lighting of the surrounding habitat and should be of the lowest illumination necessary for human safety.

BIO-3K: Runoff and Water Quality. Refer to the Indirect Impacts section in the Sensitive Plant Species section.

BIO-3M: Wildlife Mortality Avoidance. Roads and driveways along the steep slope canyon areas shall have barriers to discourage wildlife from entering the roads.

BIO-3N: Edge Effects Avoidance. Refer to the Indirect Impacts section in the Sensitive Plant Species section.

3.2 Consistency Evaluation

In accordance with the requirements in the 2019 LRDP Mitigation Measure BIO-2A: Coastal California Gnatcatcher (CAGN) Surveys, nine protocol CAGN surveys were conducted in late 2025 and early 2026 within the HMCR project area and 500-foot buffer. No CAGN were observed during those surveys. The southern mixed chaparral habitat along the northern edge of the HMCR project area is taller (over 10 feet in height) and denser than CAGN prefer. Potentially suitable coastal sage scrub habitats were observed only within the survey area, east of Bachman Place, and at least

300 feet away from the proposed permanent impact areas. No coastal sage scrub habitat is present within any areas proposed for the HMCR project, including for fuel management purposes. The CAGN survey report documenting the methods and results of these surveys is provided in Attachment 2. Analysis of potential sensitive animal species direct and indirect impacts from the project can be found below.

Consistent with the 2019 LRDP EIR, impacts to Cooper's hawk could occur during removal of vegetation during implementation of the HMCR project, especially during removal of Eucalyptus trees. These impacts would be potentially significant, but implementation of Mitigation Measure BIO-2C: Pre-Construction Raptor Nest Surveys would reduce the potential for impacts to this species.

Consistent with the 2019 LRDP EIR, impacts to orange-throated whiptail and loggerhead shrike foraging habitat would be less than significant due to relatively minor impacts on native vegetation (i.e., southern mixed chaparral) and the large stands of intact chaparral and coastal sage scrub vegetation north, west, and east of the HMCR project.

Table 2
Issue 2 Candidate, Sensitive, or Special-Status Animal Species Impacts Comparison

Proposed Action	No Impact	Less Than Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Potentially Significant Impact
2019 LRDP EIR Impact Determination	☐	☐	☒	☐
HMCR Project	☐	☐	☒	☐

Direct Impacts

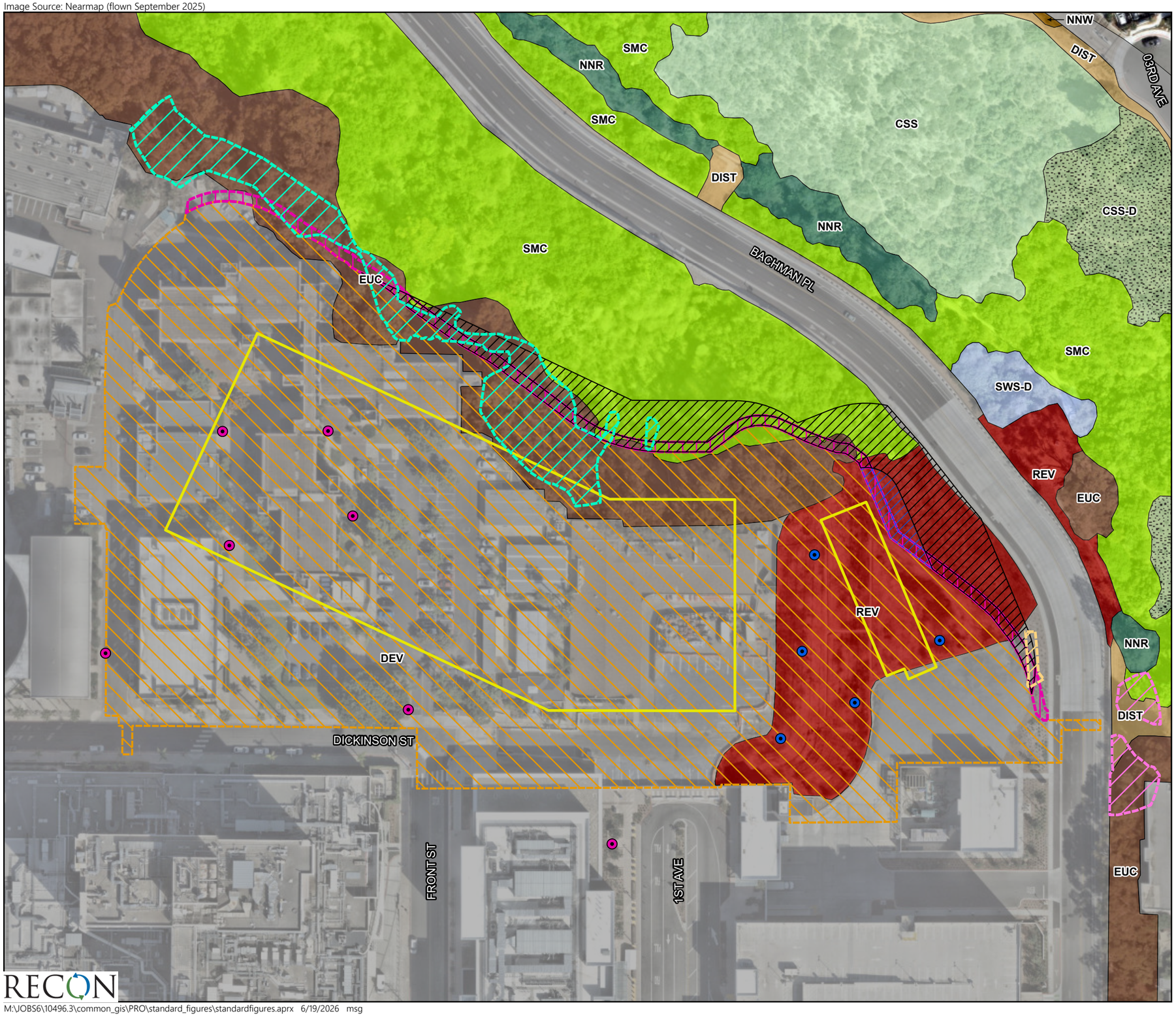
As previously discussed in Sections 1.0 and 2.0, the project includes the demolition of structures and existing utilities, construction of a new replacement hospital, CUP, generator yard, cooling tower yard, and SDG&E yard, as well as a temporary haul road. Circulation improvements to the new hospital also are proposed.

Sensitive Avian Species

The project would result in potentially significant direct impacts to Cooper's hawk and sensitive nesting birds and raptors. In addition, one special-status species, western bluebird (*Sialia mexicana*), was detected during the 2025–2026 coastal California gnatcatcher surveys; a City of San Diego Multiple Species Conservation Program (MSCP)-covered species (see Figure 5). Direct impacts to sensitive avian species would result from removal of habitat during the site preparation, grading activities, and ongoing disturbance from construction activities. Specifically, removal of nesting habitat in the nonsensitive eucalyptus woodland and within southern mixed chaparral (Figure 5) could result in direct impacts to Cooper's hawk habitat and sensitive nesting birds, including western bluebird, and raptors. As shown in Table 4, HMCR Project Impacts to Vegetation Communities, under Issue 3: Sensitive Vegetation Communities, implementation of the HMCR project would result in 0.09 acres of impact to southern mixed chaparral and 0.97 acres of impact to eucalyptus woodland.

Impacts to loggerhead shrike foraging habitat could occur during removal of 0.09 acres of native southern mixed chaparral, which is habitat for this species. Consistent with the findings of 2019 LRDP EIR, these impacts would be less than significant due to relatively minor impacts on habitat (i.e., southern mixed chaparral) and the large stands of intact chaparral and coastal sage scrub vegetation north, west, and east of the HMCR project.

Image Source: Nearmap (flown September 2025)



- Proposed Structures
- Permanent Impacts
- Temporary Impacts
- Fuel Management Zone 1
- Fuel Management Zone 2 (Impact Neutral)

Vegetation Communities

- CSS — Coastal Sage Scrub
- CSS-D — Coastal Sage Scrub - Disturbed
- DIST — Disturbed Habitat
- EUC — Eucalyptus Woodland
- NNR — Non-Native Riparian
- NNW — Non-Native Woodland
- SMC — Southern Mixed Chaparral
- SWS-D — Southern Willow Scrub - Disturbed
- DEV — Urban/Developed
- REV — Urban/Developed - Revegetation Area

Moderate to High Quality CBB Habitat

- Garden nasturtium (50% cover)
- Garden nasturtium in understory (+90% cover)
- Ornamental Sage (+90% cover)

Moderate Quality CBB Habitat

- Hydroseeded flowering plants (sourclover, California poppy, goldfields, beach evening-primrose) at 5-25% cover

Low Quality CBB Habitat

- Ornamental flowering plants (natal plum, natal lily, heavenly bamboo, star jasmine, and iceberg rose)

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FIGURE 5
Impacts to Vegetation

Mitigation Measures BIO-2C and BIO-2D proposed in the 2019 LRDP EIR shall be implemented for all project components to reduce potential direct impacts to sensitive avian species to a less than significant level by conducting preconstruction raptor and nesting bird surveys. Therefore, the project would not result in any new significant environmental effects or a substantial increase in the severity of previously identified significant effects regarding sensitive avian species.

CAGN is not expected to occur within the HMCR project area or 500-foot buffer based on negative survey results from 2025–2026 surveys. Because the survey area was found not to be occupied by CAGN, Mitigation Measure BIO-2B, which requires permitting with USFWS for impacts to CAGN, would not be required to implement for the HMCR project.

Sensitive Reptiles

Impacts to orange-throated whiptail could occur during removal of 0.09 acres of native southern mixed chaparral, which is habitat for this species. Consistent with the findings of 2019 LRDP EIR, these impacts would be less than significant due to relatively minor impacts on habitat (i.e., southern mixed chaparral) and the large stands of intact chaparral and coastal sage scrub vegetation north, west, and east of the HMCR project.

Crotch's Bumble Bee

Crotch's bumble bee (*Bombus crotchii*) was designated as a candidate for listing as endangered under the California Endangered Species Act (CESA) by the California Fish and Game Commission in September 2022, after the 2019 LRDP was finalized. Although the likelihood that Crotch's bumble bee is present on the project area is low, both the HMCR project area and the larger LRDP Planning Area contain habitat potentially suitable for Crotch's bumble bee, including ornamental and native landscape plantings.

Crotch's bumble bee's current range includes the Mediterranean region (ecoregion encompassing the greater Central Valley, Sierra Foothills, and central California Coast Ranges south to Mexico), Pacific Coast, Great Valley, and adjacent foothills though most of southwestern California. This range includes the LRDP Planning Area (i.e., Hillcrest Campus). Bumble bees have three basic habitat requirements: nesting sites for the colonies, availability of nectar and pollen from floral resources throughout the duration of the colony period (spring, summer, and fall), and overwintering sites for the queens (i.e., established by new queens, or "gynes," after the nesting season to enter a hibernation-like state until the following spring). The long-term productivity of bumble bee populations is affected by the quantity and quality of nectar and pollen available and the proximity of these resources to nesting habitat.

In California, Crotch's bumble bees typically inhabit open grassland and scrub habitats and will nest underground and likely use, at least in part, old rodent burrows (Xerces Society 2018). Some bumble bees favor nest sites near woody transitional habitats and nest in holes or crevices in leaf litter, beneath woody debris, at the base of a tree, in herbaceous plant debris, or near grass clumps. Overwintering queens may prefer shaded areas near trees in areas without dense vegetation and north-facing slopes (Liczner and Colla 2019).

A habitat assessment was conducted on November 7, 2025 and April 1, 2026 to determine if potentially suitable habitat for Crotch's bumble bee occurs within the HMCR project footprint. The April 2026 survey was conducted during the blooming period for many native and ornamental plant species. Most of the HMCR project area is within an urbanized area with limited floral resources and habitat for Crotch's bumble bee, with some exceptions as described below. No bumble bees of any kind were observed during either survey.

The following areas may provide nesting or floral resources for Crotch's bumble bee (See Figure 4):

1. Moderate-to-High-Quality Foraging, Nesting and Overwintering Habitat: The eucalyptus woodland along the northern perimeter of the HMCR project area has the potential to provide foraging and nesting habitat for Crotch's bumble bee due to the presence of leaf litter for thermal protection and small rodent burrows. In addition, there is a nearly continuous cover (greater than 90 percent) of garden nasturtium (*Tropaeolum majus*) within the understory of the eucalyptus woodland along the northern perimeter of the HMCR project area. These garden nasturtiums could provide floral resources for Crotch's bumble bee and were blooming during the April 2026 survey but no bumble bees were observed. Ornamental sage (*Salvia* sp.) was also observed just west of Bachman Place in a planted area where they comprised greater than 90 percent cover. Sages can be used as floral resources for bumble bees, as well. Finally, garden nasturtiums were observed off-site in two small areas on the eastern side of Bachman Place at approximately 50 percent absolute cover. These two areas are not within the project impact area.

   Although the overwintering habitat for Crotch's bumble bee is poorly understood, overwintering gynes have been observed in sloping areas or areas under trees insulated with moss or leaf litter (CDFW 2023). They also prefer warm, dry, and sunny locations. The eucalyptus woodland along the northern perimeter of the project area is on a steep slope and is under tree canopy, but it also is located on a north-facing slope and the ground where overwintering could occur is also under nearly 100 percent canopy cover. As such, the areas where overwintering could occur (i.e., under the eucalyptus trees along the northern perimeter of the project site) are expected to be cool and damp during the winter months. These microhabitat conditions would reduce this area's suitability as an overwintering site for gynes. However, due to the poorly understood nature of overwintering behavior and out of an abundance of caution, these areas should still be surveyed prior to ground disturbance of any kind, as stipulated in new Mitigation Measure BIO-2E, below.

2. Moderate Quality Foraging Habitat. Along the eastern edge of the project area, there is a steep slope that was revegetated with hydroseed after construction of the adjacent buildings. This area is sparsely vegetated but contains approximately 5 percent to 25 percent absolute cover of native and non-native flowering plants that could be used as floral resources by Crotch's bumble bee. These species include California poppy (*Eschscholzia californica*), beach evening-primrose (*Camissoniopsis cheiranthifolia*), sourclover (*Melilotus indicus*), and goldfields (*Lasthenia californica*). Due to lack of leaf litter and little to no evidence of rodent burrowing due to the existence of the hydroseed matrix for slope stabilization, this area is not suitable for nesting or overwintering.

3. Low-Quality Foraging Habitat. Within the developed portions of the project area, ornamental plantings were noted that could provide some marginal floral resources for Crotch's bumble bee, providing less than 1 percent cover within the entire urban/developed land cover mapping in the survey area. These ornamental plantings include natal plum (*Carissa macrocarpa*), natal lily (*Clivia miniata*), heavenly bamboo (*Nandina domestica*), star jasmine (*Trachelospermum jasminoides*), and iceberg roses (*Rosa* sp.). These plants are actively maintained landscaping components on the Hillcrest Campus, surrounded by urbanized streets, sidewalks, and buildings, and as such, are less likely to support Crotch's bumble bee than the areas previously discussed.

4. Nesting and Overwintering Habitat Only. Within the southern mixed chaparral vegetation along the northern perimeter of the HMCR project area, a few small areas of native vegetation may provide Crotch's bumble bee with floral resources when these plants are blooming, although this area is unlikely to provide a significant source of floral resources due to the very low cover (less than 1 percent) of flowering plants. These southern mixed chaparral areas are on the same north-facing slope as the

eucalyptus woodland discussed earlier and exhibit leaf litter and rodent burrows. As such, these areas may provide nesting habitat for Crotch's bumble bee. These areas are not expected to be overwintering habitat due to their cool and damp conditions during the winter months. These microhabitat conditions would reduce this area's suitability as an overwintering site for gynes. However, due to the poorly understood nature of overwintering behavior, and out of an abundance of caution, these areas should still be surveyed prior to ground disturbance of any kind, as stipulated in new Mitigation Measure BIO-2E, below. Only approximately 0.09 acres of southern mixed chaparral would be temporarily impacted by the project.

HMCR project activities that would include ground disturbance, grading, and vegetation removal in areas that contain potential foraging, nesting, or overwintering habitat could result in direct loss of Crotch's bumble bees. Use of vehicles, heavy machinery, or other equipment used to remove vegetation could result in injury or mortality of bumble bees if these activities are conducted where habitat is present (i.e., flowering plants or underground nesting or overwintering sites). This includes trimming and thinning of vegetation within Fuel Management Zone 2 if vegetation is blooming and therefore potentially providing floral resources for Crotch's bumble bee.

Implementation of the new 2019 LRDP EIR Mitigation Measure BIO-2E would reduce the potential impact on Crotch's bumble bee to a less-than-significant level by requiring a habitat assessment for bumble bee habitat; implementing a limited operating period, if feasible or applicable; conducting focused surveys for Crotch's bumble bee; and implementing measures to avoid mortality of special-status bumble bees if nests are detected. Further, if impacts cannot be avoided and an Incidental Take Permit (ITP) is required, CDFW would be required to find that the ITP includes "measures to minimize and fully mitigate the impacts of the proposed taking" (14 CCR § 783). Therefore, the HMCR project would not result in a new significant impact related to candidate, sensitive, or special-status species or a substantial increase in the severity of a previously identified significant impact related to candidate, sensitive, or special-status species.

New 2019 LRDP EIR Mitigation Measure BIO-2E: Conduct Habitat Assessment and Focused Surveys and Implement Protective Measures for Crotch's Bumble Bee.

Prior to approval of specific projects under the 2019 LRDP, and as long as this species is considered a candidate for listing under the California Endangered Species Act (CESA) or in the event that this species becomes listed under CESA, a desktop analysis and land cover assessment through site visits shall be completed by a qualified biologist to determine whether the project area and its immediately surrounding landscape has the potential to contain potential habitat for Crotch's bumble bee. This analysis will identify whether the project area is a developed area with no landscaping (i.e., contains buildings, paved roads, sidewalks, parking lots, other built infrastructure, or mowed and irrigated lawns) or contains open grassland, ornamental landscaping or scrub habitats that could be potential bumble bee foraging, nesting, or overwintering habitat.

a) If a project area has the potential to contain Crotch's bumble bee habitat, then the following measures will be implemented prior to construction:

    1) Limited Operating Period. For project areas that contain foraging habitat or nesting habitat, initial ground-disturbing work (e.g., grading, vegetation removal, staging) will take place between September 1 and February 1, if feasible, to avoid impacts on nesting and foraging Crotch's bumble bees. If this limited operating period is determined to be infeasible, or if impacts would occur within overwintering habitat along the northern edge of the project boundary, then focused surveys for Crotch's bumble bees will be conducted by a qualified biologist and avoidance measures will be implemented.

2) Focused Surveys and Avoidance Measures. For project areas that contain overwintering habitat as determined during the habitat assessment described above or if the limited operating period described above is infeasible for projects that contain foraging or nesting habitat, focused surveys to determine the presence or absence of Crotch's bumble bees will be conducted following the methods in *Survey Considerations for California Endangered Species Act (CESA) Candidate Bumble Bee Species*, or any subsequent protocol approved by CDFW.

   a) Survey timing will be determined on a project-specific basis by a qualified biologist based on seasonality, when activity or foraging will most likely occur each year, and for which life history stage is being surveyed. Surveys will not be conducted more than one year prior to project activities.

   b) A qualified biologist will conduct focused surveys for Crotch's bumble bee within one year before the start of any ground-disturbing activities. A qualified biologist familiar with Crotch's bumble bee identification and life history shall conduct three visual surveys 2–4 weeks apart during the colony's active period (April through August [CDFW 2023]). If standardized survey protocols are published before surveys are completed, surveys shall either follow these protocols or modified protocols approved by CDFW.

   c) If Crotch's bumble bees are not detected during the focused survey, no additional measures are required.

   d) If Crotch's bumble bees are detected during the focused survey, appropriate avoidance measures will be implemented. Avoidance measures may include, but are not limited to, the following:

      - Protective buffers will be implemented around active nesting colonies until these sites are no longer active, as determined by a qualified biologist. A qualified biologist will determine the appropriate buffer size to protect nesting colonies; however, buffers will typically be at least 50 feet. Protective buffers will be demarcated using a method determined by the qualified biologist, such as flagging, that does not result in adverse effects on the nest or attraction to potential predators.

      - The qualified biologist responsible for implementing Crotch's bumble bee avoidance measures shall be qualified to survey for and identify Crotch's bumble bee based on associated education, experience, and training. The qualified biologist will monitor ground-disturbing or vegetation removal activities near the protective buffer to prevent inadvertent disturbance of the nest. The qualified biologist may stop all work if it is apparent that Crotch's bumble bees are being disturbed by these activities and may expand the protective buffer.

      - Where activities occur within or adjacent to potential Crotch's bumble bee overwintering habitat, the qualified biologist shall survey for gynes in flight and overwintering queens in hibernacula ahead of ground disturbance.

      - If any Crotch's bumble bee are found during the pre-construction (vegetation removal or ground disturbing activities) surveys, the qualified biologist shall immediately stop and prohibit all project activities within 50 feet of the individual and hibernaculum. The qualified biologist will delineate a 50-foot avoidance buffer and notify all workers not to enter the environmentally sensitive area. If an overwintering queen is exposed, the qualified biologist shall cover and

protect the queen bumble bee by the substrate it was found in/under and return any materials removed during the surveys (e.g., grass, vegetation, bark, and debris) to re-create pre-disturbed conditions. The qualified biologist shall record the location with a GPS (including datum and horizontal accuracy in feet) and contact CDFW within 24 hours for further consultation. Avoidance buffers will be maintained until further instructions are received from CDFW.

e) If impacts on Crotch's bumble bees cannot be avoided, compliance with CESA and consultation with CDFW is required and may involve acquiring an Incidental Take Permit (ITP) from CDFW. UC San Diego will implement all avoidance measures included in the ITP. Compensatory mitigation for permanent direct impacts to Crotch's bumble bee habitat shall be offset through one or a combination of the following as specified in the ITP: preservation of habitat, habitat creation, and/or enhancement on the UC San Diego campus, or off-campus through habitat acquisition and preservation or purchase of suitable habitat credits from an approved conservation bank. Compensatory mitigation sites occurring on campus shall be monitored and maintained per the campuswide Habitat Management Plan. Compensatory mitigation sites occurring off campus shall be monitored and maintained according to a site-specific long term management plan. If an incidental take permit is issued for the project that covers Crotch's bumble bee, that document shall supersede any measures and mitigation ratios provided in the 2019 LRDP.

Indirect Impacts

Consistent with the 2019 LRDP EIR, the project could result in indirect impacts to the sensitive animal species, including Cooper's hawk, orange-throated whiptail, and loggerhead shrike that may occur in areas adjacent to the HMCR project. These indirect impacts could result from edge effects, increased noise, lighting, vehicle strikes, and inadvertent habitat encroachment. Mitigation Measures BIO-3F through BIO-3K and BIO-3N proposed in the 2019 LRDP EIR shall be implemented during all components of the project to reduce potential indirect impacts to sensitive animal species to a less than significant level by initiating a pre-construction meeting; managing errant construction activities; implementing fire prevention; performing construction monitoring; minimizing nighttime lighting; managing runoff, water quality, and pests; and minimizing adverse edge effects. In addition, Mitigation Measure BIO-3M shall be implemented along any applicable segments of the HMCR project area to reduce wildlife mortality from vehicle strikes. Therefore, the project would not result in any new significant environmental effects or a substantial increase in the severity of previously identified significant effects regarding sensitive animal species.

4.0 Issue 3: Riparian Habitat and Other Sensitive Natural Communities

Based on Appendix G of the CEQA Guidelines, implementation of the 2019 LRDP would have a significant impact if it resulted in a substantial adverse effect on riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the CDFW or USFWS.

As disclosed in the EIR, implementation of the 2019 LRDP would have the potential to result in potentially significant direct and indirect impacts to sensitive vegetation communities observed in the Hillcrest Campus LRDP project area.

4.1 Summary of 2019 Long Range Development Plan Environmental Impact Report Impacts

Impacts to sensitive vegetation communities as a result of 2019 LRDP implementation were assessed based on biological surveys conducted in 2017 and 2018 (UC San Diego 2019; Harris & Associates 2019).

Direct Impacts

A total of six vegetation communities and/or land cover types were documented in the 2019 LRDP survey area. Table 2a and Table 2b from the 2019 LRDP EIR show the anticipated permanent and temporary impacts for each phase of the 2019 LRDP. Of the six vegetation communities and land cover types in the 2019 LRDP survey area, only four are considered sensitive: southern willow scrub disturbed, non-vegetated channel, Diegan coastal sage scrub (including disturbed), and non-native grassland.

Table 2a
Permanent Impacts to Vegetation Communities and Land Use Types for 2019 LRDP

Vegetation Community	Project Area Acreage	Impacts per Phase (acres)							Total Impact Acreage
		1A	1B	2A	2B	3	4	5	
Wetland Vegetation Communities									
Southern Willow Scrub Disturbed[1]	1.38			0.06					0.06
Nonvegetated Channel[2]	0.04	0.01		0.03		<0.01			0.03
Wetlands Subtotal	*1.42*	*0.01*		*0.09*		*<0.01*			*0.09*
Upland Vegetation Communities									
Diegan Coastal Sage Scrub[1]	19.49			1.07	2.24			0.07	3.38
Diegan Coastal Sage Scrub Disturbed[1]	1.29								
Non-Native Grassland[1]	0.62				0.19				0.19
Eucalyptus Woodland[3]	6.69	2.16		0.01	5.05	1.63		0.34	9.19
Uplands Subtotal	*28.09*	*2.16*		*1.08*	*7.48*	*1.63*		*0.41*	*12.76*
Urban/Developed[3]	32.49								
TOTAL	**62.00**	**2.16**		**1.17**	**7.48**	**1.63**		**0.41**	**12.85**

SOURCE: UC San Diego 2019.
[1]Considered a sensitive vegetation community.
[2]Potentially sensitive resource.
[3]Nonsensitive vegetation or land cover. No significant impacts would result from redevelopment of previously developed land.

Table 2b
Temporary Impacts to Vegetation Communities and Land Use Types

Vegetation Community	Project Area Acreage	Impacts per Phase (acres)							Total Impact Acreage
		1A	1B	2A	2B	3	4	5	
Wetland Vegetation Communities									
Southern Willow Scrub Disturbed[1]	1.38			<0.01					<0.01
Nonvegetated Channel[2]	0.04								
Wetlands Subtotal	*1.42*			*<0.01*					*<0.01*
Upland Vegetation Communities									
Diegan Coastal Sage Scrub[1]	19.49				0.83	0.45			2.32
Diegan Coastal Sage Scrub Disturbed[1]	1.29								
Non-Native Grassland[1]	0.62			0.08		0.24			0.08
Eucalyptus Woodland[3]	6.69			0.17	0.44	0.69			0.85
Uplands Subtotal	*28.09*	*<0.01*		*1.27*	*1.27*				3.25
Urban/Developed[3]	32.49								
TOTAL	**62.00**	**<.01**	**0**	**1.29**	**1.27**	**0.69**	**0**	**0**	**3.25**

SOURCE: UC San Diego 2019.
[1]Considered a sensitive vegetation community.
[2]Potentially sensitive resource.
[3]Nonsensitive vegetation or land cover. No significant impacts would result from redevelopment of previously developed land.

It was determined that implementation of the 2019 LRDP could result in potential direct permanent and temporary impacts to the four sensitive vegetation communities, including southern willow scrub disturbed, nonvegetated channel, Diegan coastal sage scrub (including disturbed), and non-native grassland. Direct impacts could result from removal of these sensitive vegetation communities during construction.

In the 2019 LRDP EIR, it was determined that project phases impacting less than 0.10 acres of sensitive upland vegetation communities and less than 0.01 acres for wetland vegetation communities were not considered significant and would not require mitigation under CEQA because the small size of the impact would not be considered a substantial adverse effect. However, phases impacting less than 0.01 acres of a wetland vegetation community were determined to potentially require mitigation by the regulating agencies (e.g., U.S. Army Corps of Engineers (USACE), Regional Water Quality Control Board (RWQCB), and CDFW). Exceptions to the previously described de minimus acreage thresholds were determined to be projects that would impact habitat occupied by federally or state-listed endangered or threatened species, which would be considered significant regardless of the acreage impacted. No federally or state-listed endangered or threatened species were documented on the Hillcrest Campus during the 2017 and 2018 biological resources surveys. Additionally, it was determined that, if temporary impacts to Diegan coastal sage scrub and non-native grassland could not be restored in place after construction, these impacts would be considered permanent and would be mitigated at the applicable ratio outlined in Mitigation Measure BIO-1B (2:1 for Diegan coastal sage scrub and 0.5:1 for non-native grassland).

Both temporary and permanent direct impacts to sensitive vegetation communities were determined to be potentially significant as a result of project implementation in Phases 1A, 2A, 2B, 3, and 5 and the Fuel Management Zone 1. Mitigation Measures BIO-3A through BIO-3E were provided to reduce these direct impacts to a less than significant level.

BIO-3A: Vegetation Mapping. In areas proposed for construction that are mapped as supporting a sensitive vegetation community and vegetation community mapping has not been conducted on the site in the preceding five years, updated vegetation mapping shall be conducted by a qualified biologist as part of the project planning and environmental review process.

BIO-3B: Permanent Impacts to Upland Habitats. Permanent impacts to sensitive upland vegetation communities shall be mitigated through the preservation of habitat, habitat creation, and/or enhancement, or combination thereof on the Hillcrest Campus or off campus through habitat acquisition and preservation or purchase of credits from an approved conservation bank. Mitigation for impacts to upland communities shall be in-kind. Permanent impacts to sensitive Diegan coastal sage scrub shall be mitigated at a ratio of 2:1. Permanent impacts to sensitive non-native grassland shall be mitigated at a ratio of 0.5:1.

For on-campus mitigation, a detailed revegetation plan shall be prepared prior to the start of construction (not applicable to mitigation met through purchase of credits from an approved wetland mitigation bank). The plan shall include, at a minimum, the proposed location of the mitigation area(s), site preparation, plant palette, installation procedures, success criteria, fencing and signage, monitoring requirements, and other details of the habitat restoration effort, and be prepared by a qualified biologist.

BIO-3C: Permanent Impacts to Riparian Habitats. Impacts to sensitive riparian vegetation communities shall be mitigated on or off campus through habitat enhancement or preservation or purchase of credits from an approved conservation bank. Permanent impacts to southern willow scrub-disturbed shall be mitigated at a ratio of 3:1. Permanent impacts to nonvegetated channel shall be mitigated at a ratio of 2:1. If the impacted nonvegetated channel and southern willow scrub disturbed habitat within the Hillcrest Campus is under the jurisdiction of the USACE, RWQCB, and/or CDFW, then the applicable wetland permit conditions shall be implemented.

For on-campus mitigation, a detailed wetland restoration plan shall be prepared prior to the start of construction (not applicable to mitigation met through purchase of credits from an approved wetland mitigation bank). The plan shall include, at a minimum, the proposed location of the mitigation area(s), site preparation, plant palette, installation procedures, success criteria, fencing and signage, monitoring requirements, and other details of the habitat restoration effort, and be prepared by a qualified biologist. The plan shall be subject to approval by the corresponding regulatory permitting agencies (i.e., USACE, RWQCB, and CDFW) as part of the wetland permitting process.

BIO-3D: Temporary Impacts to Sensitive Vegetation Communities. Temporary impacts to sensitive vegetation communities including Diegan coastal sage scrub and non-native grassland shall be restored in place at a 1:1 ratio. Restoration shall be implemented in the final phase of construction or during an earlier phase if no additional impacts from future construction phases would occur.

A Revegetation Plan shall be prepared. The plan shall include site preparation specifications, plant palette, installation procedures, development of reasonable success criteria, appropriate monitoring and reporting protocols, implementation timelines, and contingency measures in the event of restoration failure. UC San Diego Campus Planning shall provide guidance for and oversight of the Revegetation Plan and implementation respectively.

The Revegetation Plan shall also include the process for establishing and sampling a representative Diegan coastal sage scrub and non-native grassland reference site within the Hillcrest Campus and the criterion for removing and minimizing non-native plant species listed as invasive by the California Invasive Plant Council.

BIO-3E: Jurisdictional Delineation. During the project planning process, if the area of disturbance is within a storm drain outlet, mapped as a potential drainage or wetland, or the project area contains or is located immediately adjacent to a natural drainage course, a qualified Biologist shall conduct a jurisdictional delineation. The jurisdictional delineation shall use current regulatory guidance from USACE, RWQCB, and CDFW to identify the presence of potential regulated wetlands, waters, and habitats in the project vicinity.

If there is potential for the project to adversely affect wetlands or waters, impacts shall be avoided and minimized during the final design phase, to the extent practicable. Unavoidable impacts shall be mitigated through implementation of Mitigation Measure BIO-3C, as applicable, and conformance with applicable wetland permit conditions.

Indirect Impacts

It was determined that sensitive vegetation communities could be indirectly affected in the short term and long term by implementation of all phases of the 2019 LRDP. Impacts included water quality degradation (e.g., through sedimentation, contaminants, or fuel release), fugitive dust, colonization of invasive or non-native plant species, edge effects, noise, wildlife mortality, lighting, inadvertent encroachments, non-native insects, and Fuel Management Zone 2. Indirect impacts to sensitive vegetation communities were determined to be potentially significant, and Mitigation Measures BIO-3F through BIO-3O were provided to reduce these impacts to a less than significant level. Detailed information and descriptions for Mitigation Measures BIO-3F through BIO-3J are provided in the Indirect Impacts section in the Sensitive Animal Species section and detailed information and descriptions for Mitigation Measures BIO-3K through BIO-3O are provided in the Indirect Impacts section in the Sensitive Plant Species section.

4.2 Consistency Evaluation

In accordance with Mitigation Measure BIO-3A: Vegetation Mapping, which requires updating vegetation mapping every five years, vegetation mapping was completed within the HMCR project area and 500-foot buffer on November 7, 2025. Minor refinements were made to reflect the recent changes to the Hillcrest Campus from implementation of prior phases of the 2019 LRDP. One sensitive natural community, southern mixed chaparral, was identified within the HMCR project area. Southern mixed chaparral is considered a Tier IIIA (common upland) by the City of San Diego (2018) (Table 3).

Table 3
Issue 3: Sensitive Natural Communities Impacts Comparison

Proposed Action	No Impact	Less Than Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Potentially Significant Impact
2019 LRDP EIR Impact Determination	☐	☐	☒	☐
HMCR project	☐	☒	☐	☐

The following vegetation communities were observed within the HMCR project area and 500-foot buffer (Figure 4).

Vegetation Communities/Land Cover Descriptions within HMCR Project Biological Survey Area

The 2019 LRDP vegetation community descriptions are hereby incorporated by reference with the following additional details provided specifically for the HMCR project survey area.

Riparian/Wetland Communities

- Non-Native Riparian. A narrow band of non-native riparian vegetation was observed within the drainage east of and parallel to Bachman Place. Species comprising this vegetation community include saltcedar (*Tamarix ramosissima*), Mexican fan palm (*Washingtonia robusta*), queen palm (*Syagrus romanzoffiana*), pampas grass (*Cortaderia selloana*) and Brazilian pepper tree (*Schinus terebinthifolia*). This vegetation community was not observed within the HMCR project area, only within the adjacent survey area.

- Southern Willow Scrub – Disturbed. Small patches of disturbed southern willow scrub were observed within the drainage east of and parallel to Bachman Place, as well as within one small area on the west side of the survey area. These stands were dominated by arroyo willow (*Salix lasiolepis*), but exhibited a high degree of invasive species cover, including saltcedar, pampas grass, and castor bean (*Ricinus communis*). Southern willow scrub is a sensitive natural community. This vegetation community was not observed within the HMCR project area, only within the adjacent survey area.

Upland Communities

- Coastal Sage Scrub. Diegan coastal sage scrub was observed east of and on the slopes above Bachman Place. These stands include common sage scrub species such as California sagebrush, coast California buckwheat (*Eriogonum fasciculatum* var. *fasciculatum*), lemonade berry (*Rhus integrifolia*), and laurel sumac (*Malosma laurina*). Diegan coastal sage scrub is a sensitive natural community. This vegetation community was not observed within the HMCR project area, only within the adjacent survey area.

- *Coastal Sage Scrub – Disturbed*. These stands were observed east of Bachman Place adjacent to urban areas. Signs of human-caused disturbances were evident, including trash, lower absolute cover of native shrubs, and higher absolute cover of bare ground, including from informal use trails that traverse the area. The disturbed form of Diegan coastal sage scrub is considered a sensitive natural community. This vegetation community was not observed within the HMCR project area, only within the adjacent survey area.

- *Disturbed Habitat*. This vegetation community was mapped in areas where fuel management has recently occurred, primarily along the northern edge of the HMCR project area. Although there is a low-growing cover of non-native species, this area is kept mowed and as such, does not provide suitable cover or habitat for sensitive species despite its location directly adjacent to southern mixed chaparral.

- *Eucalyptus Woodland*. Large stands of eucalyptus woodland were mapped along the northern edge of the HMCR project area where mature eucalyptus (*Eucalyptus* spp.) were observed. The understory within these areas is almost entirely devoid of vegetation and contains thick leaf litter.

- *Non-Native Woodland*. Stands dominated by ornamental trees were observed along Third Avenue and at the southern end of Bachman Place. Ornamental trees included Brazilian pepper tree, ornamental pine (*Pinus* sp.) and western coastal wattle (*Acacia cyclops*).

- *Southern Mixed Chaparral*. This vegetation community was observed on the slopes directly north, east, and west of the proposed project. These areas are dominated by lemonade berry, laurel sumac and toyon (*Heteromeles arbutifolia*), with an occasional Mission manzanita (*Xylococcus bicolor*). Many of these areas were previously mapped as coastal sage scrub, likely due to the presence of lemonade berry, but the presence of toyon and Mission manzanita, and the lack of any sage scrub species excludes these areas from mapping as coastal sage scrub. The overall height of most shrubs in these stands exceeds 10 feet, and vegetation is very dense (usually more than 75 percent absolute cover), indicating these stands are mature chaparral.

  Southern mixed chaparral is not listed as a sensitive natural community by the CDFW (2026). However, locally, it is considered a sensitive natural community due to its inclusion in the City of San Diego's Biology Guidelines as a Tier IIIA (common uplands) habitat type requiring mitigation to implement the MSCP (City of San Diego 2018). Typical mitigation ratios for impacts to this vegetation community vary from 0.5:1 to 1.5:1 depending on the location of the impact and location of the mitigation land. However, the significance threshold included Section 3.3.3.3 of the 2019 LRDP EIR states that total sensitive upland impacts less than 0.10 acres are not considered significant and do not require mitigation.

- *Southern Mixed Chaparral – Disturbed*. One stand of disturbed southern mixed chaparral was observed on the west side of the HMCR project survey area where lemonade berry was observed at low absolute cover and there was a high absolute cover of bare ground. No impacts to this stand would occur from the HMCP project.

Land Covers

- *Urban/Developed*. Most of the survey area was mapped as urban/developed, including within the existing Hillcrest Campus and adjacent neighborhood to the east. These areas contain buildings, streets, sidewalks, and vegetation associated with an urbanized environment.

- *Urban/Developed - Revegetation Area*. This land cover was observed at the far eastern edge of the HMCR project area, just west of Bachman Place. This area was recently under construction and, at the time of the

survey, hydroseeding matrix was still evident and the plant growth was only a few inches tall, indicating recent application of hydroseed for slope stabilization purposes. Fiber rolls were also evident at the time of the survey.

The following sections describe the direct and indirect impacts to all vegetation communities from the HMCR project.

Direct Impacts

As previously discussed in the Project Description and under Issues 1 and 2, the project includes the demolition of structures and existing utilities, construction of a new replacement hospital, CUP, generator yard, cooling tower yard, and SDG&E yard, as well as a temporary haul road. Circulation improvements to the new hospital also are proposed. Most of the impacts from the HMCR project would occur within urban/developed areas and eucalyptus woodlands of the Hillcrest Campus. Table 4 provides the acreage impacts to vegetation communities and land covers that would occur during implementation of the HMCR project.

The HMCR project would result in 0.09 acres of impact to southern mixed chaparral, which is considered a sensitive natural community by the City of San Diego. As mentioned above, the 2019 LRDP EIR states that less than 0.10 acres are not significant and do not require mitigation. Because impacts from the HMCP project are less than 0.10, these impacts are not significant and therefore, no mitigation is required.

As previously discussed, Mitigation Measure BIO-3A, requiring vegetation mapping, was implemented for the project survey area. Therefore, the project has satisfied the requirements of Mitigation Measure BIO-3A, and this measure would not be required until after 2030.

Because impacts to sensitive natural communities observed within the HMCR project area are not significant, Mitigation Measures BIO-3B and BIO-3D proposed in the 2019 LRDP EIR are not required. Mitigation Measures BIO-3C and BIO-3E do not apply to the project due to the lack of impacts to riparian or wetland communities.

Indirect Impacts

Consistent with the 2019 LRDP EIR, the project could result in indirect impacts to the sensitive natural communities documented in the project survey area (e.g., southern willow scrub, southern mixed chaparral, and coastal sage scrub) from water quality degradation (e.g., through sedimentation, contaminants, or fuel release), fugitive dust, colonization of invasive or non-native plant species, edge effects, noise, wildlife mortality, lighting, inadvertent encroachments, non-native insects, and fuel management activities.

Mitigation Measures BIO-3F through BIO-3I, BIO-3K, BIO-3L, BIO-3N, and BIO-3O proposed in the 2019 LRDP EIR shall be implemented during all components of the project to reduce potential indirect impacts to sensitive vegetation communities to a less than significant level by initiating a preconstruction meeting; managing errant construction activities; implementing fire prevention; implementing construction monitoring; managing runoff, water quality, and pests; preventing the spread of invasive species; minimizing adverse edge effects; and implementing non-native insects avoidance. Therefore, the project would not result in any new significant environmental effects or a substantial increase in the severity of previously identified significant effects regarding sensitive vegetation communities.

5.0 Issue 4: Jurisdictional Aquatic Resources

Based on Appendix G of the CEQA Guidelines, implementation of the 2019 LRDP would have a significant impact if it resulted in a substantial adverse effect on state or federally protected wetlands through direct removal, filling, hydrological interruption, or other means.

5.1 Summary of 2019 Long Range Development Plan Environmental Impact Report Impacts

Impacts to jurisdictional aquatic resources as a result of 2019 LRDP implementation were assessed based on biological surveys conducted in 2017 and 2018 (UC San Diego 2019; Harris & Associates 2019). The 2019 LRDP would have the potential to result in direct and indirect impacts to jurisdictional aquatic resources that occur on the Hillcrest Campus.

Table 4 HMCR Project Impacts to Vegetation Communities								
Vegetation Community	Project Survey Area (acres)	Impacts (acres)						
		Permanent	Temporary	Temporary and Fuel Management Zone 1	Temporary and Fuel Management Zone 2	Fuel Management Zone 1 Only	**All Impacts (Permanent and Temporary)**	Fuel Management Zone 2 (Selective Thinning Only)
Riparian/Wetland								
Non-Native Riparian[2]	0.6	--	--	--	--	--	--	--
Southern Willow Scrub - Disturbed[1]	0.2	--	--	--	--	--	--	--
Subtotal[4]	*0.9*	--	--	--	--	--	--	--
Upland								
Coastal Sage Scrub[1]	3.3	--	--	--	--	--	--	--
Coastal Sage Scrub - Disturbed[1]	1.0	--	--	--	--	--	--	--
Disturbed Habitat[3]	0.6	--	--	--	--	--	--	--
Eucalyptus Woodland[3]	4.2	0.86	0.04	--	0.07	--	**0.97**	0.07
Non-Native Woodland[3]	0.4	--	--	--	--	--	**--**	--
Southern Mixed Chaparral[1]	9.5	0.04	0.00		0.05		**0.09**	0.26
Southern Mixed Chaparral - Disturbed[1]	0.3	--	--	--	--	--	--	--
Subtotal[4]	*19.4*	*0.89*	*0.04*	*0.00*	*0.12*	*0.00*	***1.05***	*0.33*
Land Cover								
Urban/Developed[3]	35.4	6.41	0.02	--	0.01	--	**6.45**	0.06
Urban/Developed - Revegetation Area[3]	1.5	0.99	--	0.03	0.03	0.03	**1.07**	0.21
Subtotal	*36.9*	*7.42*	*0.02*	*0.03*	*0.04*	*0.03*	***7.55***	*0.27*
GRAND TOTAL[4]	**57.1**	**8.30**	**0.06**	**0.03**	**0.16**	**0.03**	**8.58**	**0.60**

SOURCES: Holland 1986; Oberbauer et al. 2008.

[1] Considered a sensitive vegetation community.

[2] Potentially sensitive resource.

[3] Nonsensitive vegetation or land cover.

[4] Totals do not sum due to rounding.

Direct Impacts

A formal jurisdictional aquatic resources delineation was not conducted as part of the survey efforts for the 2019 LRDP. However, nonwetland waters, including nonvegetated channels, and the associated riparian vegetation communities, were observed in the 2019 LRDP survey area during the biological resources surveys. These aquatic resources were determined to be potentially under state and federal jurisdiction. Formal aquatic resource delineations were anticipated to occur prior to each phase in which potential impacts to nonwetland, wetland, and riparian habitat could occur. It was determined that impacts to potentially jurisdictional nonvegetated channels and associated riparian habitat (e.g., southern willow scrub) would occur as a result of implementation of the 2019 LRDP in Phases 1A, 2A, and 2B and would be potentially significant and mitigation would be required (Tables 2a and 2b). Direct impacts could result from the removal of these potentially jurisdictional aquatic resources during construction.

Direct impacts to potentially jurisdictional aquatic resources were determined to be potentially significant as a result of project implementation in all phases of the 2019 LRDP. Mitigation Measures BIO-3C and BIO-3E were provided to reduce these impacts to a less than significant level. Detailed information and descriptions for Mitigation Measures BIO-3C and BIO-3E are provided in the Indirect Impacts section in the Sensitive Vegetation Communities section.

Indirect Impacts

It was determined that jurisdictional aquatic resources could be indirectly affected in the short term and long term by implementation of all phases of the 2019 LRDP. Indirect impacts include water quality degradation (e.g., through sedimentation, contaminants, or fuel release), fugitive dust, colonization of invasive or non-native plant species, edge effects, inadvertent encroachments, and Fuel Management Zone 2. Indirect impacts to jurisdictional aquatic resources were determined to be potentially significant, and Mitigation Measures BIO-3F through BIO-3I, BIO-3K, BIO-3L, and BIO-3N were provided to reduce these impacts to a less than significant level. Detailed information and descriptions for Mitigation Measures BIO-3F through BIO-3I are provided in the Indirect Impacts section in the Sensitive Animal Species section, and detailed information and descriptions for B Mitigation Measures IO-3K, BIO-3L, and BIO-3N are provided in the Indirect Impacts section in the Sensitive Plant Species section.

5.2 Consistency Evaluation

Analysis of potential jurisdictional aquatic resources direct and indirect impacts from the HMCR project is below. No potential jurisdictional aquatic resources were identified within the HMCR project area. As such, no direct impacts to potential jurisdictional aquatic resources would occur from the HMCR project (Table 4).

Table 5
Issue 4: Potential Jurisdictional Aquatic Resources

Proposed Action	No Impact	Less Than Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Potentially Significant Impact
2019 LRDP EIR Impact Determination	☐	☐	☒	☐
HMCR project	☒	☐	☐	☐

Direct Impacts

Mitigation Measure BIO-3E: Jurisdictional Delineation requires that a jurisdictional delineation (i.e., an aquatic resource delineation) is conducted during the project planning process if the area of disturbance is within a storm drain outlet, mapped as a potential drainage or wetland, or the project area contains or is located immediately adjacent to a natural drainage course. None of these conditions apply to the HMCR project; no potential aquatic resources are present within the HMCR project and, as a result, no impacts to aquatics resources would occur and Mitigation Measure BIO-3E and BIO-3C (related to the provision of mitigation for impacts to aquatic resources) do not apply. The project would not result in any new significant environmental effects or a substantial increase in the severity of previously identified significant effects regarding jurisdictional aquatic resources.

Indirect Impacts

Consistent with the 2019 LRDP EIR, the project could result in indirect impacts to the jurisdictional aquatic resources documented in the project survey area from water quality degradation (e.g., through sedimentation, contaminants, or fuel release), fugitive dust, colonization of invasive or non-native plant species, edge effects, inadvertent encroachments, and Fuel Management Zone 2. Mitigation Measures BIO-3F through BIO-3I, BIO-3K, BIO-3L, and BIO-3N proposed in the 2019 LRDP EIR shall be implemented during all components of the project to reduce potential indirect impacts to jurisdictional aquatic resources to a less than significant level by initiating a preconstruction meeting; managing errant construction activities; implementing fire prevention; implementing construction monitoring; managing runoff, water quality, and pests; preventing the spread of invasive species; minimizing adverse edge effects; and implementing non-native insects avoidance. Therefore, the project would not result in any new significant environmental effects or a substantial increase in the severity of previously identified significant effects regarding jurisdictional aquatic resources.

6.0 Issue 5: Wildlife Corridors and Nursery Sites

Based on Appendix G of the CEQA Guidelines, implementation of the 2019 LRDP would have a significant impact if it resulted in substantial interference with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors or impede the use of native wildlife nursery sites.

6.1 Summary of 2019 Long Range Development Plan Environmental Impact Report Impacts

Impacts to wildlife corridors and nursery sites as a result of 2019 LRDP implementation were assessed based on biological surveys conducted in 2017 and 2018 (UC San Diego 2019; Harris & Associates 2019). The 2019 LRDP would not result in direct or indirect impacts to wildlife corridors and nursery sites on the Hillcrest Campus.

Direct and Indirect Impacts

Analysis in the 2019 LRDP EIR determined that there are two main areas that support the majority of wildlife habitat on the Hillcrest Campus, including the two steep slope canyon areas east and west of Bachman Place. The two areas are part of a system of canyons sporadically connected along the southern slopes of Mission Valley that continue west to Presidio Park where they end at the I-8 and I-5 interchange. It was determined that construction of the north access driveway in Phase 2A would add another physical barrier to the already segmented canyon system but that the wildlife habitat on the Hillcrest Campus only serves as live-in habitat due to separation from other wildlife habitats by State Route 163, I-8, I-5, and surrounding developed areas. Because of this, it was determined that no wildlife corridors or nursery sites were present on the Hillcrest Campus and that the Hillcrest

Campus was not connected to other larger regional wildlife corridors within and surrounding the Hillcrest Campus. Therefore, direct and indirect impacts resulting from implementation of the 2019 LRDP EIR would be less than significant, and no mitigation was required.

6.2 Consistency Evaluation

Analysis of potential wildlife corridors or nursery sites direct and indirect impacts from the project is below.

Direct and Indirect Impacts

Consistent with the 2019 LRDP EIR, the project would occur primarily within an already developed setting that does not currently function as a wildlife corridor or wildlife nursery site. The areas in the HMCR project survey area only provide live-in habitat for wildlife and are not corridors or nursery sites that connect to larger regional wildlife corridors. Separation from other wildlife habitats is created currently by the presence of nearby State Route 163, I-8, I-5, and surrounding developed areas, consistent with the 2019 LRDP findings. Therefore, consistent with the 2019 LRDP EIR, impacts to wildlife corridors and nursery sites would be less than significant, and no mitigation is required.

7.0 Issue 6: Local Policies and Ordinances

Based on Appendix G of the CEQA Guidelines, implementation of the 2019 LRDP would have a significant impact if it resulted in a conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.

7.1 Summary of 2019 Long Range Development Plan Environmental Impact Report Impacts

Impacts from conflicts with local policies or ordinances as a result of 2019 LRDP implementation were assessed based on a database review conducted prior to biological resources surveys conducted in 2017 and 2018 (UC San Diego 2019; Harris & Associates 2019). The 2019 LRDP would not result in conflicts with local policies or ordinances that protect biological resources on the Hillcrest Campus.

Impacts

UC San Diego is a part of the University of California (UC), a constitutionally created unit of the State of California. As a state entity, the UC is not subject to municipal plans, policies, and regulations, such as county and city General Plans or local policies or ordinances. During preparation of the 2019 LRDP EIR, UC San Diego voluntarily reviewed the proposed 2019 LRDP for consistency with local policies or ordinances found in the City's Land Development Code (2018), including the Environmentally Sensitive Lands regulations and the City's Biology Guidelines (2018), and determined that no local policy or ordinance conflicts would arise with implementation of the 2019 LRDP.

Therefore, no significant impacts from conflict with local policies or ordinances protecting biological resources would occur, and no mitigation was required.

7.2 Consistency Evaluation

Analysis of project impacts from conflicts with local policies and ordinances protecting biological resources is below.

Impacts

Consistent with the 2019 LRDP, the HMCR project is being carried out by the UC and, therefore, is not subject to municipal plans, policies, and regulations, such as county and city General Plans or local policies or ordinances, protecting biological resources due to the UC's constitutional autonomy. Therefore, consistent with the 2019 LRDP EIR, impacts from conflicts with local policies or ordinances protecting biological resources would be less than significant, and no mitigation is required.

8.0 Issue 7: Regional Conservation Planning

Based on Appendix G of the CEQA Guidelines, implementation of the 2019 LRDP would have a significant impact if it resulted in a conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state Habitat Conservation Plan.

8.1 Summary of 2019 Long Range Development Plan Environmental Impact Report Impacts

Impacts from conflicts with regional conservation planning from 2019 LRDP implementation were assessed based on a database review performed prior to biological resources surveys conducted in 2017 and 2018 (UC San Diego 2019; Harris & Associates 2019). Implementation of the 2019 LRDP would not conflict with regional conservation planning.

Impacts

In the 2019 LRDP EIR, it was disclosed that the Hillcrest Campus is not included in the City's Multiple Species Conservation Program (MSCP) Subarea Plan and that UC San Diego is not an enrolled agency in the Natural Community Conservation Planning Program. Therefore, the City's MSCP Subarea Plan is not applicable to UC San Diego-owned property. However, the City's MSCP Subarea Plan was taken into account during preparation of the 2019 LRDP biological resources analysis due to its applicability to the surrounding region. Preserve areas designated by the City's MSCP Subarea Plan are referred to as the Multiple Habitat Planning Area (MHPA) and occur north and west of the Hillcrest Campus. A portion of the City's MHPA is mapped within the undeveloped canyon areas on the Hillcrest Campus. At the time that the 2019 LRDP EIR was drafted, UC San Diego planned to pursue an MHPA map revision with the City to remove the MHPA mapping in this area because UC San Diego is not a signatory to the MSCP and the MHPA was mapped on UC property.

The 2019 LRDP was determined to not result in a significant impact from conflicts with regional conservation planning. Therefore, no significant impacts from conflict with regional conservation planning would occur, and no mitigation was required. Where appropriate, UC San Diego's analysis of biological resources impacts reflected many of the standards established by the MSCP Subarea Plan, including species and vegetation community sensitivities and mitigation ratios.

8.2 Consistency Evaluation

Analysis of project impacts from conflicts with regional conservation planning is below.

Table 6 HMCR project Impacts within MHPA					
	Impacts (acres)				
Vegetation Community	Permanent	Temporary	Temporary and Fuel Management Zone 2	**All Impacts (Permanent and Temporary)**	Fuel Management Zone 2 (Selective Thinning Only)
Riparian/Wetland					
Non-Native Riparian[2]	--	--	--	--	--
Southern Willow Scrub - Disturbed[1]	--	--	--	--	--
Subtotal[4]	--	--	--	--	--
Upland					
Coastal Sage Scrub[1]	--	--	--	--	--
Coastal Sage Scrub - Disturbed[1]	--	--	--	--	--
Disturbed Habitat[3]	--	--	--	--	--
Eucalyptus Woodland[3]	0.44	0.02	0.06	**0.52**	0.07
Non-Native Woodland[3]	--	--			
Southern Mixed Chaparral[3]	0.04	0.00	0.05	**0.09**	0.25
Southern Mixed Chaparral - Disturbed[3]	--	--	--	--	--
Subtotal[4]	0.47	0.02	0.11	**0.61**	0.32
Urban/Developed[3]	0.02	--	--	**0.02**	0.01
Urban/Developed - Revegetation Area[3]	0.01	--	<0.01	**0.01**	<0.01
Subtotal	*0.03*	--	*<0.01*	***0.03***	0.01
GRAND TOTAL[4]	**0.50**	**0.02**	**0.11**	**0.64**	**0.33**

SOURCES: Holland 1986; Oberbauer et al. 2008.
[1] Considered a sensitive vegetation community.
[2] Potentially sensitive resource.
[3] Non-sensitive vegetation or land cover.
[4] Totals do not sum due to rounding.

Impacts

As a State of California entity, UC San Diego is not an enrolled agency in the Natural Community Conservation Planning Program. Therefore, the MSCP Subarea Plan, Natural Community Conservation Planning Program, or other regional conservation plans are not applicable to UC San Diego-owned property. The HMCR project would result in approximately 0.09 acres of impact to native vegetation (i.e., southern mixed chaparral) within the MHPA (Table 4) and would not preclude implementation of the MSCP or assembly of the MHPA within the City of San Diego. Therefore, consistent with the 2019 LRDP EIR, impacts from conflicts with regional conservation planning would be less than significant, and no mitigation is required.

9.0 Summary of Biological Resources Impacts

Impacts related to biological resources from implementation of the project are consistent with those identified in the 2019 LRDP EIR. The project is not expected to include any components that would result in new significant impacts to biological resources that were not previously addressed in the 2019 LRDP EIR, as summarized below:

- Consistent with the 2019 LRDP EIR, UC San Diego has already implemented the following 2019 LRDP EIR Mitigation Measures for the HMCR project: BIO-1A, BIO-2A, and BIO-3A.

- The following 2019 LRDP EIR Mitigation Measures do not apply to the HMCR project: BIO-1B, 1C, 1D, 2B, 3B, 3C, 3D, and 3E.

- The following 2019 LRDP EIR Mitigation Measures will be implemented during construction for the HMCR project: BIO-2C, BIO-2D, and BIO-3F through BIO-3O.

- New Mitigation Measure BIO-2E will be implemented to ensuring potential impacts on Crotch's bumble bee remain less than significant.

With implementation of the 2019 LRDP EIR Mitigation Measures and the new Mitigation Measure BIO-2E, the HMCR project would result in either no impacts or less than significant impacts to sensitive plant and animal species, sensitive natural communities, and jurisdictional aquatic resources. Project impacts to wildlife movement corridors and nursery sites, approved local policies and ordinances, and regional Habitat Conservation Plans would remain less than significant, consistent with the 2019 LRDP EIR. Because no new direct or increased impacts would occur, the project would not result in any new or increased contributions to cumulative impacts. Therefore, the project would not result in any new significant environmental effects or a substantial increase in the severity of previously identified significant effects related to biological resources.

Sincerely,

Makela Mangrich

Makela Mangrich
Senior Project Manager

MNM/dcs

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Attachment 1
Plant Species Observed

Attachment 1 Plant Species Observed				
Major Plant Group	Family	Scientific Name	Common Name	Origin
Leptosporangiate Ferns	Polypodiaceae / Polypody Family	*Polypodium californicum*	California polypody	N
Conifers	Pinaceae / Pine Family	*Pinus sp.*	pine	N/I
Angiosperms: Monocots	Agavaceae / Agave Family	*Hesperoyucca whipplei [=Yucca whipplei]*	chaparral candle	N
Angiosperms: Monocots	Arecaceae / Palm Family	*Syagrus romanzoffiana*	queen palm	I
Angiosperms: Monocots	Poaceae (Gramineae) / Grass Family	*Bromus diandrus*	ripgut grass	I
Angiosperms: Monocots	Poaceae (Gramineae) / Grass Family	*Cortaderia selloana*	pampas grass	I
Angiosperms: Monocots	Poaceae (Gramineae) / Grass Family	*Festuca perennis [=Lolium multiflorum and Lolium perenne]*	rye grass	I
Angiosperms: Monocots	Poaceae (Gramineae) / Grass Family	*Stipa miliacea var. miliacea [=Piptatherum miliaceum ssp. miliaceum and Oryzopsis miliacea]*	smilo grass	I
Angiosperms: Eudicots	Anacardiaceae / Sumac or Cashew Family	*Malosma laurina*	laurel sumac	N
Angiosperms: Eudicots	Anacardiaceae / Sumac or Cashew Family	*Rhus integrifolia*	lemonade berry	N
Angiosperms: Eudicots	Anacardiaceae / Sumac or Cashew Family	*Schinus terebinthifolia*	Brazilian pepper tree	I
Angiosperms: Eudicots	Anacardiaceae / Sumac or Cashew Family	*Toxicodendron diversilobum*	western poison oak	N
Angiosperms: Eudicots	Apocynaceae / Dogbane Family	*Carissa macrocarpa*	amatungulu, natal plum	I
Angiosperms: Eudicots	Asteraceae / Sunflower Family	*Artemisia californica*	California sagebrush	N
Angiosperms: Eudicots	Asteraceae / Sunflower Family	*Carduus pycnocephalus*	Italian thistle	I

Attachment 1 Plant Species Observed				
Major Plant Group	Family	Scientific Name	Common Name	Origin
Angiosperms: Eudicots	Asteraceae / Sunflower Family	*Encelia californica*	California encelia	N
Angiosperms: Eudicots	Asteraceae / Sunflower Family	*Erigeron canadensis [=Conyza canadensis]*	horseweed	N
Angiosperms: Eudicots	Asteraceae / Sunflower Family	*Lactuca serriola*	prickly lettuce	I
Angiosperms: Eudicots	Asteraceae / Sunflower Family	*Lasthenia californica*	goldfields	N
Angiosperms: Eudicots	Cactaceae / Cactus Family	*Opuntia littoralis*	coast prickly-pear, shore cactus	N
Angiosperms: Eudicots	Ericaceae / Heath Family	*Xylococcus bicolor*	mission manzanita	N
Angiosperms: Eudicots	Euphorbiaceae / Spurge Family	*Ricinus communis*	castor bean	I
Angiosperms: Eudicots	Fabaceae (Leguminosae) / Legume Family	*Acacia cyclops*	western coastal wattle	I
Angiosperms: Eudicots	Fabaceae (Leguminosae) / Legume Family	*Melilotus indicus*	sourclover	I
Angiosperms: Eudicots	Lamiaceae / Mint Family	*Salvia mellifera*	black sage	N
Angiosperms: Eudicots	Lamiaceae / Mint Family	*Salvia sp.*	ornamental sage	I/N
Angiosperms: Eudicots	Malvaceae / Mallow Family	*Malva parviflora*	cheeseweed, little mallow	I
Angiosperms: Eudicots	Myrtaceae / Myrtle Family	*Eucalyptus camaldulensis*	red gum, river red gum	I
Angiosperms: Eudicots	Myrtaceae / Myrtle Family	*Eucalyptus globulus*	blue gum	I
Angiosperms: Eudicots	Onagraceae / Evening-Primrose Family	*Camissoniopsis cheiranthifolia*	beach evening-primrose	N

Attachment 1 Plant Species Observed				
Major Plant Group	Family	Scientific Name	Common Name	Origin
Angiosperms: Eudicots	Oxalidaceae / Oxalis Family	*Oxalis pes-caprae*	Bermuda buttercup	I
Angiosperms: Eudicots	Papaveraceae / Poppy Family	*Eschscholzia californica*	California poppy	N
Angiosperms: Eudicots	Polygonaceae / Buckwheat Family	*Eriogonum fasciculatum var. fasciculatum*	coast California buckwheat	N
Angiosperms: Eudicots	Rhamnaceae / Buckthorn Family	*Rhamnus crocea*	spiny redberry	N
Angiosperms: Eudicots	Rosaceae / Rose Family	*Cotoneaster pannosus*	silverleaf cotoneaster	I
Angiosperms: Eudicots	Rosaceae / Rose Family	*Heteromeles arbutifolia*	toyon, Christmas berry	N
Angiosperms: Eudicots	Salicaceae / Willow Family	*Salix lasiolepis*	arroyo willow	N
Angiosperms: Eudicots	Simmondsiaceae / Jojoba Family	*Simmondsia chinensis*	jojoba, goatnut	N
Angiosperms: Eudicots	Solanaceae / Nightshade Family	*Nicotiana glauca*	tree tobacco	I
Angiosperms: Eudicots	Tamaricaceae / Tamarisk Family	*Tamarix ramosissima*	saltcedar	I
Angiosperms: Eudicots	Tropaeolaceae / Nasturtium Family	*Tropaeolum majus*	garden nasturtium	I
ORIGIN N =Native to locality I = Introduced species from outside locality				

Attachment 2

2025–2026 CAGN Post Survey Report

RECON

An Employee-Owned Company

March 4, 2026

Ms. Jess Sattler
U.S. Fish and Wildlife Service
Carlsbad Field Office
2177 Salk Avenue, Suite 250
Carlsbad, CA 92008

Reference: 2025/2026 Protocol Survey Results for the Coastal California Gnatcatcher for the University of California San Diego Hillcrest Medical Center Renewal Project, San Diego County, California (Recovery Permit ES-797665-11.1; RECON Number 10496.3)

Dear Ms. Sattler:

This letter is to notify the U.S. Fish and Wildlife Service (USFWS) of the results of our focused surveys for the federally listed threatened coastal California gnatcatcher (*Polioptila californica californica*) conducted for the University of California, San Diego Hillcrest Medical Center Renewal Project (project). The project site is located in the City of San Diego, immediately west of State Route 163 and south of Interstate 8 (Figure 1). The project site is found on the U.S. Geological Survey (USGS) 7.5-minute topographical map series, La Jolla quadrangle within Pueblo Lands of San Diego Land Grant (USGS 1996; Figure 2). The 9.20-acre project site is located on thirteen parcels (assessor parcel numbers 444-110-24, 444-301-01, 444-301-02, 444-301-03, 444-301-04, 444-301-08, 444-302-01, 444-302-03, 444-302-04, 444-302-05, 444-302-06, 444-311-10, and 444-311-12) and is generally bounded by developed areas to the east and south and existing Hillcrest Campus buildings to the west. Undeveloped, steep-sloped canyons occur to the north and past the existing development to the west (Figure 3).

Methods

RECON Environmental, Inc. (RECON) biologist Alex Fromer conducted nine focused surveys for coastal California gnatcatcher in November 2025, December 2025, January 2026, February 2026 and March 2026 (Table 1) under USFWS permit number TE-797665. Before the surveys were conducted, a pre-survey notification letter dated October 31, 2025, was submitted via email to the USFWS stating the intent to conduct surveys. In accordance with the USFWS presence/absence survey protocol for this species (USFWS 1997), the surveys were focused within approximately 5.82 acres of potentially suitable Diegan coastal sage scrub, disturbed Diegan coastal sage scrub, and southern mixed chaparral habitat within the project site and surrounding 500-foot buffer (see Figure 3).

Survey dates, personnel, times, and weather conditions are provided in Table 1. In accordance with survey guidelines (USFWS 1997), nine surveys are to be conducted at least one week apart. Surveys were not conducted in high heat, wind, rain, fog, or other inclement weather. The RECON permitted biologist walked all portions of suitable habitat and periodically used recorded vocalizations in an attempt to elicit initial calls. Recorded vocalizations were not used in the vicinity of predators such as California scrub-jay (*Aphelocoma californica*), Cooper's hawk (*Astur cooperii*), or northern mockingbird (*Mimus polyglottos polyglottos*). All bird species observed during the surveys were noted.

Table 1
Survey Dates, Personnel, Times, and Conditions

Date	Surveyor	Beginning Conditions	Ending Conditions	Survey Number	Acres Surveyed per Hour
11/19/2025	Alex Fromer	7:00 a.m.; 51°F; winds 0–1 mph; 0% cloud cover	9:15 a.m.; 54°F; winds 0–1 mph; 0% cloud cover	1	2.59
12/3/2025	Alex Fromer	9:00 a.m.; 62°F; winds 0–2 mph; 50% cloud cover	11:30 a.m.; 71°F; winds 0–2 mph; 65% cloud cover	2	2.33
12/17/2025	Alex Fromer	8:45 a.m.; 57°F; winds 0–1 mph; 100% cloud cover (foggy)	11:30 a.m.; 65°F; winds 0–1 mph; <10% cloud cover	3	2.12
12/31/2025	Alex Fromer	8:30 a.m.; 71°F; winds 1–2 mph; 100% cloud cover	10:45 a.m.; 72°F; winds 2–3 mph; 100% cloud cover	4	2.59
1/16/2026	Alex Fromer	9:30 a.m.; 61°F; winds 1–3 mph; 0% cloud cover	11:45 a.m.; 69°F; winds 0–1 mph; 0% cloud cover	5	2.59
2/3/2026	Alex Fromer	9:45 a.m.; 67°F; winds 0–1 mph; 0% cloud cover	12:00 a.m.; 70°F; winds 1–2 mph; 0% cloud cover	6	2.59
2/17/2026	Alex Fromer	--	--	7	--
3/3/2026	Alex Fromer	--	--	8	--
3/17/2026	Alex Fromer	--	--	9	--

°F = degrees Fahrenheit; mph = miles per hour; % = percent

Exisiting Conditions

A total of 5.82 acres were identified as potentially suitable habitat for the coastal California gnatcatcher and are herein referred to as the survey area. Survey efforts were focused on these areas (see Figure 3). Suitable vegetation communities within the survey area include Diegan coastal sage scrub, disturbed Diegan coastal sage scrub, and southern mixed chaparral. These vegetation communities are characterized by low to dense native shrub cover, with suitable host shrubs for nesting. Vegetation communities and land cover types that were excluded from the survey area include urban/developed, urban/developed revegetation area, disturbed habitat, eucalyptus woodland, non-native riparian, disturbed southern mixed chaparral, and disturbed southern willow scrub due to lack of suitable shrub cover to support coastal California gnatcatcher (see Figure 3). Critical habitat for coastal California gnatcatcher does not occur within the survey area (USFWS 2007).

Diegan coastal sage scrub occurs in the northern portion of the 500-foot buffer. This vegetation community is generally high in quality and is dominated by common sage scrub species, including California sagebrush (*Artemisia californica*), coast California buckwheat (*Eriogonum fasciculatum* var. *fasciculatum*), lemonade berry (*Rhus integrifolia*), and laurel sumac (*Malosma laurina*). Disturbed Diegan coastal sage scrub occurs in in the eastern portion of the 500-foot buffer. This vegetation community occurs adjacent to urban areas and is defined by a lower absolute cover of native shrubs, a higher absolute cover of bare ground, and signs of human-caused disturbance, including trash

and informal trails. Southern mixed chaparral occurs throughout the northern and western portions of the survey area. This vegetation community is dominated by lemonade berry, laurel sumac, and toyon (*Heteromeles arbutifolia*), with interspersed occurrences of Mission manzanita (*Xylococcus bicolor*). Shrubs in this vegetation community are generally tall, with most shrubs exceeding a height of 10 feet, and vegetation is very dense (usually more than 75 percent absolute cover).

Results

No coastal California gnatcatchers were detected during the 2025/2026 protocol surveys. However, one special-status species, western bluebird (*Sialia mexicana*), a City of San Diego Multiple Species Conservation Program-covered species, was detected during the surveys (see Figure 3).

If you have any questions concerning the contents of this results letter, please contact me by email or phone at afromer@reconenvironmental.com or (619) 308-9333 extension 193.

Sincerely,

Alex Fromer
Biologist

APF:dcs

Reference Cited

U.S. Fish and Wildlife Service (USFWS)

1997 Coastal California Gnatcatcher (*Polioptila californica californica*) Presence/Absence Survey Protocol.

2007 Endangered and Threatened Wildlife and Plants; Revised Designation of Critical Habitat for the Coastal California Gnatcatcher *(Polioptila californica californica). Federal Register 72* (242): 72010–72213. December.

U.S. Geological Survey (USGS)

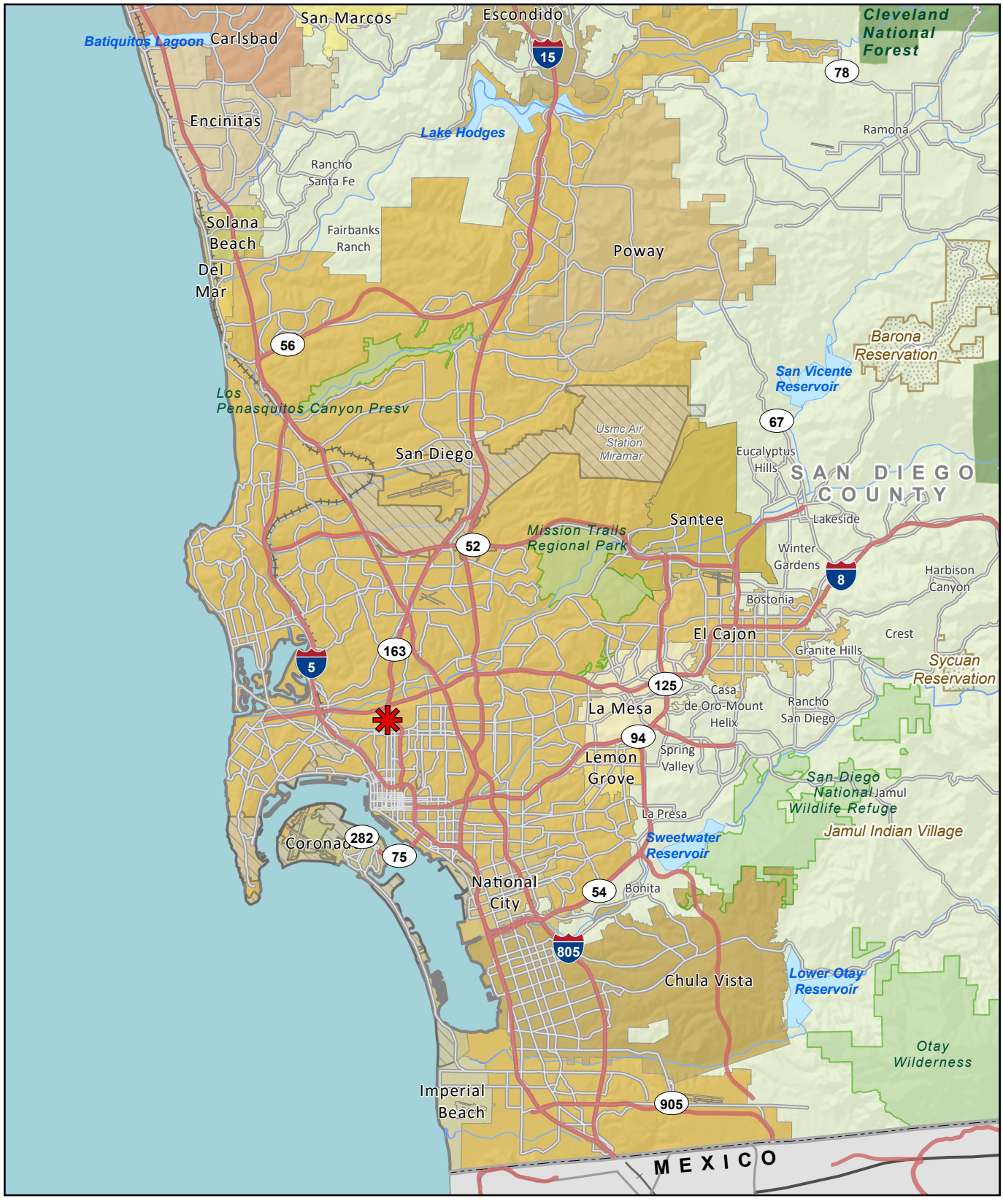
1996 7.5 Minute Topographic Map Series La Jolla Quadrangle, Pueblo Lands of San Diego Land Grant.

Certification

I certify that the information in this survey report and attached exhibits fully and accurately represents my work.

Alex Fromer
Permit Number TE-797665

February 19, 2026
Date



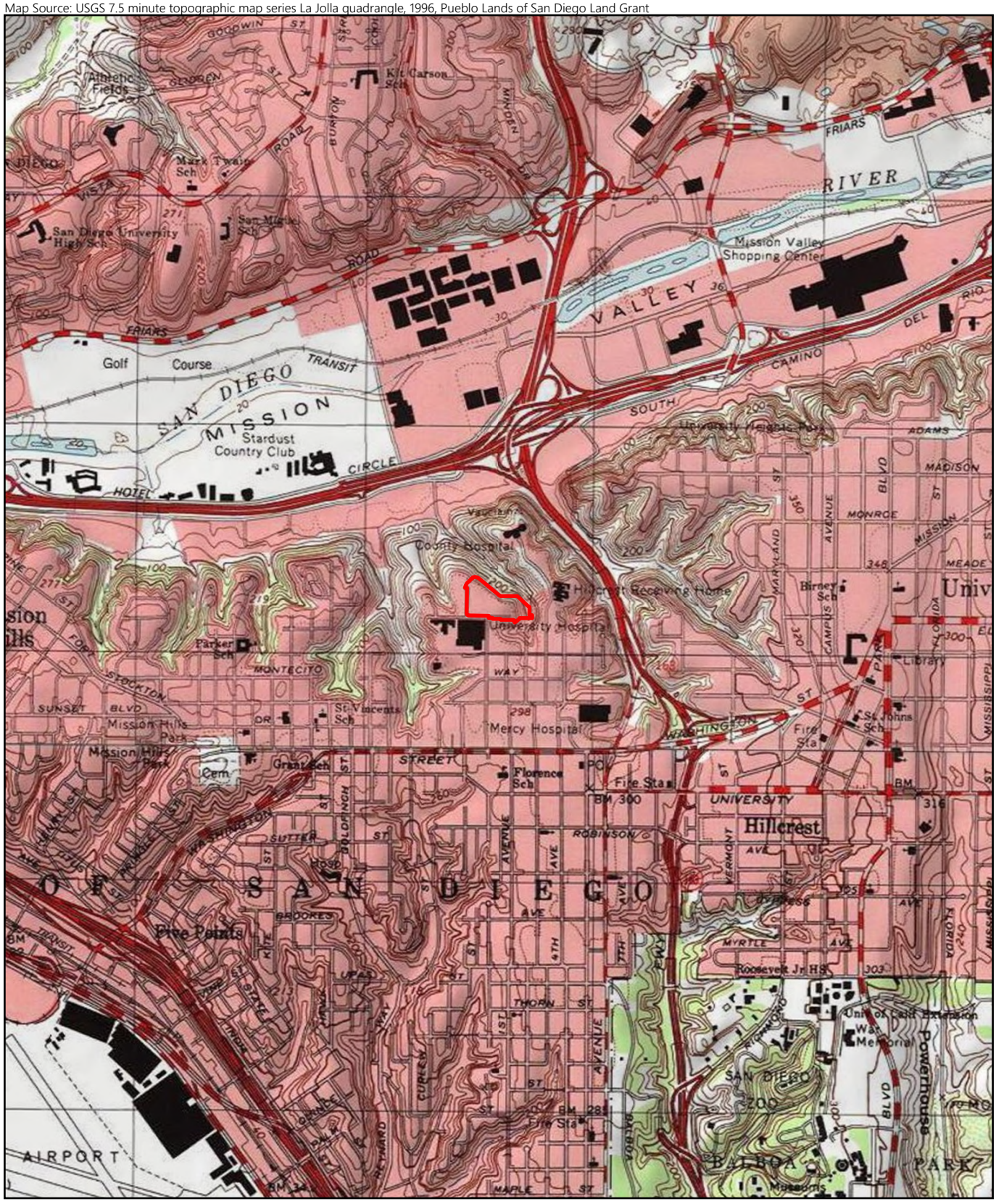
Project Location

RECON

M:\JOBS6\10496.3\common_gis\PRO\standard_figures\standardfigures.aprx 10/30/2025 FMM

FIGURE 1
Regional Location

Map Source: USGS 7.5 minute topographic map series La Jolla quadrangle, 1996, Pueblo Lands of San Diego Land Grant



Project Boundary

RECON

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FIGURE 2
Project Location on USGS Map

Image Source: Nearmap (flown September 2025)



Project Boundary
300-ft Buffer
Coastal California Gnatcatcher Survey Area

Sensitive Wildlife Observation

Western Bluebird (*Sialia mexicana*)

Vegetation Communities

Diegan Coastal Sage Scrub
Disturbed Diegan Coastal Sage Scrub
Disturbed Habitat
Eucalyptus Woodland
Non-Native Riparian
Non-Native Woodland
Southern Mixed Chaparral
Disturbed Southern Mixed Chaparral
Disturbed Southern Willow Scrub
Urban/Developed
Urban/Developed - Revegetation Area

0 Feet 150

RECON

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FIGURE 3
Coastal California Gnatcatcher Survey Area

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Appendix D CEQA Hydrology and Stormwater Quality Memorandum

5551 UC San Diego Hillcrest Medical Center Renewal

Latitude 33 Project #: 2000.0
UC San Diego Project #: 5551

CEQA Hydrology & Stormwater Quality Memorandum

April 17th, 2026

Latitude 33 Planning and Engineering

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SECTION 1 – INTRODUCTION

1.1 Purpose

The purpose of this drainage and stormwater quality memorandum is to provide a preliminary hydrologic and storm water quality assessment of the UC San Diego 5551 Hillcrest Medical Center Renewal (HMCR) Project in support of CEQA documentation. The project is approximately halfway through schematic design, with many design elements essential to drainage and stormwater quality yet to be designed. This memorandum should be considered preliminary and used as a guide for the how the project can progress in order to satisfy the different hydrologic, hydraulic, and stormwater quality requirements.

This report utilizes the modified rational method outlined in the County of San Diego Hydrology Manual (2003) to analyze the existing and proposed hydrologic conditions for the project. Requirements of the UC San Diego Storm Water Management Program – created and adopted by UC San Diego as part of their compliance with the MS4 Phase II Non-Traditional Permit (discussed below) – are reviewed based on the preliminary hydrologic analysis of the site. Initial recommendations on storm drain improvements, water quality treatment devices, and storm water detention and storage will be provided for the proposed condition of the project site based on the project's design progress to date.

1.2 Scope

The scope of this memorandum includes the following elements:

- Review existing and proposed flow rates for the HMCR Project.
- Review existing/proposed land uses within the Bachman Place Widening Project.
- Determine existing/proposed hydrologic conditions for the HMCR Project.
- Identify potential drainage and storm water quality mitigation measures for the HMCR Project.
- Identify potential post-construction BMP's needed for compliance with legislation/programs that govern the UC San Diego Hillcrest Medical Campus.

1.3 Project Description

The Hillcrest Medical Campus comprises an area of approximately 75.3 acres (0.12 square miles) that lies entirely outside of a FEMA defined floodplain. The Hillcrest Medical Center Renewal Project will build a replacement hospital building, supporting central utility plant (CUP) building, new site utility infrastructure, loading dock, vehicle and pedestrian circulation routes, and various receiving areas for patient drop off. The project is bounded on the south east by the existing McGrath Outpatient CUP, loading dock, and Pavilion, to the southwest by

Dickinson Street, to the west by the existing central plant access road, and to the north by steep, naturally vegetated canyon slopes.

See **Figure 1** for the project vicinity map and **Figure 2** for the project limits.

Figure 1 – Vicinity Map

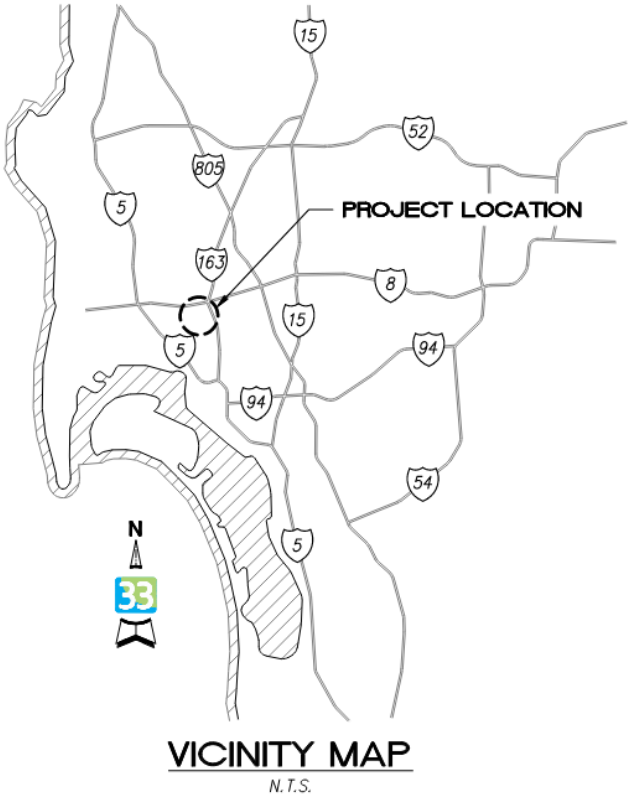
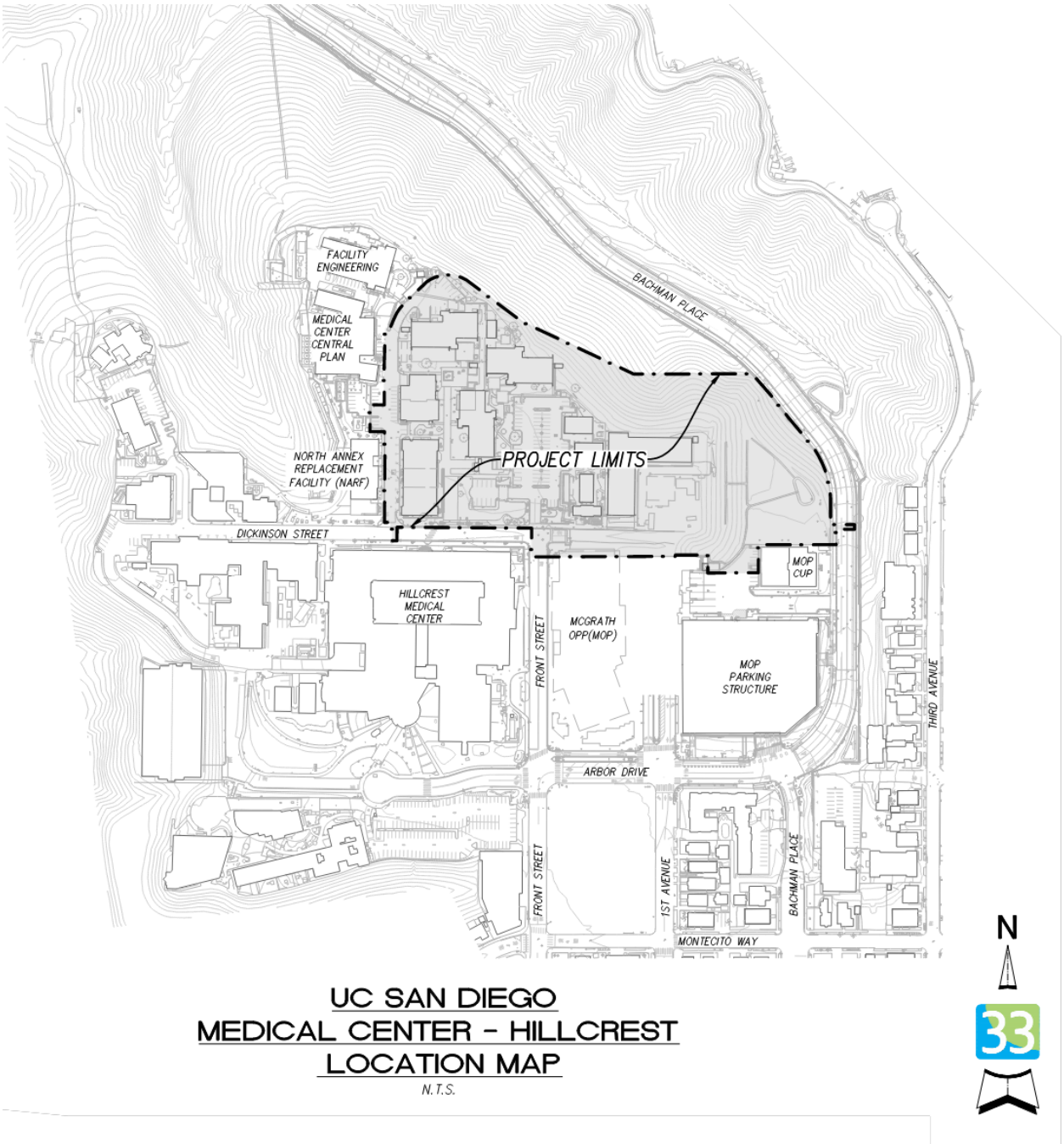


Figure 2 – Project Limits



SECTION 2 – EXECUTIVE SUMMARY

The Hillcrest Medical Center Renewal Project will build a replacement hospital building, supporting central utility plant (CUP) building, new site utility infrastructure, loading dock, vehicle and pedestrian circulation routes, and various receiving areas for patient drop off. Within the project footprint, the proposed condition will alter existing drainage patterns. Whereas most of the drainage currently discharges into the canyon slopes north of the mesa, the HMCR project will redirect the majority of its drainage east and discharge into Bachman Place storm drain infrastructure. Nevertheless, overall campus drainage patterns will remain unchanged. All flows from the project will continue northwest within the existing drainage channel north and parallel to Bachman Place, discharging into City of San Diego storm drain infrastructure at the north end of the campus boundary.

The redirection of drainage within the project footprint will cause the (unmitigated) peak-flow runoff to increase at the project boundary. Therefore, the project will require the installation of stormwater detention facilities that maintain the peak runoff at the pre-project rate for the 10-year, 6-hour storm event in the post-construction condition.

Finally, due to substantial site constraints, this memorandum recommends the use of compact, underground bio-filtration devices to treat the required flow rates. These devices remove pollutants and sedimentation from storm water runoff and meet or exceed all City of San Diego and UC San Diego requirements for post-construction BMP design. Furthermore, these devices are TAPE certified and would therefore remove the 303(d) impairment of indicator bacteria for the San Diego River watershed.

SECTION 3 – PERFORMANCE CRITERIA

3.1 Design Guideline Selection

The UCSD 5551 Hillcrest Medical Center Renewal (HMCR) Project satisfies several of the conditions listed in the UCSD Design Guidelines (see 2.01.H) that require a drainage study according to the latest version of the San Diego Hydrology Manual and Hydraulic Design Manual, respectively.

3.2 Design Storm Frequency

The County Hydrology manual states that “the flood frequency for determining the design storm discharge is 50 years for drainage that is upstream of any major roadway” and that the “50-year storm flows shall be contained within the pipe and not encroach into the travel lane.” In the event of a 100-year storm, overflow is considered acceptable if contained within the street and gutters. Furthermore, UC San Diego Design Guidelines require all projects that increase impervious area

in excess of 10,000 sq. ft. to maintain the peak runoff at the pre-project rate for the 10-year, 6-hour storm event in the post-construction condition.

3.3 Hydrologic Design Method

For watershed areas up to 1 square mile, the County Hydrology Manual recommends the Rational Method be used to calculate the peak rate of runoff (Q) at any given location in a watershed. This is computed using the drainage area (A), the runoff coefficient (C), and rainfall intensity (I) for a duration equal to the time of the concentration (Tc).

$$Q = C * I * A$$

Runoff coefficient (C) is a function of land use and soil type and has been assumed to 0.90 based on Soil Type D and General Commercial/Industrial land use (see Table 3-1 in the County Hydrology Manual).

Rainfall intensity (I) can be calculated using the following equation:

$$I = 7.44 * P^{6} * D^{-0.645}$$

Where: P_6 = adjusted 6-hour storm rainfall amount (see discussion below)
D = duration in minutes (use Tc)

Typically, the overall project drainage is divided into subareas by locating significant points of interest based on topography, soil type, and land use. Given the preliminary nature of the project's design, the worst case value for time of concentration (Tc) has been assumed, namely, 5 minutes. This value may be refined in the future to better align with the project's design.

Table 1 summarizes the project's criteria for Hydrologic modeling using the Rational Method:

Table 1		
Hydrologic Criteria		
Runoff Coefficient (C)	Based on Land Use and Soil Type	0.90
Land Use	General Commercial/Industrial	
Hydrologic Soil Type:	Soil Type D	
Rainfall Intensity (I):	Based on Storm Event	
10 Year Event	UC San Diego Flowrate Mitigation	4.48
50 Year Event	County of San Diego Underground Routing	5.53
100 Year Event	County of San Diego Streets/Gutters	6.72

3.4 Hydraulic Design Method

In accordance with UCSD Design Guidelines, stormwater drainage and flood management facilities shall adhere to the criteria set forth in the latest edition of the San Diego County Hydraulic Design Manual. These facilities include roadway drainage (streets and gutters), inlets, underground storm drain, open channels, storm water treatment, and detention basins. Roadway drainage and inlet design are critical components of a stormwater drainage system, as the surface drainage system must be consistent with the capacity of the storm conveyance system immediately downstream. Roadway cross-sections must have the capacity to convey the peak discharge from a 50-year design event, within constraints on flow width, depth, and velocity.

Storm drain capacity analysis shall account for changes in flow conditions (open channel versus pressure flow) in the hydraulic grade line (HGL) calculations. The flow in a conduit operating as an open channel can be evaluated numerically using the Uniform Flow Equation. Underground storm conduits shall be designed to convey the design flow with the hydraulic grade line (HGL) maintaining a minimum freeboard of 1.0 ft below the ground surface or gutter flow line during the design event. The minimum pipe gradient shall be 0.5 percent grade or the pipe shall have a minimum velocity of four feet per second (fps) with the pipe flowing one quarter full.

SECTION 4 – EXISTING CONDITION ASSESSMENT

4.1 Existing Condition Hydrologic Summary – Rational Method

The greater UC San Diego Hillcrest Medical Campus comprises an area of approximately 75.3 acres (0.12 square miles). In the existing condition, the overall Hillcrest Campus generally drains into three distinct drainage discharge points. The western portion of the campus discharges to the canyon west of the existing Arbor Parking Structure, ultimately discharging towards the Legacy Center in Mission Valley. A small, southern portion of campus discharges into public City of San Diego streets via Front Street (public) and Montecito Way (public). The eastern portion of the campus discharges into an existing concrete swale located north of Bachman Place that connects to an existing City of San Diego 48” RCP storm drain at its northern terminus (labeled POC to City Storm Drain in **Figure 3**).

Because the eastern drainage basin includes the HMCR project area, it shall be described in greater detail below. This basin can be roughly divided into three major sub-basins: northwestern, southern, and northeastern. The northwestern third includes all the buildings north of Dickinson Street (private) and east of the existing central plant access road (Bannister House, MRI Research, MRI, MPF, Bunker, NARF, ECUP, and FE), which collect within a canyon drainage that routes north and beneath Bachman Place within two, 24-inch culverts. The southern third includes the existing Medical Center and greater MOP areas, including the MOP parking structure and CUP buildings, as well as offsite drainage from City of San Diego Public streets (portions of First Avenue, Montecito Way, Bachman Place, and Third Avenue) and private

properties adjacent to these streets. A portion of the HMCR project area is included within this southern drainage basin boundary. The northeastern third includes the majority of the HMCR project area, the canyon slopes to the north and outside the HMCR project boundary, Bachman Place, and the existing drainage channel north of Bachman Place.

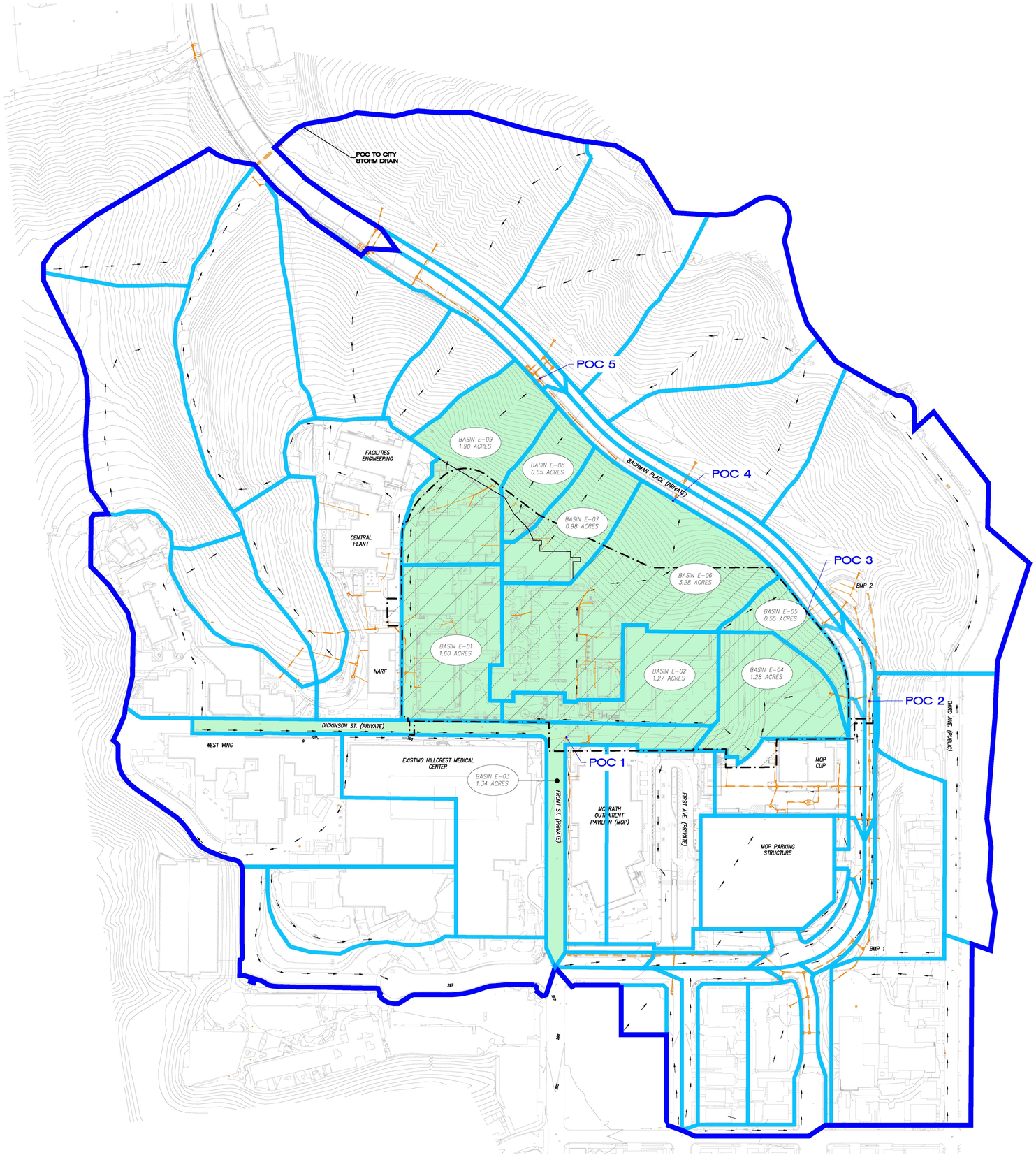
The HMCR project area itself is bound by Dickinson Street (private) and McGrath Outpatient Pavilion (MOP) to the south, the existing central plant access road on the west, steep and naturally vegetated slopes on the north, and Bachman Place (private) on the east. The land use of the site is a mix of developed streets, existing buildings, parking lots, and a naturally vegetated canyon. The area of disturbance of the HMCR project is approximately 9 acres.

Most drainage within the main project area between CTF, Medical Library, Theodore Gildred, Surgery Research Laboratory, and adjacent parking lots and modular buildings generally flows overland where it is intercepted by surface storm drain inlets and conveyed by a network of underground storm drains to outfalls in natural canyon channels. These outfalls are collected by a series of inlets on the high side of the permanent soil nail shoring walls along the southern edge of Bachman Place (private) and conveyed to the north side of the road via underground storm drain pipes. Drainage collected from the roadway itself is directed to stormwater treatment vaults within Bachman Place and discharged into the existing drainage channel running parallel to Bachman Place to the north.

The engineered fill slope east of SRL drains east into a sediment basin prior to being directed into a biofiltration basin north of the MOP CUP. Storm water along the central plant access road (private), Dickinson Street (private), and Front Street (private) is collected at sump inlets located at the intersection of these two streets, ultimately flowing south through a private 24” storm drain that routes south via Front Street and east via Arbor Drive and Bachman Place, discharging into a (second) biofiltration basin, upstream of the one previously mentioned. This basin drains into the existing drainage channel north and parallel to Bachman Place.

This existing drainage channel collects the majority of the drainage from the eastern basin of the Hillcrest Campus, and discharges to the existing 48” RCP City of San Diego storm drain that runs under the Days Inn (labeled POC to City Storm Drain in **Figure 3**).

Figure 3 shows the existing drainage condition for the Eastern Drainage Basin mentioned above, and depicts the existing storm drain infrastructure. The figure also shows the project’s relationship within the Eastern Drainage basin, and highlights the various sub-basin footprints that will be impacted by the HMCR project. Hydrological analysis has been limited to the impacted drainage sub-basins for the purposes of this report.



LEGEND

- HMCR PROJECT BOUNDARY
- EX. DRAINAGE BASIN BOUNDARY
- EX. DRAINAGE SUB-BASIN BOUNDARY
- EX. DRAINAGE BASINS AFFECTED BY HMCR PROJECT
- EX. STORM DRAIN
- EX. FLOW PATH
- BASIN ID TAG (BASIN ID / AREA (ACRES))

EXISTING PEAK FLOW RATES			
POC #	EXISTING Q10 (CFS)	EXISTING Q50 (CFS)	EXISTING Q100 (CFS)
1	16.3	20.1	24.5
2	2.9	3.6	4.3
3	1.3	1.7	2.0
4	9.5	11.7	14.2
5	9.9	12.2	14.8

N

0 40 80 160 240

(IN FEET)
1 inch = 80 ft.

latitude 33
PLANNING & ENGINEERING
10731 Treena Street, San Diego, CA 92131
Tel 858.7511.0633

UC SAN DIEGO HEALTH
HILLCREST MEDICAL CENTER REDEVELOPMENT PROJECT
200 WEST ARBOR DR.

L33 PROJECT #:	2000.00
UCSD PROJECT #:	5551
DATE:	1/15/2026
DRAWN BY:	RT
CHECKED BY:	KB

EXHIBIT

FIGURE 3 – EXISTING DRAINAGE CONDITIONS

SHEET 1

THE CONCEPTS AND DESIGNS SHOWN ON THIS PLAN SET, AS AN INSTRUMENT OF SERVICE, ARE AND SHALL REMAIN THE PROPERTY OF LATITUDE 33 PLANNING & ENGINEERING. THEY ARE NOT TO BE USED IN WHOLE OR IN PART FOR ANY PURPOSE OR PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF LATITUDE 33 PLANNING & ENGINEERING. VISUAL CONTACT WITH THESE PLANS SHALL CONSTITUTE PRIMA FACIE EVIDENCE OF ACCEPTANCE OF THESE RESTRICTIONS.

4.2 Existing Condition Modeling Results – Rational Method

The existing condition hydrology was modeled for the impacted drainage sub-basins and associated points of connection (POC). The result of this modeling is shown below in **Table 2**:

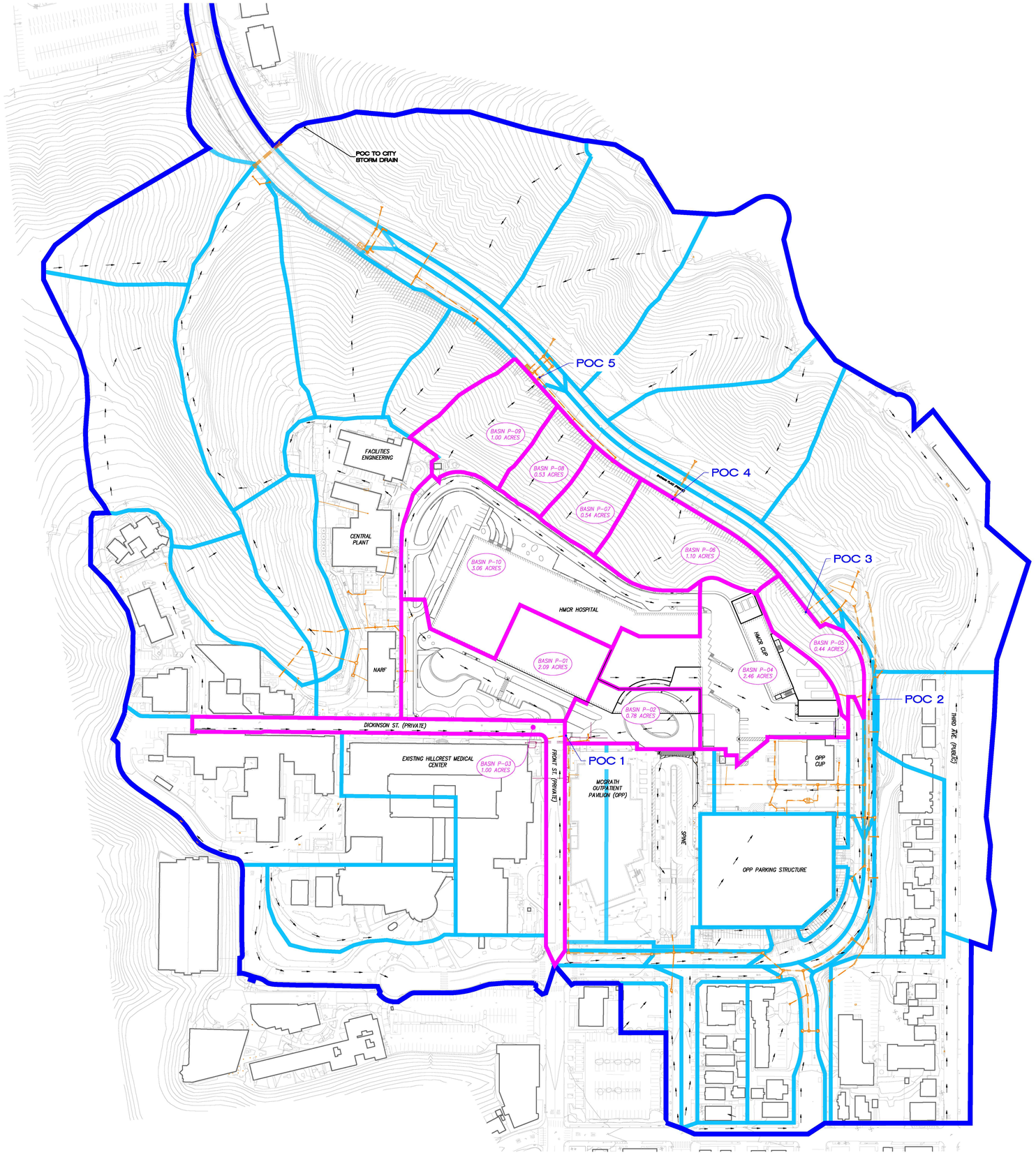
TABLE 2			
Existing Condition Hydrology Results			
P.O.C #	10 Year Event (CFS)	50 Year Event (CFS)	100 Year Event (CFS)
1	16.3	20.1	24.5
2	2.9	3.6	4.3
3	1.3	1.7	2.0
4	9.5	11.7	14.2
5	9.9	12.2	14.8

SECTION 5 – PROPOSED CONDITION ASSESSMENT

5.1 Proposed Condition Hydrologic Summary – Rational Method

Similar to the existing condition, the land use of the site in the proposed condition is a mix of streets, buildings, parking, and a naturally vegetated canyon. The Hillcrest Medical Center Renewal project includes two new buildings (hospital and central utility plant, CUP) along with the associated infrastructure to support its operations (e.g., loading duck, utility systems and yards, main entry drop off, emergency department drop off, and ambulance/custodial drop off, etc.). The required circulation for vehicular access with multiple connection points to the building demands a substantial portion of the project footprint to be paved/impervious surfaces. The project's location at the edge of the mesa introduce significant site constraints from the perspective of drainage collection, conveyance, treatment, and detention.

Figure 4 illustrates the proposed condition hydrology. The project will reduce drainage off of its southern edge that is routed to underground treatment facilities prior to discharge into the storm drain system at the Dickinson and Front Street intersection (see POC #1). Similarly, drainage to the northern slope will also be reduced (see POC's #3, #4, and #5). The majority of the project will re-direct drainage east to underground treatment and detention facilities located within the loading dock, and which discharge into existing underground storm drain located in Bachman Place (see POC #2).



LEGEND

- HMCR PROJECT BOUNDARY
- EX. DRAINAGE BASIN BOUNDARY
- EX. DRAINAGE SUB-BASIN BOUNDARY
- PROP. DRAINAGE SUB-BASIN BOUNDARY
- EX. STORM DRAIN
- EX. FLOW PATH
- BASIN ID TAG — BASIN ID / AREA (ACRES)

PROPOSED CONDITION PEAK FLOW RATES			
POC #	PROPOSED Q10 (CFS)	PROPOSED Q50 (CFS)	PROPOSED Q100 (CFS)
1	14.2	17.61	21.4
2	22.2	27.4	33.3
3	1.2	1.7	2.0
4	2.7	3.3	4.0
5	4.8	5.9	7.1

N

0 40 80 160 240

(IN FEET)
1 inch = 80 ft.

latitude 33
PLANNING & ENGINEERING
10731 Treena Street, San Diego, CA 92131
Tel 858.751.0633

UC SAN DIEGO HEALTH
HILLCREST MEDICAL CENTER REDEVELOPMENT PROJECT
200 WEST ARBOR DR.

L33 PROJECT #:	2000.00
UCSD PROJECT #:	5551
DATE:	4/17/2026
DRAWN BY:	RT
CHECKED BY:	KB

EXHIBIT

FIGURE 4 – PROPOSED DRAINAGE CONDITIONS

SHEET 1

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5.2 Proposed Condition Modeling Results – Rational Method

The proposed condition hydrology was modeled for the modified drainage sub-basins within the Eastern Drainage Basin and their associated points of connection (POC). The result of this modeling is shown below in **Table 3**:

TABLE 3			
Proposed Condition Hydrology Results			
P.O.C #	10 Year Event (CFS)	50 Year Event (CFS)	100 Year Event (CFS)
1	14.2	17.6	21.4
2	22.2	27.4	33.3
3	1.2	1.7	2.0
4	2.7	3.3	4.0
5	4.8	5.9	7.1

The proposed condition peak flow discharge decreased in the proposed condition for POC's # 1, 3, 4, and 5. For POC #2, see section 8.2 below regarding mitigation of the increased peak flow discharge.

SECTION 6 – STORMWATER QUALITY REGULATORY SETTING & PERFORMANCE CRITERIA

6.1 National Pollutant Discharge Elimination System

UC San Diego is one of ten UC campuses governed and administrated by the Regents of the University of California. As such, UC San Diego is regulated by the Federal Environmental Protection Agency (EPA) Phase II storm water regulations, the Clean Water Act (CWA) and the Small Municipal Separate Storm Sewer System's (MS4's) Order No. 2013-0001-DEG, NPDES No. CAS00004. UC San Diego adopted the revised Phase II Small MS4 General Permit as a Non-Traditional Permitee on July 1st, 2013. In response to section F of said permit, UC San Diego is required to create and maintain a Storm Water Management Program (SWMP) to govern Storm Water policy on the campus.

As part of the SWMP, design guidelines were created for all new projects on campus requiring drainage reports for any regulated project (those that create/replace 5,000 sq. ft or greater impervious area) that meet the following conditions:

- A development or redevelopment project that would result in an increase or decrease in impervious area
- A project that will install or modify an existing storm drain system

- A project that is in the Coastal Zone and will be reviewed by the Coastal Commission as determined by the University
- A project site area that is one acre or greater and SWPPP is required
- Project-level CEQA analysis is required
- A project or building that will be attaining a LEED Certification
- Projects that create or replace 2,500 sq. ft. or more of impervious area are required to follow the post-construction storm water management program as set by the UC San Diego Storm Water Management Plan and enforced by the EH&S department. These requirements are shown in **Table 4** on the next page.

Table 4 – BMP Requirements

UC San Diego Storm Water BMP Requirements for all Development Projects	
All projects that create or replace more than 2,500 sq. ft.	Complete and submit the "Post-Construction Stormwater Management Checklist" and receive project approval from UC San Diego Civil Engineers as well as Environmental Health and Safety Staff during the planning phase, Design Development Phase, and Construction Document Phase.
All projects that create or replace less than 2,500 sq. ft of impervious surface	Complete page 1 & 2 of the checklist for 2,500 SF -5,000 SF and submit for record.
All projects that create or replace between 2,500 sq. ft. and less than 5,000 sq. ft. of impervious area	Complete Post-Construction Stormwater Management Checklist for 2,500 SF to 5,000 SF. Quantify the runoff reduction using State's Post-Construction Water Balance Calculator, available at http://stormwater.ucsd.edu or request from EH&S Environmental Affair at ehsea@ucsd.edu and attach to the checklist.
All projects that create or replace 5,000 sq. ft. or more of impervious area	Classified as a regulated project. Complete in full the Post-Construction Stormwater Management Checklist for 5,000 sq. ft. or greater. Quantify "Site Design" BMPs using State's Post-Construction Water Balance Calculator and show that post-construction water balance is achieved. If balancing is not possible, see below. "Treatment Control" BMPs are only required if the Site Design BMPs above cannot fully meet Permit requirements. a) Quantify and explain in the Post-Construction Stormwater Management Checklist and include any attachments as needed. b) Design shall be based on the Flow-Based or Volume-Based criteria specified in Section F.5.g.2.b (Numeric Sizing Criteria) of the Phase II Small MS4 Permit c) Bioretention facilities are preferred, however alternative treatment BMPs can be used if proper documentation and supporting calculations prepared by a Registered Civil Engineer are provided and attached to the checklist. d) An Operations and Maintenance Plan (O&M) for each Post-Construction BMP must be included in the checklist.

6.2 UC San Diego Design Guidelines

UC San Diego Design Guidelines, dated January 31st, 2025, give specific guidelines for the creation of a Storm Water Quality Management Plan (SWQMP) for projects that create/replace over 5,000 sq. ft. of impervious area. The UC San Diego 5551 HMCR Project meets the requirements of a Regulated Project and will require submission of a SWQMP to comply with UC San Diego Guidelines, in conjunction with the stated goal of meeting the legislative requirements of the Phase II Small MS4 General Permit as a Non-Traditional Permitee.

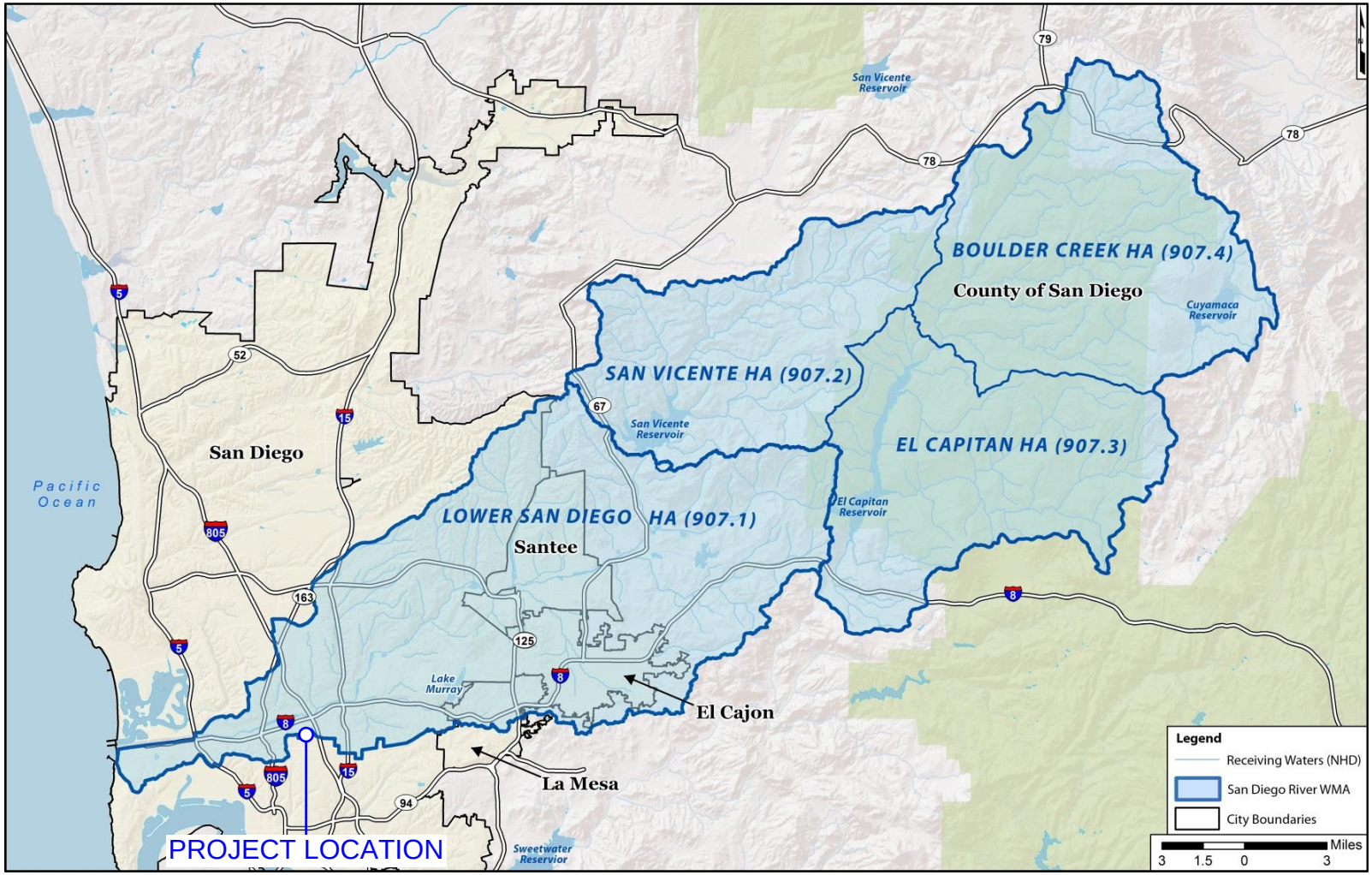
SECTION 7 – HYDROLOGIC AREA/DOWNSTREAM IMPAIRMENTS

7.1 Hydrologic Area/Downstream Receiving Water/303(d) Impairment

The UC San Diego Hillcrest campus broadly, and the HMCR project by extension, is located at the edge of the San Diego River watershed, specifically the Lower San Diego Hydrologic Area (907.1). **Figure 5** shows the location of the UC San Diego Hillcrest Project in relation to the Hydrologic Area. Since UC San Diego is a Phase II Small MS4 Non-Traditional Permitee, they are required to identify 303(d) impairments downstream of the project location for source control measures and storm water treatment. However, the Phase 1 Co-Permittee's for the Region 9 area have created a comprehensive Water Quality Improvement Plan for the San Diego River accepted by the California Regional Water Quality Control Board, titled San Diego River Watershed Management Area Water Quality Improvement Plan January 2016, submitted by the City of El Cajon, La Mesa, San Diego, Santee, County of San Diego, and Caltrans prepared by Larry Walker Associates, and amec, with modeling by Geosyntec that includes 303(d) impairments and the highest priority pollutant based on test sampling for a 2-year return period. Based on this approved 2016 San Diego River Water Quality Improvement Plan, the 303(d) Impairment/Highest Priority Pollutants for this watershed are included in the following table:

Table 5	
Highest Priority Water Quality Condition	
Watershed Area	303(d) Impairment/Highest Priority Water Quality Condition
San Diego River	Indicator Bacteria

Figure 5 - San Diego River Watershed



SECTION 8 – STORM WATER TREATMENT/HYDROMODIFICATION

8.1 Storm Water Treatment Requirements

Per the UC San Diego Design Guidelines, the UC San Diego Hillcrest Medical Center Renewal Project is a Regulated Project and is required to implement site design measures and Light Impact Design (LID) measures on-site to show compliance with the UC San Diego Storm Water Management Plan and the Phase II Small MS4 Non-Traditional Permit.

The proposed drainage condition of the HMCR project was divided into 3 distinct drainage management areas (DMAs) as shown in **Figure 6**. These areas are summarizes below in **Table 6**:

Table 6

HMCR Project DMA's

DMA	Area (Acres)	C-Value
1	4.0	0.90
2	3.1	0.90
3*	0.6	0.5
4*	1.2	0.5
5*	2.1	0.5

* Denotes a self-mitigating DMA and does not require additional Site Design Measures or LID Measures.

Due to site constraints of the Hillcrest Medical Center Renewal Project, flow-based storm water treatment devices were chosen for mitigation of any new impervious improvements. The requirement for this treatment is as follows:

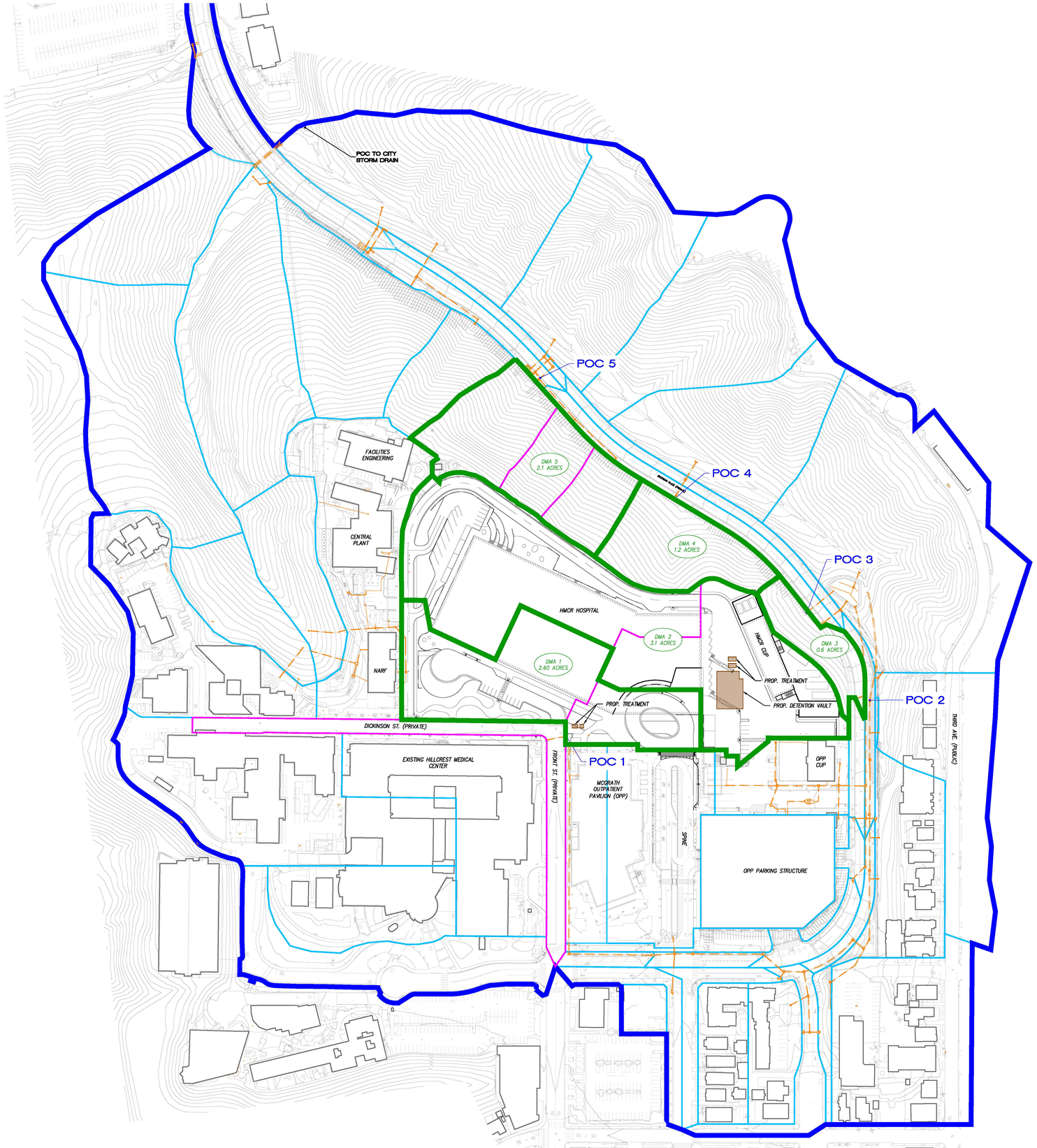
> *The flow of runoff produced from a rain event equal to at least 0.2 inches per hour intensity (Per UC San Diego Design Guidelines, Per Small Non-Traditional MS4 Permit)*

Based on this information, the following calculations were made for the non-self-mitigating DMA's within the proposed project footprint:

Table 7

DMA Areas

DMA	Area (Acres)	C-Value	Intensity (In/Hr)	Flow Rate (CFS)
1	2.6	0.90	0.20	0.468
2	3.1	0.90	0.20	0.558
			Grand Total	1.0



LEGEND

- HMCR PROJECT BOUNDARY
- EX. DRAINAGE BASIN BOUNDARY
- EX. DRAINAGE SUB-BASIN BOUNDARY
- PROP. DRAINAGE SUB-BASIN BOUNDARY
- PROP. DRAINAGE MANAGEMENT ATEA
- EX. STORM DRAIN
- EX. FLOW PATH
- BASIN ID TAG — DMA ID / AREA (ACRES)

N

0 40 80 160 240

(IN FEET)
1 inch = 80 ft.

latitude 33
PLANNING & ENGINEERING
10731 Treena Street, San Diego, CA 92131
Tel 858.7511.0633

UC SAN DIEGO HEALTH
HILLCREST MEDICAL CENTER REDEVELOPMENT PROJECT
200 WEST ARBOR DR.

L33 PROJECT #:	2000.00
UCSD PROJECT #:	5551
DATE:	4/17/2026
DRAWN BY:	RT
CHECKED BY:	KB

EXHIBIT

FIGURE 6 – PROPOSED DRAINAGE MANAGEMENT AREAS

SHEET 1

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Based on the above calculations and site constraints, this memorandum recommends the use of compact, underground bio-filtration devices such as the Old Castle Bio-Pod or Contech Modular Wetland systems. Unit sizing should be selected to treat the required flow rates. These devices remove pollutants and sedimentation from storm water runoff, and meet or exceed all City of San Diego and UC San Diego requirements for post-construction BMP design. Furthermore, these devices are TAPE certified, and would therefore remove the 303(d) impairment of indicator bacteria for the San Diego River watershed.

See **Appendix A** for a product data sheets and Operation & Maintenance Manuals for these two proprietary treatment devices.

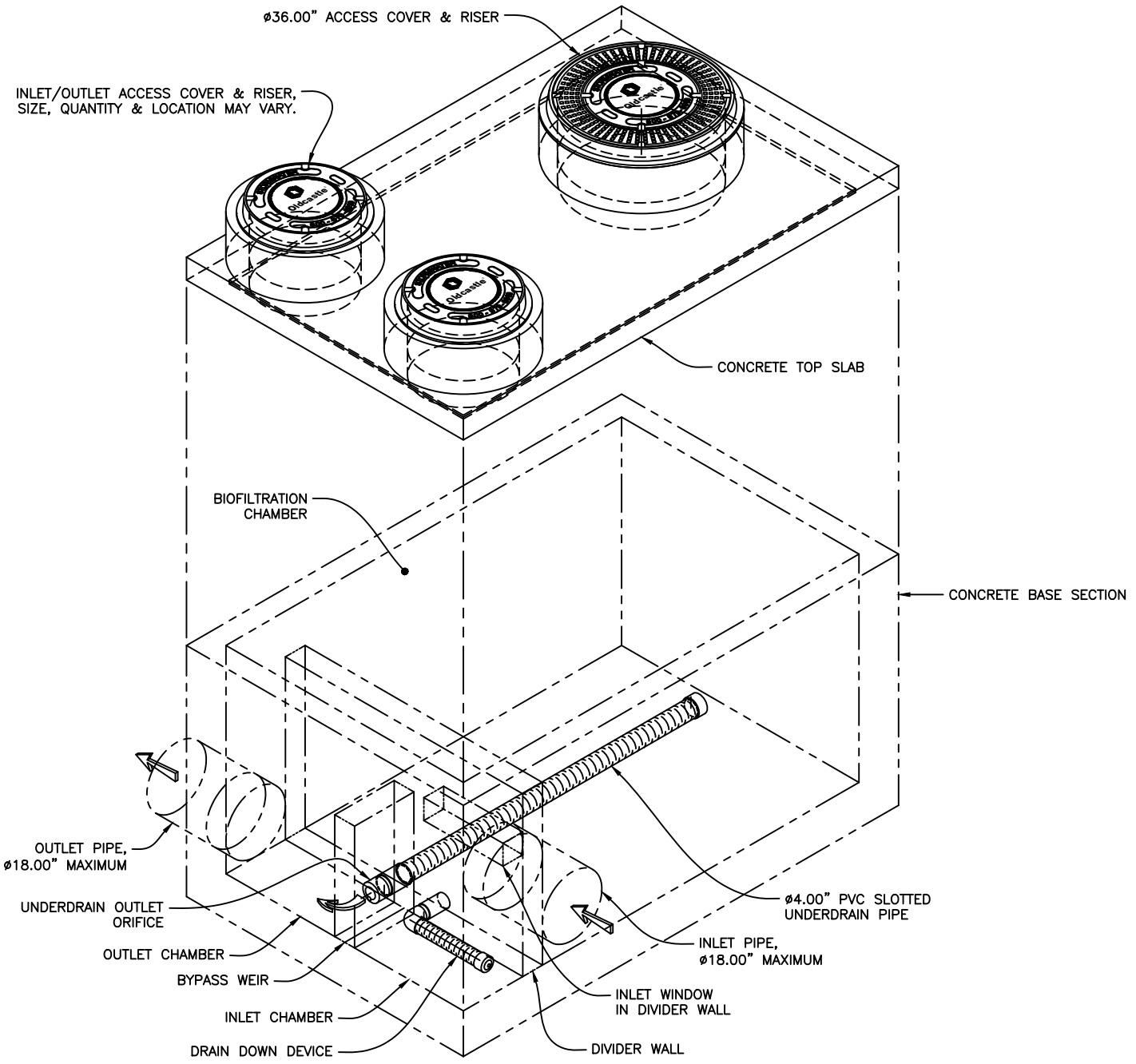
8.2 Hydromodification Requirements

As shown in section 5.2 above, the overall peak flow rates for POC's #1, #3, #4, and #5 are all lower in the proposed condition than in the existing condition. Peak flow does increase at POC #2 in the proposed condition, however, requiring mitigation measures to maintain the peak runoff at the pre-project condition for the 10-year, 6-hour storm event in the post-construction condition.

To achieve this, the project proposes the installation of an underground storm detention vault with outlet control, such as Old Castle StormCapture or StormTrap vaults. See **Appendix B** sample product data brochures. Preliminary hydrograph analysis is included in **Appendix C**. It should be noted, however, that multiple conservative assumptions when into this initial analysis, which will need to be revisited and revised when a more developed site plan and drainage design is available.

The placement of the storm water treatment and detention vaults is shown schematically in **Figure 6**.

Appendix A – Stormwater Treatment Product Data



ISOMETRIC VIEW

FILTER MEDIA & DRAIN ROCK NOT SHOWN FOR CLARITY.
SCALE: 1X

NOTES:

1. LEFT CONFIGURATION SHOWN, MIRROR RIGHT CONFIGURATION OF INLET AND OUTLET CHAMBER AVAILABLE.
2. CONTACT OLDCASTLE INFRASTRUCTURE FOR ENGINEERING ASSISTANCE AND DETAIL DRAWINGS.
3. CONCRETE COMPONENTS SHALL BE MANUFACTURED IN ACCORDANCE WITH ASTM C890 & C913.

US Patents Pending

Bioretention/ Biofiltration

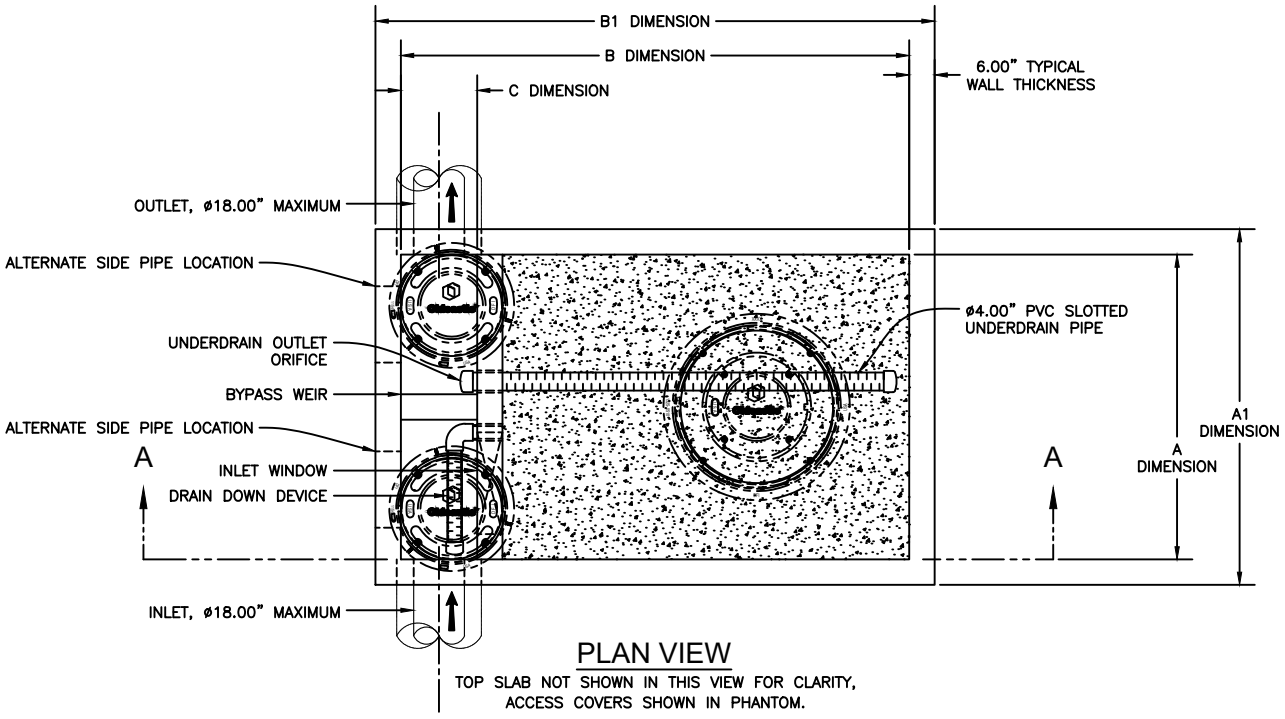
BioPod™ Biofilter Underground

Vault with Internal Bypass

Oldcastle Infrastructure™
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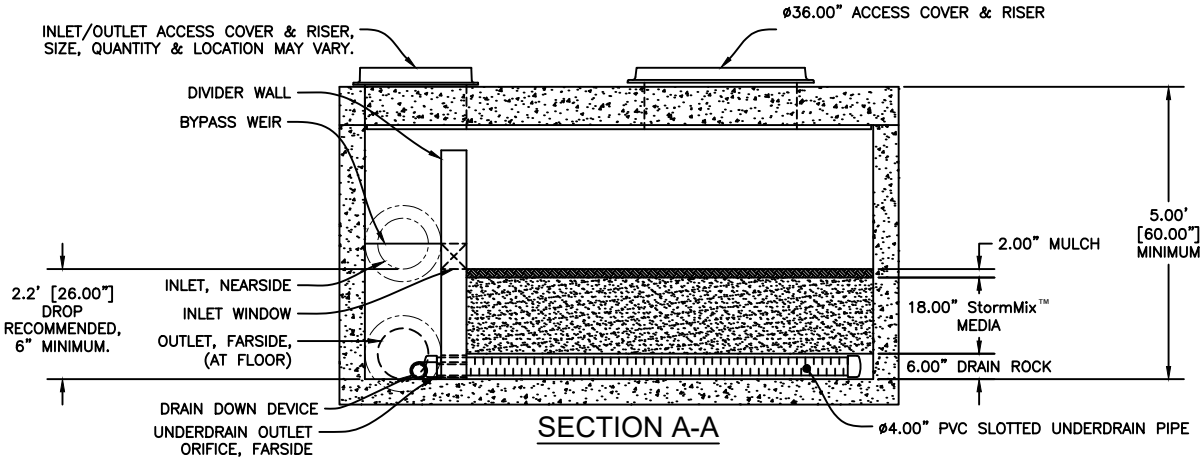
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PLAN VIEW

TOP SLAB NOT SHOWN IN THIS VIEW FOR CLARITY, ACCESS COVERS SHOWN IN PHANTOM.



SECTION A-A

MODEL	VAULT SIZE [1] (ID)			VAULT FOOTPRINT [1] (OD)		TREATMENT FLOW CAPACITY (GPM/CFS)	
	A DIM	B DIM	C DIM	A1 DIM	B1 DIM	1.6 GPM/SF (WA GULD[2])	1.8 GPM/SF (NJCAT[3])
BPU-46.5IB	4'	6.5'	1.5'	5'	7.5'	28.8 / 0.064	32.4 / 0.072
BPU-48IB	4'	8'	1.5'	5'	9'	38.4 / 0.086	43.2 / 0.096
BPU-413IB	4'	13'	1.5'	5'	14'	70.4 / 0.157	79.2 / 0.176
BPU-66IB	6'	6'	1.5'	7'	7'	38.4 / 0.086	43.2 / 0.096
BPU-68IB	6'	8'	1.5'	7'	9'	57.6 / 0.128	64.8 / 0.144
BPU-612IB	6'	12'	2'	7'	13'	91.2 / 0.203	102.6 / 0.229
BPU-88IB	8'	8'	2'	9'	9'	76.8 / 0.171	86.4 / 0.193
BPU-812IB	8'	12'	2'	9'	13'	121.6 / 0.271	136.8 / 0.305
BPU-816IB	8'	16'	2'	9'	17'	172.8 / 0.385	194.4 / 0.433

SITE SPECIFIC DATA				
Structure ID				
Model Size				
Orientation (Left or Right)				
Treatment Flow Rate (cfs)				
Peak Flow Rate (cfs)				
Rim Elevation				
Pipe Data	Pipe Location (Front or Side)	Pipe Size	Pipe Type	Invert Elevation
Inlet				
Outlet				
Notes:				

[1] All Dimensions are nominal, ID=Inside Dimension, OD=Outside Dimension.
[2] Treartment flow capacity at 1.6 gpm/sf media surface area based on an WA Ecology GULD Approval for Basic, Enhanced & Phosphorus.
[3] Treatment flow capacity at 1.8 gpm/sf media surface area based on an NJCAT Verification & NJ DEP Certification.

US Patents Pending

Bioretention/ Biofiltration

BioPod™ Biofilter Underground

Vault with Internal Bypass

Oldcastle Infrastructure™ A CRH COMPANY

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BIOPOD™ SYSTEM

with StormMix™ Media

Inspection & Maintenance Guide



Oldcastle Infrastructure™
A CRH COMPANY

BIOPOD™ BIOFILTER WITH STORMMIX™ BIOFILTRATION MEDIA

DESCRIPTION

The BioPod™ Biofilter System (BioPod) is a storm water biofiltration treatment system used to remove pollutants from storm water runoff. Impervious surfaces and other urban and suburban landscapes generate a variety of contaminants that can enter storm water and pollute downstream receiving waters unless treatment is provided. The BioPod system uses proprietary StormMix™ biofiltration media to capture and retain pollutants including total suspended solids (TSS), metals, nutrients, gross solids, trash and debris as well as petroleum hydrocarbons.

FUNCTION

The BioPod system uses engineered, high-flow rate filter media to remove storm water pollutants, allowing for a smaller footprint than conventional bioretention systems. Contained within a compact precast concrete vault, the BioPod system consists of a biofiltration chamber and an optional integrated high-flow bypass. The biofiltration chamber is filled with horizontal layers of aggregate, biofiltration media and mulch. Storm water passes vertically down through the mulch and biofiltration media for treatment. The mulch provides pretreatment by retaining most of the solids or sediment. The biofiltration media provides further treatment by retaining finer sediment and dissolved pollutants. The aggregate allows the media bed to drain evenly for discharge through an underdrain pipe or by infiltration.

INSPECTION & MAINTENANCE OVERVIEW

State and local regulations require all storm water management systems to be inspected on a regular basis and maintained as necessary to ensure performance and protect downstream receiving waters. Without maintenance, excessive pollutant buildup can limit system performance by reducing the operating capacity of the system and increasing the potential for scouring of pollutants during periods of high flow.

Some configurations of the BioPod may require periodic irrigation to establish and maintain vegetation. Vegetation will typically become established about two years after planting. Irrigation requirements are ultimately dependent on climate, rainfall and the type of vegetation selected.

INSPECTION & MAINTENANCE FREQUENCY

Periodic inspection is essential for consistent system performance and is easily completed. Inspection is typically conducted a minimum of twice per year, but since pollutant transport and deposition varies from site to site, a site-specific maintenance frequency should be established during the first two or three years of operation.

INSPECTION EQUIPMENT

The following equipment is helpful when conducting BioPod inspections:

- Recording device (pen and paper form, voice recorder, iPad, etc.)
- Suitable clothing (appropriate footwear, gloves, hardhat, safety glasses, etc.)
- PPE as required for entry
- Traffic control equipment (cones, barricades, signage, flagging, etc.)
- Manhole hook or pry bar
- Flashlight
- Tape measure
- Socket

INSPECTION PROCEDURES

BioPod inspections are visual and are conducted without entering the unit. To complete an inspection, safety measures including traffic control should be deployed before the access covers or tree grates are removed. Once the covers have been removed, the following items should be checked and recorded (see form provided on page 6) to determine whether maintenance is required:

- If the BioPod unit is equipped with an internal bypass, inspect the inlet rack (or inlet chamber on underground units) and outlet chamber and note whether there are any broken or missing parts. In the unlikely event that internal parts are broken or missing, contact Oldcastle Storm water at (800) 579-8819 to determine appropriate corrective action.
- Note whether the curb inlet, inlet pipe, or inlet rack is blocked or obstructed.
- If the unit is equipped with an internal bypass, observe, quantify and record the accumulation of trash and debris in the inlet rack or inlet chamber. The significance of accumulated trash and debris is a matter of judgment. Often, much of the trash and debris may be removed manually at the time of inspection if a separate maintenance visit is not yet warranted.
- If it has not rained within the past 24 hours, note whether standing water is observed in the biofiltration chamber.
- Finally, observe, quantify and record presence of invasive vegetation and the amount of trash and debris and sediment load in the biofiltration chamber. Erosion of the mulch and biofiltration media bed should also be recorded. Often, much of the invasive vegetation and trash and debris may be removed manually at the time of inspection if a separate maintenance visit is not yet warranted. Sediment load may be rated light, medium or heavy depending on the conditions. Loading characteristics may be determined as follows:
  - **Light sediment load** – sediment is difficult to distinguish among the mulch fibers at the top of the mulch layer; the mulch appears almost new.
  - **Medium sediment load** – sediment accumulation is apparent and may be concentrated in some areas; probing the mulch layer reveals lighter sediment loads under the top 1" of mulch.
  - **Heavy sediment load** – sediment is readily apparent across the entire top of the mulch layer; individual mulch fibers are difficult to distinguish; probing the mulch layer reveals heavy sediment load under the top 1" of mulch.

MAINTENANCE INDICATORS

Maintenance should be scheduled if any of the following conditions are identified during inspection:

- The concrete structure is damaged or the tree grate or access cover is damaged or missing
- The inlet obstructed
- Standing water is observed in the biofiltration chamber more than 24 hours after a rainfall event (use discretion if the BioPod is located downstream of a storage system that attenuates flow)
- Trash and debris in the inlet rack cannot be easily removed at the time of inspection
- Trash and debris, invasive vegetation or sediment load in the biofiltration chamber is heavy or excessive erosion has occurred

MAINTENANCE EQUIPMENT

The following equipment is helpful when conducting BioPod maintenance:

- Suitable clothing (appropriate footwear, gloves, hardhat, safety glasses, etc.)
- PPE as required for entry
- Traffic control equipment (cones, barricades, signage, flagging, etc.)
- Manhole hook or pry bar
- Flashlight
- Tape measure
- Rake, hoe, shovel and broom
- Bucket
- Pruners
- Vacuum truck (optional)
- Socket

MAINTENANCE PROCEDURES

Maintenance should be conducted during dry weather when no flows are entering the system. In most cases, maintenance may be conducted without entering. Entry may be required to maintain BioPod Underground units, depending on system depth. Once safety measures such as traffic control are deployed, the access covers may be removed and the following activities may be conducted to complete maintenance:

- Remove all trash and debris from the curb inlet and inlet rack manually or by using a vacuum truck as required.
- Remove all trash and debris and invasive vegetation from the biofiltration chamber manually or by using a vacuum truck as required.
- If the sediment load is medium or light but erosion of the biofiltration media bed is evident, redistribute the mulch with a rake or replace missing mulch as appropriate. If erosion persists, rocks may be placed in the eroded area to help dissipate energy and prevent recurring erosion.
- If the sediment load is heavy, remove the mulch layer using a hoe, rake, shovel and bucket, or by using a vacuum truck as required. If the sediment load is particularly heavy, inspect the surface of the biofiltration media once the mulch has been removed. If the media appears clogged with sediment, remove and replace one or two inches of biofiltration media prior to replacing the mulch* layer.
- Prune vegetation as appropriate and replace damaged or dead plants as required.
- Replace the tree grate and/or access covers and sweep the area around the BioPod to leave the site clean.
- All material removed from the BioPod during maintenance must be disposed of in accordance with local environmental regulations. In most cases, the material may be handled in the same manner as disposal of material removed from sumped catch basins or manholes.

* Natural, shredded hardwood mulch should be used in the BioPod. Timely replacement of the mulch layer according to the maintenance indicators described above should protect the biofiltration media below the mulch layer from clogging due to sediment accumulation. However, whenever the mulch is replaced, the BioPod should be visited 24 hours after the next major storm event to ensure that there is no standing water in the biofiltration chamber. Standing water indicates that the biofiltration media below the mulch layer is clogged and must be replaced. Please contact Oldcastle Infrastructure at (800) 579-8819 to purchase the proprietary StormMix™ biofiltration media.



BIOPOD SURFACE



BIOPOD TREE



BIOPOD PLANTER



BIOPOD UNDERGROUND

BIOPOD INSPECTION & MAINTENANCE LOG

BioPod Model _____ Inspection Date _____

Location _____

Condition of Internal Components *NOTES:*

☐ **GOOD** ☐ **DAMAGED** ☐ **MISSING**

Curb Inlet or Inlet Rack Blocked *NOTES:*

☐ **YES** ☐ **NO**

Standing Water in Biofiltration Chamber *NOTES:*

☐ **YES** ☐ **NO**

Trash and Debris in Inlet Rack *NOTES:*

☐ **YES** ☐ **NO**

Trash and Debris in Biofiltration Chamber *NOTES:*

☐ **YES** ☐ **NO**

Invasive Vegetation in Biofiltration Chamber *NOTES:*

☐ **YES** ☐ **NO**

Sediment in Biofiltration Chamber *NOTES:*

☐ **LIGHT** ☐ **MEDIUM** ☐ **HEAVY**

Erosion in Biofiltration Chamber *NOTES:*

☐ **YES** ☐ **NO**

Maintenance Requirements

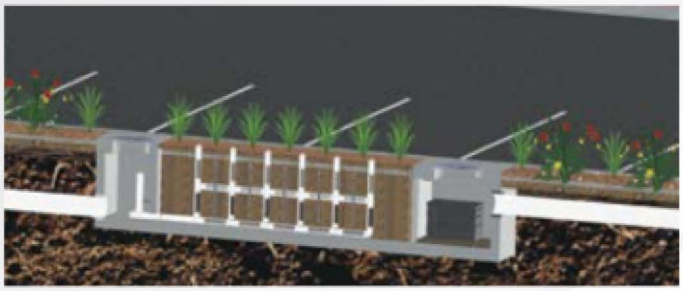
☐ **YES - Schedule Maintenance** ☐ **NO - Schedule Re-Inspection**

NOTES

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Flow Based Sizing

The MWS Linear can be used in stand alone applications to meet treatment flow requirements. Since the MWS Linear is the only biofiltration system that can accept inflow pipes several feet below the surface it can be used not only in decentralized design applications but also as a large central end-of-the-line application for maximum feasibility.

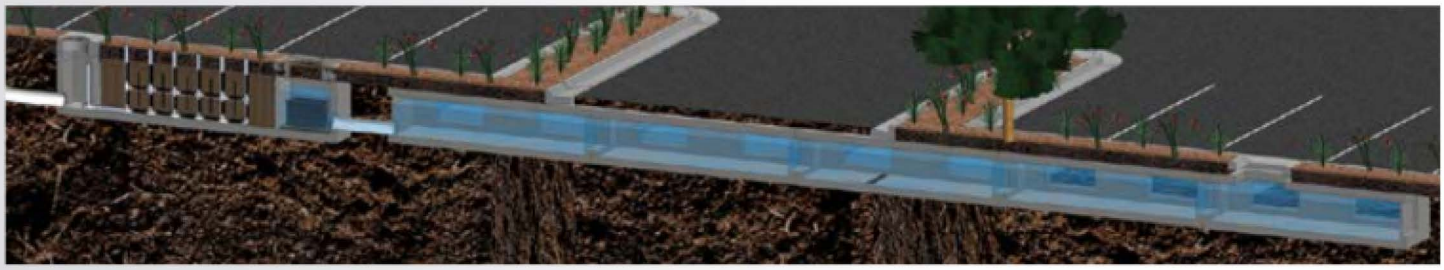


Treatment Flow Sizing Table

Model #	Dimensions	WetlandMedia Surface Area	Treatment Flow Rate (cfs)
MWS-L-4-4	4' x 4'	23 ft^2	0.052
MWS-L-4-6	4' x 6'	32 ft^2	0.073
MWS-L-4-8	4' x 8'	50 ft^2	0.115
MWS-L-4-13	4' x 13'	63 ft^2	0.144
MWS-L-4-15	4' x 15'	76 ft^2	0.175
MWS-L-4-17	4' x 17'	90 ft^2	0.206
MWS-L-4-19	4' x 19'	103 ft^2	0.237
MWS-L-4-21	4' x 21'	117 ft^2	0.268
MWS-L-8-8	8' x 8'	100 ft^2	0.230
MWS-L-8-12	8' x 12'	151 ft^2	0.346
MWS-L-8-16	8' x 16'	201 ft^2	0.462

Volume Based Sizing

Many states require treatment of a water quality volume and do not offer the option of flow based design. The MWS Linear and its unique horizontal flow makes it the only biofilter that can be used in volume based design installed downstream of ponds, detention basins, and underground storage systems.

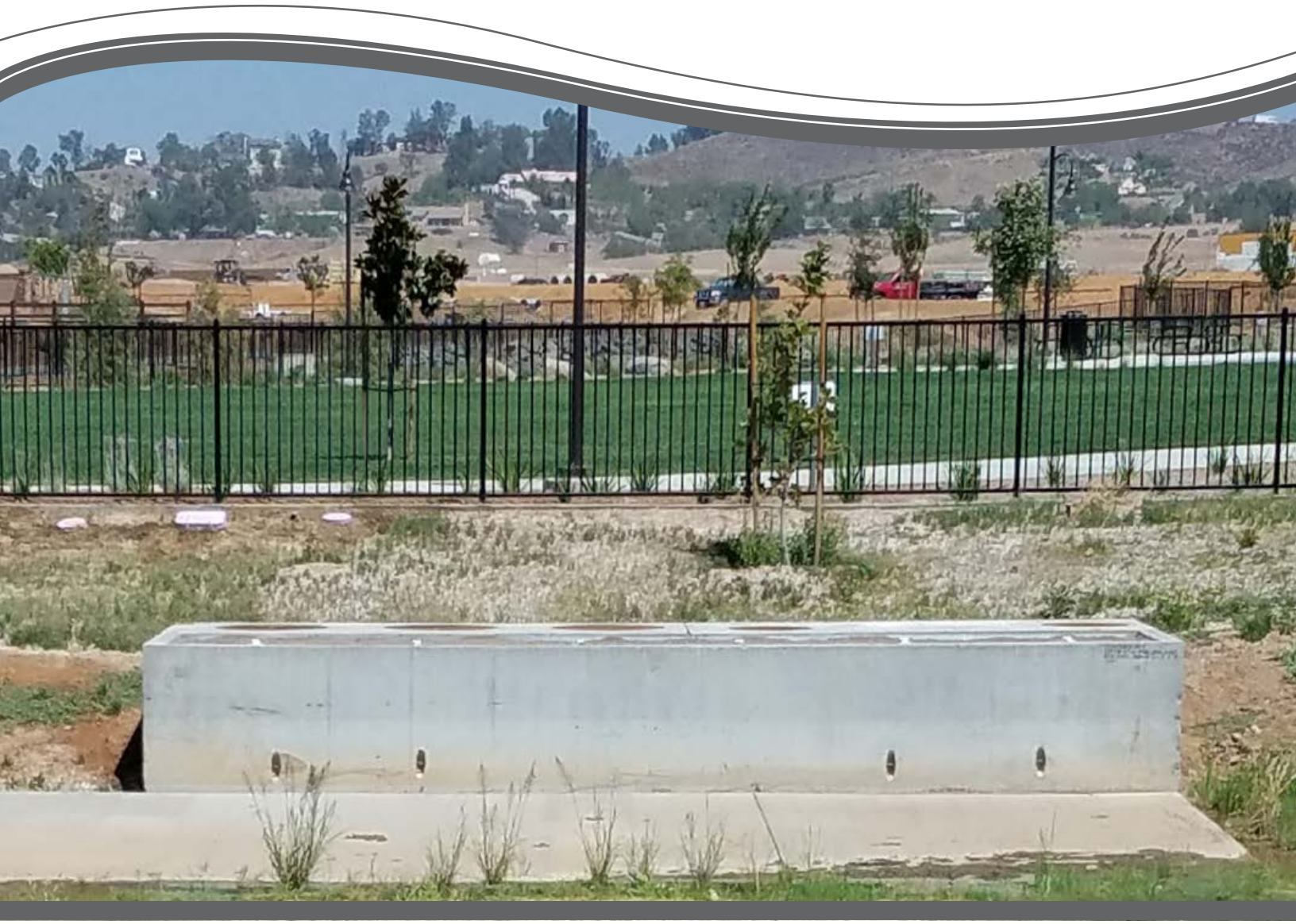


Treatment Volume Sizing Table

Model #	Treatment Capacity (cu. ft.) @ 24-Hour Drain Down	Treatment Capacity (cu. ft.) @ 48-Hour Drain Down
MWS-L-4-4	1140	2280
MWS-L-4-6	1600	3200
MWS-L-4-8	2518	5036
MWS-L-4-13	3131	6261
MWS-L-4-15	3811	7623
MWS-L-4-17	4492	8984
MWS-L-4-19	5172	10345
MWS-L-4-21	5853	11706
MWS-L-8-8	5036	10072
MWS-L-8-12	7554	15109
MWS-L-8-16	10073	20145

CONTECH®
ENGINEERED SOLUTIONS

Modular Wetlands® Linear Operatons & Maintenance Manual



MODULAR WETLANDS®

MODULAR WETLANDS LINEAR
OPERATION & MAINTENANCE MANUAL

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OVERVIEW

This operation and maintenance (O&M) manual is for the Modular Wetlands Linear Biofilter (MWL). Please read the instructions and equipment lists closely prior to starting. It is important to follow all necessary safety procedures associated with state and local regulations. Please contact Contech for more information on pre-authorized third-party service providers who can provide inspection and maintenance services in your area. For a list of service providers in your area, please visit www.conteches.com/maintenance.





WARNING

Confined space entry may be required. Contractor to obtain all equipment and training to meet applicable local and OSHA regulations regarding confined space entry. It is the Contractor's or entry personnel's responsibility to always proceed safely.

SAFETY NOTICE & PERSONAL SAFETY EQUIPMENT

Job site safety is a topic and a practice addressed comprehensively by others. The inclusions here are merely reminders to whole areas of Safety Practice that are the responsibility of the Owner(s), Manager(s), and Service Provider(s). OSHA and Canadian OSH, Federal, State/Provincial, and Local Jurisdiction Safety Standards apply on any given site or project. The knowledge and applicability of those responsibilities is the Service Provider's responsibility and outside the scope of Contech Engineered Solutions.



Safety Boots



Gloves



Hard Hat



Eye Protection

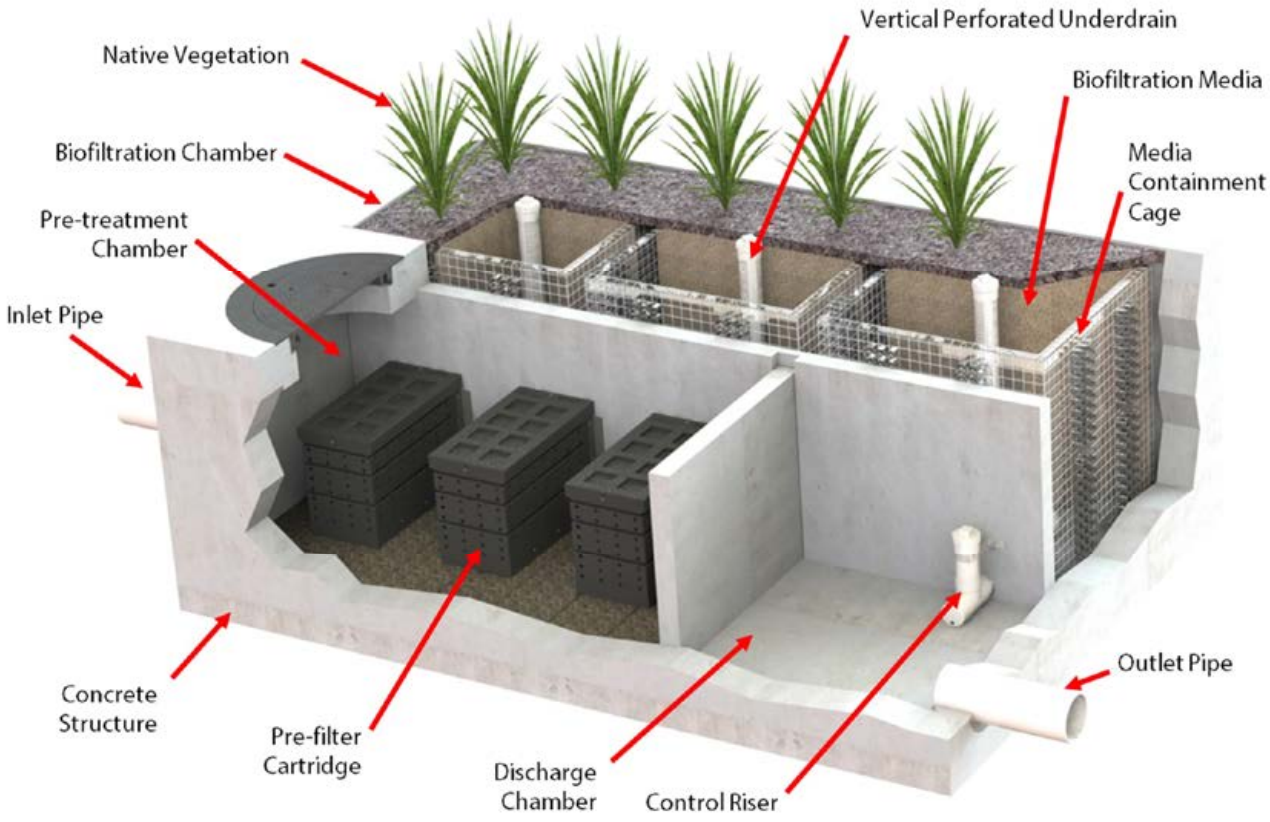


Maintenance and Protection of Traffic Plan

MODULAR WETLANDS LINEAR COMPONENTS LIST

The MWL system comes in multiple sizes and configurations, including side by side or end to end layouts, both as open planters or underground systems. See shop drawings (plans) for project specific details.

The standard MWL system is comprised of the following components:



INSPECTION SUMMARY & EQUIPMENT LIST

Stormwater regulations require BMPs be inspected and maintained to ensure they are operating as designed to allow for effective pollutant removal and provide protection to receiving water bodies. It is recommended that inspections be performed multiple times during the first year to assess the site-specific loading conditions. The first year of inspections can be used to set inspection and maintenance intervals for subsequent years to ensure appropriate maintenance is provided.

- Inspect pre-treatment, biofiltration, and discharge chambers an average of once every six to twelve months. Varies based on site specific and local conditions.
- Average inspection time is approximately 15 minutes. Always ensure appropriate safety protocol and procedures are followed.

The following is a list of equipment required to allow for simple and effective inspection of the MWL:



Modular Wetlands Linear Inspection Form



Flashlight



Tape Measure



Access Cover Hook



Ratchet
& 7/16" Socket
(if required for older pre-filter cartridges that have two bolts holding the lids on)

INSPECTION & MAINTENANCE NOTES

1. Following maintenance and/or inspection, it is recommended that the maintenance operator prepare a maintenance/inspection record. The record should include any maintenance activities performed, amount and description of debris collected, and condition of the system and its various filter mechanisms.
2. The owner should keep maintenance/inspection record(s) for a minimum of five years from the date of maintenance. These records should be made available to the governing municipality for inspection upon request at any time.
3. Transport all debris, trash, organics, and sediments to approved facility for disposal in accordance with local and state requirements.
4. Entry into chambers may require confined space training based on state and local regulations.
5. No fertilizer shall be used in the biofiltration chamber.
6. Irrigation should be provided as recommended by manufacturer and/or landscape architect. Amount of irrigation required is dependent on plant species. Some plants may not require irrigation after initial establishment.

INSPECTION PROCESS

1. Prepare the inspection form by writing in the necessary information including project name, location, date & time, unit number and other information (see inspection form).
2. Observe the inside of the system through the access covers. If minimal light is available and vision into the unit is impaired, utilize a flashlight to see inside the system and all chambers.
3. Look for any out of the ordinary obstructions in the inflow pipe, pre-treatment chamber, biofiltration chamber, discharge chamber or outflow pipe. Write down any observations on the inspection form.
4. Through observation and/or digital photographs, estimate the amount of trash, debris accumulated in the pre-treatment chamber. Utilizing a tape measure or measuring stick, estimate the amount of sediment in this chamber. Record this depth on the inspection form.
5. Through visual observation, inspect the condition of the pre-filter cartridges. Look for excessive build-up of sediment on the cartridges, any build-up on the tops of the cartridges, or clogging of the holes. Record this information on the inspection form. The pre-filter cartridges can be further inspected by removing the cartridge tops and assessing the color of the BioMediaGREEN filter cubes (requires entry into pre-treatment chamber - see notes previous notes regarding confined space entry). Record the color of the material. New material is a light green color. As the media becomes clogged, it will turn darker in color, eventually becoming dark brown or black. The closer to black the media is the higher percentage that the media is exhausted and in need of replacement.



6. The biofiltration chamber is generally maintenance-free due to the system's advanced pre-treatment chamber. For units which have open planters with vegetation, it is recommended that the vegetation be inspected. Look for any plants that are dead or showing signs of disease or other negative stressors. Record the general health of the plants on the inspection form and indicate through visual observation or digital photographs if trimming of the vegetation is required.

7. The discharge chamber houses the control riser (if applicable), drain down filter (only in California - older models), and is connected to the outflow pipe. It is important to check to ensure the orifice is in proper operating condition and free of any obstructions. It is also important to assess the condition of the drain down filter media which utilizes a block form of the BioMediaGREEN. Assess in the same manner as the cubes in the pre-filter cartridge as mentioned above.

8. Finalize the inspection report for analysis by the maintenance manager to determine if maintenance is required.

MAINTENANCE INDICATORS

Based upon the observations made during inspection, maintenance of the system may be required based on the following indicators:

- Missing or damaged internal components or cartridges.
- Obstructions in the system or its inlet and/or outlet pipes.
- Excessive accumulation of floatables in the pre-treatment chamber in which the length and width of the chamber is fully impacted more than 18".
- Excessive accumulation of sediment in the pre-treatment chamber of more than 6" in depth.
- Excessive accumulation of sediment on the BioMediaGREEN media housed within the pretreatment cartridges. When media is more than 85% clogged, replacement is required. The darker the BioMediaGREEN, the more clogged it is and in need of replacement.
- Excessive accumulation of sediment on the BioMediaGREEN media housed within the drain down filter (California only - older models).
- Overgrown vegetation.

MAINTENANCE SUMMARY & EQUIPMENT LIST

The time has come to maintain your MWL. All necessary pre-maintenance steps must be carried out before maintenance occurs. Once traffic control has been set up per local and state regulations and access covers have been safely opened, the maintenance process can begin. It should be noted that some maintenance activities require confined space entry. All confined space requirements must be strictly followed before entry into the system. In addition, the following is recommended:

- Prepare the maintenance form by writing in the necessary information including project name, location, date & time, unit number and other info (see maintenance form).
- Set up all appropriate safety and maintenance equipment.
- Ensure traffic control is set up and properly positioned.
- Prepared pre-checks (OSHA, safety, confined space entry) are performed.
    - A gas meter should be used to detect the presence of any hazardous gases prior to entering the system. If hazardous gases are present, do not enter the vault. Following appropriate confined space procedures, take steps such as utilizing a venting system to address the hazard. Once it is determined to be safe, enter the system utilizing appropriate entry equipment such as a ladder and tripod with harness.

The following is a list of equipment required for maintenance of the MWL:



Modular Wetlands Linear Maintenance Form



Flashlight



Access Cover Hook



Ratchet
& 7/16" Socket
(if required for older pre-filter cartridges that have two bolts holding the lids on)



Vacuum Assisted Truck with Pressure Washer



Replacement
BioMediaGREEN
(If Required)

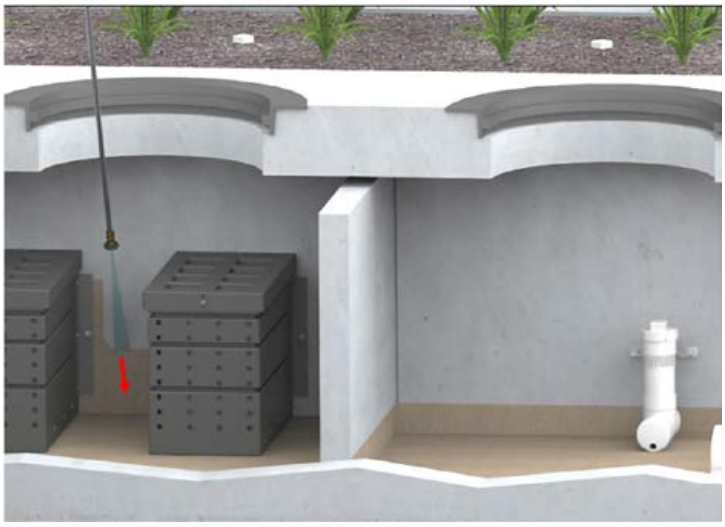
(order BioMediaGREEN from Contech's Maintenance Team members at https://www.conteches.com/maintenance)

MAINTENANCE INSTRUCTIONS



1. ACCESS COVER REMOVAL

Upon determining that the vault is safe for entry, remove all access cover(s) and position the vacuum truck accordingly.



2. PRESSURE WASH SYSTEM CHAMBERS

With the pressure washer, spray down pollutants accumulated on the walls and floors of the pre-treatment and discharge chambers. Then wash any accumulated sediment from the pre-filter cartridge(s).



3. VACUUM SYSTEM CHAMBERS

Vacuum out pre-treatment and discharge chambers and remove all accumulated pollutants including trash, debris, and sediments. Be sure to vacuum the pre-treatment floor until the pervious pavers are visible and clean. **(MWL systems outside of California may or may not have pervious pavers on the floor in the pre-treatment chamber)** If pre-filter cartridges require media replacement, proceed to **Step 4**. If not, replace the access cover(s) and proceed to **Step 7**.



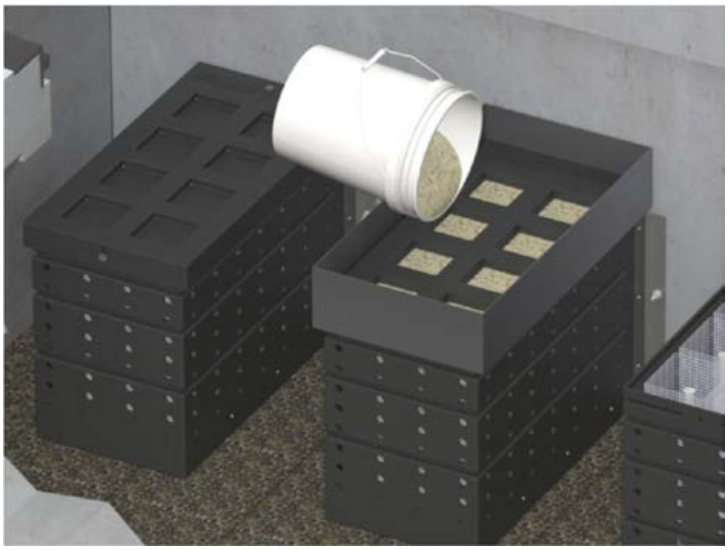
4. PRE-FILTER CARTRIDGE LID REMOVAL

After successfully cleaning out the pre-treatment chamber, enter the chamber and remove the lid(s) from the pre-filter cartridge(s) by removing the two thumb screws. (Older pre-filter cartridges have two bolts holding the lids on that require a 7/16" socket to remove)



5. VACUUM EXISTING PRE-FILTER MEDIA

Utilize the vacuum truck hose or hose extension to remove the filter media from each of the individual media cages. Once filter media has been sucked out, use a pressure washer to spray down the inside of the cartridge and its media cages. Remove cleaned media cages and place to the side. Once removed, the vacuum hose can be inserted into the cartridge to vacuum out any remaining material near the bottom of the cartridge.



6. PRE-FILTER MEDIA REPLACEMENT

Reinstall media cages and fill with new media from the manufacturer or outside supplier. Manufacturer will provide specification of media and sources to purchase. The easiest way to fill the media cages is to utilize a refilling tray that can also be sourced from the manufacturer. Place the refilling tray on top of the cartridge and fill with new bulk media shaking it down into the cages. Using your hands, lightly compact the media into each filter cage. Once the cages are full (each cartridge will hold five heaping 5gal buckets of bulk media), remove the refilling tray and replace the cartridge top, ensuring fasteners are properly tightened.



7. MAINTAINING VEGETATION

In general, the biofiltration chamber is maintenance-free with the exception of maintaining the vegetation. The MWL utilizes vegetation similar to surrounding landscape areas, therefore, trim vegetation to match surrounding vegetation. If any plants have died, replace them with new ones.



8. INSPECT UNDERDRAIN SYSTEM

Each vertical under drain on the biofiltration chamber has a removable threaded cap that can be taken off to check for any blockages or root growth. Once removed, a jetting attachment to the pressure washer can be used to clean out the under drain and orifice riser if needed.

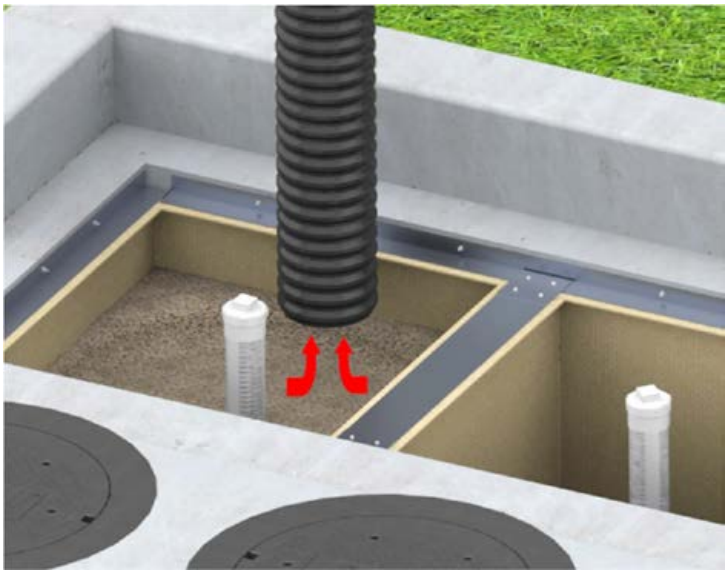


9. REPLACE ACCESS COVERS

Once maintenance is complete, replace all access cover(s)

REPLACING BIOFILTRATION MEDIA IF REQUIRED

As with all biofilter systems, at some point the biofiltration media will need to be replaced, either due to physical clogging or sorptive exhaustion (for dissolved pollutants) of the media ion exchange capacity (to remove dissolved metals and phosphorous). The general life of this media is 10 to 20 years based on site specific conditions and pollutant loading, so replacing the biofiltration media should not be a common occurrence. In the event that the biofiltration media requires replacement, contact one of Contech's Maintenance Team members at https://www.conteches.com/maintenance to order new biofiltration media. The quantity of media needed can be determined by providing the model number and unit depth. Media will be provided in super sacks for easy installation. Each sack will weigh between 1,000 and 2,000 lbs. Biofiltration media replacement can be done following the steps below:



1. VACUUM EXISTING BIOFILTRATION MEDIA

Remove the mulch and vegetation to access the biofiltration media, and then position the vacuum truck accordingly. Utilize the vacuum truck to vacuum out all the media. Once all media is removed, use the pressure washer to spray down all the netting and underdrain systems on the inside of the media containment cage. Vacuum out any remaining debris after spraying down netting. Inspect the netting for any damage or holes. If the netting is damaged, it can be repaired or replaced with guidance by the manufacturer.



2. INSTALLING NEW BIOFILTRATION MEDIA

Ensure that the chamber is fully cleaned prior to installation of new media into the media containment cage(s). Media will be provided in super sacks for easy installation. A lifting apparatus (forklift, backhoe, boom truck, or other) is recommended to position the super sack over the biofiltration chamber. Add media in lifts to ensure that the riser pipes remain vertical. Be sure to only fill the media cage(s) up to the same level as the old media.



3. REPLANT VEGETATION

Once the media has been replaced, replant the vegetation and cover biofiltration chamber with approved mulch (if applicable). If the existing vegetation is not being reused, and new vegetation is being planted, you will need to acquire new plant establishment media that will be installed just below the mulch layer at each plant location. (see plan drawings for details). Contact one of Contech's Maintenance Team members at https://www.conteches.com/maintenance to order new plant establishment media.

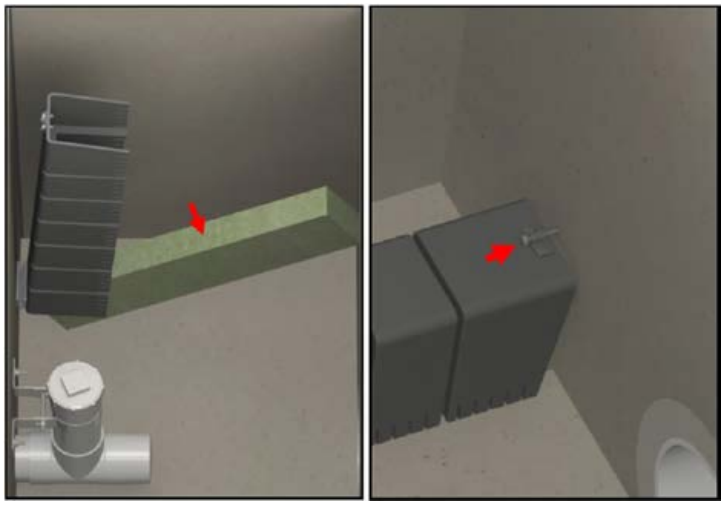
REPLACING DRAIN DOWN FILTER MEDIA (ONLY ON OLDER CALIFORNIA MODELS)

NOTE: The drain down filter is only found on units installed in California prior to 2023
If during inspection it was determined that the drain down filter media requires replacement, contact one of Contech's Maintenance Team members at https://www.conteches.com/maintenance to order new media.



1. REMOVE EXISTING DRAIN DOWN MEDIA

Pull knob back to unlock the locking mechanism and lift the drain down filter housing to remove the used BioMediaGREEN filter block.



2. INSTALL NEW DRAIN DOWN MEDIA

Ensure that the chamber and housing are fully cleaned prior to installation of new media, and then insert the new BioMediaGREEN filter block. The media filter block should fit snugly between the chamber walls and be centered under the filter housing. Lower the housing over the filter block and secure the locking mechanism.

NOTES

CONTECH® ENGINEERED SOLUTIONS

Inspection Report
Modular Wetlands Linear

Project Name _____

Project Address _____
(city) (Zip Code)

Owner / Management Company _____

Contact _____ Phone ( ) –

For Office Use Only
(Reviewed By)
(Date)
Office personnel to complete section to the left.

Inspector Name _____ Date ____/____/____ Time _____ AM / PM

Type of Inspection ☐ Routine ☐ Follow Up ☐ Complaint ☐ Storm Storm Event in Last 72-hours? ☐ No ☐ Yes

Weather Condition _____ Additional Notes _____

Inspection Checklist

Modular Wetland System Type (Curb, Grate or UG Vault): _____ Size (22', 14' or etc.): _____

Structural Integrity:	**Yes**	**No**	**Comments**
Damage to pre-treatment access cover (manhole cover/grate) or cannot be opened using normal lifting pressure?			
Damage to discharge chamber access cover (manhole cover/grate) or cannot be opened using normal lifting pressure?			
Does the MWS unit show signs of structural deterioration (cracks in the wall, damage to frame)?			
Is the inlet/outlet pipe or drain down pipe damaged or otherwise not functioning properly?			
Working Condition:			
Is there evidence of illicit discharge or excessive oil, grease, or other automobile fluids entering and clogging the unit?			
Is there standing water in inappropriate areas after a dry period?			
Is the filter insert (if applicable) at capacity and/or is there an accumulation of debris/trash on the shelf system?			
Does the depth of sediment/trash/debris suggest a blockage of the inflow pipe, bypass or cartridge filter? If yes, specify which one in the comments section. Note depth of accumulation in in pre-treatment chamber.			Depth:
Does the cartridge filter media need replacement in pre-treatment chamber and/or discharge chamber?			Chamber:
Any signs of improper functioning in the discharge chamber? Note issues in comments section.			
Other Inspection Items:			
Is there an accumulation of sediment/trash/debris in the wetland media (if applicable)?			
Is it evident that the plants are alive and healthy (if applicable)? Please note Plant Information below.			
Is there a septic or foul odor coming from inside the system?			

Waste:	**Yes**	**No**
Sediment / Silt / Clay		
Trash / Bags / Bottles		
Green Waste / Leaves / Foliage		

Recommended Maintenance	
No Cleaning Needed	
Schedule Maintenance as Planned	
Needs Immediate Maintenance	

Plant Information	
Damage to Plants	
Plant Replacement	
Plant Trimming	

Additional Notes: _____

CONTECH®
ENGINEERED SOLUTIONS

Cleaning and Maintenance Report
Modular Wetlands Linear

Project Name _____

Project Address _____
(city) (Zip Code)

Owner / Management Company _____

Contact _____ Phone ( ) –

For Office Use Only
(Reviewed By)
(Date)
Office personnel to complete section to the left.

Inspector Name _____ Date ____/____/____ Time _____ AM / PM

Type of Inspection ☐ Routine ☐ Follow Up ☐ Complaint ☐ Storm Storm Event in Last 72-hours? ☐ No ☐ Yes

Weather Condition _____ Additional Notes _____

Site Map #	GPS Coordinates of Insert	Manufacturer / Description / Sizing	Trash Accumulation	Foliage Accumulation	Sediment Accumulation	Total Debris Accumulation	Condition of Media 25/50/75/100 (will be changed @ 75%)	Operational Per Manufactures' Specifications (If not, why?)
	Lat: Long:	MWS Catch Basins						
		MWS Sedimentation Basin						
		Media Filter Condition						
		Plant Condition						
		Drain Down Media Condition						
		Discharge Chamber Condition						
		Drain Down Pipe Condition						
		Inlet and Outlet Pipe Condition						

Comments:



CONTECH®
ENGINEERED SOLUTIONS

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800-338-1122

WWW.CONTECHES.COM

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DRAWINGS AND SPECIFICATIONS ARE AVAILABLE AT WWW.CONTECHES.COM

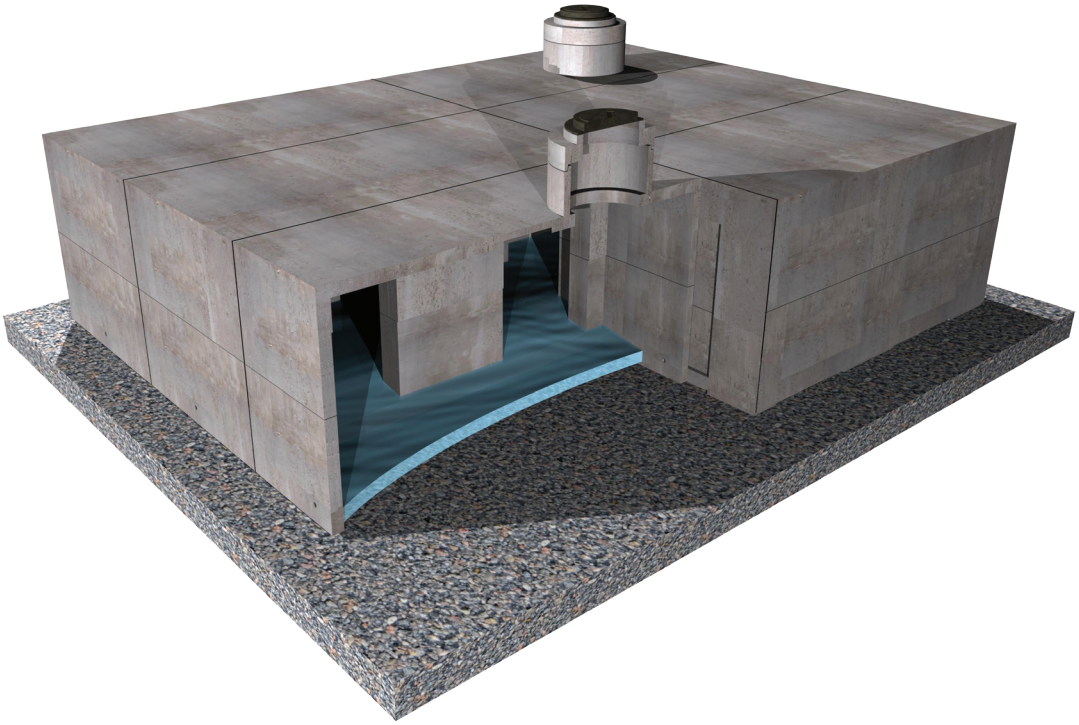
ModWetLinear OM Manual 03/24

Appendix B – Detention Vault Product Data

Oldcastle Infrastructure™
A CRH COMPANY

STORMCAPTURE®

Inspection and Maintenance Guide



Water

Description

The StormCapture® system is an underground, modular, structural precast concrete storage system for stormwater detention, retention, infiltration, harvesting and reuse, and water quality volume storage. The system's modular design utilizes multiple standard precast concrete units with inside dimensions of 7 feet by 15 feet (outside dimensions of 8 feet by 16 feet) to form an underground storage system. The inside height of the StormCapture system can range from 2 feet to 14 feet. This modular design provides limitless configuration options for site-specific layouts.

StormCapture components can be provided as either open-bottom modules to promote infiltration or closed-bottom modules for detention. In some cases, StormCapture modules can be placed in a checkerboard configuration for an even more efficient design. A Link Slab, with a footprint of 9 feet by 17 feet, is then used to bridge each space without a module.

The standard StormCapture design incorporates lateral and longitudinal passageways between modules to accommodate internal stormwater conveyance throughout the system. These passageways may be classified as either a "window configuration" with standard 12-inch tall sediment baffles extending up from the floor of the module to the bottom of the window, or a "doorway configuration" without the sediment baffles. The function and drainage rate of a StormCapture system depends on site-specific conditions and requirements.

Stormwater typically enters the StormCapture system through an inlet pipe. Grated inlets can also be used for direct discharge into the system. The StormCapture system is rated for H-20 traffic loading with limited cover. Higher load requirements can also be accommodated. In addition, StormCapture systems are typically equipped with a limited number of maintenance modules that provide access to the system for ongoing inspection and maintenance.

Function

The StormCapture system is primarily used to manage water quantity by temporarily storing stormwater runoff from impervious surfaces to prevent flooding, slow down the rate at which stormwater leaves the site, and reduce receiving stream erosion. In addition, the StormCapture system can be used to capture stormwater runoff for water quality treatment. Regardless of how the StormCapture system is used, some sedimentation may occur in the modules during the time water is stored.

Configurations

The configuration of the StormCapture systems may vary, depending on the water quality and/or quantity requirements of the site. StormCapture configurations for detention, retention/infiltration, and retention/harvesting are described below.

Detention

StormCapture Detention systems are designed with a closed bottom to detain stormwater runoff for controlled discharge from the site. This design may incorporate a dead storage sump and a permanent pool of water if the outlet pipe is higher than the floor elevation. Discharge from the system is typically controlled by an outlet orifice and/or outlet weir to regulate the rate of stormwater leaving the system. StormCapture Detention systems are typically designed with silt-tight joints, however when conditions exist that require a StormCapture system to be watertight, the system may be wrapped in a continuous, impermeable geomembrane liner. If the StormCapture Detention system includes Link Slabs, a liner must be used to detain water since the chambers under each Link Slab have no floor slab. In this case, care must be taken by maintenance personnel not to damage the exposed liner beneath each Link Slab.

Retention/Infiltration

StormCapture Retention/Infiltration systems are designed with an open bottom to allow for the retention of stormwater onsite through infiltration into the base rock and surrounding soils. For infiltration systems, the configuration of the base of the StormCapture system may vary, depending on the needs of the site and the height of the system. Some systems may use modules that have fully open bottoms with no concrete floor, while other systems may use modules that incorporate floor openings in the base of each module. These are typically 24-inch by 24-inch openings. For open-bottom systems, concrete splash pads may be installed below inlet grate openings and pipe inlets to prevent erosion of base rock. A StormCapture Infiltration system may have an elevated discharge pipe for peak overflow.

Retention/Harvesting

StormCapture Retention/Harvesting systems are similar to detention systems using closed-bottom modules, but stormwater is typically retained onsite for an extended period of time and later reused for non-potable applications or irrigation. For rainwater harvesting systems, an impermeable geomembrane liner is typically installed around the modules to provide a water-tight system.

Inspection and Maintenance Overview

State and local regulations typically require all stormwater management systems to be inspected on a regular basis and maintained as necessary to ensure performance and protect downstream receiving waters. Inspections should be used to evaluate the conditions of the system. Based on these inspections, maintenance needs can be determined. Maintenance needs vary by site and system. Using this Inspection & Maintenance Guide, qualified maintenance personnel should be able to provide a recommendation for maintenance needs. Requirements may range from minor activities such as removing trash, debris or pipe blockages to more substantial activities such as vacuuming and removal of sediment and/or non-draining water. Long-term maintenance is important to the operation of the system since it prevents excessive pollutant buildup that may limit system performance by reducing the operating capacity and increasing the potential for scouring of pollutants during periods of high flow.

Only authorized personnel shall inspect and/or enter a StormCapture system. Personnel must be properly trained and equipped before entering any underground or confined space structure. Training includes familiarity with and adherence to any and all local, state and federal regulations governing confined space access and the operation, inspection, and maintenance of underground structures.

Inspection and Maintenance Frequency

The StormCapture system should be inspected on a regular basis, typically twice per year, and maintained as required. The maintenance frequency will be driven by the amount of runoff and pollutant loading encountered by a given system. Local jurisdictions may also dictate inspection and maintenance frequencies.

Inspection Equipment

The following equipment is helpful when conducting StormCapture inspections:

- Recording device (pen and paper form, voice recorder, iPad, etc.)
- Suitable clothing (appropriate footwear, gloves, hardhat, safety glasses, etc.)
- Traffic control equipment (cones, barricades, signage, flagging, etc.)
- Manhole hook or pry bar
- Confined space entry equipment, if needed
- Flashlight
- Tape measure
- Measuring stick or sludge sampler
- Long-handled net (optional)

Inspection Procedures

A typical StormCapture system provides strategically placed access points that may be used for inspection. StormCapture inspections are usually conducted visually from the ground surface, without entering the unit. This typically limits inspection to the assessment of sediment depth, water drain down, and general condition of the modules and components, but a more detailed assessment of structural condition may be conducted during a maintenance event.

To complete an inspection, safety measures including traffic control should be deployed before the access covers are removed. Once the covers have been removed, the following items should be inspected and recorded (see form provided at the end of this document) to determine whether maintenance is required:

- Observe inlet and outlet pipe penetrations for blockage or obstruction.
- If possible, observe internal components like baffles, flow control weirs or orifices, and steps or ladders to determine whether they are broken, missing, or possibly obstructed.
- Observe, quantify, and record the sediment depths within the modules.
- Retrieve as much floating trash as possible with a long-handled net. If a significant amount of trash remains, make a note in the Inspection & Maintenance Log.
- For infiltration systems, local regulations may require monitoring of the system to ensure drain down is occurring within the required permit time period (typically 24 to 72 hours). If this is the case, refer to local regulations for proper inspection procedure.

Maintenance Indicators

Maintenance should be scheduled if any of the following conditions are identified during the inspection:

- Inlet or outlet piping is blocked or obstructed.
- Internal components are broken, missing, or obstructed.
- Accumulation of more than six inches of sediment on the system floor or in the sump, if applicable.
- Significant accumulation of floating trash and debris that cannot be retrieved with a net.
- The system has not drained completely after it hasn't rained for one to three days, or the drain down does not meet permit requirements.
- Any hazardous material is observed or reported.

Maintenance Equipment

The following equipment is helpful when conducting StormCapture maintenance:

- Suitable clothing (appropriate footwear, gloves, hardhat, safety glasses, etc.)
- Traffic control equipment (cones, barricades, signage, flagging, etc.)
- Manhole hook or pry bar
- Confined space entry equipment, if needed
- Flashlight
- Tape measure
- Vacuum truck

Maintenance Procedures

Maintenance should be conducted during dry weather when no flow is entering the system. Confined space entry is usually required to maintain the StormCapture. Only personnel that are OSHA Confined Space Entry trained and certified may enter underground structures. Once safety measures such as traffic control have been deployed, the access covers may be removed and the following activities may be conducted to complete maintenance:

- Remove trash and debris using an extension on the end of the boom hose of the vacuum truck. Continue using the vacuum truck to completely remove accumulated sediment. Some jetting may be necessary to fully evacuate sediment from the system floor or sump. Jetting is acceptable in systems with solid concrete floors or base slabs (referred to as closed-bottom systems). However, jetting is not recommended for open-bottom systems with a gravel foundation since it may cause bedding displacement, undermining of the foundation, or internal disturbance.
- All material removed from the system during maintenance must be disposed of in accordance with local regulations. In most cases, the material may be handled in the same manner as disposal of material removed from sumped catch basins or manholes.
- Inspect inlet and outlet pipe penetrations for cracking and other signs of movement that may cause leakage.
- Inspect the concrete splash pads (applicable for open-bottom systems only) for proper function and placement.
- Inspect the system for movement of modules. There should be less than 3/4-inch spacing between modules.
- Inspect the general interior condition of modules for concrete cracking or deterioration. If the system consists of horizontal joints as part of the modules, inspect those joints for leakage, displacement or deterioration.

Be sure to securely replace all access covers, as appropriate, following inspection and/or maintenance. If the StormCapture modules or any of the system components show significant signs of cracking, spalling, or deterioration or if there is evidence of excessive differential settlement between modules, contact Oldcastle Infrastructure at **800-579-8819.**

StormCapture
Inspection & Maintenance Log

Refer to as-built records for details about system size and location onsite

Location _____

System Configuration:

Inspection Date _____

☐ Detention ☐ Infiltration ☐ Retention/Harvesting

Inlet or Outlet Blockage or Obstruction

Notes:

☐ Yes ☐ No

Condition of Internal Components

Notes:

☐ Good ☐ Damaged ☐ Missing

Sediment Depth Observed

Notes:

☐ Inches of Sediment: _____

Trash and Debris Accumulation

Notes:

☐ Significant ☐ Not Significant

Drain Down Observations

Notes:

☐ Appropriate Time Frame ☐ Inappropriate Time Frame

Maintenance Requirements

☐ **Yes - Schedule Maintenance** ☐ **No - Inspect Again in _____ Months**

STORMCAPTURE®

OUR MARKETS



BUILDING STRUCTURES



COMMUNICATIONS



WATER



ENERGY



TRANSPORTATION

StormTrap®

MODULAR CONCRETE
STORMWATER MANAGEMENT

STORMWATER MANAGEMENT SOLUTIONS

StormTrap offers the industry's best solutions for managing runoff, protecting waterways and improving the use of your property. Whether you are concerned about detention, retention, water quality or water harvesting, StormTrap has a design that will reduce your footprint, accommodate any site constraints, lower overall costs and meet your specific project needs.



SingleTrap®

A durable stormwater management system customized to your site's exact requirements, ideal for working in an extremely limited space while preserving land above for parks, buildings or parking lots.

DoubleTrap®

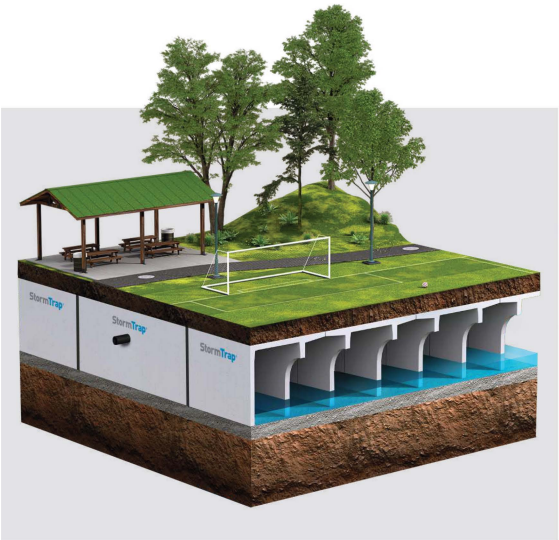
The stormwater management solution you need to control runoff volume and discharge timing. Its modular design maximizes storage volume while minimizing footprint and installation cost.

STORMWATER APPLICATIONS



Detention

StormTrap underground stormwater detention systems temporarily store runoff in large underground chambers before releasing it at a controlled rate. This mitigates erosion, flooding and many of the other harmful effects of high volumes of stormwater runoff.



Infiltration

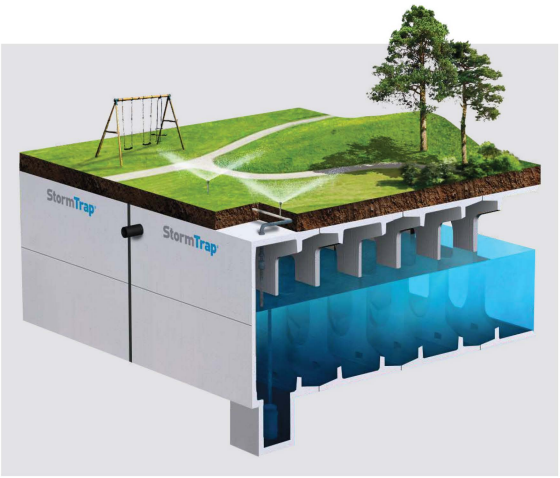
The StormTrap infiltration system provides a large infiltrative surface area that allows water to recharge into the native soil. The system can also help meet low impact development (LID) goals by reducing the volume of stormwater runoff discharged from a site.



Treatment

StormTrap is committed to improving stormwater quality by deploying our range of treatment products that target your pollutant issues with integrated or stand-alone solutions.

- **Filtration:** Sandfilters use various media to remove pollutants such as nutrients and heavy metals
- **Sedimentation:** Remove suspended solids with systems customized for your particle size and flow rate
- **Oil/Water Separation:** Baffle chambers eliminate hydrocarbons from runoff
- **Litter, Trash and Debris Removal:** Disposable mesh nets efficiently capture and remove trash and floatables from Stormwater and CSO discharges



Reuse and Harvesting

StormTrap offers rainwater harvesting applications that collect stormwater on site for use in irrigation or as greywater inside buildings.

These sustainable stormwater management practices adhere to low impact development (LID) principles for runoff reduction and also contribute to LEED (Leadership in Energy and Environmental Design) design credits for Sustainable Sites and Water Efficiency.

SIGNIFICANT ADVANTAGES

Increase Options

Sizes ranging from 1'1" to 15'0"

Designed to exceed HS-20 loading with minimum of 6" cover

Locally manufactured in a NPCA (National Precast Concrete Association) certified facility

Modular design maximizes storage volume while minimizes footprint and cost

Lower Costs

Installed savings compared to traditional systems

Innovative design allows quick and efficient installation

Reduced labor and excavation costs

Meets water quantity requirements without compromising land use

Minimize Maintenance

Total accessible void storage for easy maintenance

Reclaim 100% of original storage volume

High-strength precast concrete provides up to 100 years of service life

Streamline Design and Installation

Structural stamp on each project

Budget estimate for system and installation

Complete set of drawings

Pre-construction meeting

Representative on site during installation



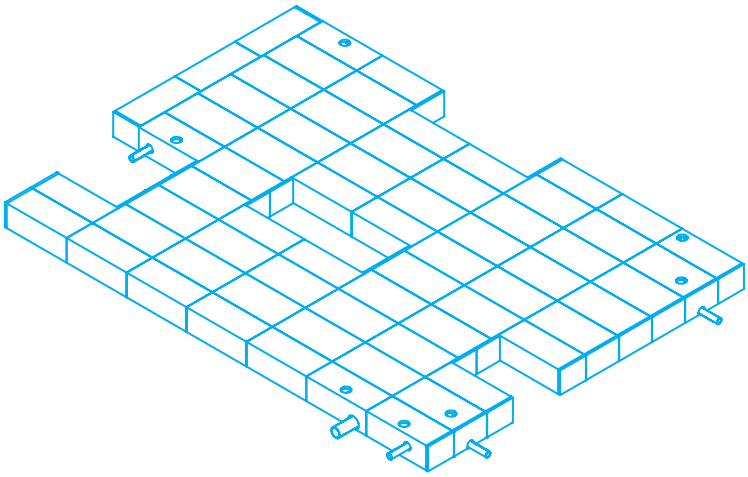




FLEXIBLE AND ADAPTABLE DESIGNS

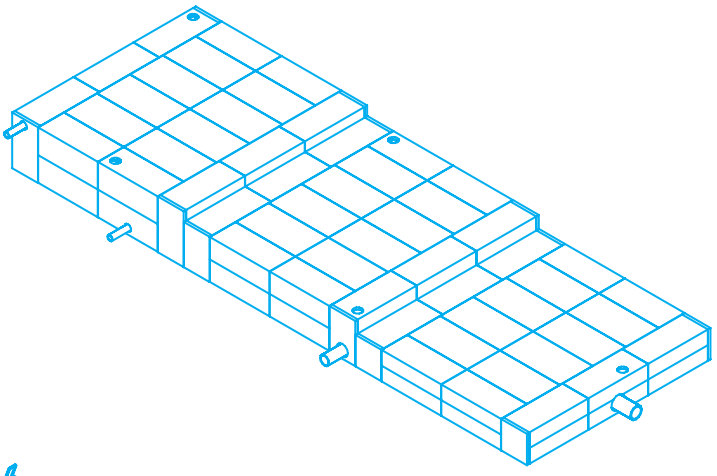
Unique Configurations

Flexible, modular design easily accommodates existing utilities, light pole foundations, trees and other job site constraints



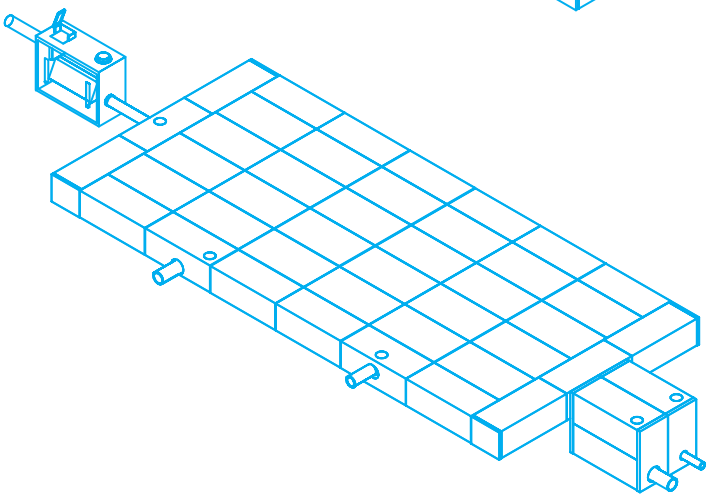
Varying Heights

Made of reinforced, high strength concrete available in sizes ranging from 1'1" to 15'0"



Integrated Applications

Integrated solutions, such as the SiteSaver water quality device or outlet control structures



PHONE 877 867 6872
WEB stormtrap.com

Schedule a lunch and learn, download product specifications, or request a free Design & Budget estimate to get your project started!

Appendix C – Hydrograph Data

RATIONAL METHOD HYDROGRAPH PROGRAM
COPYRIGHT 1992, 2001 RICK ENGINEERING COMPANY

RUN DATE 1/15/2026
HYDROGRAPH FILE NAME Text1
TIME OF CONCENTRATION 5 MIN.
6 HOUR RAINFALL 1.7 INCHES
BASIN AREA 3.1 ACRES
RUNOFF COEFFICIENT 0.9
PEAK DISCHARGE 22.18 CFS

TIME (MIN) = 0	DISCHARGE (CFS) = 0
TIME (MIN) = 5	DISCHARGE (CFS) = 0.3
TIME (MIN) = 10	DISCHARGE (CFS) = 0.3
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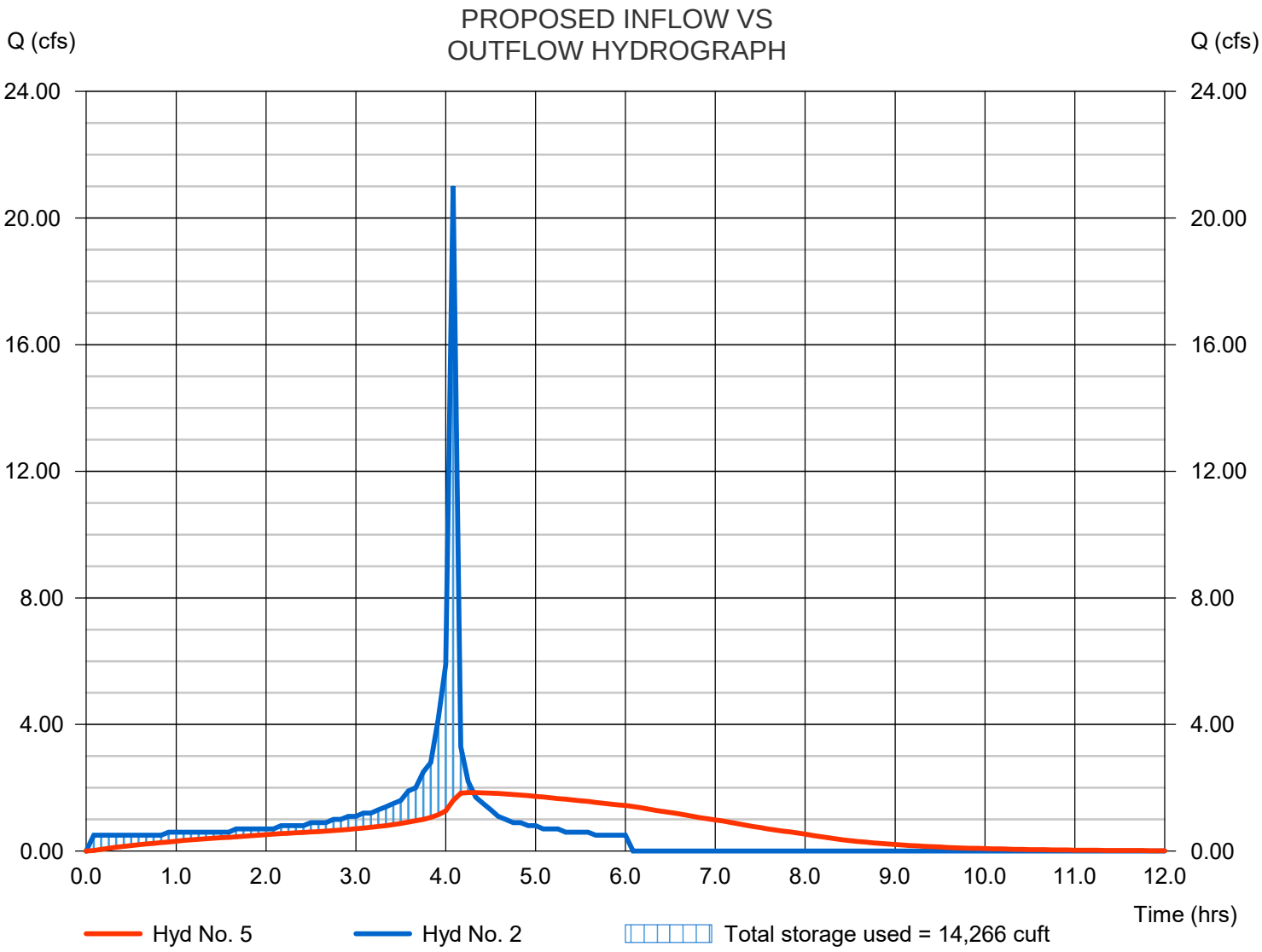
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024 Thursday, 01 / 15 / 2026

PROPOSED DETENTION TANK

Hydrograph type	=	Reservoir	Peak discharge	=	1.848 cfs
Storm frequency	=	10 yrs	Time to peak	=	4.33 hrs
Time interval	=	5 min	Hyd. volume	=	28,706 cuft
Inflow hyd. No.	=	2 - Proposed 10 Year	Max. Elevation	=	4.08 ft
Reservoir name	=	Detention Tank	Max. Storage	=	14,266 cuft

Storage Indication method used.



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