Addendum to the Final Environmental Impact Report for the Queen of the Valley Specific Plan

Phase 1 – Medical Office Building, Parking Structure, Emergency Department / Intensive Care Unit Project

Prepared for

Emanate Health
140 West College Street
Covina, California 91722
Contact: Tony Blakely, MSEM
(606) 858-8536

Prepared by

Psomas
5 Hutton Centre Drive, Suite 300
Santa Ana, California 92707
Contact: Alia Hokuki
(714) 751-7373

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ACRONYM LIST

AAM	Annual Arithmetic Mean
AB	Assembly Bill
ac	acre
ACM	asbestos-containing materials
af	Acre-feet
AFY	acre-feet per year
AQMD	Air Quality Management District
AQMP	Air Quality Management Plan
bgs	below the existing ground surface
BMP	Best Management Practice
CAAQS	California Ambient Air Quality Standards
CalARPP	California Accidental Release Prevention Program
CalEEMod	California Emissions Estimator Model
CalEPA	California Environmental Protection Agency
CalFire	California Department of Forestry and Fire Prevention
CALGreen Code	California Green Building Standards Code
CalOSHA	State Occupational Safety and Health Regulations
Caltrans	California Department of Transportation
CARB	California Air Resources Board
CBC	California Building Code
CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CGS	California Geological Survey
CH_4	methane
City	City of West Covina
CNEL	Community Noise Equivalent Level
CO	carbon monoxide
CO_2	carbon dioxide
Cortese List	Hazardous Waste and Substances Site List
CPUC	California Public Utilities Commission
CWA	Clean Water Act
cy	cubic yards
dBA	A-weighted decibel scale
DIFs	Development Impact Fees
DOC	Department of Conservation
DPM	diesel particulate matter
DTSC	Department of Toxic Substances Control
DTSC-SLs	Department of Toxic Substance Control Screening Levels
du	dwelling units
EAP	Energy Action Plan
EIR	Environmental Impact Report
EMFAC	EMissions FACtor
EO	Executive Order
ESA	Environmental Site Assessment
FEMA	Federal Emergency Management Agency

ft	feet
FTA	Federal Transportation Administration
GHG	greenhouse gas
GP	General Plan
gpcd	gallons per capita per day
HCP	Habitat Conservation Plan
HFC	hydrofluorocarbons
HOA	Homeowners Association
HVAC	heating, ventilation, and air conditioning
HWCA	California Hazardous Waste Control Act
I	Interstate
in/sec	inches per second
IRPs	integrated resources plans
ISSD	Investigative & Support Services Division
ITE	Institute of Transportation Engineers
km	kilometer
LACSD	Los Angeles County Sanitation District
LBP	lead-based paint
L_{eq}	energy average
L_{eq} dBA	Equivalent Continuous Noise Level in A-weighted decibels
L_{max}	maximum noise level
L_{min}	minimum noise level
LOS	Level of Service
LST	localized significance threshold
MBTA	Migratory Bird Treaty Act
MEI	maximally exposed individual
mg	Million Gallons
mgd	million gallons of wastewater per day
mg/m^3	milligrams per cubic meter
mph	miles per hour
MPO	metropolitan planning organization
MRF	Materials Recovery Facility
MRZs	Mineral Resources Zones
MRZ-1	Mineral Resource Zone-1 (an area with no significant mineral deposits)
MRZ-2	Mineral Resource Zone-2 (an area with significant mineral deposits)
MRZ-3	Mineral Resource Zone-3 (an area containing known mineral resources of undetermined significance)
MTdba ldn	metric tons of carbon dioxide equivalent
$MTCO_2e$	metric tons of CO_2 equivalent
$MTCO_2e/yr$	metric tons of CO_2 equivalent per year
NAAQS	National Ambient Air Quality Standards
N-C	Neighborhood Commercial
NCCP	Natural Community Conservation Plan
NHMP	Natural Hazard Mitigation Plan
NPDES	National Pollutant Discharge Elimination System
N_2O	nitrous oxide
NO	nitric oxide

NO_2	nitrogen dioxide
NOI	Notice of Intent
NOx	nitrogen oxide
O_3	ozone
OCPs	organochlorine pesticides
OEHHA	Office of Environmental Health Hazard Assessment
OPR	Governor's Office of Planning and Research
OSHA	Federal Occupational Safety and Health Regulations
PFC	perfluorocarbons
PlanWC	City of West Covina General Plan
PM2.5	fine particulate matter with a diameter of 2.5 microns or less
PM10	respirable particulate matter with a diameter of 10 microns or less
ppm	parts per million
ppv	peak particle velocity
PRD	Permit Registration Document
pvc	polyvinyl chloride
R-1	Residential Single-Family
RCP	Regional Comprehensive Plan
RCRA	Resource Conservation and Recovery Act
REC	recognized environmental condition
RHNA	Regional Housing Needs Assessment
RPS	Renewable Portfolio Standard
RSLs	Residential Regional Screening Levels
RTP/SCS	Regional Transportation Plan/Sustainable Communities Strategy
RWQCB	Regional Water Quality Control Board
SB	Senate Bill
S-C	Service Commercial
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SCE	Southern California Edison
SCGC	Southern California Gas Company
SCS	sustainable communities strategy
sf	square feet
SF_6	sulfur hexafluoride
SIP	State Implementation Plan
SJCWRP	San Jose Creek Water Reclamation Plant
SO_2	sulfur dioxide
SoCAB	South Coast Air Basin
S-P	Specific Plan
SR	State Route
SUSMP	standard urban stormwater mitigation plan
SWP	State Water Project
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TACs	toxic air contaminates
TPA	Transit Priority Area
$\mu g/m^3$	micrograms per cubic meter
USACE	U.S. Army Corps of Engineers

USEPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
UWMP	Urban Water Management Plan
VdB	vibration decibels
VHFHSZ	Very High Fire Hazard Severity Zone
VMT	vehicle miles traveled
VOCs	volatile organic compounds
WCFD	West Covina Fire Department
WCPD	West Covina Police Department
WCUSD	West Covina Unified School District
WNRP	Whittier Narrows Reclamation Plant

1.0 INTRODUCTION

1.1 PURPOSE AND BASIS FOR THE ADDENDUM

On November 5, 2019, the City Council (Council) of the City of West Covina (City) certified the "*Queen of the Valley Hospital Specific Plan Program Environmental Impact Report*" (State Clearinghouse Number 2018101068), which consists of the Draft Program Environmental Impact (Draft PEIR) with Technical Appendices dated April 2019, and the Final PEIR, including the Responses to Comments and Errata, dated June 2019, Mitigation Monitoring and Reporting Program (MMRP) and Findings of Fact and Statement of Overriding Considerations, collectively referred to as the "Final PEIR"). The Council found that the Final PEIR was complete and was prepared in compliance with the California Environmental Quality Act (CEQA, *Public Resources Code,* Section 21000 et seq.). The Final PEIR is herein referred to as the "Certified Final PEIR". The project activities analyzed in the Certified Final PEIR are herein referred to as the "Approved Project".

CEQA allows for the preparation of an Addendum to a certified EIR (Section 15164 of the CEQA Guidelines, Addendum to an EIR or Negative Declaration) to document minor changes in the project characteristics or environmental conditions under which the project will be developed. This Addendum to the Certified Final PEIR for the proposed Project has been prepared in accordance with the provisions of CEQA (*California Public Resources Code,* Sections 21000 et seq.); the State CEQA Guidelines (Title 14, *California Code of Regulations,* Sections 15000 et seq.); and the rules, regulations, and procedures for implementing CEQA as adopted by the City of West Covina. Section 15164(a) of the State CEQA Guidelines states that "the lead agency or a 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 EIR have occurred". Pursuant to Section 15162 of the CEQA Guidelines, no subsequent EIR may be required for a project unless the District determines, on the basis of substantial evidence, that one or more of the following conditions are met:

A. 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 the light of the whole record, one or more of the following:

   (1) Substantial changes are proposed in the project 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;

   (2) Substantial changes occur with respect to the circumstances under which the project is 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; or

   (3) 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:

(a) The project will have one or more significant effects not discussed in the previous EIR or negative declaration;

(b) Significant effects previously examined will be substantially more severe than shown in the previous EIR;

(c) 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

(d) 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.

Subsequent certification of the Final PEIR and in accordance with the phasing plan described in the Final PEIR, the implementation of the expansion and improvements to the Queen of the Valley Hospital (QVH) began with planning and approval of the Precise Plan for the Sunset Field Surface Parking Lot. The proposed Medical Office Building, Parking Structure, Emergency Department/Intensive Care Unit Project (MOB, PS, ED/ICU—proposed Project or Project) constitute Phase 1 (1A and 1B) of the Queen of the Valley Hospital Specific Plan (QVHSP).

In accordance with Sections 15162 and 15164 of the State CEQA Guidelines, based on the analysis and substantial evidence presented in this Addendum, the City has determined there are no new significant environmental impacts resulting from the proposed Project. The City has determined that there are no substantial increases in the severity of any previously identified significant environmental impacts and no new mitigation measures are required for the implementation of the proposed Project; there are no changes in circumstances under which the proposed Project would be undertaken that would result in new or more severe significant environmental impacts; and there is no new information of substantial importance that would result in one or more new or substantially more severe significant impacts. Therefore, an Addendum is the appropriate environmental documentation for the proposed Project and requested approvals.

Pursuant to Section 15050 of the State CEQA Guidelines, the City of West Covina is the lead agency for this Addendum and has the authority for Project approval and approval of the accompanying environmental documentation (i.e., this Addendum).

1.2 PROJECT BACKGROUND

1.2.1 APPROVED PROJECT DESCRIPTION

The purpose of the QVHSP Project was to plan the expansion of the existing QVH community hospital over a ten-year period with the use of a Specific Plan and associated CEQA document. As previously discussed in the Certified Final PEIR, a "specific plan" is a customized regulatory document established in order to provide a flexible means of implementing a General Plan. It

provides more focused guidance and regulations and details the permitted uses of specific areas. The proposed QVHSP would govern the future development of the entire hospital campus. The Certified Final PEIR examined "reasonable worst case" assumptions about the ultimate hospital development to address all future potential environmental impacts that could occur as the hospital expands.

The QVH expansion would be accomplished in phases depending on need and financing. Initially four existing buildings (Marian Rooms A and B and Buildings A–C) would be demolished to accommodate new buildings. This initial work would also involve adding surface parking on the former City-owned 2.8-acre Sunset Field park property adjacent and to the north of the hospital grounds. It should be noted that approval of the Sunset Field Parking Lot occurred through the use of a Precise Plan on October 13, 2020.

As described in the Certified Final PEIR, first phase (1A) of new construction would involve expansion and new construction of the emergency room and intensive care unit for a total of 66,000 square feet. Phase 1B would entail construction of a new medical office building (MOB) and ambulatory surgery center and a new multi-story parking structure. Phases 1A and 1B were expected to occur in the 2020-2022 timeframe. Phase 2 construction would occur from 2022-2026 and include a new 5-6 story medical tower with 132,000 square feet of new building space. The final phase of long-range improvements planned for 2028 or later would involve consolidation of the two medical towers, a new medical office building with 90,000 square feet of space, a second multi-story parking structure, and a new hospital building with 132,000 square feet. New buildings may be up to 6 stories tall.

The Approved Project would increase patient and support services, add several new buildings, renovate and demolish a number of existing buildings or structures onsite. One or two stand-alone parking structures may also be included in the master planned changes to the site. These and other possible changes on the site would be phased over a period of many years as funding becomes available and services are needed. The hospital may expand services into the community and may add new services as medical practices change over time and needs arise.

The discussion in the Certified Final PEIR noted that the phasing plan proposed was only an estimate based on plans and conditions at that time. It was identified that many factors would affect the timing and funding of the planned improvements, so the indicated phasing was merely suggestive of what may occur in the future, but the actual phasing of the various improvements may occur at times different than those identified in the Certified Final PEIR, due to unanticipated delays or conditions. Some phases may even be implemented prior to previous phases.

The Certified Final PEIR was prepared to evaluate the environmental impacts of the Approved Project and address various actions by the City and other agencies to adopt and implement the Approved Project. It was the intent of the Certified Final PEIR to inform the City, other agencies, and interested parties public agencies of the potential environmental impacts of the Approved Project.

The Phasing Plan described in the Certified Final PEIR included the following:

- Immediate Improvements (2019)
- Phase 1A Improvements (2020-2022)

- Phase 1B Improvements (2020-2022)
- Phase 2 Improvements (2022-2026)
- Long Range Improvements (2028+)

Mitigation Measures of the Certified Final PEIR

The analysis in Section 4.0 of the Certified Final PEIR evaluated the impacts associated with the Approved Project implementation. The Mitigation Measures (MMs) associated with the Approved Project are included under each topical section of this document (i.e., Sections 3.1 through 3.19), as applicable. The Approved Project resulted in less than significant impacts on Noise and Population and Housing and less than significant impacts with implementation of the MMs on Aesthetics, Air Quality, Biological Resources, Cultural Resources, Geology and Soils, Greenhouse Gas Emissions, Hazards and Hazardous Materials, Hydrology and Water Quality, Land Use and Planning, Public Services, Transportation, Tribal Cultural Resources, and Utilities and Service Systems.

The MMs were verified as part of the Mitigation Monitoring and Reporting Program (MMRP) and will be implemented to the satisfaction of the City of West Covina and would also apply to the Precise Plan for the MOB, PS, ED/ICU Project, as deemed necessary.

1.2.2 QUEEN OF THE VALLEY HOSPITAL SPECIFIC PLAN

The QVHSP was prepared to provide the land use and development standards for implementation of the various phases and components of the expansion proposed on the QVH Campus. In addition, the QVHSP provided design guidelines to assist development on the campus in creating an architectural theme and landscape character. The development standards established in the QVHSP outlined the permitted uses, setbacks, and general development criteria with and serve as the zoning for the QVHSP area.

The land use plan established three zones: Core Medical (Zone 1), Transitional Office (Zone 2), and Transitional Flex (Zone 3) within the QVHSP area. These zones would allow for the core hospital facilities and a buffer between the center of campus and the surrounding community, while guiding development at varying intensities.

Zone 1. Zone 1 would include the highest intensity and height limit and would house the majority of hospital-related use. Zone 1 could include immediate improvements involving the demolition of four existing buildings, including Building A, Building B, and two Mario Oakwood Rooms, totaling 20,000 square feet in addition to the potential improvements under Phases 1A, 1B, 2 and Long Range.

Zone 2. Zone 2 would include moderate intensity uses primarily medical offices and provide a transition to the adjacent office uses.

Zone 3. Zone 3 would primarily consist of parking and supporting services. This zone would have the lowest intensity in the QVHSP area and will provide a buffer from the neighboring apartment complex and single-family homes across the Walnut Creek Wash to the north. Zone 3 could include immediate improvements phase involving the conversion of the 3-acre former Sunset Field Park property will be converted to surface parking.

2.0 PROJECT DESCRIPTION AND SETTING

2.1 PROJECT LOCATION

The Queen of the Valley Hospital (QVH or Hospital) occupies approximately 28.8 acres and is located at 1115-1135 South Sunset Avenue in the City of West Covina, in Los Angeles County, California. The property is at the north corner of South Sunset Avenue and West Merced Avenue approximately a half mile south of the Interstate (I)-10 Freeway in the east-central portion of the San Gabriel Valley. See Exhibit 2-1, Regional Location and Local Vicinity Map.

The QVH is in the eastern San Gabriel Valley, which is part of the larger Los Angeles Basin and also within the South Coast Air Basin (SoCAB). The Walnut Creek Flood Control Channel is just north of the hospital, which is under the jurisdiction of various federal, State, and county agencies. The site is essentially flat and fully developed with buildings, parking lots, landscaping, and related improvements and contains no native vegetation or undisturbed land. Surrounding land uses include residential to the northeast and north across the flood control channel, community park facilities to the west, two schools to the south across Merced Avenue, and commercial uses to the southeast and east across Sunset Avenue.

The existing sites for the MOB, PS, ED/ICU Project are centrally located adjacent to existing surface parking lots and existing QVH campus buildings. The sites of the MOB and PS is to the south of the Sunset Field Surface Parking Lot and west and southwest of the existing Torrey Pines Apartments. The site of the ED/ICU is located to the south of the existing Orangewood Park.

2.2 EXISTING SITE AND AREA CHARACTERISTICS

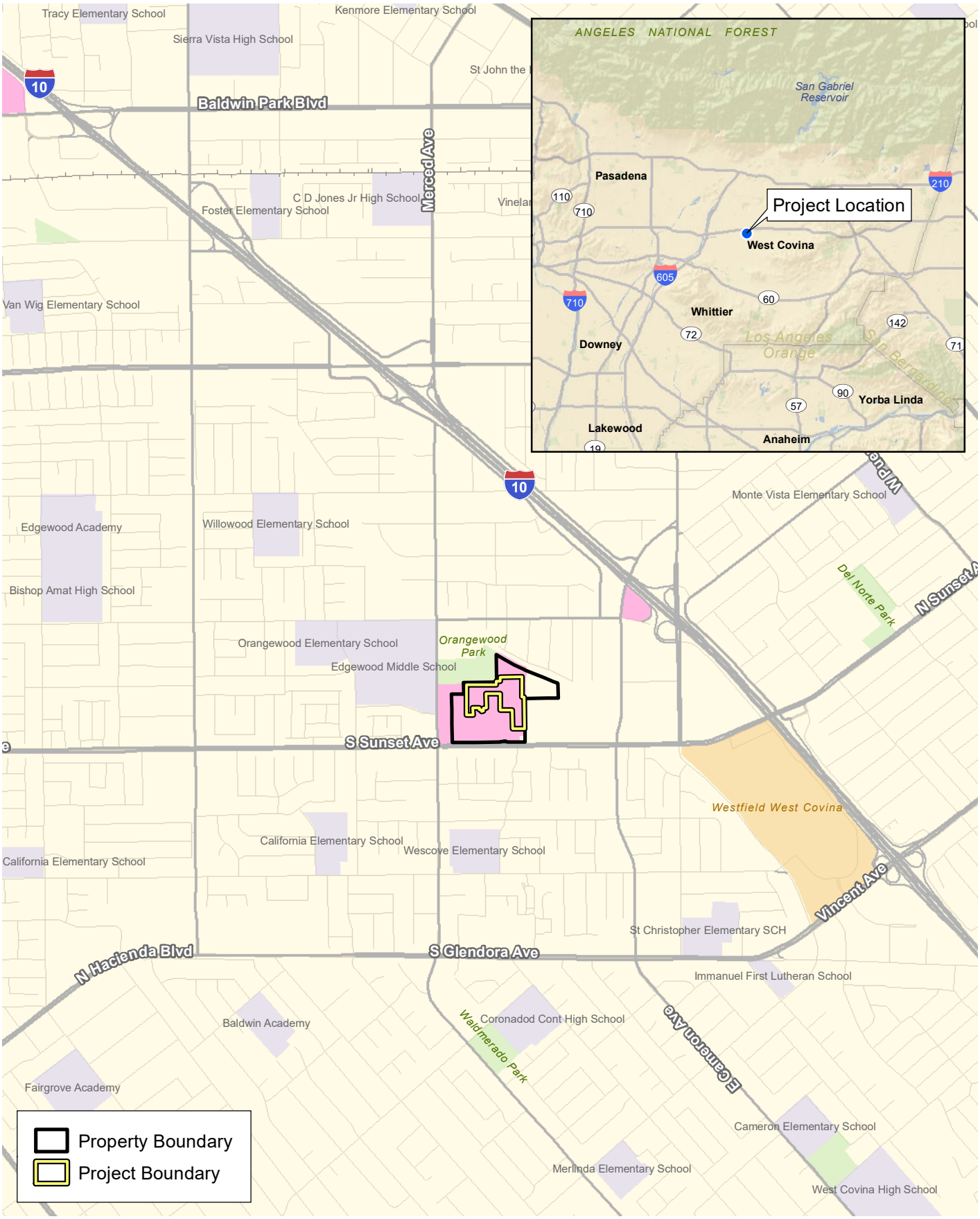
2.2.1 SITE ACCESS

Vehicular access to the QVH campus is provided by one primary access point and two secondary access points off South Sunset Avenue; one access point off West Merced Avenue; and one access point off a driveway through the adjacent commercial building parking lot to the northeast of the camps. The driveway off West Merced Avenue would provide direct access to the proposed Project site.

South Sunset Avenue is a Principal Arterial that extends along the entire length of the QVH campus to the east and southeast, and West Merced Avenue is a Minor Arterial that borders the QVH campus to the southwest.

2.2.2 EXISTING SITE CONDITIONS

The QVH site is flat and fully developed with buildings, parking lots, and related improvements and contains no undisturbed land. The Project site is currently developed with the same. The site also contains ornamental trees and landscaping scattered throughout, mostly around the existing buildings. However, no native vegetation exists within the site. See Exhibit 2-2, Aerial Photograph.



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Regional Location and Local Vicinity

Exhibit 2-1

Medical Office Building, Parking Structure, Emergency Department/Intensive Care Unit
Addendum to the Certified Final PEIR

2,000 1,000 0 2,000 Feet

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Aerial Source: Esri, Maxar 2020

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Aerial Photograph

Exhibit 2-2

Medical Office Building, Parking Structure, Emergency Department/Intensive Care Unit
Addendum to the Certified Final PEIR

300 150 0 300 Feet

PSOMAS

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More specifically, the site for the MOB is currently developed with Building A and Building D, which would be demolished to accommodate the MOB, and Building B, which would be moved to a different location. The site for the PS is developed with a surface parking lot, and the site for the new ED/ICU building includes an existing building and surface parking, which would also be demolished to accommodate the new structure for the ED/ICU.

2.2.3 SURROUNDING LAND USES AND DEVELOPMENT

The QVH campus proper is surrounded by a variety of land uses including residential (apartments) to the northeast, institutional and commercial to the east and southeast, institutional to the west and southwest, and Walnut Creek Wash and single-family residential uses to the north.

The specific sites for the proposed MOB, PS, ED/ICU Project are surrounded by existing QVH related buildings and surface parking lots. The site for the MOB and PS is located to the south of the Sunset Field Surface Parking Lot, and the site for the ED/ICU is to the south of the existing Orangewood Park.

2.3 PLANNING CONTEXT

2.3.1 GENERAL PLAN DESIGNATION

The QVH campus in its entirety has a General Plan Land Use designation of "Commercial". The northeastern portion of the Project site (i.e., former Sunset Field Park) had a designation of "Parks and Open Spaces"; however, with the approval of the Sunset Field Surface Parking Lot Project, the designation of "Parks and Open Space" changed to "Commercial".

The land use designations in the vicinity of the Project site include Neighborhood—Low Density Residential to the north, northwest, east and southeast across South Sunset Avenue; Neighborhood—Medium Density Residential to the north and northeast; Parks and Open Spaces to the west; and commercial to the southwest. Additionally, Civic: Schools land use exists to the west across from West Merced Avenue.

2.3.2 ZONING DESIGNATION

The QVH campus in its entirety has a Zoning designation of "Specific Plan". The northeastern portion of the Project site (i.e., former Sunset Field Park) had a designation of "MF-20 – Residential 20 du/ac", which changed to "Specific Plan" with the approval of the Sunset Field Surface Parking Lot Project.

Adjacent zoning designations include R-1 – Residential Single Family to the north, northwest across Walnut Creek Parkway, and southeast across South Sunset Avenue; MF-20 – Residential 20 du/ac to the east; O-P – Office Professional to the east and west; and N-C – Neighborhood Commercial to the south.

2.4 PROPOSED PROJECT DESCRIPTION

The proposed Project implements Phase 1 expansion of the Hospital, as identified in the QVHSP and analyzed in the Certified Final PEIR. The purpose of the proposed MOB, PS, ED/ICU Project is to replace outdated buildings with modern facilities and amenities that would meet the local, national, and international patient demands. The Project would also replace older infrastructure that require high maintenance with more efficient, lower-maintenance, updated, and environmentally sensitive systems that meet the needs of new medical technologies.

The proposed components of the Project would be located within Zone 1 of the QVH's 3 zones. The uses within this zone include the highest intensity and height limit, and majority of the hospital-related buildings are located within this zone.

The following provides a discussion of characteristics of each of the components of the proposed Project, the MOB, PS, ED/ICU and their associated parking. Phase 1A consists of the MOB and PS and associated surface parking, and Phase 1B consists of the ED/ICU and associated surface parking.

2.4.1 MEDICAL OFFICE BUILDING

As identified in the Certified Final PEIR, the short-term phase of the QVH expansion and redevelopment would focus on the construction of a 58,868 square-foot, 2-story MOB where Buildings A and B and two Mario Oakwood Rooms, totaling 20,000 square feet, are located. The new building would be to the northeast of the existing main building of the QVH.

The new MOB would include, but not be limited to, operating rooms, waiting rooms, nurses' stations, exam rooms, lounges, offices, supply rooms, equipment rooms, storage, and more. The main entrance would be along the northeast side of the building with a patient drop-off area. The entrance area would include a total of four handicap parking spaces and a total of 22 spaces within an enclosed area (Lot C), surrounded by landscaping. Additional visitor parking spaces would be included in this area along the access road.

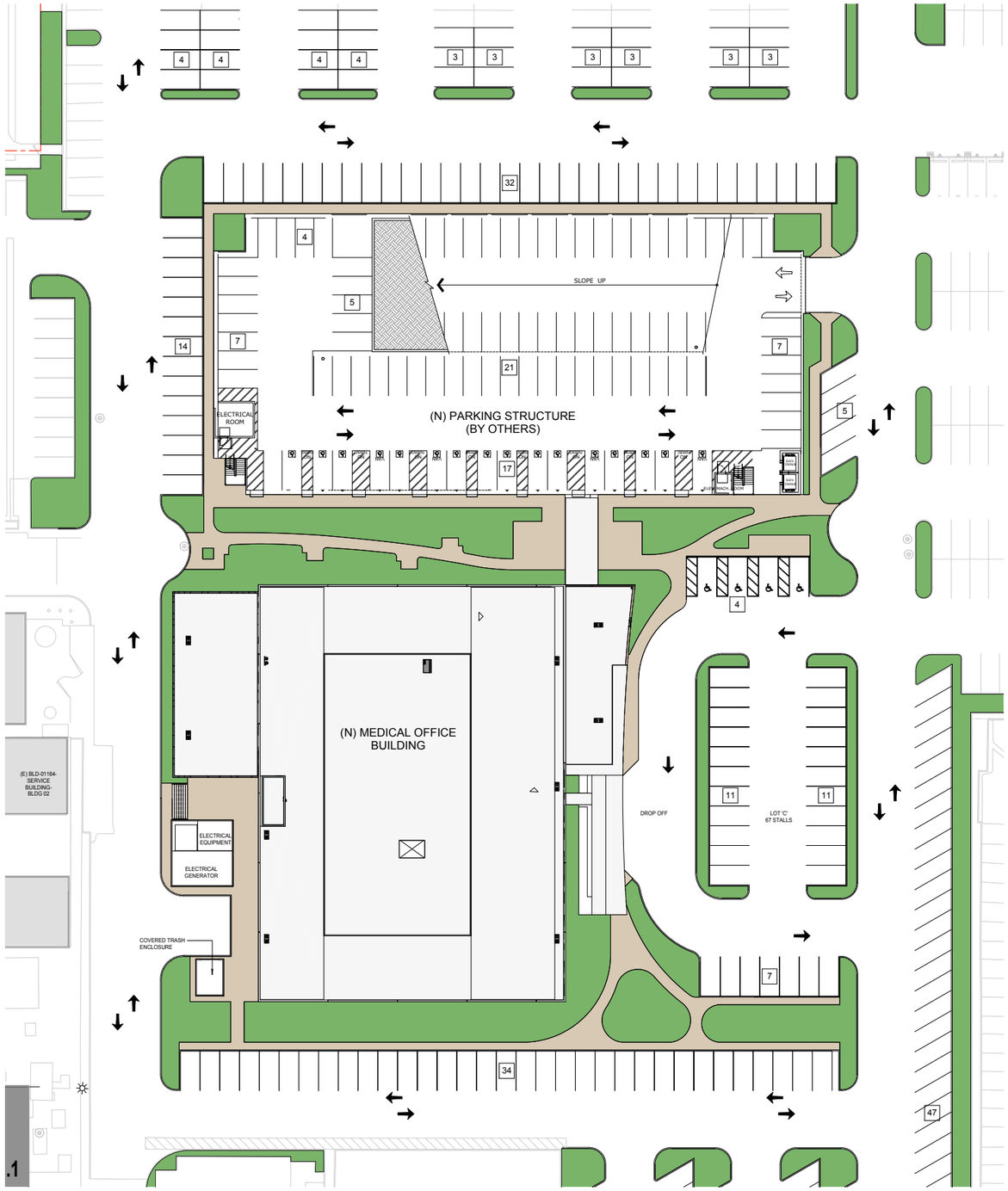
Exhibit 2-3 depicts the MOB's site plan; Exhibit 2-4 depicts the Elevations; and Exhibit 2-5 depicts the renderings.

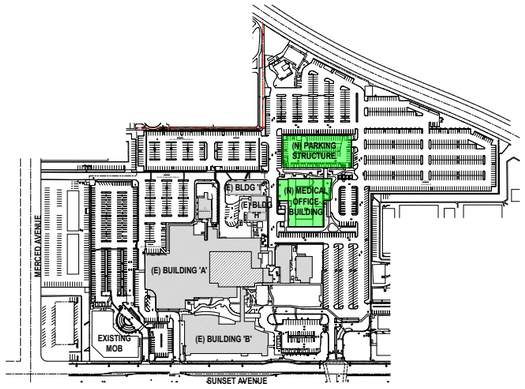
2.4.2 PARKING STRUCTURE

In addition to the MOB, described above, the proposed Project also includes construction of a new 4-level parking structure to the northwest of the existing main building, adjacent to the new MOB and separated from it by a landscaped area and a walkway.

Level 1 of the structure would have 63 spaces, including 4 van-accessible spaces; levels 2 and 3 would include 114 spaces each; and level 4 would include 107 spaces, for a total of 398 parking spaces. Surface parking spaces are also provided outside the structure adjacent to the entrance and along the north and west sites of the structure. The PS' entrance would be along its east elevation.

Exhibit 2-3 also depicts the PS and Exhibit 2-6 shows the elevations of the PS.





Source: gkkworks/Cannon Design, 2020

Medical Office Building and Parking Structure Site Plan

Exhibit 2-3

Medical Office Building, Parking Structure, Emergency Department/Intensive Care Unit
Addendum to the Certified Final PEIR

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EAST ELEVATION

NORTH ELEVATION

SOUTH ELEVATION

WEST ELEVATION

Source: gkkworks/Cannon Design, 2020

Medical Office Building Elevations

Exhibit 2-4

Medical Office Building, Parking Structure, Emergency Department/Intensive Care Unit
Addendum to the Certified Final PEIR

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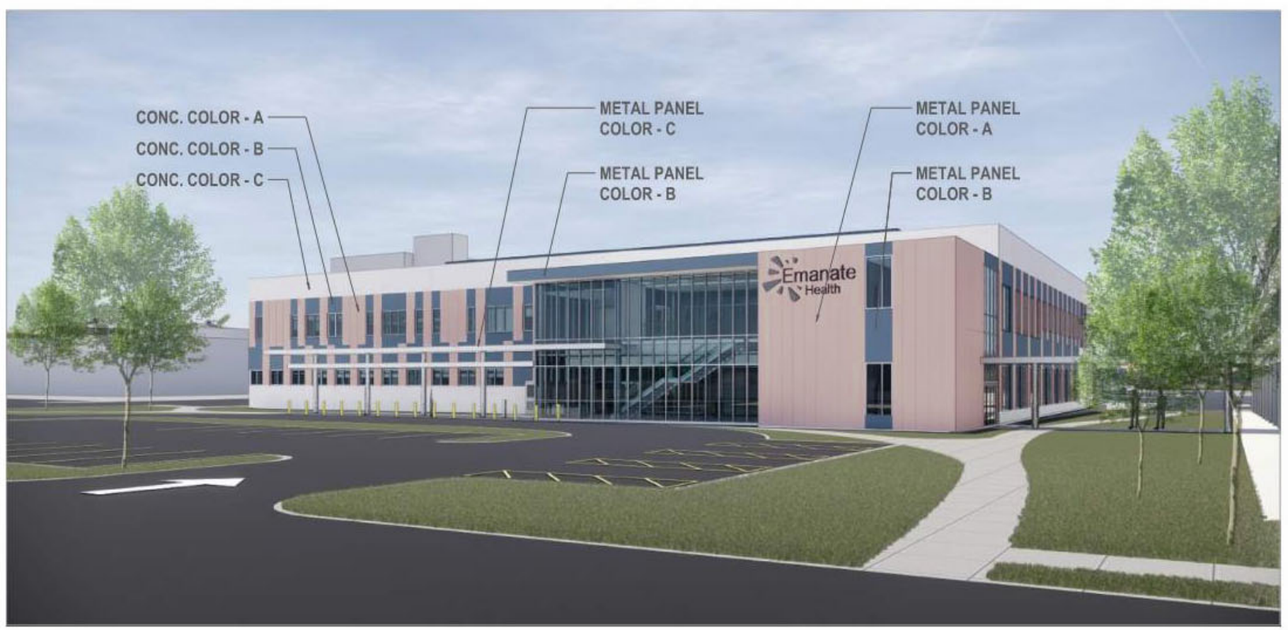

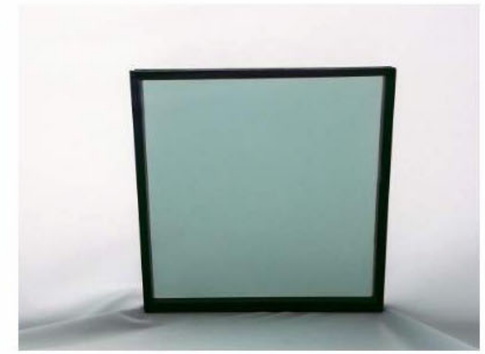

GLASS
VIRACON VUE1 - 50

CONC. COLOR - A

CONC. COLOR - B

CONC. COLOR - C

METAL PANEL
COLOR - A
CENTRIA - 9951
CHAMPAGNE PEARL

METAL PANEL
COLOR - B
CENTRIA - 9955
BLUE

METAL PANEL
COLOR - A
CENTRIA - 9946
SILVERSMITH

Source: gkkworks/Cannon Design, 2020

Medical Office Building

Exhibit 2-5

Medical Office Building, Parking Structure, Emergency Department/Intensive Care Unit
Addendum to the Certified Final PEIR

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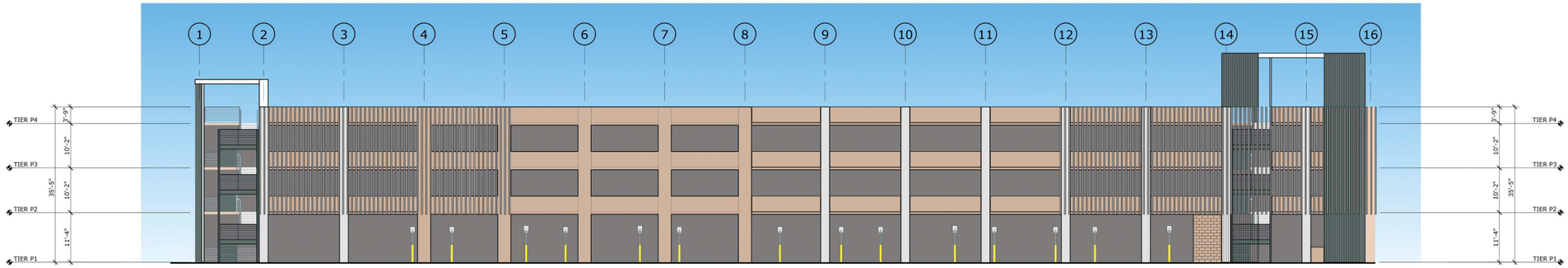
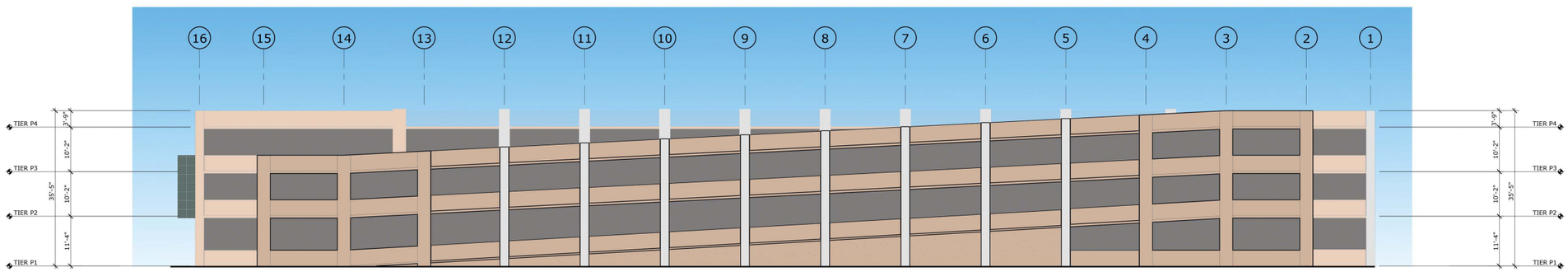
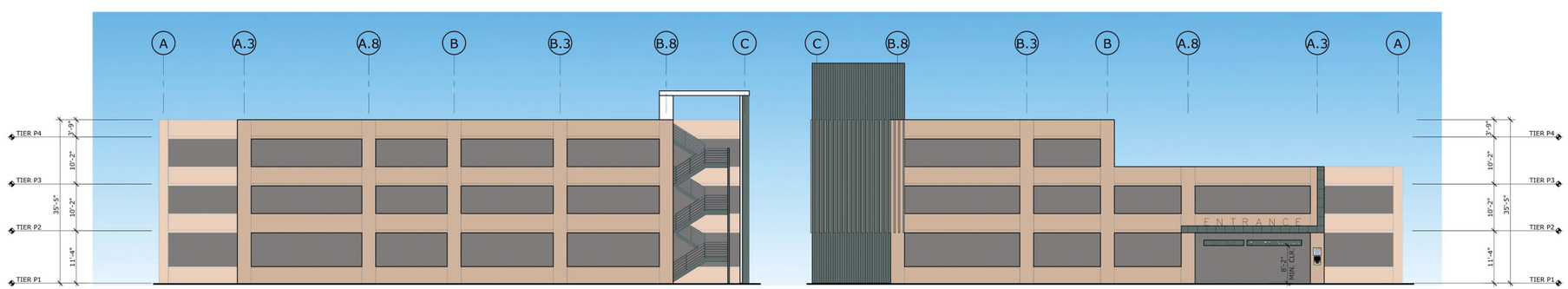


1 SOUTH ELEVATION



2 NORTH ELEVATION



4 WEST ELEVATION

3 EAST ELEVATION

Source: gkkworks/Cannon Design, 2020

Parking Structure Elevations

Exhibit 2-6

Medical Office Building, Parking Structure, Emergency Department/Intensive Care Unit
Addendum to the Certified Final PEIR

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2.4.3 EMERGENCY DEPARTMENT / INTENSIVE CARE UNIT

The new two-story ED/ICU would be constructed to the southwest of the existing Education Annex, to the west of the main hospital building, and the south of the Orangewood Park. The first and second floors of the new building would be 33,523 square feet and 25,378 square feet, respectively, for a total of 58,901 square feet. The ED/ECU would include a total of 235 on-site parking spaces to accommodate the patients' visitors. Adjacent to the building's entry/exit would be a patient drop-off area and eight ambulance parking spaces (Lot H). There would be landscaping along the entrance and patient drop-off area and within the surface parking lot (Lot G and Lot F) across from the ED/ICU building.

Exhibit 2-7 depicts the ED/ICU's site plan; Exhibit 2-8 depicts the elevations; and Exhibit 2-9 shows the renderings.

2.5 ARCHITECTURAL DESIGN

The concept behind the design of the proposed structures is to establish a cohesive and contemporary design character for the campus that creates a dynamic relationship between the existing and new buildings.

Additionally, the design seeks to replace outdated and obsolete buildings with modern facilities that can accommodate innovative therapies for local, national, and international patients. The new facilities would incorporate green building standards and maximize energy efficiency, indoor air quality, energy-efficient lighting, building orientation, and shading through local and state standards and/or through implementation of LEED principles and ensure that new buildings on campus comply with CalGreen standards.

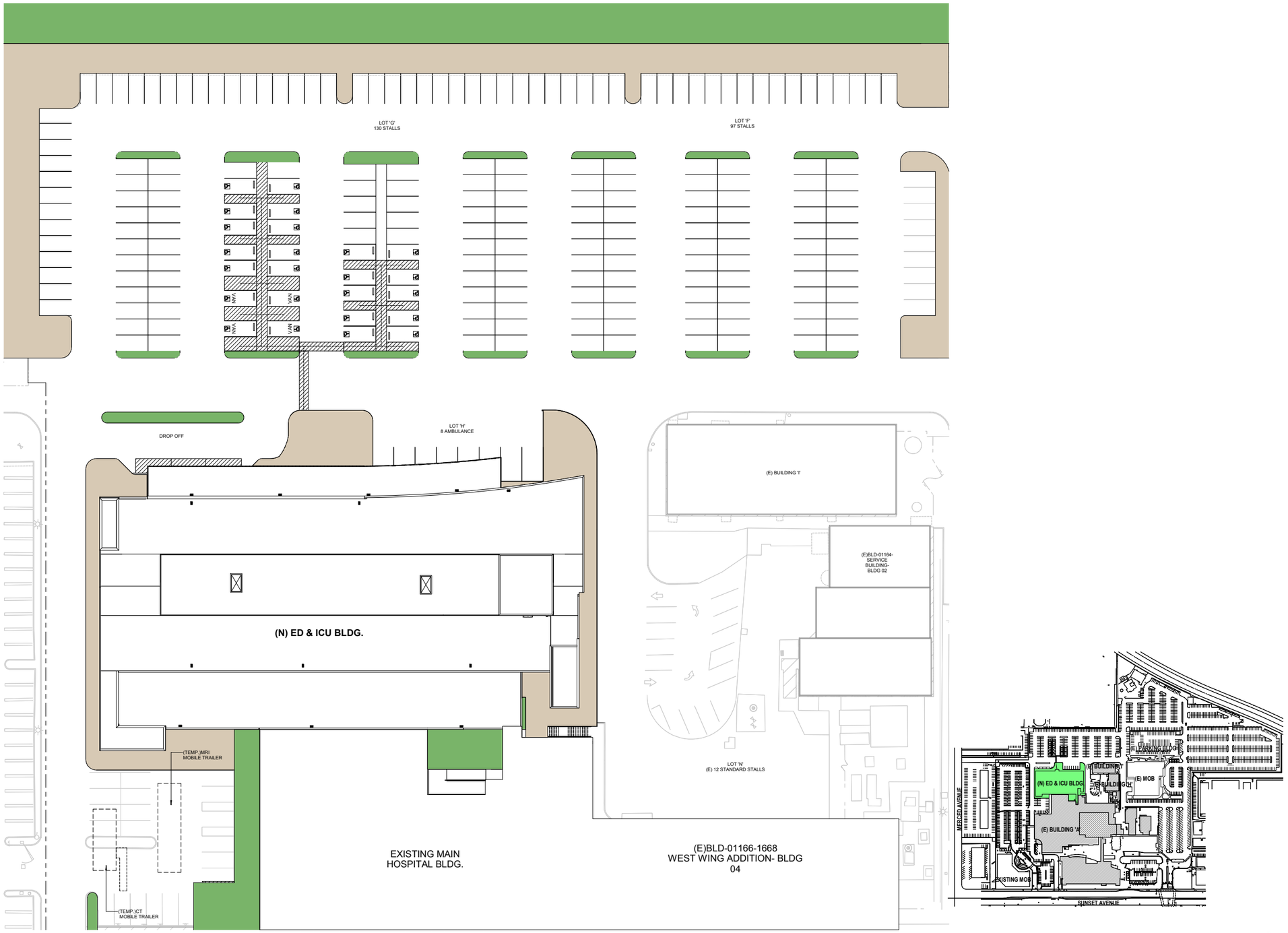
The existing infrastructure, which requires high maintenance would also be replaced with more efficient, lower-maintenance, and environmentally sensitive systems.

2.6 CONCEPTUAL LANDSCAPE PLAN

The drought tolerant landscape plan concept for the proposed Project provides for a hierarchy of landscaping that would create a visually appealing and cohesive environment.

The landscape concept for the MOB, PS, ED/ICU Project would include trees, low ornamental grasses, mid-height shrubs, tall shrubs and screens, ground covers, and mixed succulents accent, and specific options are shown on Exhibits 2-10 and 2-11 for MOB/PS and ED/ICU, respectively.

Landscaping for the MOB is proposed primarily around the perimeter of the building and the entry. Trees would be planted to screen the drop-off zone and parking structure from the existing residential to the east. Additionally, an 8-foot tall wall and landscape improvements would be installed along the proposed wall abutting existing residential. A total of 42 trees would be planted within the parking lot. A lush paseo and ample landscaping comprised to different types of trees, shrubs, and low ornamental ground cover would be installed between the MOB and PS. The ED/ICU would include landscaping around the entry to the facility and the drop-off zone. A total of 38 trees, existing and new, would be included within the parking lot of the ED/ICU.



Source: gkkworks/Cannon Design, 2020

Emergency Department/Intensive Care Unit Site Plan

Exhibit 2-7

Medical Office Building, Parking Structure, Emergency Department/Intensive Care Unit
Addendum to the Certified Final PEIR

PSOMAS

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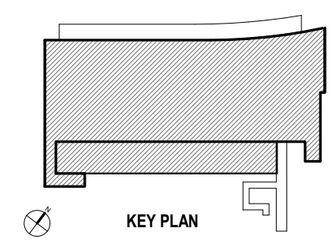
NORTH ELEVATION

EAST ELEVATION

WEST ELEVATION

SOUTH ELEVATION



Source: gkkworks/Cannon Design, 2020

Emergency Department/Intensive Care Unit Elevations

Exhibit 2-8

Medical Office Building, Parking Structure, Emergency Department/Intensive Care Unit
Addendum to the Certified Final PEIR

PSOMAS

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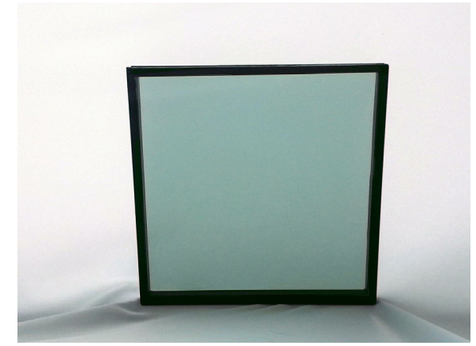

GLASS
VIRACON VUE1 - 50

METAL PANEL
COLOR - B
CENTRIA - 9951
CHAMPAGNE PEARL

METAL PANEL
COLOR - A
CENTRIA - 9955
BLUE

METAL PANEL
COLOR - C
CENTRIA - 9946
SILVERSMITH

STUCCO. COLOR - B

STUCCO. COLOR - A

Source: gkkworks/Cannon Design, 2020

Emergency Department/Intensive Care Unit

Exhibit 2-9

Medical Office Building, Parking Structure, Emergency Department/Intensive Care Unit
Addendum to the Certified Final PEIR

PSOMAS

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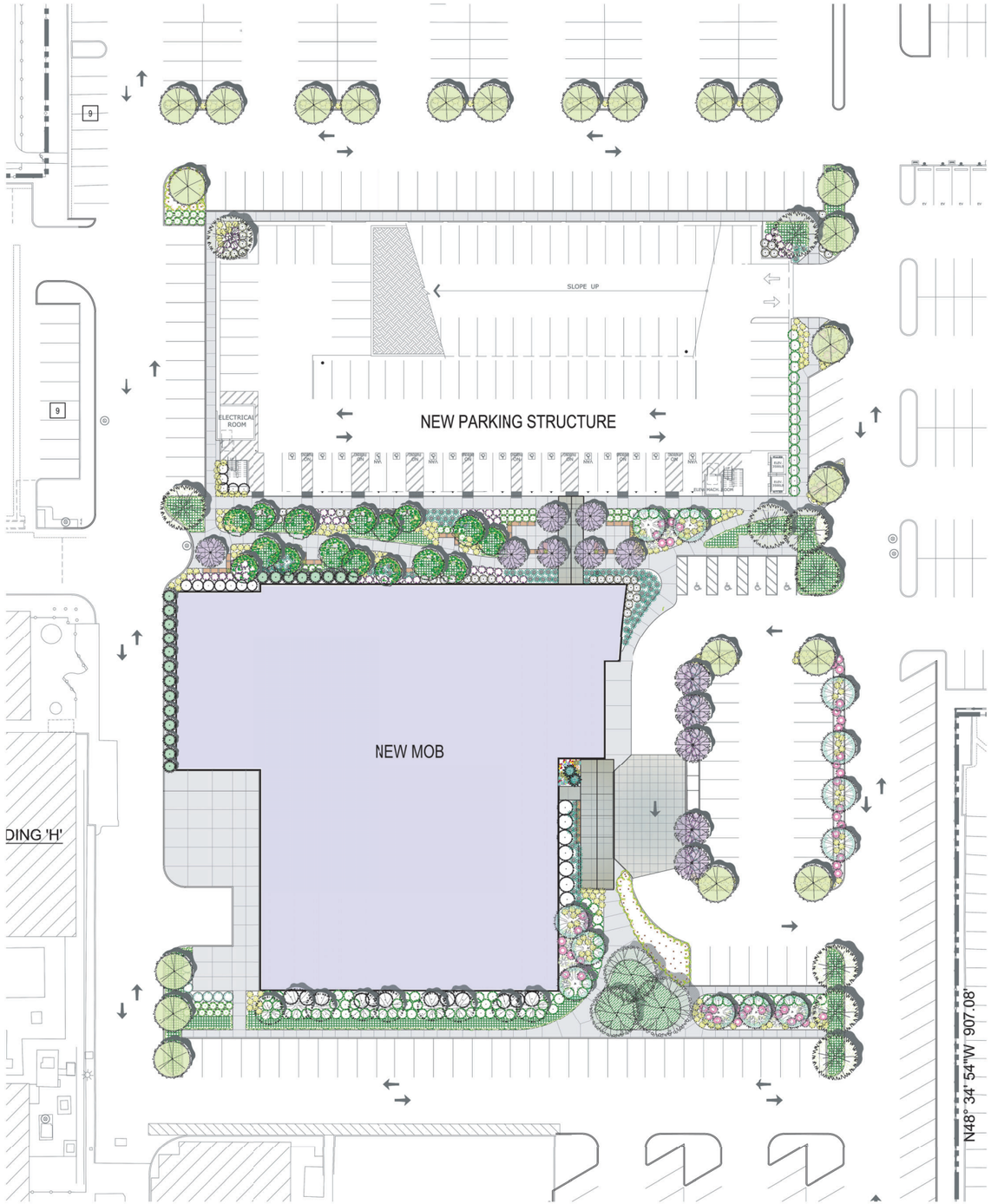

QUEEN OF THE VALLEY HOSPITAL
MEDICAL OFFICE BUILDING
PLANT MATERIAL

TREES

ACACIA ANEURA
MULGA
24" BOX LOW BRANCHED

CHITALPA TASHKENTENTSIS
FLOWERING DESERT WILLOW
36" BOX STANDARDS

GINKGO BILOBA
GINKGO
36" BOX STANDARDS

HYMENOSPORUM FLAVUM
SWEETSHADE TREE
24" AND 36" BOX

MELALEUCA QUINQUENERVIA
CAJEPUT TREE
36" BOX MULTI-TRUNK

LAGERSTROEMIA MUSKOGEE
HYBRID CRAPE MYRTLE
36" BOX MULTI-TRUNK

PLATANUS RACEMOSA
SYCAMORE
36" BOX LOW BRANCHED

LOW ORNAMENTAL GRASSES
ALL 5 GALLON
MUHLENBERGIA LINDHEIMERII
MUHLENBERGIA CAPPILARIS
LOMANDRA PLATINUM BEAUTY

MID-HEIGHT SHRUBS
5 AND 15 GALLON
LOROPETALUM HYBRIDS
CALLISTEMON VIMINALIS "LITTLE JOHN"
ANIGOZANTHOS HYBRIDS
NANDNA DOMESTICA
PITTOSPORUM CRASSIFOLIUM
DIANELLA TASMANICA
BACCHARIS PILULARIS

TALL SHRUBS AND SCREENS
15 GALLON
PITTOSPORUM 'SILVER SHEEN'
PODOCARPUS 'ICEE BLUE'

GROUND COVERS
4" POTS AND 1 GALLON
CAREX DIVULSA
MYOPORUM PAVIFOLIUM

MIXED SUCCULENTS ACCENT
1 AND 5 GALLON
AEONIUMS
CRASSULA
AGAVE

NATURAL GRAY TOPCAST WASH OFF
FINISH CONCRETE PAVING

WOOD SLAT SEAT, CAST IN PLACE
CONCRETE BENCHES


ACACIA ANEURA


CHITLAPA TASHKENTENSIS


LAGERSTROEMIA INDICA


PLATANUS RACEMOSA


MELALEUCA QUINQUENERVIA


HYMENOSPORUM FLAVUM

Source: gkkworks/Cannon Design, 2020

Medical Office Building and Parking Structure Landscape Plan

Exhibit 2-10

Medical Office Building, Parking Structure, Emergency Department/Intensive Care Unit
Addendum to the Certified Final PEIR

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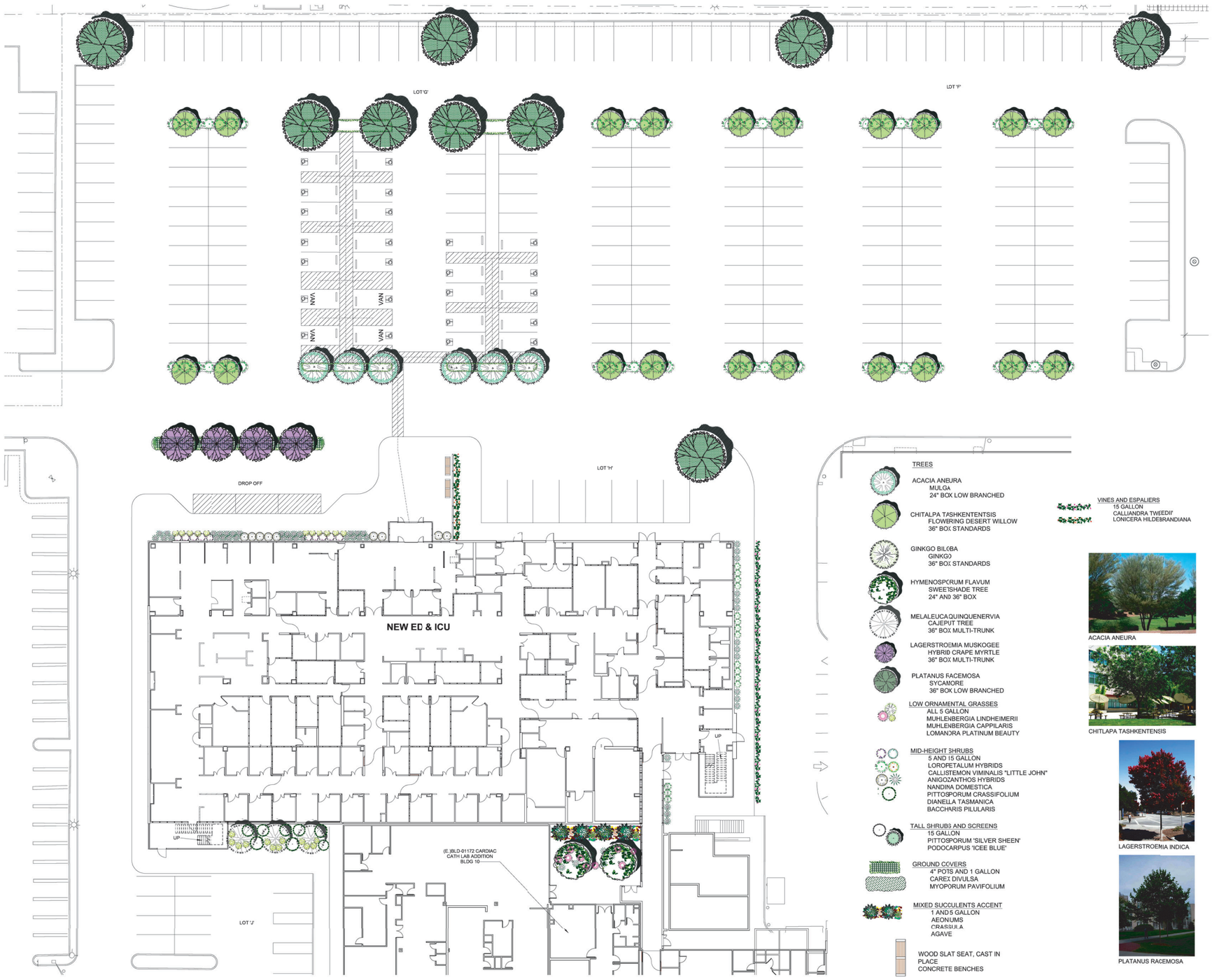

Source: gkkworks/Cannon Design, 2020

Emergency Department/Intensive Care Unit Landscape Plan

Exhibit 2-11

Medical Office Building, Parking Structure, Emergency Department/Intensive Care Unit
Addendum to the Certified Final PEIR

PSOMAS

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2.7 CONSTRUCTION ACTIVITIES

For Phase 1A, construction activities are anticipated to begin in February 2021 through July 2022, for a total of 18 months, for the MOB/PS. For Phase 1B, construction activities are anticipated to begin in May 2021 through November 2022 for a total of 19 months for the ED/ICU. For both phases, construction activity would occur for 9 hours per day, and 6 days per week, in accordance with the City's permitted hours of construction.

Construction of the proposed Project would generate temporary trips associated with construction activities. Construction-related traffic would primarily be associated with delivery of building materials and construction equipment, removal of construction debris, and construction workers commuting to/from the Project site.

2.7.1 DEMOLITION

Implementation of the Project would include demolition or relocation of the existing buildings. For Phase 1A, Buildings A and D, surface parking, and associated site improvements would be demolished and Building B would be relocated. During Phase 1A, there would be 1,606 tons of demolished material. For Phase 1B, the existing magnetic resonance imaging (MRI) building and surface parking/associated site improvements would be demolished, for a total of 4,280 tons of demolished material. A portion of the demolition and construction debris (65 percent) would be recycled, reused, and/or salvaged in compliance with the California Green Building Standards Code (CALGreen Code). Materials that cannot be recycled, reused, or salvaged would be transported to a local landfill. Any hazardous materials (e.g., asbestos-containing materials and lead-based paint) encountered during demolition would be handled and disposed of in accordance with South Coast Air Quality Management District (SCAQMD) rules and other pertinent regulations.

2.7.2 GRADING

The proposed grading of the site would retain the relatively flat topography. Total earthwork proposed is approximately 1,000 cubic yards (cy) of soil imported during Phase 1A, and 5,900 cy of soil exported during Phase 1B.

Construction activities would utilize standard construction equipment, including earth-moving equipment, trucks, cranes, and forklifts. Construction activities and construction staging would mainly occur within the Project site. Implementation of traffic control measures during demolition and construction activities would minimize obstruction of vehicular traffic on public roadways in the vicinity of the Project site.

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3.0 ENVIRONMENTAL CHECKLIST

This Addendum evaluates whether any of the conditions requiring preparation of a Subsequent Environmental Impact Report (SEIR) pursuant to Section 15162 of the CEQA Guidelines are met, and whether there are new significant impacts resulting from the proposed Project, as compared to the impacts previously approved and analyzed. As previously identified in Section 1.0, Introduction, of this Addendum, the Certified Final PEIR was certified by the West Covina City Council in November 2019. The analysis contained within this Addendum thus relies upon and incorporates by reference the Certified Final PEIR.

This Addendum uses an Environmental Checklist Form, pursuant to 15063(d)(3) of the CEQA Guidelines, that compares the anticipated environmental effects of the proposed Project with those addressed in the Certified Final PEIR.

For each topical issue, summaries of the environmental analysis conclusions from the Certified Final PEIR are provided. In conjunction with certification of the Final PEIR, the Council also adopted a Mitigation Monitoring and Reporting Program (MMRP). Applicable mitigation measures that are incorporated into the proposed Project are listed for each topical issue in this Addendum, in their entirety, and are assumed in the analysis presented.

Following the summary of the Certified Final PEIR, the analysis for the proposed Project is presented. This document is an Addendum to the Certified Final PEIR and demonstrates that there are no changes to the previously Approved Project or changes in circumstances that would substantially increase significant environmental impacts or create any new significant impacts. This Addendum demonstrates that no new information of substantial importance has been identified that shows the proposed Project would have one or more significant effects not discussed in the Certified Final PEIR. Additionally, this Addendum demonstrates that no new mitigation measures are required beyond those identified in the MMRP for the Certified Final PEIR, and that applicable mitigation measures in the MMRP remain feasible to reduce the significance of such impacts in the manner set forth in the Certified Final PEIR.

3.1 AESTHETICS

Certified Final PEIR Environmental Review

The Certified Final PEIR identified that the Approved Project's impacts related to scenic vistas would be less than significant, as the Approved Project would not obstruct northern views of the San Gabriel Mountains or southern views of the Puente Hills along Sunset Avenue. Additionally, it was determined that implementation of the Approved Project would not damage scenic resources within a State scenic highway, as none exists in the vicinity of the QVH. Furthermore, it was indicated that the Approved Project would be compatible with the surrounding uses and not visually intrusive. Development in compliance with the development standards and design guidelines of the Specific Plan would create a visually cohesive community that would not substantially degrade the existing visual character or quality of the site and its surroundings. Lastly, it was determined that even though new sources of light and glare would be introduced, adherence to the development standards and design guidelines in the Specific Plan would ensure that potential impacts related to light and glare would be less than significant.

Mitigation Measures

MM AES-1 Construction staging areas shall be located as far as practical from residential neighborhoods immediately adjacent to the Project site, and perimeter fencing shall be installed to obstruct views from adjacent ground level vantage points into the Project site during construction. Implementation of this measure shall be verified by the City during construction. **(Applicable)**

MM AES-2 The development of the QVHSP limits new parking structures to 60 feet in height. Buildings would be subject to a six-story height limit in Zones 1 and 2. Zone 3 would reduce the height limit of 30 feet for parking structures and three stories for buildings. Compliance with the established height limits shall be confirmed by the City in accordance with implementation provisions outlined in Chapter 6 of the Queen of the Valley Specific Plan prior to the issuance of any building permits. **(Applicable)**

MM AES-3 Prior to approval of any building plans for structures over 45 feet or 3 stories in height that are within 100 feet of the Orangewood Park soccer fields, a detailed shade and shadow analysis shall be conducted to accurately inform the City and park users as to any anticipated encroachment (i.e., shade or shadow) on the park fields upon completion of the involved structure(s). The hospital shall also plan for any structures in this location to be at the minimum height necessary to minimize shade and shadow impacts on City park facilities to the extent practical. This measure shall be implemented to the satisfaction of the City Community Development Director. **(Applicable)**

MM AES-4 Temporary nighttime lighting installed during construction for security or any other purpose shall be downward-facing and hooded or shielded to prevent light from spilling outside the staging area and from directly broadcasting security light into the sky or onto adjacent residential properties. Compliance with this measure shall be verified by the City's Building and Safety Services Department during inspections of the construction site. **(Applicable)**

Proposed Project Impact Analysis

Environmental Issues	New Significant Impact	More Severe Impacts	New Ability to Substantially Reduce Significant Impact	No Substantial Change From Previous Analysis
AESTHETICS – Would the project:				
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?	☐	☐	☐	☑

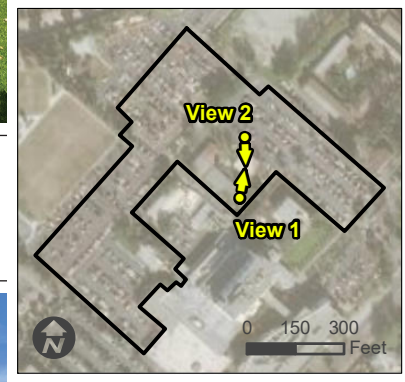
Existing Views and Visual Character

The Project site is currently developed with surface parking lots and four single-story buildings, including modular buildings (Building A, Building B, Building D), and a magnetic resonance imaging (MRI) building. Access to the site is primarily from South Sunset Avenue, at the intersection of South Sunset Avenue and West Vine Avenue.

Exhibits 3-1a through 3-1c, Existing Site Views, include photographs that depict the existing visual character of the Project site. More specifically, Views 1 through 3 are views of the on-site buildings and surface parking lots for the MOB site and Views 4 through 6 are on-site buildings and surface parking lots for the ED/ICU site.

- **View 1**, looking north from along a portion of the Project's southeastern boundary, shows a view of existing modular Building B and access ramp leading to the front entrance. Landscaping is visible on the southwest and southeast sides of the building with mature trees visible on the southeast side. Additionally, mature trees can be seen on the far northwest side of the building. A surface parking lot located on the north side of the building is visible through two trees to the southeast of the building.
- **View 2**, looking south from a northern portion of the Project site depicts the north, northeast, and northwest sides of Building B. In the foreground, parking spaces and an electrical utility structure on the north corner of the building are visible. Two entrances to Building B and signage for Building A are depicted on the northwest side of the building. Mature trees are visible in the background on the southwest side of the building and in the distance to the south.

View 1



View 2

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Existing Site Views

Exhibit 3-1a

Medical Office Building, Parking Structure, Emergency Department/Intensive Care Unit
Addendum to the Certified Final PEIR

PSOMAS

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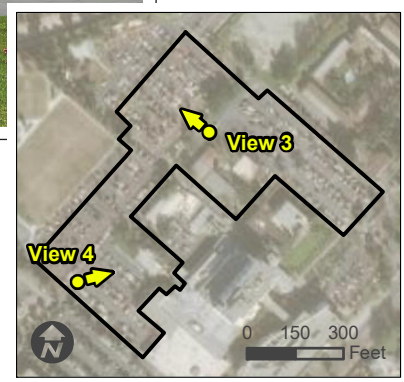
View 3



View 4

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Existing Site Views

Exhibit 3-1b

Medical Office Building, Parking Structure, Emergency Department/Intensive Care Unit
Addendum to the Certified Final PEIR

PSOMAS

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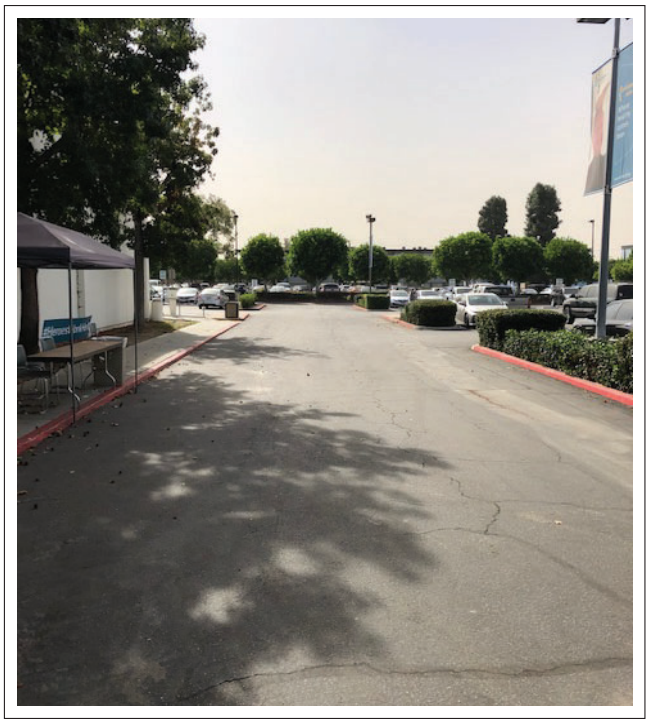
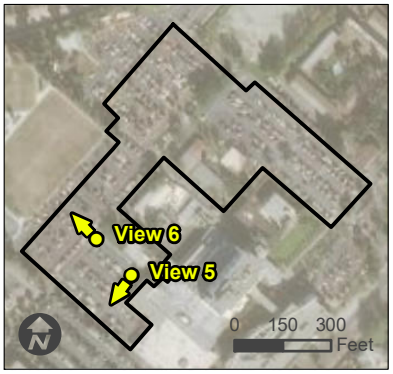
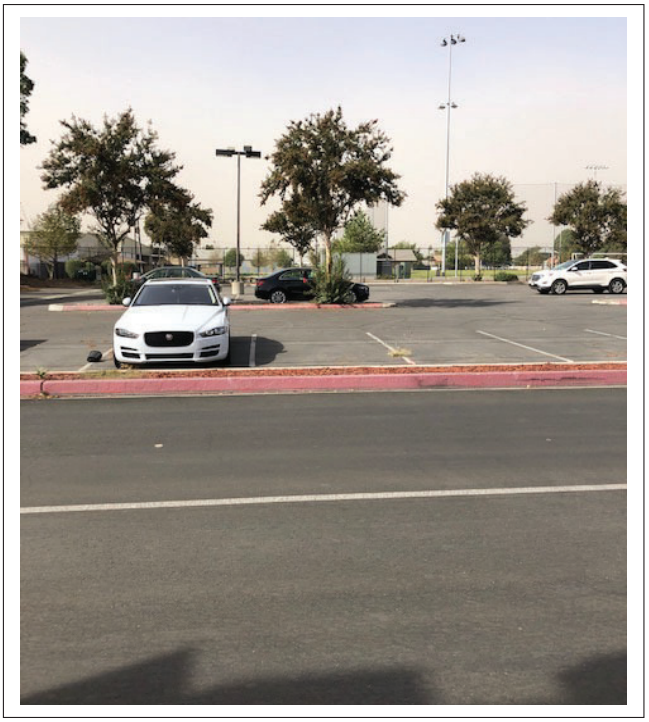


View 5





View 6

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Existing Site Views

Exhibit 3-1c

Medical Office Building, Parking Structure, Emergency Department/Intensive Care Unit
Addendum to the Certified Final PEIR

PSOMAS

(11/20/2020 MMD) R:\Projects\EMA\3EMA010100\Graphics\Addendum\ex_ExistingSiteViews.pdf

- **View 3**, looking northwest from a private Hospital road, approximately 280 feet east of Orangewood Park. From this view, a sidewalk, parking lot signage, lighting, and a median are visible in the foreground. Beyond the median, several rows of parking spaces are depicted interspersed with median, mature trees, landscaping, and parking lot lighting. Outside of the Project site boundary, views consist of more parking spaces, low one-story modular buildings, and mature trees.
- **View 4**, looking northeast from the surface parking lot along the southern Project boundary are visible various on-site buildings, parking spaces, mature trees and ornamental hedges. In the background on the left, the Citrus Valley Medical Center is visible from this location.
- **View 5**, looking southwest from directly next to the Citrus Valley Medical Center shows a private Hospital driveway leading to a surface parking lot. Views from this vantage point show parking lot lighting, mature trees, ornamental bushes, various parking lot and hospital signage, and trash receptacles. In addition, to the east is a partial wall of an on-site building along which are mature trees, a temporary table, chairs, and tent. Outside of the Project boundary, in the distance to the southwest are mature trees and the roofs of commercial buildings along West Mercer Avenue.
- **View 6**, looking northwest across the private Hospital road is a surface parking lot, mature trees, vegetation, parking lot lighting, and mediums. Outside of the Project boundary is the Orangewood Soccer Complex and various park buildings. A wire fence divides the Hospital surface parking lot and soccer field. Distant views of mature trees and buildings are visible from this location.

Would the Project:

a) Have a substantial adverse effect on a scenic vista?

No Substantial Change from Previous Analysis. The Our Natural Community Element of the City's General Plan identifies the San Jose Hills, located at the southeasterly boundary of the City, as the scenic vista (City of West Covina 2016a). The San Jose Hills are located 5.2 miles east of the Project site. The City is located within the San Gabriel Valley, with the San Gabriel Mountains and San Bernardino Mountains located approximately 6.5 miles north of the Project site. The Los Angeles National Forest and San Gabriel Mountains are visible in the background throughout West Covina; however, their views are dependent on the viewer's vantage point and orientation and are not designated as scenic vistas by the City.

Under the Our Natural Community Element, Access to Nature, Policy 1.9, encourages minimization of view obstruction by requiring analysis of potential impacts to views of natural areas from public streets, parks, trails, and community facilities, during review of public and private development projects. Sunset Avenue and West Merced Avenue are public streets nearest to the Project sit. Views of the San Gabriel and San Bernardino Mountains may be visible and provide a scenic backdrop from certain vantage points on Sunset Avenue and West Merced Avenue; however, these views are partially obstructed by existing development and mature trees and are limited due to the topography of the area.

The Project site is currently developed with single-story administrative buildings and associated uses, including surface parking and scattered landscaping. However, implementation of the Project would include construction of new structures and buildings and result in denser

development than the existing Project site. The MOB would be two stories tall. The Parking Structure would be 4 stories and a maximum of 45 feet tall. The ED and ICU building would be a 2-stories at a height of 44 feet. All Project buildings would be located within Zone 1, Core Medical, of the QVHSP. Zone 1 is designated for the highest intensity and hospital-relate uses (City of West Covina 2019). The Project buildings are subject to a six-story height limit in Zones 1 and 2 per the QVHSP and would comply with this requirement.

Overall, the proposed building heights would be taller than existing uses. Due to the proposed Project's location in the central area of the City and the lack of scenic resources in the immediate area, the Project would not have a substantial adverse effect on a scenic resource. Views of the San Jose Hills with Project implementation would be consistent with existing views; partial views may be offered at certain vantage points, but intervening structures and trees would continue to block most views of the San Jose Hills. Similarly, with implementation of the Project, the San Gabriel and San Bernardino Mountains would continue to offer partial views at certain vantage points on Sunset Avenue, but intervening structures and trees would continue to block most views of the San Gabriel and San Bernardino Mountains. Implementation of the Project would not further exacerbate obstruction of existing views, which are currently mostly blocked by existing development and mature trees. Therefore, the Project would not create a new significant impact pertaining to scenic vistas that was not previously analyzed, and no new mitigation measures are required.

b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

No Substantial Change from Previous Analysis. There are no officially designated scenic highways within West Covina (City of West Covina 2016a). Views of the Project site from this Officially Designated Highway are completely obstructed by distance and intervening topography, and there is no direct line-of-sight to the Project area such that short-term construction activities and long-term operation would affect public views from the Angeles Crest Highway. State Route (SR) 57 between SR 91 and SR 60, located approximately 2 miles east of the southeastern tip of the City, is identified as Eligible for State Scenic Highway designation (City of West Covina 2016b). The nearest Officially Designated and Eligible State Scenic Highways are located approximately 20 miles north and over 2.5 miles south of the Project site, respectively (Caltrans 2011). There are no scenic resources, including trees, rock outcroppings, and historic buildings in the vicinity of the Project site. Views of the Project site from the portion of SR-57, which is an Eligible State Scenic Highway, are completely obstructed by intervening topography, and there is no direct line-of-sight to the Project area such that short-term construction activities and long-term operation would affect public views from SR 57. Implementation of the Project would not damage scenic resources within a State scenic highway. Therefore, the Project would not create a new significant impact pertaining to scenic resources that was not previously analyzed, and no new mitigation measures are required.

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?

No Substantial Change from Previous Analysis. The aerial photograph (Exhibit 2-2) previously presented, shows the Project site's relationship to the surrounding land uses. The Project site is located within an urbanized area. The Project is consistent with its zoning designation of Specific Plan. Surrounding land uses to the proposed Project uses include other medical facility uses of the QVH. Past the boundaries of the existing hospital campus, surrounding land uses include multi-family residential uses to the northwest, medical office buildings to the northeast, medical office buildings to the northeast and south, Orangewood Park to the west, and single family residential uses to the northwest and west. The Project would be compatible with the surrounding uses and not visually intrusive; the mass and scale of the proposed structure would be consistent with existing buildings on the QVH campus. Due to the developed nature and flat topography of the Project area, the presence of mature trees and existing walls, views of the Project site are limited to immediately adjacent vantage points. However, given the views to be analyzed are from public and not private vantage points, only views experienced by transient users (i.e., passengers in vehicles and pedestrians) on Sunset Avenue would be considered. There are no other public vantage points such as from public parks and trails that would have views of the Project site. With respect to adjacent roadways, changes in views would be most notable for people traveling north and south along Sunset Avenue adjacent to the Project site and those traveling east and west Merced Avenue. As noted previously, these views would be momentary. Sunset Avenue currently has landscaped medians and parkways along the southern side of the street with pedestrian sidewalks along the north side. The main entry intersection of the QVH campus from Sunset Avenue and Vine Avenue leading into the campus would not be altered as a result of the Project. The secondary access from Sunset Avenue located south of the main entrance would also remain.

During construction, staging areas would be located as far from as possible from residential uses, per the requirements of MM AES-1 and MM AES-4 of the Certified Final PEIR. Development of the proposed buildings and the associated uses are required to comply with the development standards and design guidelines identified in the QVHSP, including height restrictions, per MM AES-2 from the QVHSP PEIR. MM AES-2 requires that new parking structures be limited to 60 feet in height within Zones 1 and 2. The proposed Parking Structure would be 45 feet in height in Zone 1 and would therefore comply with MM AES-2. The Project would create a visually cohesive community that would not substantially degrade the existing visual character or quality of the site and its surroundings.

Visual Changes

During demolition and construction activities on the Project site, views of construction equipment; ongoing demolition and construction activities; short-term stockpiles of building materials and debris; and haul trucks delivering building materials and removing debris would be visible from surrounding area. These views would be typical of construction sites in an urban environment and temporary in nature. Project construction is anticipated to occur in a single phase, for a total of 22 months for both phases. Additionally, construction staging would occur within the Project's boundaries. Per MM AES-1 of the Certified Final PEIR, construction staging area shall be located as far as practical from residential neighborhoods immediate adjacent to the Project site.

Once construction is completed, the proposed Project would alter views of the Project site by replacing the existing buildings with larger structures, including a parking structure. The MOB, ED, and ICU would be similar in design. Both buildings would feature concrete and glass

structures, painted with neutral colors such as light browns and shades of light grey. The Project buildings would integrate modern themes through incorporation of metal panels, concrete, and glass facades, which is consistent with the guidelines of the QVHSP, to use varied material types for the architectural façade of the buildings. The structures would utilize architectural components such as varied building heights, textures, and materials for architectural interest. The Parking Structure would complement the buildings in color and height.

The Project would replace on-site landscaping with trees, shrubs, and groundcover throughout the Project site and in open space areas. Between the MOB and Parking Structure there would be a curving pathway with seating areas featuring wood slat seats and concrete benches. Trees would line this pathway and would be dispersed outside of the buildings. At the ED/ICU building, shrubbery and trees would surround the building's façade, with seating areas dispersed with wood slat seats and concrete benches. Throughout the surface parking surrounding the proposed buildings, trees would be planted to provide shade and visual interest.

While the proposed Project would alter the existing visual character of the Project site this change would not be considered a degradation of the Project site or its surroundings. The new development would replace older structures and increase visual interest and character of the site with quality design and landscaping. In light of visual improvement over the existing condition and the quality of design, the Project would not substantially degrade the visual character or quality of the site for public viewers. Therefore, the Project would not create a new significant impact pertaining to visual character that was not previously analyzed, and no new mitigation measures are required.

d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

No Substantial Change from Previous Analysis. The Project site is currently subject to nighttime lighting associated with security lighting from the existing buildings within the QVH campus and parking lot and the adjacent lighting from the Orangewood Park located to the west of the Project site. In addition, surrounding residential, office, and commercial uses have exterior lighting, parking lot lighting, and interior lighting visible through windows and doors. Streetlights along surrounding roadways and light from motor vehicles traveling along these roadways add to nighttime lighting levels in the Project area. The proposed Project would introduce new lighting sources associated with the construction and operation of the proposed Project. Policy 1.10 of the PlanWC encourages the preservation of nighttime views within and immediately adjacent to single family residential zones, requires property owners within and directly adjacent to these zones to utilize shielding and directional lighting methods to direct lighting away from adjoining properties.

All construction activities would comply with all applicable provisions in the City's Noise Ordinance (Chapter 15, Article IV, Noise Regulations of the City's Municipal Code), which prohibits construction activity between the hours of 8:00 PM of one day and 7:00 AM of the next day, within a residential zone, or within a radius of 500 feet from a residential zone. While the hours of construction may be limited, lighting would likely be used within the construction areas (notably the construction staging areas) to provide security for construction equipment and construction materials. This type of temporary security lighting is often unshielded and may shine onto adjacent properties and roadways. Even though construction staging areas would be located as far as possible from adjacent residential uses east and northeast of the Project site,

such security lighting may cause a significant impact in the form of a nuisance to the residents, resulting in a potentially significant impact prior to mitigation. Mitigation Measure AES-4 of the QVHSP requires that construction staging areas be located as far as possible from the residential developments near the Project site to minimize light intrusion and also requires that temporary nighttime lighting that is installed for security purposes be downward facing and hooded or shielded to prevent security lighting from spilling outside the staging area or from directly broadcasting security lighting into the sky or onto adjacent residential properties. With implementation of MM AES-4, potential lighting impacts during construction would be reduced to less than significant levels.

Although implementation of the Project would introduce new and more intensive development to the Project area, the Project is located in an area that is already subject to nighttime lighting both on-site (hospital buildings and associated structures, parking lots, walkways, etc.) and off-site (existing buildings, parking lots, soccer field lights, street lights, and security lighting, among others). Due to the urban nature of the Project area and surrounding areas, "sky glow", which is the illumination of the night sky from urban uses, already occurs.

As described in Chapter 4.5, Lighting and Chapter 5.4.2, *Secondary Development Standards* of the QVHSP, lighting would be installed and used as necessary for safety, security, and ambience, including lighting for parking areas, pedestrian walkways, architectural, and landscape features. A hierarchy would be established by using a variety of lighting fixtures and illumination levels based on the lighting design intent. As identified in the QVHSP, security lighting would not cause off-site glare on neighboring uses, and exterior lighting in parking lots, service areas, and other lit areas would minimize glare outside of the site. As part of the design review process a comprehensive lighting plan would be prepared. Adherence to the lighting design requirements outlined in the City Municipal Code and QVHSP would be enforced through the City's development review and permit process and would ensure that on-site development does not significantly affect adjacent uses in terms of light spillover.

Although there would be a minor increase in the amount of lighting throughout the Project site compared to the existing condition, the effect would be consistent with the type and extent of nighttime lighting in place as currently on site and in the surrounding residential and non-residential land uses. Therefore, operational lighting impacts would be less than significant, and no mitigation is required.

Glare

Glare is caused by light reflections from pavement, vehicles, and building materials such as reflective glass and polished surfaces. During daylight hours, the amount of glare depends on intensity and direction of sunlight. Glare can create hazards to motorists and can be a nuisance for pedestrians and other viewers. Exterior building materials that would be used at ground level to form the building base include brick, stone, tile, and pre-cast concrete. These non-reflective building materials would not result in potential glare impacts within the Project area or surrounding areas, and notably at the street level. The buildings could also create new sources of glare in the form of glazed building surfaces, use of mirrors and glass as exterior building surfaces, and other reflective materials that would reflect the sun or light sources and create glare. However, adherence to the development standards and design guidelines (architectural and landscape) outlined in the QVHSP would ensure that these materials would not result in potential glare impacts. As such, all impacts would be reduced to less than significant with

implementation of MM AES-4 of the QVHSP. Therefore, the Project would not create a new significant impact pertaining to day or nighttime views that was not previously analyzed, and no new mitigation measures are required.

Conclusion

The aesthetics impacts of the proposed Project would be consistent with the impacts identified for the Approved Project, analyzed in the Certified Final PEIR. The proposed Project would not create a new significant impact or a substantial increase in the severity of previously identified effects. In regard to Section 15162 of the State CEQA Guidelines, (1) no substantial changes are proposed as part of the proposed Project that would result in new significant effects or an increase in severity of previous effects; (2) no substantial changes in circumstances have occurred that would result in new significant effects; and (3) no new information has become known that was not previously known that would (a) create new significant impacts, (b) increase the severity of previously examined effects, or (c) determine that mitigation measures or alternatives previously found not to be feasible would, in fact, be feasible; or (4) introduce mitigation measures that are considerably different from those analyzed in the Certified Final PEIR. For these reasons, no major revisions to the aesthetics analysis provided in the Certified Final PEIR nor to the MMRP are required.

3.2 AGRICULTURE AND FOREST RESOURCES

This topic was focused out from analysis in the Certified Final PEIR, as per the Farmland Mapping and Monitoring Program (FMMP), managed by the State Department of Conservation (CDC 2018), the entire City, including the QVH campus, is classified as "Urban and Built-Up Land", which contains no agricultural resources. Similarly, the Fire and Resource Assessment Program (FRAP), maintained by the California Department of Forestry and Fire Protection (CDFFP), indicates that the entire City, including the QVH campus, does not contain any forest or forest-related resources.

Additionally, the proposed Project site is currently disturbed and undeveloped with some ornamental trees. The site contains no agricultural or forest resources, so there is no potential for any significant impacts from the proposed Project relative to agricultural or forest resources. Therefore, these issues will not be further evaluated in this Addendum.

3.3 AIR QUALITY

Certified Final PEIR Environmental Review

The Certified Final PEIR identified that the Approved Project would be consistent with the South Coast Air Quality Management District's (SCAQMD's) Air Quality Management Plan, because the Approved Project would have construction and operational phase emissions that were below the SCAQMD's regional emissions threshold with implementation of MMs AIR-1 through AIR-3. Additionally, it was determined that the Approved Project would not conflict with or exceed the assumptions in the AQMP because although the Approved Project required a General Plan Amendment and Zone Change, the trip and energy use would likely be reduced with implementation of the Approved Project, resulting in lower air quality emissions. The Certified Final PEIR determined that regional and local construction emissions would be less than significant with the incorporation of MMs AIR-1 and AIR-2. Long-term operational regional emissions of O_3 precursors (VOC and NOx), CO, PM10, and PM2.5 would be less than established thresholds and therefore impacts would be less than significant. Similarly, cumulative air quality impacts would be less than significant. The Approved Project was determined to have less than significant impacts for (1) off-site CO hotspots, (2) exposure of persons to construction and operational phase criteria pollutants, and (3) exposure of persons during construction or operation to toxic air contaminants (with implementation of MM AIR-3). Objectionable odors for the Approved Project were deemed less than significant.

Mitigation Measures

MM AIR-1 During construction of the Long Range Improvements Phase of the Project, the Hospital shall use paints that have a volatile organic compound (VOC) content of 10 grams/Liter (g/L) or less for all architectural coating activities. **(Applicable)**

MM AIR-2 During all construction phases of the Project, all off-road diesel-powered construction equipment that is greater than or equal to 50 horsepower shall be required to meet or exceed U.S. Environmental Protection Agency (USEPA) Tier 3 emission standards. **(Applicable)**

MM AIR-3 Prior to the start of any construction activities, proposed building plans shall demonstrate that any standby emergency generator proposed as part of that phase shall be powered by natural gas. This measure shall be implemented to the satisfaction of the City Engineer. **(Applicable)**

Proposed Project Impact Analysis

Environmental Issues	New Significant Impact	More Severe Impacts	New Ability to Substantially Reduce Significant Impact	No Substantial Change From Previous Analysis
AIR QUALITY – Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project:				
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 non-attainment under an applicable federal or state ambient air quality standard.	☐	☐	☐	☑
c) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☐	☑
e) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☐	☐	☐	☑

The South Coast Air Quality Management District (SCAQMD) has established quantitative thresholds for short-term (construction) emissions and long-term (operational) emissions for the following criteria pollutants: ozone, carbon monoxide, nitrogen oxides, sulfur dioxide, and particulate matter 10 and 2.5 microns. The characteristics and health effects of these criteria pollutants are described below:

- Ozone (O_3) is a nearly colorless gas that is formed by photochemical reaction (when nitrogen dioxide is broken down by sunlight). Ground-level O_3 exposure can cause a variety of health problems, including lung irritation, wheezing, coughing, pain when taking a deep breath, and breathing difficulties during exercise or outdoor activities; permanent lung damage; aggravated asthma; and increased susceptibility to respiratory illnesses.
- Carbon monoxide (CO) is a colorless and odorless toxic gas which, in the urban environment, is associated primarily with the incomplete combustion of fossil fuels in motor vehicles. CO combines with hemoglobin in the bloodstream and reduces the amount of oxygen that can be circulated through the body. High CO concentrations can lead to headaches, aggravation of cardiovascular disease, and impairment of central nervous system functions.
- Nitrogen oxides (NOx) are yellowish-brown gases, which at high levels can cause breathing difficulties. NOx are formed when nitric oxide (a pollutant from internal combustion processes) combines with oxygen.
- Sulfur dioxide (SO_2) is a colorless, pungent gas formed primarily by the combustion of sulfur-containing fossil fuels. Health effects include acute respiratory symptoms and difficulty in breathing for children.
- Particulate Matter 10 (PM10) and Particulate Matter 2.5 (PM2.5) refer to particulate matter less than ten microns and two and one-half microns in diameter, respectively.

Particulates of this size cause a greater health risk than larger-sized particles since fine particles can more easily cause irritation. Particulate matter includes both aerosols and solid particles. An example of particulate matter is fugitive dust. Short-term exposure to high PM2.5 levels is associated with premature mortality and increased hospital admissions and emergency room visits. Long-term exposure to high PM2.5 levels is associated with premature mortality and development of chronic respiratory disease. Short-term exposure to high PM10 levels is associated with hospital admissions for cardiopulmonary diseases, increased respiratory symptoms, and possible premature mortality.

The SCAQMD regulates air quality in the Los Angeles County and is the agency principally responsible for comprehensive air pollution control in the South Coast Air Basin (SoCAB). The SCAQMD develops rules and regulations, establishes permitting requirements for stationary sources, inspects emissions sources, and enforces such measures through educational programs or fines, when necessary. The SCAQMD is directly responsible for reducing emissions from stationary (area and point), mobile, and indirect sources. It has responded to this requirement by preparing a sequence of Air Quality Management Plans (AQMPs).

The SCAQMD adopted the 2016 AQMP on March 3, 2017 (SCAQMD 2017). The 2016 AQMP incorporates the latest scientific and technical information and planning assumptions, including Southern California Association of Government's (SCAG's) 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), updated emission inventory methodologies for various source categories, and SCAG's latest growth forecasts.

The two principal criteria for conformance to an AQMP are:

1. Whether a project will result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations or delay timely attainment of air quality standards or the interim emissions reductions in the AQMP.
2. Whether a project will exceed the assumptions in the AQMP based on the year of Project buildout.

To estimate if a project may adversely affect the air quality in the region, the SCAQMD has prepared the *Air Quality Analysis Guidance Handbook* (SCAQMD CEQA Handbook) to provide guidance to those who analyze the air quality impacts of projects (SCAQMD 1993). The SCAQMD CEQA Handbook provides significance thresholds for both construction and operation of projects within the SCAQMD's jurisdictional boundaries. The SCAQMD recommends that projects be evaluated in terms of the quantitative thresholds established to assess both the regional and localized impacts of project-related air pollutant emissions. The SCAQMD CEQA Handbook states that any project in the SoCAB with daily emissions that exceed any of the identified significance thresholds may have an individually and cumulatively significant air quality impact. The City of West Covina uses the current SCAQMD thresholds to determine whether a project would have a significant impact (SCAQMD 2019). These SCAQMD thresholds are identified in Table 3-1, *South Coast Air Quality Management District Air Quality Significance Thresholds*.

TABLE 3-1
SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
AIR QUALITY SIGNIFICANCE THRESHOLDS

Mass Daily Thresholds (lbs/day)		
Pollutant	**Construction**	**Operation**
VOC	75	55
NOx	100	55
CO	550	550
PM10	150	150
PM2.5	55	55
SOx	150	150
Lead	3	3

lbs/day: pounds per day; VOC: volatile organic compound; NOx: nitrogen oxides; CO: carbon monoxide; PM10: respirable particulate matter 10 microns or less in diameter; PM2.5: fine particulate matter 2.5 microns or less in diameter; SOx: sulfur oxides.

Source: SCAQMD 2019.

Existing Air Quality Conditions

The monitoring data presented in Table 3-2, Air Quality Measurements at the Azusa Monitoring Station, were obtained from the SCAQMD and CARB (SCAQMD 2020, CARB 2020). Pollutants measured at this monitoring station include O_3, PM10, PM2.5, NO_2, CO. Federal and State air quality standards are presented with the number of times those standards were exceeded.

TABLE 3-2
AIR QUALITY MEASUREMENTS AT THE AZUSA MONITORING STATION

Pollutant	California Standard	National Standard	Year	Max. Level[a]	State Standard Days Exceeded[b]	National Standard Days Exceeded[b, c]
O_3 (1 hour)	0.09 ppm	None	2017	0.152	38	7
			2018	0.139	24	3
			2019	0.123	34	0
O_3 (8 hour)	0.070 ppm	0.070 ppm	2017	0.114	64	62
			2018	0.100	43	42
			2019	0.084	43	39
PM10 (24 hour)	50 µg/m³	150 µg/m³	2017	83.9	7/–	0/0
			2018	78.3	10/59	0/0
			2019	80.3	4/24	0/0
PM10 (AAM)	20 µg/m³	None	2017	31.4	N/A	N/A
			2018	32.2	N/A	N/A
			2019	–	N/A	N/A
NO_2 (1 Hour)	0.18 ppm	0.100 ppm	2017	0.065	0	0
			2018	0.070	0	0
			2019	0.059	0	0
NO_2 (AAM)	0.030 ppm	0.053 ppm	2017	0.016	–	–
			2018	0.015	–	–
			2019	0.018	–	–
CO (8 hour)	9.0 ppm	9.0 ppm	2017	0.9	–	–
			2018	1.0	–	–
			2019	1.5	–	–
PM2.5 (24 Hour)	None	35 µg/m³	2017	24.9	N/A	0/0
			2018	41.8	N/A	1/3
			2019	70.3	N/A	1/3
PM2.5 (AAM)	12 µg/m³	15 µg/m³	2017	10.42	N/A	N/A
			2018	10.35	N/A	N/A
			2019	10.34	N/A	N/A

O_3: ozone; ppm: parts per million; PM10: respirable particulate matter with a diameter of 10 microns or less; µg/m³: micrograms per cubic meter; AAM: annual arithmetic mean; NO_2: nitrogen dioxide; CO: carbon monoxide; PM2.5: fine particulate matter with a diameter of 2.5 microns or less

"–" indicates that the data are not reported or there is insufficient data available to determine the value. N/A indicates that there is no applicable standard.

[a] California maximum levels were used.
[b] For annual averaging times, a "Yes" or "No" response is given if the annual average concentration exceeded the applicable standard.
[c] PM is measured once every 6 days. Where 2 values are shown for PM10 and PM2.5, the first is for the measured value, and the second is the estimated value if monitored every day.

Source: SCAQMD 2020, CARB 2020.

Regulatory Background

The U.S. Environmental Protection Agency (USEPA) defines seven "criteria" air pollutants, as described above. These pollutants are called criteria pollutants because the USEPA has established National Ambient Air Quality Standards (NAAQS) for the concentrations of these pollutants (USEPA 2014). The California Air Resources Board (CARB) has also established

standards for the criteria pollutants, known as California Ambient Air Quality Standards (CAAQS), and the State standards are generally more restrictive than the NAAQS. When a region has air quality that fails to meet the standards, the USEPA and the CARB designate the region as "nonattainment" and the regional air quality agency must develop plans to attain the standards.

Based on monitored air pollutant concentrations, the USEPA and the CARB designate an area's status in attaining the NAAQS and the CAAQS, respectively, for selected criteria pollutants. These attainment designations are shown in Table 3-3. As identified in Table 3-3, Los Angeles County is a nonattainment area for O_3, PM10, and PM2.5 for the State standards and a nonattainment area for O_3, and PM2.5 for the State standards.

TABLE 3-3
ATTAINMENT STATUS OF CRITERIA POLLUTANTS
IN THE SOUTH COAST AIR BASIN

Pollutant	State	Federal
O_3 (1 hour)	Nonattainment	No standards
O_3 (8 hour)	Nonattainment	Nonattainment
PM10	Nonattainment	Attainment/Maintenance
PM2.5	Nonattainment	Nonattainment
CO	Attainment	Unclassified/Attainment
NO_2	Attainment	Unclassified/Attainment
SO_2	Attainment	Attainment
Lead	Attainment	Attainment/Nonattainment*
All others	Attainment/Unclassified	No standards

O_3: ozone; PM2.5: respirable particulate matter 10 microns or less in diameter; PM2.5: fine particulate matter 2.5 microns or less in diameter; CO: carbon monoxide; NO_2: nitrogen dioxide; SO_2: sulfur dioxide; SoCAB: South Coast Air Basin.

* Los Angeles County is classified nonattainment for lead; the remainder of the SoCAB is in attainment of the State and federal standards.

Source: CARB 2019 (State), CARB 2018 (Federal).

CARB, a part of the California Environmental Protection Agency (CalEPA), is responsible for coordinating and administering both the federal and State air pollution control programs in California. In this capacity, CARB conducts research, sets the CAAQS (as shown in Table 3-4), compiles emission inventories, develops suggested control measures, oversees local programs, and prepares the State Implementation Plan (SIP). For regions that do not attain the CAAQS, CARB requires the air districts to prepare plans for attaining the standards. These plans are then integrated into the SIP. CARB establishes emissions standards for (1) motor vehicles sold in California, (2) consumer products (e.g., hair spray, aerosol paints, barbecue lighter fluid), and (3) various types of commercial equipment. It also sets fuel specifications to further reduce vehicular emissions.

Ozone (O_3) is a secondary pollutant and is created when nitrogen oxides (NOx) and volatile organic compounds (VOCs) react in the presence of sunlight. The predominant source of air emissions generated by Project development would be from vehicle emissions. Motor vehicles primarily emit CO, NOx, and VOCs. The NAAQS and CAAQS are designed to protect the health and welfare of the populace within a reasonable margin of safety. The NAAQS and CAAQS for O_3, CO, NO_2, SO_2, PM10, PM2.5, and lead are shown in Table 3-4.

TABLE 3-4
CALIFORNIA AND FEDERAL AMBIENT AIR QUALITY STANDARDS

Pollutant	Averaging Time	California Standards	Federal Standards	
			Primary[a]	Secondary[b]
O_3	1 Hour	0.09 ppm (180 µg/m³)	–	–
	8 Hour	0.070 ppm (137 µg/m³)	0.070 ppm (137 µg/m³)	Same as Primary
PM10	24 Hour	50 µg/m³	150 µg/m³	Same as Primary
	AAM	20 µg/m³	–	Same as Primary
PM2.5	24 Hour	–	35 µg/m³	Same as Primary
	AAM	12 µg/m³	12.0 µg/m³	15.0 µg/m³
CO	1 Hour	20 ppm (23 mg/m³)	35 ppm (40 mg/m³)	–
	8 Hour	9.0 ppm (10 mg/m³)	9 ppm (10 mg/m³)	–
	8 Hour (Lake Tahoe)	6 ppm (7 mg/m³)	–	–
NO_2	AAM	0.030 ppm (57 µg/m³)	0.053 ppm (100 µg/m³)	Same as Primary
	1 Hour	0.18 ppm (339 µg/m³)	0.100 ppm (188 µg/m³)	–
SO_2	24 Hour	0.04 ppm (105 µg/m³)	–	–
	3 Hour	–	–	0.5 ppm (1,300 µg/m³)
	1 Hour	0.25 ppm (655 µg/m³)	0.075 ppm (196 µg/m³)	–
Lead	30-day Avg.	1.5 µg/m³	–	–
	Calendar Quarter	–	1.5 µg/m³	Same as Primary
	Rolling 3-month Avg.	–	0.15 µg/m³	
Visibility Reducing Particles	8 Hour	Extinction coefficient of 0.23 per km – visibility ≥ 10 miles (0.07 per km – ≥30 miles for Lake Tahoe)	**No Federal Standards**	
Sulfates	24 Hour	25 µg/m³		
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m³)		
Vinyl Chloride	24 Hour	0.01 ppm (26 µg/m³)		

O_3: ozone; ppm: parts per million; µg/m³: micrograms per cubic meter; PM10: respirable particulate matter 10 microns or less in diameter; AAM: Annual Arithmetic Mean; –: No Standard; PM2.5: fine particulate matter 2.5 microns or less in diameter; CO: carbon monoxide; mg/m³: milligrams per cubic meter; NO_2: nitrogen dioxide; SO_2: sulfur dioxide; km: kilometer.

[a] *National Primary Standards:* The levels of air quality necessary, within an adequate margin of safety, to protect the public health.
[b] *National Secondary Standards:* The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.

Note: More detailed information in the data presented in this table can be found at the CARB website (www.arb.ca.gov).

Source: SCAQMD 2016

Would the Project:

a) Conflict with or obstruct implementation of the applicable air quality plan?

No Substantial Change from Previous Analysis. CEQA requires a discussion of any inconsistencies between a project and applicable General Plans (GPs) and regional plans (CEQA Guidelines Section 15125). The regional plan that applies to the proposed Project includes the SCAQMD's AQMP, as discussed above.

The SCAQMD CEQA Handbook states that "New or amended GP Elements (including land use zoning and density amendments), Specific Plans, and significant projects must be analyzed for consistency with the AQMP". Strict consistency with all aspects of the plan is usually not required. A project should be considered to be consistent with the AQMP if it furthers one or more policies and does not obstruct other policies. The SCAQMD CEQA Handbook identifies two key indicators of consistency, as discussed above:

(1) Whether the project will result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations or delay timely attainment of air quality standards or the interim emission reductions specified in the AQMP.

(2) Whether the project will exceed the assumptions in the AQMP or increments based on the year of project buildout and phase.

Both criteria are evaluated for the Project, as shown below.

With respect to the first criterion, based on the air quality modeling analysis conducted for the proposed Project [Thresholds 4.3(b) and 4.3(c), below)], construction and operation of the Project would not exceed the SCAQMD's CEQA thresholds of significance and consequently would not result in an increase in the frequency or severity of existing air quality violations nor cause or contribute to new violations, or delay timely attainment of air quality standards or the interim emissions reductions in the AQMP. Therefore, the Project is consistent with the first criterion.

With respect to the second criterion, the proposed Project was assessed as to whether it would exceed the assumptions in the AQMP. The SCAQMD's current air quality planning document is the 2016 Air Quality Management Plan (2016 AQMP). The 2016 AQMP is a regional and multi-agency effort among the SCAQMD, CARB, SCAG, and USEPA. The 2016 AQMP includes an analysis of emissions, meteorology, atmospheric chemistry, regional growth projections, and the impact of existing control measures. The purpose of the 2016 AQMP is to set forth a comprehensive program that would promote reductions in criteria pollutants, greenhouse gases, and toxic risk and efficiencies in energy use, transportation, and goods movement. The 2016 AQMP incorporates the latest scientific and technical information and planning assumptions, including SCAG's 2016-2040 RTP/SCS; updated emission inventory methods for various source categories; and SCAG's latest growth forecasts (SCAQMD 2017). The 2016 AQMP includes strategies and measures necessary to meet the NAAQS. The AQMP is based on projections of energy usage and vehicle trips from land uses within the SoCAB.

The Project site is within the QVHSP land use designation. The Project consists of uses that are consistent with the adopted Specific Plan designation. Therefore, the Project is consistent with the General Plan, its land use designation, and its relevant goals and objectives. The proposed

Project is planned to provide and meet existing and future medical services and facilities needs for residents of San Gabriel Valley. Provision of these services locally would reduce the need for residents to travel further to meet their medical needs. The reduction in travel length for vehicles would likewise have benefits for air quality emissions. Additionally, implementation of the Project results in emissions which are less than the significance thresholds adopted by the SCAQMD (as detailed in the following emissions analyses). The QVH is an existing use and was accounted for in the SCAQMD's 2016 AQMP. The Project would also incorporate the latest energy efficiency standards and include the use of alternative energy generation (solar photovoltaic panels) to assist in meeting the Project's energy needs. As such, the proposed Project is not anticipated to exceed the AQMP assumptions for the Project site and is found to be consistent with the AQMP for the second criterion. The Project would not result in an inconsistency with the SCAQMD's 2016 AQMP. Therefore, the Project would not create a new significant impact pertaining to obstruction of an air quality plan that was not previously analyzed, and no new mitigation measures are required.

b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non- attainment under an applicable federal or state ambient air quality standard?

No Substantial Change from Previous Analysis. Los Angeles County is a nonattainment area for O_3, PM10, and PM2.5, as shown in Table 3-3, Attainment Status of Criteria Pollutants in the South Coast Air Basin. The Project would generate PM10, PM2.5, NO_2, and O_3 precursors (NOx and VOC) during short-term construction and long-term operations.

Construction Impacts

Construction-Related Regional Impacts

A project may have a significant impact where project-related emissions would exceed federal, State, or regional standards or thresholds, or where project-related emissions would substantially contribute to an existing or projected air quality violation.

A project with daily emission rates below the SCAQMD's established air quality significance thresholds (shown in Table 3-1) would have a less than significant impact on regional air quality. Project emissions were estimated using the California Emissions Estimator Model (CalEEMod) version 2016.3.2 computer program (CAPCOA 2016). CalEEMod is designed to model construction and operational emissions for land development projects and allows for the input of project- and County-specific information. The CalEEMod input for construction emissions was based on the Project's construction assumptions (as detailed in Section 2.7, Construction Activities) and default assumptions derived from CalEEMod. MMs AIR-1, MM AIR-2, and MM AIR-3 would be applicable from the Certified Final PEIR and were applied to this analysis. SCAQMD Rule 403, Fugitive Dust, would be applicable to this analysis (RR AQ-1).

Table 3-5, Estimated Maximum Daily Construction Emissions, presents the estimated maximum daily emissions during construction of the proposed Project and compares the estimated emissions with the SCAQMD's daily regional emission thresholds. As shown in Table 3-5, all criteria pollutants are below the SCAQMD's respective thresholds with implementation of Certified Final PEIR mitigation measures for Phases 1A and 1B.

TABLE 3-5
ESTIMATED MAXIMUM DAILY CONSTRUCTION EMISSIONS

Year	Emissions (lbs/day)					
	VOC	NOx	CO	SOx	PM10	PM2.5
2021	4	73	84	<1	10	6
2022	4	32	39	<1	3	2
Maximum Emissions	**4**	**73**	**84**	**<1**	**10**	**6**
SCAQMD Thresholds (Table 3-1)	*75*	*100*	*550*	*150*	*150*	*55*
Exceeds SCAQMD Thresholds?	**No**	**No**	**No**	**No**	**No**	**No**

lbs/day: pounds per day; VOC: volatile organic compound; NOx: nitrogen oxides; CO: carbon monoxide; SOx: sulfur oxides; PM10: respirable particulate matter 10 microns or less in diameter; PM2.5: fine particulate matter 2.5 microns or less in diameter; SCAQMD: South Coast Air Quality Management District.

Source: SCAQMD 2019 (thresholds); see Appendix A, Air Quality and Greenhouse Gas Emissions Modeling Data, for CalEEMod model outputs.

Cumulative Construction Impacts

Construction activities associated with the proposed Project would result in less than significant construction-related regional and localized air quality impacts with implementation of MMs AIR-1 through AIR-3, as quantified above in Table 3-5, Estimated Maximum Daily Construction Emissions, and Table 3-7, Localized Significance Threshold Construction Emissions (discussed under Threshold 3.3c), respectively. Short-term cumulative impacts related to air quality could occur if construction of the Project and other projects in the surrounding area were to occur simultaneously. In particular, with respect to local impacts, the consideration of cumulative construction particulate (PM10 and PM2.5) impacts is limited to cases when projects constructed simultaneously are within a few hundred yards of each other because of: (1) the combination of the short range (distance) of particulate dispersion (especially when compared to gaseous pollutants), and (2) the SCAQMD's required dust-control measures, which further limit particulate dispersion from the Project site.

SCAQMD's policy with respect to cumulative impacts associated with the above-referenced pollutants and their precursors is that impacts that would be directly less than significant on a project level would also be cumulatively less than significant (SCAQMD 2003a). Because the Project's construction emissions are below the SCAQMD's regional and local significance thresholds, local construction emissions would not be cumulatively considerable. Therefore, the Project would not create a new significant impact pertaining to cumulatively considerable air quality construction emissions that was not previously analyzed, and no new mitigation measures are required.

Operational Impacts

The following section provides an analysis of potential long-term air quality impacts to regional air quality with the long-term operation of the proposed Project. The potential operations-related air emissions have been analyzed below for the regional and local criteria pollutant emissions and cumulative impacts.

Operations-Related Regional Impacts

Operational emissions associated with the Project are comprised of area, energy, and mobile source emissions. The principal source of VOC emissions associated with the Project would result from stationary sources (an emergency generator). Area and energy source emissions are based on CalEEMod assumptions for the specific land uses and size. Mobile source emissions are based on estimated Project-related trip generation forecasts, as contained in the Project traffic impact analysis. Stationary source emissions are based on a proposed emergency generator included in the Project. The Project would generate 2,579 net daily trips for Phase 1A and 1B (Psomas 2020). The peak day operational emissions for VOC, NOx, CO, SOx, PM10, and PM2.5 daily emissions that would be created from the Project's long-term operation have been calculated for Phases 1A and 1B and are summarized below in Table 3-6, Peak Daily Operational Emissions.

TABLE 3-6
PEAK DAILY OPERATIONAL EMISSIONS

Source	Emissions (lbs/day)*					
	VOC	NOx	CO	SOx	PM10	PM2.5
Area sources	2	<1	<1	<1	<1	<1
Energy sources	<1	1	1	<1	<1	<1
Mobile sources	3	8	45	<1	15	4
Stationary sources	7	1	18	<1	<1	<1
Total Operational Emissions*	**13**	**10**	**64**	**<1**	**15**	**4**
SCAQMD Significance Thresholds (Table 3-1)	*55*	*55*	*550*	*150*	*150*	*55*
Significant Impact?	**No**	**No**	**No**	**No**	**No**	**No**

lbs/day: pounds per day; VOC: volatile organic compound; NOx: nitrogen oxides; CO: carbon monoxide; SOx: sulfur oxides; PM10: respirable particulate matter 10 microns or less in diameter; PM2.5: fine particulate matter 2.5 microns or less in diameter; SCAQMD: South Coast Air Quality Management District.

* Some totals do not add due to rounding.

Source: SCAQMD 2019 (thresholds); see Appendix A, Air Quality and Greenhouse Gas Emissions Modeling Data, for CalEEMod model outputs.

The data provided in Table 3-6 shows that none of the analyzed criteria pollutants would exceed the regional emissions operational thresholds for Phases 1A or 1B.

Cumulative Operational Impacts

As shown in Table 3-6, Peak Daily Operational Emissions, and Table 3-8, Localized Significance Thresholds Operational Emissions (under Threshold 3.3c, below) operational emissions of VOC, NOx, CO, SOx, PM10, and PM2.5 would be below the SCAQMD CEQA significance thresholds. Consistent with the approach described above (under Cumulative Construction Impacts), SCAQMD's policy with respect to cumulative impacts associated with the above-referenced pollutants and their precursors is that impacts that would be directly less than significant on a project level would also be cumulatively less than significant. Therefore, because the Project's operational emissions are less than the respective SCAQMD daily operational thresholds, the Project's operations phase activities would not contribute to a cumulatively considerable net increase of a pollutant for which the SoCAB is in nonattainment. Emissions of nonattainment pollutants or their precursors would not be cumulatively considerable.

Cumulative Health Impacts

The SoCAB is designated as nonattainment for O_3, PM10, and PM2.5, which means that the background levels of those pollutants are, at times, higher than the ambient air quality standards. The air quality standards were set to protect public health, including the health of sensitive individuals (the elderly, children, and the sick). Therefore, when the concentrations of those pollutants exceed the standard, it is likely that some sensitive individuals in the population would experience health effects. These health effects are not identified for specific individual receptors nor does the analysis identify the magnitude of health effects. The regional analysis detailed above found that the Project would not exceed the SCAQMD regional significance thresholds for VOC and NOx (ozone precursors), PM10, and PM2.5. Therefore, the Project would not create a new significant impact pertaining to cumulatively considerable air quality emissions that was not previously analyzed, and no new mitigation measures are required.

c) Expose sensitive receptors to substantial pollutant concentrations?

No Substantial Change from Previous Analysis. A significant impact may occur when a project would generate pollutant concentrations to a degree that would significantly affect sensitive receptors, which include populations that are more susceptible to the effects of air pollution than the population at large. Exposure of sensitive receptors is addressed for emissions from construction and operation of the proposed Project. To address construction activities, the analysis below includes the following analyses: localized air quality impacts from construction and toxic air contaminants (TACs), specifically diesel particulate matter (DPM) from on-site construction, and asbestos and exposure to lead-based paint during demolition activities. To address operational emissions exposure to sensitive receptors, the analysis below discusses local air quality impacts from on-site operations and CO hotspots. Operational, long-term TACs may be generated by some industrial land uses; commercial land uses (e.g., gas stations and dry cleaners); and diesel trucks on freeways.

Construction

Localized Criteria Pollutants from On-Site Construction

In addition to the mass daily emissions thresholds established by the SCAQMD, short-term local impacts to nearby sensitive receptors from on-site emissions of NOx, CO, PM10, and PM2.5 are examined based on SCAQMD localized significance threshold (LST) methodology. To assess local air quality impacts for development projects without complex dispersion modeling, the SCAQMD developed screening (lookup) tables to assist lead agencies in evaluating impacts.

The LST method is recommended to be limited to projects that are five acres or less. For the purposes of an LST analysis, the SCAQMD considers receptors where it is possible that an individual could remain for 1 hour for NO2 and CO exposure and 24 hours for PM10 and PM2.5 exposure. The emissions limits in the lookup tables are based on the SCAQMD's Ambient Air Quality Standards (SCAQMD 2016). The closest receptors to the Project site are multi-family residential uses adjacent to the Project's northeastern boundary and athletic facilities adjacent to the Project's northwestern boundary. Individuals at these uses and residences were evaluated for exposure for 1 hour and 24 hours. The emissions thresholds are for receptors within 25 meters (82 feet) of the Project site; the thresholds for receptors farther away would be higher, and the Project emissions would be a smaller fraction of the thresholds.

Table 3-7, Localized Significance Threshold Construction Emissions, shows the maximum daily on-site emissions for construction activities compared with the SCAQMD LSTs with receptors within 25 meters for a Project site area of 5 acres. The Project's maximum daily on-site emissions would occur during the overlapping phases of the Phases 1A and 1B in 2021: ED/ICU grading/excavation phase, ED/ICU site preparation phase, and MOB/PS building construction. As shown in Table 3-7, the localized emissions from the Project would be below the thresholds, and no significant impacts would result to sensitive receptors. No mitigation is required.

TABLE 3-7
LOCALIZED SIGNIFICANCE THRESHOLD CONSTRUCTION EMISSIONS

	Emissions (lbs/day)			
Emissions and Thresholds	**NOx**	**CO**	**PM10**	**PM2.5**
Project maximum daily on-site emissions	64	77	8	6
SCAQMD Localized Significance Threshold[a]	**183**	**1,814**	**14**	**9**
Exceed threshold?	**No**	**No**	**No**	**No**

lbs/day: pounds per day; NOx: nitrogen oxides; CO: carbon monoxide; PM10: respirable particulate matter 10 microns or less in diameter; PM2.5: fine particulate matter 2.5 microns or less in diameter.

[a] Data is for SCAQMD Source Receptor Area 11, South San Gabriel Valley, 25-meter distance, 5 acres.

Source: SCAQMD 2009 (thresholds); see Appendix A, Air Quality and Greenhouse Gas Emissions Modeling Data, for CalEEMod outputs.

Toxic Air Contaminant Emissions from On-Site Construction

Construction activities would result in short-term, project-generated emissions of DPM from the exhaust of off-road, heavy-duty diesel equipment used for site preparation (e.g., demolition, excavation, and grading); paving; building construction; and other miscellaneous activities. CARB identified DPM as a TAC in 1998. The dose to which receptors are exposed is the primary factor used to determine health risk. Dose is a function of the concentration of a substance or substances in the environment and the duration of exposure to the substance. Thus, the risks estimated for a maximally exposed individual (MEI) are higher if a fixed exposure occurs over a longer time period. According to the Office of Environmental Health Hazard Assessment (OEHHA), health risk assessments—which determine the exposure of sensitive receptors to TAC emissions—should be based on a 40-year exposure period; however, such assessments should be limited to the period/duration of activities associated with the Project.

The total construction period would be relatively short when compared to a 40-year exposure period. Combined with the highly dispersive properties of DPM and additional reductions in particulate emissions from newer construction equipment, as required by USEPA and CARB regulations, construction emissions of TACs would not expose sensitive receptors to substantial emissions of TACs. Additionally, consistent with the Certified Final PEIR, the Project would use cleaner Tier III off-road equipment as required under MM AIR-2.

Exposure to Asbestos and Lead Paint During Demolition

Exposure of persons to asbestos-containing materials (ACM) and lead-based paint (LBP) during demolition is addressed in Section 3.8, Hazards and Hazardous Materials, of this Addendum. The demolition of these materials would then be handled in accordance with applicable regulations and MM HAZ-2 from the Certified Final PEIR. MM HAZ-2 requires that, prior to demolition of any

structures, the hospital shall provide evidence that an assessment for ACMs and LBP has been performed and any necessary abatement has been conducted in accordance with regulatory guidelines. Therefore, the Project would not create a new significant impact pertaining to substantial pollutant concentrations from construction that was not previously analyzed, and no new mitigation measures are required.

Operational

Localized Criteria Pollutants from On-site Operations

Project-related air emissions may have the potential to exceed the State and federal air quality standards in the vicinity of the Project even though these pollutant emissions may not be significant enough to create a regional impact to the SoCAB. Project-related air emissions from on-site sources such as architectural coatings, landscaping equipment, and on-site usage of natural gas appliances may have the potential to generate emissions that exceed the State and federal air quality standards in the vicinity of the Project even though these pollutant emissions may not be significant enough to create a regional impact to the SoCAB.

The local air quality emissions from on-site operations were analyzed using the SCAQMD's Mass Rate LST Look-up Tables and the LST Methodology. Table 3-8, Localized Significance Threshold Operational Emissions, shows the on-site operational emissions from area sources, energy usage, vehicles operating on-site, and the calculated emissions thresholds.

TABLE 3-8
LOCALIZED SIGNIFICANCE THRESHOLD OPERATIONAL EMISSIONS

On-Site Emission Source	Pollutant Emissions (pounds/day)			
	NOx	CO	PM10	PM2.5
Area Sources	<1	<1	<1	<1
Energy Sources	1	1	<1	<1
Mobile Sources[a]	<1	2	1	<1
Stationary Sources	1	18	<1	<1
Project's total maximum daily on-site emissions	**2**	**21**	**1**	**<1**
SCAQMD Localized Significance Threshold[b]	**183**	**1,814**	**4**	**2**
Exceeds Threshold?	**No**	**No**	**No**	**No**

lbs/day: pounds per day; NOx: nitrogen oxides; CO: carbon monoxide; PM10: respirable particulate matter 10 microns or less in diameter; PM2.5: fine particulate matter 2.5 microns or less in diameter.

[a] Onsite vehicle emissions based on 5% of the gross vehicular emissions, which is the estimated portion of vehicle emissions occurring within a quarter mile of the Project site.

[b] Data is for SCAQMD Source Receptor Area 11, San Gabriel Valley, with a source receptor distance of 25-meters, 5 acres.

Source: SCAQMD 2009 (thresholds); see Appendix A, Air Quality and Greenhouse Gas Emissions Modeling Data, for CalEEMod outputs.

The data provided in Table 3-8 shows that the ongoing operations of the Project would not exceed the local NOx, CO, PM10, and PM2.5 thresholds of significance. Therefore, the Project would not create a new significant impact pertaining to operational LSTs that was not previously analyzed, and no new mitigation measures are required.

Toxic Air Contaminant Emissions from Onsite Operations

As detailed in the Certified Final PEIR, the Project would produce TACs from trucks and passenger vehicles accessing the site as well as the use of a proposed standby generator. Passenger vehicles associated with the Project are considered to generate levels of TACs that would not result in human health risk to sensitive uses proximate to the Project site due to the low level of toxicity associated with gasoline based automotive exhaust. Diesel trucks related to deliveries and diesel ambulances used for transport of hospital patients do generate diesel exhaust, which is the primary source of health risk within the SoCAB. However, diesel trucks and ambulance trips generated by the Project constitute a small proportion of vehicle trips. The locations of these vehicles (i.e., emergency room entrance) and delivery trucks (loading dock) would be at least 250 feet from the nearest offsite residential uses. This distance would allow for dispersion of diesel exhaust such that significant health risks are not anticipated. The Project would also entail the development of a standby generator in case of power outages. This generator could be powered by natural gas or diesel. To avoid exposure of diesel exhaust to offsite residences or hospital patients and staff, the use of a natural gas generator would be required for impacts to be reduced to less than significant levels, as required by MM AIR-3 of the Certified Final PEIR. Natural gas exhaust does not create a significant health risk related to the toxicity of these emissions. Therefore, the Project would not create a new significant impact pertaining to TACs emissions from onsite operations that was not previously analyzed, and no new mitigation measures are required.

Carbon Monoxide Hotspot

In an urban setting, vehicle exhaust is the primary source of CO. Consequently, the highest CO concentrations generally are found close to congested intersections. Under typical meteorological conditions, CO concentrations tend to decrease as the distance from the emissions source (e.g., congested intersection) increases. Therefore, for purposes of providing a conservative worst-case impact analysis, CO concentrations typically are analyzed at congested intersection locations. If impacts are less than significant close to congested intersections, impacts also would be less than significant at more distant sensitive-receptor and other locations. Per the Traffic Impact Study prepared for the Project, implementation of the Project would result in 208 trips in the AM peak proposed and 252 trips in the PM peak hour with a total of 2,579 trips per day (Psomas 2020). The Certified Final PEIR determined that the proposed Project's vehicle trips would not result in CO concentrations of such magnitude to exceed the State and federal ambient air quality standards, and that impacts regarding CO hotspots would be less than significant. Because the daily trips, AM peak hour trips, and PM peak hour trips for Phase 1A and 1B for the proposed Project would be less than the trip numbers assumed for the Approved Project, traffic generated under Phase 1A and 1B would likewise not result in a CO hotspot. the Project would not create a new significant impact pertaining to CO Hotspots that was not previously analyzed, and no new mitigation measures are required.

d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

No Substantial Change from Previous Analysis. Project construction would use equipment and activities that could result in other emissions (such as those leading to odors). However, these odors would be typical during construction and not extraordinarily objectionable. Potential construction odors include on-site construction equipment's diesel exhaust emissions

as well as roofing, painting, and paving operations. There may be situations where construction activity odors could be noticed. However, these odors would be temporary and would dissipate rapidly from the source with an increase in distance. These odors would not be of such magnitude to cause a public nuisance. Therefore, the impacts would be short-term; would not affect a substantial number of people. These impacts would be consistent with the Certified Final PEIR.

According to the SCAQMD CEQA Handbook, land uses associated with odor complaints typically include agricultural uses, sewer treatment plants, food processing plants, chemical plants, composting, refineries, landfills, dairies, and fiberglass molding (SCAQMD 1993). The Project does not include any uses identified by the SCAQMD as being associated with odors, and therefore, would not likely produce objectionable odors. In addition, the Project uses are regulated from nuisance odors or other objectionable emissions by SCAQMD Rule 402, Nuisance. Rule 402 prohibits discharge from any source of air contaminants or other material which would cause injury, detriment, nuisance, or annoyance to people or the public. Therefore, the Project would not create a new significant impact pertaining to other emissions that was not previously analyzed, and no new mitigation measures are required.

Conclusions

The air quality impacts of the proposed Project would be consistent with the impacts identified for the Approved Project, analyzed in the Certified Final PEIR. The proposed Project would not create a new significant impact or a substantial increase in the severity of previously identified effects. In regard to Section 15162 of the State CEQA Guidelines, (1) no substantial changes are proposed as part of the proposed Project that would result in new significant effects or an increase in severity of previous effects; (2) no substantial changes in circumstances have occurred that would result in new significant effects; and (3) no new information has become known that was not previously known that would (a) create new significant impacts, (b) increase the severity of previously examined effects, or (c) determine that mitigation measures or alternatives previously found not to be feasible would, in fact, be feasible; or (4) introduce mitigation measures that are considerably different from those analyzed in the Certified Final PEIR. For these reasons, no major revisions to the air quality analysis provided in the Certified Final PEIR nor to the MMRP are required.

3.4 BIOLOGICAL RESOURCES

Certified Final PEIR Environmental Review

As indicated in the Certified Final PEIR, the City and surrounding communities are largely urbanized with only isolated areas that support remnant native vegetation. The analysis identified that onsite vegetation is either introduced or weedy species that provide minimal habitat for native animals except for songbirds and small mammals tolerant of human activity (e.g., ground squirrels). The onsite trees and large shrubs may provide some nesting or roosting opportunities for migratory birds or raptors, which could be impacted during construction. However, compliance with the Migratory Bird Treaty Act (MBTA) and Sections 3503, 3503.5, 3511 and 3513 of the *California Fish and Game Code*, as outlined in MMs BIO-1 and BIO-2, would ensure that potential impacts to nesting birds and raptors would be less than significant. Additionally, the planting of hundreds of new trees under the Specific Plan would help continue to provide nesting opportunities for avian species and raptors. Lastly, the Certified Final PEIR identified that the site is not within any established Habitat Conservation Plan (HCP) and Natural Community Conservation Plan (NCCP), and as such no impacts would occur. In terms of potential conflict with policies and ordinances protecting biological resources, including tree preservation policy, it was concluded that removal and replanting of onsite trees for proposed Project construction would comply with the landscaping requirements of the Specific Plan, and no impacts would occur related to conflicts with local policies or ordinances.

Mitigation Measures

The following measures are recommended to reduce potential impacts related to nesting birds and raptors to less than significant levels:

MM BIO-1 All construction activities shall comply with the federal Migratory Bird Treaty Act of 1918 (MBTA), the Golden Eagle Protection Act, and *California Fish and Game Code* Sections 3503, 3511 and 3513. The MBTA governs the taking and killing of migratory birds, their eggs, parts, and nests and prohibits the take of any migratory bird, their eggs, parts, and nests. Compliance with the MBTA shall be accomplished by completing the following:

Construction activities involving vegetation removal shall be conducted between outside of the peak nesting period (February 1 and September 1), if possible. If it is not possible for construction to occur outside of the peak nesting season, a pre-construction survey by a qualified biologist shall be conducted within 72 hours prior to construction activities to identify any active nesting locations. If the biologist does not find any active nests, the construction work shall be allowed to proceed. The biologist conducting the clearance survey shall document a negative survey with a report indicating that no impacts to active avian nests shall occur.

If the biologist finds an active nest on the Project site and determines that the nest may be impacted, the Biologist shall delineate an appropriate buffer zone around the nest. The size of the buffer shall be determined by the biologist in consultation with California Department of Fish and Wildlife (CDFW), and shall be based on the nesting species, its sensitivity to disturbance, and expected types of

disturbance. These buffers are typically 300 feet from the nests of non-listed species and 500 feet from the nests of listed species. Any active nests observed during the survey shall be mapped on an aerial photograph. Only construction activities (if any) that have been approved by a Biological Monitor shall take place within the buffer zone until the nest is vacated. The Biologist shall serve as a Construction Monitor when construction activities take place near active nest areas to ensure that no inadvertent impacts on these nests occur. Results of the pre-construction survey and any subsequent monitoring shall be provided to the Property Owner, CDFW and the City. The monitoring report shall summarize the results of the nest monitoring, describe construction restrictions currently in place, and confirm that construction activities can proceed within the buffer area without jeopardizing the survival of the young birds. Construction within the designated buffer area shall not proceed until written authorization is received by the applicant from CDFW. **(Applicable)**

MM BIO-2 All construction activities shall comply with Sections 3503, 3503.5, 3511 and 3513 of the *California Fish and Game Code,* which protect active nests of any raptor species, including common raptor species. Compliance with these codes shall be accomplished by completing the following:

If vegetation is to be cleared during the potential raptor nesting season (December 1 to August 31), all suitable habitat within 500 feet of the Project site shall be thoroughly surveyed for the presence of nesting raptors by a qualified biologist within 72 hours prior to clearing. If the biologist does not find any active nests, the construction work shall be allowed to proceed. The biologist conducting the clearance survey shall document a negative survey with a report indicating that no impacts to active avian nests shall occur.

If any active nests are detected, the area shall be flagged and mapped on the construction plans with a buffer. The size of the buffer shall be determined by the biologist in consultation with CDFW, and shall be based on the nesting species, its sensitivity to disturbance, and expected types of disturbance. These buffers are typically 500 feet from the nests of raptors. The buffer area shall be avoided until the nesting cycle is complete or until it is determined that the nest has failed. Results of the pre-construction survey and any subsequent monitoring shall be provided to the Property Owner, CDFW and the City. The monitoring report shall summarize the results of the nest monitoring, describe construction restrictions currently in place, and confirm that construction activities can proceed within the buffer area without jeopardizing the survival of the young birds. Construction within the designated buffer area shall not proceed until authorization is received by the applicant from CDFW.

Although presumed absent, prior to development of the Project site, a pre-construction burrowing owl clearance survey shall be conducted to ensure burrowing owls remain absent from the Project site. The clearance survey shall be conducted in accordance with the CDFW 2012 Staff Report on Burrowing Owl Mitigation, which requires that two clearance surveys be conducted 14 – 30 days and 24 hours prior to any grading or vegetation removal on the Project site. If burrowing owls are observed on the Project site during the pre-construction

surveys, a burrowing owl passive relocation plan shall be prepared and submitted to CDFW for review and approval prior to commencement of vegetation clearing/grubbing, grading, and construction activities on the Project site. The burrowing owl relocation plan shall outline methods to passively relocate any burrowing owls occurring on the Project site and ensure compliance with the MBTA and *California Fish and Game Code*. **(Applicable)**

Proposed Project Impact Analysis

Environmental Issues	New Significant Impact	More Severe Impacts	New Ability to Substantially Reduce Significant Impact	No Substantial Change From Previous Analysis
BIOLOGICAL RESOURCES – Would the project:				
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 Game 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 Game or US Fish and Wildlife Service?	☐	☐	☐	☑
c) Have a substantial adverse effect on state or federally protected wetlands (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?	☐	☐	☐	☑

This section identifies and describes the existing condition of the Project site pertaining to biological resources and evaluates the potential impacts that the proposed Project may have on those resources. Information presented in this section is based on the existing conditions described in the Certified Final PEIR (City of West Covina 2019).

Would the Project:

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?

No Substantial Change from Previous Analysis. Although the surrounding region may contain a number of sensitive biological resources, as identified in the Certified Final PEIR, the proposed Project site and surrounding communities are largely urbanized with only isolated areas that support remnant native vegetation. The QVH campus is entirely developed with hospital and medical office uses and associated improvements. As there are no native vegetation or habitat on campus and within the Project site, there is little or no potential for sensitive plant or wildlife species to be present. As previously discussed, the proposed Project site is part of the QVH campus and is surrounded with surface parking lots and existing QVH campus buildings. The vegetation on the Project site consists of ornamental trees and shrubs, which can provide foraging habitat for birds, small mammals, small reptiles, and insects that have adapted to human disturbance. However, the Project site does not provide natural habitats for sensitive plant and animal species, as the sites for the proposed structures are either disturbed or developed. Migratory birds and raptors are discussed under Threshold (d).

Review of the USFWS' Critical Habitat for Threatened and Endangered Species shows there are no designated critical habitat areas on or near the site. The nearest critical habitat is located in Galster Park, approximately 3 miles to the south/southeast.

Additionally, since there are no natural or sensitive biological resources on the Project site, the implementation of the proposed Project would not impact any federal or State Candidate, Sensitive, or Special Status species, as identified in the local or regional plans, policies, or regulations by the California Department of Fish and Wildlife (CDFW) or U.S. Fish and Wildlife Service (USFWS). Therefore, the Project would not create a new significant impact to candidate, sensitive, or special status species that was not previously analyzed, and no new mitigation measures are required.

b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and 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 (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

No Substantial Change from Previous Analysis. The Project site is fully developed with various hospital and medical office buildings, parking lots, and walkways. As indicated above, the site is either developed or disturbed with no native vegetation or any sensitive natural communities. The site does not have any water bodies, drainage, and does not support State or federally protected wetlands, or other areas under the jurisdiction of the CDFW, the Regional Water Quality Control Board (RWQCB), or U.S. Army Corps of Engineers (USACE). The Walnut Creek (flood control) Channel is approximately 0.05 mile to the north of the Project site; however, it contains no resources under the jurisdiction of state or federal resource agencies,

and the proposed Project would not have any direct impacts on this drainage channel. Therefore, the Project would not create a new significant impact to riparian habitat, or other sensitive natural communities, or federally protected wetlands that was not previously analyzed, and no new mitigation measures are required.

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?

No Substantial Change from Previous Analysis. The proposed Project site contains trees that may support avian species, but the Project site, as part of the QVH campus, has been developed and disturbed with a high level of human activity. The Project site is not within any regionally or locally recognized wildlife movement corridors (City of West Covina 2019). According to PlanWC and the General Plan EIR, this portion of the City of West Covina, including the proposed Project site, does not contain known native wildlife nursery sites. Additionally, although the Project site is approximately 0.05 miles south of the Walnut Creek Channel, the portion of the channel in the vicinity of the campus is lined with concrete thus providing little or no actual support for any biological resources. The proposed Project would not encroach into or impact the flood control corridor (i.e., channel and adjacent maintenance roads); therefore, Project development would not result in new impacts on limited wildlife movement that may occur along the channel. Therefore, Project construction and operation would not have a significant impact on regional wildlife movement through this portion of the San Gabriel Valley or within the south coast region as a whole.

Due to the presence of trees and vegetation within campus proper and on the site, the existing trees and vegetation on the Project site have the potential to provide suitable nesting opportunities for avian species, as discussed above. Nesting birds, their eggs, and nests are protected pursuant to the MBTA, Bald/Golden Eagle Protection Act, and Fish and Game Code (Sections 3503, 3503.3, 3511, and 3513 of the California Fish and Game Code prohibit the take, possession, or destruction of birds, their nests or eggs). Bird species protected under the provisions of the MBTA are identified by the List of Migratory Birds (50 Code of Federal Regulations [CFR] Section 10.13, as amended). Therefore, pre-construction clearance surveys for nesting bird and raptor surveys are required to be conducted prior to any vegetation removal, tree removal, or ground disturbing activities that may disrupt the birds during the avian and raptor nesting seasons. The mitigation measures from the Certified Final PEIR (MM BIO-1 and MM BIO-2) would apply to the proposed Project to address the potential impact to migratory birds and nesting raptors during construction of the proposed Project. Therefore, potential impacts to migratory birds would be less than significant with implementation of MM BIO-1 and MM BIO-2, and no new mitigation measures are required.

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

No Substantial Change from Previous Analysis. On-site trees and vegetation would be removed and replaced by a variety of trees, vines, shrubs and groundcovers. The landscape plan would comply with Chapter 26, Article XIV, Division 1, Water Efficient Landscaping, of the West Covina Municipal Code, as reviewed and approved by the City of West Covina. As described in the Tree Inventory Report prepared for the Project (Appendix B), the Project site has no heritage trees and 70 significant trees, as defined by the City. Significant trees are defined as any tree in

the front yard of a parcel (or street-side yard of a corner lot) with a trunk diameter measuring at least 12 inches or trees located anywhere on a lot whose trunk measures at least 6 inches for the following species: any oak tree species (*Quercus* spp.) that is native to California, California sycamore (*Platanus racemosa*), or American sycamore (*Platanus occidentalis*). The trees listed in this report are those that meet the size and/or species requirements to be considered as significant trees though the City's Municipal Code does not specify if the definition of significant trees applies to commercial properties. The significant tree definition does not indicate how to calculate the trunk diameter of multi-trunk trees. Therefore, trees that have a cumulative trunk diameter of 12 inches are included in this inventory. In all, a total of 70 significant trees are expected to be removed for Project construction, consisting of 23 tree removals for the MOB, 29 removals for the new PS, and 18 removals for the ED/ICU. None of the trees on the Project site are considered heritage trees.

The removal of these trees would require a permit to remove trees. Therefore, the Project would be subject to Chapter 26, Article VI, Division 9, Preservation, Protection, and Removal of Trees, of the West Covina Municipal Code. As part of the Project, 80 new trees would be planted (detailed in Section 2.6, Conceptual Landscape Plan). The Project would not conflict with City regulations in this regard. As such the Project would not conflict with local policies and ordinances protecting biological resources, and no new impact that was not previously analyzed in the Certified Final PEIR, would occur, and no mitigation is required.

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?

No Substantial Change from Previous Analysis. As indicated in the Certified Final PEIR, the QVH campus, including the proposed Project site is in a highly urbanized region and not within any established Habitat Conservation Plan (HCP), Natural Community Conservation Plan (NCCP), or other approved type of habitat conservation plan. In addition, there are no HCP or NCCP areas within two miles of the Project site. Therefore, the Project would not create a new significant impact pertaining to approved habitat conservation plans that was not previously analyzed, and no new mitigation measures are required.

Conclusion

The biological resources impacts of the proposed Project would be consistent with the impacts identified for the Approved Project, analyzed in the Certified Final PEIR. The proposed Project would not create a new significant impact or a substantial increase in the severity of previously identified effects. In regard to Section 15162 of the State CEQA Guidelines, (1) no substantial changes are proposed as part of the proposed Project that would result in new significant effects or an increase in severity of previous effects; (2) no substantial changes in circumstances have occurred that would result in new significant effects; and (3) no new information has become known that was not previously known that would (a) create new significant impacts, (b) increase the severity of previously examined effects, or (c) determine that mitigation measures or alternatives previously found not to be feasible would, in fact, be feasible; or (4) introduce mitigation measures that are considerably different from those analyzed in the Certified Final PEIR. For these reasons, no major revisions to the biological resources analysis provided in the Certified Final PEIR nor to the MMRP are required.

3.5 CULTURAL RESOURCES

Certified Final PEIR Environmental Review

The Certified Final PEIR identified that there are no known historical sites within the QVH campus or in the immediately surrounding area. The Approved Project would not result in any impacts on the closest historic property, located within a half mile of the QVH. Regarding archaeological resource as defined in Section 15064.5, the Certified Final PEIR indicated that even though there are no known archaeological sites located within the Project site or in the immediately surrounding area and the potential for Project-related grading to have significant impacts on archaeological resources is considered low, there is a possibility that unknown archaeological artifacts or resources may be encountered during grading. As such mitigation measures (MM CUL-1 through MM CUL-3) were proposed to reduce the impacts to less than significant level. In terms of paleontological resources, it was indicated that according to the PlanWC's Resource Conservation Element, soils and geologic formations within the City, including the Hospital campus, have a low potential to contain significant paleontological resources. Searches of databases identified that no fossil localities have been previously recorded within one mile of the Project site. Paleontological resources were not anticipated to be discovered during excavation in younger (Holocene) alluvial fan deposits. However, it would be possible that grading in older alluvial materials (i.e., Quaternary) could impact previously undiscovered paleontological resources. As such, mitigation measures (MM CUL-4) was proposed to reduce the potential impact to less than significant. Lastly, the analysis in the Certified Final PEIR indicated that if human remains are found, state law requires proper treatment for the remains in accordance with applicable regulations. Section 7050.5 of the *California Health and Safety Code* describes the protocols to be followed in the event that human remains are accidentally discovered during excavation of a site. In addition, the requirements and procedures set forth in Section 5097.98 of the *California Public Resources Code* would be implemented. Although there was no indication that human remains would be present, it was stated that grading would have the potential to unearth previously undiscovered human remains. As such a mitigation measure (MM CUL-5) was proposed to reduce the potential impact to less than significant level.

Mitigation Measures

MM CUL-1 A qualified archaeologist (the "Project Archaeologist") shall be retained prior to the start of grading for Project-related construction. The Project Archaeologist shall monitor all ground-disturbing activities within the areas of native soil (i.e., below existing areas of artificial fill from previous hospital construction). If archaeological or historical resources are encountered during implementation of any phase of the Project, the Project Archaeologist will be allowed to temporarily divert or redirect grading or excavation activities in the vicinity of the find in order to make an evaluation of the find.

If historical materials are found during grading, a qualified historian ("Project Historian") shall be retained to evaluate and make appropriate recommendations on the disposition of any historical artifacts in consultation with the City local historical experts as determined appropriate by the City. The disposition of any

archaeological resources shall be governed by Mitigation Measure CUL-3. **(Applicable)**

MM CUL-2 Prior to the start of any Project-related grading, the following note shall be placed on the Grading Plan:

> "If any suspected archaeological resources are discovered during ground-disturbing activities and the archaeological monitor or Tribal representatives are not present, the construction supervisor is obligated to halt work in a 100-foot radius around the find and call the Project Archaeologist and appropriate Tribal representatives to the site to assess the significance of the find." **(Applicable)**

MM CUL-3 The Project Archaeologist shall monitor Project-related grading as outlined in Mitigation Measure CUL-1. Any archaeological resources are uncovered during the course of Project-related grading shall be recorded and/or removed per applicable guidelines, in consultation and cooperation with the City, the South Central Coastal Information Center Staff (located at Cal State Fullerton) and appropriate Native American tribal representatives.

If a significant archaeological resource(s) is discovered on the property, ground disturbing activities shall be suspended 100 feet around the resource(s). The archaeological monitor and representatives of the appropriate Native American Tribe(s), Hospital Staff, and the City Planning Department shall confer regarding mitigation of the discovered resource(s). A treatment plan and/or preservation plan shall be prepared and by the archaeological monitor and reviewed by representatives of the appropriate Native American Tribe(s), Hospital Staff, and the City Planning Department and implemented by the archaeologist to protect the identified archaeological resource(s) from damage and destruction.

The Hospital shall relinquish ownership of all archaeological artifacts that are of Native American origin found on the Project site to the culturally affiliated Native American tribe(s) for proper treatment and disposition. A final report containing the significance and treatment findings shall be prepared by the archaeologist and submitted to the City Planning Department, the appropriate Native American tribe(s), and the South Central Coastal Information Center. All cultural material, excluding sacred, ceremonial, grave goods and human remains, collected during the grading monitoring program and from any previous archaeological studies or excavations on the Project site shall be curated, as determined by the treatment plan, according to the current professional repository standards and may include a culturally affiliated tribal curatorial facility. **(Applicable)**

MM CUL-4 A qualified Paleontologist (the "Project Paleontologist") shall be retained prior to the start of grading for any Project-related construction. Also prior to the start of grading, the Project Paleontologist shall review the grading plan to identify any areas where excavation will occur in native soils that could contain fossils (i.e., older Quaternary alluvium). The Project Paleontologist shall monitor all ground-disturbing activities in those areas and prepare a brief memo report on monitoring activities during that time. If fossiliferous materials are found during

grading in other (i.e., non-marked) areas, work shall be halted until the Project Paleontologist is contacted and can evaluate the find and determine an appropriate course of action to protect significant paleontological resources. **(Applicable)**

MM CUL-5 If human remains are encountered during any Project-related ground-disturbing activities, Section 7050.5 of the *California Health and Safety Code* states that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition of the materials pursuant to Section 5097.98 of the *California Public Resources Code.* The provisions of Section 15064.5 of the California Environmental Quality Act Guidelines shall also be followed. The County Coroner must be notified of the find immediately. If the remains are determined to be prehistoric, the Coroner shall notify the Native American Heritage Commission (NAHC). The NAHC will determine and notify a Most Likely Descendent (MLD). With the permission of the landowner or his/her authorized representative, the MLD may inspect the site of the discovery. The descendent must complete the inspection within 24 hours of notification by the NAHC. The MLD may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials. These requirements shall be included as notes on the contractor specification and verified by the Community Development Department, prior to issuance of grading permits. This measure shall be implemented to the satisfaction of the City in consultation with the County Coroner. **(Applicable)**

Proposed Project Impact Analysis

Environmental Issues	New Significant Impact	More Severe Impacts	New Ability to Substantially Reduce Significant Impact	No Substantial Change From Previous Analysis
CULTURAL RESOURCES – Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?	☐	☐	☐	☑
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☐	☐	☑
c) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☐	☑

Would the Project:

a) Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?

No Substantial Change from Previous Analysis. The Project site has been disturbed and is currently developed with existing buildings. Consistent with the findings of the Certified Final PEIR, the Project does not include any historic resources, and the closest historic resource to the

site is a farmhouse within a half mile, at 1127 West Merced Avenue. However, the Project would not result in any direct or indirect impacts on the property. As there are no known historic resources located within the Project area, the Project would not result in a substantial change in the significance of a historical resources. Thus, no new impact pertaining to historic resources that was not previously identified in the Certified Final PEIR, would result, and no mitigation is required.

b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?

No Substantial Change from Previous Analysis. As identified in the Certified Final PEIR, per the City's General Plan EIR, no known archaeological sites are located within the QVH campus, including the Project site. However, even though the potential for discovery of archaeological resources is considered low, there is a possibility that unknown archaeological artifacts or resources would be encountered during grading activities. To address this potentially significant impact, mitigation measures (MM CUL-1 through MM CUL-3) from the Certified Final PEIR would be implemented to reduce the impacts to less than significant level, consistent with PlanWC Policy 7.7 and Action 7.7. Therefore, no new significant impacts that were not previously identified in the Certified Final PEIR would result that would require a new mitigation measure.

c) Disturb any human remains, including those interred outside of formal cemeteries?

No Substantial Change from Previous Analysis. Consistent with the findings of the Certified Final PEIR, there is no indication that human remains are present within the Project site. In the unlikely event of an unanticipated encounter with human remains at the site, the *California Health and Safety Code* and the *California Public Resources Code* requires that any activity in the area of a potential find be halted and the Los Angeles County Coroner be notified, as described in MM CUL-5. Compliance with MM CUL-5 would ensure that impacts would be less than significant. The proposed Project would not result in a new significant impact related to the disruption of human remains, that was not previously identified, and no new mitigation is required.

Conclusion

The cultural resources impacts of the proposed Project would be consistent with the impacts identified for the Approved Project, analyzed in the Certified Final PEIR. The proposed Project would not create a new significant impact or a substantial increase in the severity of previously identified effects. In regard to Section 15162 of the State CEQA Guidelines, (1) no substantial changes are proposed as part of the proposed Project that would result in new significant effects or an increase in severity of previous effects; (2) no substantial changes in circumstances have occurred that would result in new significant effects; and (3) no new information has become known that was not previously known that would (a) create new significant impacts, (b) increase the severity of previously examined effects, or (c) determine that mitigation measures or alternatives previously found not to be feasible would, in fact, be feasible; or (4) introduce mitigation measures that are considerably different from those analyzed in the Certified Final PEIR. For these reasons, no major revisions to the cultural resources analysis provided in the Certified Final PEIR nor to the MMRP are required

3.6 ENERGY

Certified Final PEIR Environmental Review

The Certified Final PEIR addressed energy under Section 6.0, Other CEQA Considerations. Section 6.3 of the Certified Final PEIR provided a discussion of potential energy impacts, addressing Appendix F of the State CEQA Guidelines. The analysis quantified the short-term construction energy use and long-term energy use from hospital and medical office buildings for the Approved Project. The Certified Final PEIR noted that fuel energy consumed during construction would be temporary in nature and would not represent a significant demand on energy resources. The Approved Project would have no unusual Project characteristics that would necessitate the use of construction equipment that would be less energy-efficient than comparable equipment at construction sites in other parts of the State. Energy used in the construction of the Approved Project would enable the development of buildings that meet the latest energy efficiency standards, as detailed in California's Title 24 building standards. Therefore, the proposed construction activities would not result in inefficient, wasteful, or unnecessary fuel consumption. Fuel consumption associated with vehicle trips was determined to not be considered inefficient, wasteful, and unnecessary, due to the expansion of medical services and employment in a housing-rich area. Lastly, the Certified Final PEIR determined that because the Approved Project proposed expanded medical services to meet the needs of the local population, they would not need to travel further to obtain these services. Based on the above, the proposed Project was not expected to result in excessive long-term operational building energy demand.

Mitigation Measures

No mitigation measures were required.

Proposed Project Impact Analysis

Environmental Issues	New Significant Impact	More Severe Impacts	New Ability to Substantially Reduce Significant Impact	No Substantial Change From Previous Analysis
ENERGY – Would the project:				
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?	☐	☐	☐	☑

Would the Project:

a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

No Substantial Change from Previous Analysis. Section 21100(b)(3) of the *California Public Resources Code* and Appendix F to the State CEQA Guidelines require a discussion of potential energy impacts of proposed projects. Appendix F states:

> The goal of conserving energy implies the wise and efficient use of energy. The means of achieving this goal include:
>
> (1) Decreasing overall per capita energy consumption,
>
> (2) Decreasing reliance on fossil fuels such as coal, natural gas and oil, and
>
> (3) Increasing reliance on renewable energy sources.

Southern California Edison (SCE) and the Southern California Gas Company (SCGC) are utility companies that currently provide and would continue to provide electrical and natural gas services to the Project site. Compliance with energy efficiency and conservation policies and regulations is discussed in this section.

The City of West Covina has adopted an Energy Action Plan (EAP) to address environmental and fiscal impacts associated with energy consumption. The EAP was developed to guide the City toward attainable conservation goals that would reduce the impact of GHG emissions within the community. These conservation goals include:

- Educating the public about energy saving techniques and programs.
- Promoting and creating energy conservation opportunities and programs.
- Installing environmentally benign, renewable and reliable energy facilities.
- Participating in alliances with local businesses and with other agencies.
- Pursuing and performing local and higher funding opportunities.
- Coordinating other City policies, programs and ordinances to become compatible with Sustainable Community goals.

The State of California has also adopted efficiency design standards within the Title 24 Building Standards and CALGreen requirements. Title 24 of the California Code of Regulations (CCR, specifically, Part 6) is California's Energy Efficiency Standards for Residential and Non-residential Buildings. Title 24 was established by the California Energy Commission (CEC) in 1978 in response to a legislative mandate to create uniform building codes to reduce California's energy consumption and to provide energy efficiency standards for residential and non-residential buildings. The 2019 California Green Building Standards Code (24 CCR, Part 11), also known as the CALGreen Code, contains mandatory requirements for new residential and nonresidential buildings throughout California. The development of the CALGreen Code is intended to (1) cause a reduction in GHG emissions from buildings; (2) promote environmentally responsible, cost-effective, healthier places to live and work; (3) reduce energy and water

consumption; and (4) respond to the directives by the Governor. In short, the Code is established to reduce construction waste; make buildings more efficient in the use of materials and energy; and reduce environmental impact during and after construction. The regulation of energy efficiency for residential and non-residential structures is established by the CEC and its California Energy Code. Starting on January 1, 2020, nonresidential uses would incorporate energy efficiency measures that would result in approximately 30% greater energy efficiency than the previous standards.

The City has adopted an Energy Action Plan (EAP). Therefore, the Project is evaluated against the City's EAP. The goals of the City's EAP include: educating the public about energy-saving techniques and programs; promoting and creating energy conservation opportunities and programs; installing environmentally benign, renewable, and reliable energy facilities; participating in alliances with local businesses and with other agencies; pursuing and performing local and higher funding opportunities; and coordinating other City policies, programs, and ordinances to become compatible with Sustainable Community goals.

Construction

Project construction would require the use of construction equipment for grading and building activities. All off-road construction equipment is assumed to use diesel fuel. Construction also includes the vehicles of construction workers and vendors traveling to and from the Project site.

Off-road construction equipment use was calculated from the equipment data (mix, hours per day, horsepower, load factor, and days per phase) provided in the CalEEMod construction output files included in Appendix C of this Addendum. The total horsepower hours for the Project was then multiplied by fuel usage estimates per hours of construction activities included in the Off-Road Model.

Fuel consumption from construction worker, vendor, and delivery/haul trucks was calculated using the trip rates and distances provided in the CalEEMod construction output files. Total vehicle miles traveled (VMT) was then calculated for each type of construction-related trip and divided by the corresponding miles per gallon factor using CARB's EMissions FACtor (EMFAC) 2017 model (CARB 2017). EMFAC provides the total annual VMT and fuel consumed for each vehicle type. Construction vendor and delivery/haul trucks were assumed to be heavy-duty diesel trucks.

As shown in Table 3-9, a total of 39,420 gallons of gasoline and 34,886 gallons of diesel fuel is estimated to be consumed during Project construction.

TABLE 3-9
ENERGY USE DURING CONSTRUCTION

Source	Gasoline - gallons	Diesel Fuel - gallons
Off-road Construction Equipment	11,391	32,956
Worker commute	22,241	89
Vendors	5,785	82
On-road haul	2	1,760
Totals	**39,420**	**34,886**
Sources: Data from CalEEMod, OffRoad and EMFAC2017 (CARB 2017). Energy data can be found in Appendix C of this Addendum.		

Fuel energy consumed during construction would be temporary in nature and would not represent a significant demand on energy resources. The Project would also implement best management practices such as requiring equipment to be properly maintained and minimize idling and where feasible, use electric or clean alternative fuel equipment. Furthermore, there are no unusual Project characteristics that would necessitate the use of construction equipment that would be less energy-efficient than at comparable construction sites in other parts of the State. Energy used in the construction of the Project would enable the development of buildings that meet the latest energy efficiency standards as detailed in California's Title 24 building standards. In addition, the development of the Project would provide for an expansion of medical facilities that accommodates existing and future medical needs of local communities. Therefore, the proposed construction activities would not result in inefficient, wasteful, or unnecessary fuel consumption. The Project would not create a new significant impact pertaining to construction related energy consumption that was not previously analyzed, and no new mitigation measures are required.

Operations

The proposed Project would promote building energy efficiency through compliance with energy efficiency standards (Title 24 and CALGreen). The Project site is currently developed with hospital uses that complied with older less stringent building energy efficiency standards. The development of the Project is required to comply with the latest (2019) building energy efficiency standards adopted by the State of California. Additionally, per MM GHG-1, the Hospital is required to install solar photovoltaic panels that generate at least 25 percent of the additional electricity demand associated with the proposed structures, which includes Phases 1A and 1B. The estimated energy consumption attributable to the Project is shown in Table 3-10 below.

TABLE 3-10
ENERGY USE DURING OPERATIONS

Land Use	Gasoline	Diesel	Natural Gas (kBTU/yr)	Electricity (kWh/yr)
Project Land Uses	193,420	20,174	4,427,176	1,813,227
Sources: Psomas 2020. Energy data can be found in Appendix C of this Addendum.				

The CEC anticipates the new 2019 Building Energy Efficiency Standards would result in a reduction of energy use by more than 30 percent as compared to previous energy standards for nonresidential buildings (CEC 2018). Therefore, the new buildings would be more energy efficient than the existing buildings to be demolished. In terms of whether the operations phase would result in a wasteful, inefficient, or unnecessary consumption of energy resources, during Project operation, the Project would add new energy efficient buildings that would meet the existing and future medical needs of local communities. Therefore, the proposed Project would not result in an inefficient, wasteful, or unnecessary consumption of energy. The Project would not create a new significant impact pertaining to energy consumption from the operations of the Project that was not previously analyzed, and no new mitigation measures are required.

b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

No Substantial Change from Previous Analysis. The proposed Project would promote building energy efficiency through compliance with energy efficiency standards (Title 24 and CALGreen) and providing energy efficiency measures that exceed required standards. Based on CalEEMod, the electricity demand from the Project would be approximately 7.1 million kilowatt hours per year (kWh/yr), and the natural gas consumption would be approximately 10.6 billion British Thermal Units per year (BTU/yr), which includes peak demands. The 2019 Title 24 standards would reduce energy consumption by approximately 30 percent over the 2016 standards (CEC 2018). Because the Project proposes expanded medical services to meet the needs of the local population, they would not need to travel further to obtain these services. Based on the above, the proposed Project is not expected to result in excessive long-term operational building energy demand. As stated above, the City adopted the EAP to identify the City's long-term strategies and commitment to achieve energy efficiency in the community and in City operations. However, the EAP does not include requirements or standards for implementation of energy reduction to development projects. Table 3-11, below, shows the EAP policies applicable to the Project and the Project's consistency with these policies.

TABLE 3-11
ENERGY ACTION PLAN CONSISTENCY

Energy Action Plan Policy	Project Consistency Analysis
Provide on-line (Internet accessible) guidance and assistance to Homeowners and Builders to make compliance with new Title 24 energy requirements as effective and efficient as possible.	**Consistent**. The Project site would be equipped with internet accessibility, which would provide builders with the ability to effectively and efficiently meet Title 24 energy requirements.
Modify the City's lighting standards to encourage the application of "Dark Skies" goals (discourage excessive and spill-over lighting).	**Consistent**. The Project would comply with the City's lighting ordinance (Section 26-570) for non-residential buildings.

TABLE 3-11
ENERGY ACTION PLAN CONSISTENCY

Energy Action Plan Policy	Project Consistency Analysis
Promote energy and water conservation design features in all major renovation and development projects.	**Consistent**. The Project is designed to meet current Title 24 Standards at the time of Building Permit Review. The regulation of energy efficiency for residential and non-residential structures is established by the CEC and its California Energy Code. Per MM GHG-1, the Hospital is required to install solar photovoltaic panels that generate at least 25 percent of the additional electricity demand associated with the new Project-related structures. Therefore, the proposed Project would be consistent with these objective and policies.
Encourage the efficient use of water and reduce urban runoff through the use of natural drainage, drought tolerant landscaping, and efficient irrigation systems in major renovation and new development projects. Recommend the incorporation of these practices within the approval processes of other local and regional departments and jurisdictions.	**Consistent.** The Project would meet current California Green Building Standards Code (CALGreen Code) for indoor water use.
Source: City of West Covina 2011.	

As shown in Table 3-11, the Project is consistent with applicable EAP policies. The Project would be built to meet the current applicable Title 24 Energy Efficiency Standards for Nonresidential Buildings (California Code of Regulations [CCR], Title 24, Part 6) and the applicable CALGreen Code (24 CCR 11). The proposed Project would be developed in compliance with the requirements of these regulations. As such, the Project would not create a new significant impact pertaining to obstruction with a state or local plan that was not previously analyzed, and no new mitigation measures are required.

Conclusion

The energy impacts of the proposed Project would be consistent with the impacts identified for the Approved Project, analyzed in the Certified Final PEIR. The proposed Project would not create a new significant impact or a substantial increase in the severity of previously identified effects. In regard to Section 15162 of the State CEQA Guidelines, (1) no substantial changes are proposed as part of the proposed Project that would result in new significant effects or an increase in severity of previous effects; (2) no substantial changes in circumstances have occurred that would result in new significant effects; and (3) no new information has become known that was not previously known that would (a) create new significant impacts, (b) increase the severity of previously examined effects, or (c) determine that mitigation measures or alternatives previously found not to be feasible would, in fact, be feasible; or (4) introduce mitigation measures that are considerably different from those analyzed in the Certified Final PEIR. For these reasons, no major revisions to the energy analysis provided in the Certified Final PEIR are required.

3.7 GEOLOGY AND SOILS

Certified Final PEIR Environmental Review

The Certified Final PEIR identified that the Approved Project would result in no impacts pertaining to loss, injury, or death involving fault rupture of a known earthquake fault, as the QVH campus has no known active or potentially active faults, and the campus in not included in an Alquist-Priolo Earthquake Fault Zone. The analysis also indicated that the primary geologic hazard for the Approved Project area is seismic ground shaking; however, implementation of MM GEO-1 would ensure the potential impacts to strong ground shaking would have less than significant impacts.

Further, it was determined that the potential for seismically induced settlement and liquefaction is low, as the campus is not in a designated Liquefaction Hazard Zone. The analysis also identified that the Approved Project site is not located within a Landslide Zone, and the potential for seismically-induced slope instability was considered low.

Additionally, the analysis determined that the Approved Project would have a less than significant impact related to soil erosion during construction and no impact during operation. The Approved Project would comply with the grading regulations of the City and the National Pollutant Discharge Elimination System (NPDES) Construction General Permit to minimize erosion during construction activities. Best Management Practices (BMPs) would also be implemented at each construction site as part of a Storm Water Pollution Prevention Plan (SWPPP). Thus, with adherence to regulations and implementation of MMs HYD-1 and GEO-2, the potential impacts related to erosion would be less than significant.

The Certified Final PEIR indicated that impacts related to unstable soil would be reduced with implementation of MM GEO-1 and MM GEO-2 and compliance with applicable local and State regulations. Also, potential impacts related to onsite or offsite landslide, lateral spreading, subsidence, liquefaction, or collapse would be less than significant and further reduced with implementation of MMs GEO-1 and GEO-2. Moreover, it was determined that with adherence to applicable regulations, and future site-specific geotechnical investigations and grading plan submittals, as outlined in MM GEO-1 and GEO-2, potential impacts related to expansive soils would be mitigated if encountered on the site.

Finally, it was indicated that the Project would not include the construction of a septic system, and no impacts would occur.

Mitigation Measures

MM GEO-1 Prior to approval of Project plans, a site-specific Geotechnical Report shall be prepared for each proposed structure. The Geotechnical Report shall be prepared by a registered Civil Engineer or certified Engineering Geologist and shall contain site-specific evaluations of the seismic and geologic hazards affecting the Project and shall identify recommendations for earthwork and construction. All recommendations from forthcoming site-specific geotechnical studies shall be included in the site preparation and building design specifications. Compliance with this requirement shall be verified by the City Engineer as part of the Project

certification process, which includes review and approval of the site-specific geotechnical studies by the California Geological Survey (CGS). **(Applicable)**

MM GEO-2 Prior to the issuance of building permits, the final Grading Certification (on the approved City of West Covina form) shall be prepared, stamped, and signed by the appropriate professional personnel. A California registered Civil Engineer, soil engineer, and geologist (if applicable) and the grading contractor shall sign the final Grading Certification. In addition, the final compaction report shall be signed by the soils engineer and submitted for review and approval by the Building and Safety Official prior to the issuance of building permits. **(Applicable)**

CUL-4 is provided under Section 3.5, Cultural Resources.

Proposed Project Impact Analysis

Environmental Issues	New Significant Impact	More Severe Impacts	New Ability to Substantially Reduce Significant Impact	No Substantial Change From Previous Analysis
GEOLOGY AND SOILS – Would the project:				
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 direct or indirect 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 waste water?	☐	☐	☐	☑
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☐	☑

This section describes the existing geology and soils on the Project site and analyzes the potential impacts of existing geotechnical hazards that may adversely affect the proposed Project or may be exacerbated by Project implementation. Information presented in this section is derived primarily from the *Geotechnical Exploration Report Citrus Valley Medical Center Queen of The Valley Campus 1115 South Sunset Avenue West Covina, California* (Leighton 2011), West Covina General Plan 2016 (PlanWC), West Covina Natural Hazard Mitigation Plan (NHMP), the City of West Covina 2016 General Plan Update, and the Certified Final PEIR (City of West Covina 2019).

Would the Project:

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?

No Substantial Change from Previous Analysis. No active or potentially active faults are known to exist on or within the Project site, and the site is not in a current State of California Earthquake Fault Zone (Leighton 2011). However, as with all Southern California, the Project site lies in a seismically active region, and a major earthquake occurring along any of these faults would be capable of generating seismic hazards and strong ground shaking effects within the City. In addition to regional faults, there are several local faults located within or near the City that are considered potentially active. The closest faults to the Project site, which traverse the City of West Covina, include the Indian Hill fault located approximately four miles to the northeast, Walnut Creek fault located approximately two miles to the south, and San Jose Fault located approximately four miles to the southeast.

Ground rupture occurs when movement on a fault breaks through the surface. The State of California has established Earthquake Fault Zones for the purpose of mitigating the hazard of fault rupture by prohibiting the location of most human occupancy structures across the traces of active faults. The Project site is outside of an Earthquake Fault Zone, no known active or potentially active faults traverse the campus, and the campus is not included in an Alquist-Priolo Earthquake Fault Zone (Leighton 2011). Since no known active or potentially active faults traverse the QVH campus, the Project would result in no impacts due to risk of loss, injury, or death involving fault rupture of a known earthquake fault, and no mitigation is required. Therefore, the Project would not create a new significant impact pertaining to faults that was not previously analyzed, and no new mitigation measures are required.

ii) Strong seismic groundshaking?

No Substantial Change from Previous Analysis. The City of West Covina and the rest of California are located within a seismically active region. There are no known active or potentially active faults on the Project site. It is anticipated that because the Project site is located within a seismically active region, the site would experience ground shaking during the life of the Project.

The nearest known active local fault is the San Jose fault, located approximately four miles to the southeast. According to the City of West Covina NHMP, moderate to severe ground shaking may

be expected within the City, including the Project site, due to the proximity of the San Jose fault, as well as the major active faults in the area.

The nearest known active major fault, located approximate 13 miles from the QVH campus, is the Cucamonga frontal thrust fault, which is capable of producing a 7.0 magnitude event along the mountain front. The nearest active local fault, the San Jose fault, is capable of producing a 6.5 magnitude event. While other active faults (regional faults) in the area are located further from the site, they may have a greater potential to produce earthquakes of higher magnitudes. The possibility of ground acceleration or shaking at the Project site is similar to that for all of Southern California and is considered a potentially significant impact that requires mitigation.

Implementation of MM GEO-1 from the Certified Final PEIR requires a site-specific Geotechnical Report to determine appropriate site and building designs, which would reduce potential impacts related to soil and geologic constraints to less than significant levels. In order to reduce the effects of ground shaking, the Project should be designed in accordance with all applicable current codes and standards utilizing the appropriate seismic design parameters to reduce seismic risk as defined by California Geological Survey (CGS) Chapter 2 of Special Publication 117a and the 2019 California Building Code (CBC). All buildings and other structures constructed as part of the proposed Project would be designed in accordance with applicable requirements of the CBC in effect at the time of grading plan submittal, and any applicable building and seismic codes in effect at the time the grading plans are submitted. Compliance with applicable regulations and implementation of MM GEO-1 would ensure that people and/or structures would not be exposed to potential substantial adverse effects from strong seismic groundshaking. Therefore, the Project would not create a new significant impact pertaining to strong seismic groundshaking that was not previously analyzed, and no new mitigation measures are required.

iii) Seismic-related ground failure, including liquefaction?

No Substantial Change from Previous Analysis. According to the City of West Covina NHMP, the Project site is not located within a designated Liquefaction Hazard Zone and thus is not located in an area susceptible to liquefaction (City of West Covina 2020a). Liquefaction and dynamic settlement of soils can be caused by strong ground motion due to earthquakes. Research and historical data indicate that loose, saturated granular soils are most susceptible to liquefaction (Leighton 2011). According to California Geological Survey (1998), historic high groundwater elevations below the site are greater than 50 feet below existing ground surface (bgs). Further, no groundwater was encountered during previous site-specific exploration. Therefore, because of the relatively dense nature of the underlying granular material and lack of a shallow groundwater table, potential for liquefaction is low (Leighton 2011). The potential for seismically induced settlement is also considered low. Therefore, the Project would not create a new significant impact pertaining to seismic-related ground failure that was not previously analyzed, and no new mitigation measures are required.

iv) Landslides?

No Substantial Change from Previous Analysis. The Project site and surrounding area are located in a generally flat, urbanized portion of the City. The California Department of Conservation (DOC) does not designate the site and the surrounding area as Earthquake-Induced Landslide Zones, which include areas with historical occurrence of landslide movement or where

local topographic, geological, geotechnical, and subsurface water conditions indicate a potential for permanent ground displacement (DOC 2020). Therefore, the Project would not create a new significant impact pertaining to landslides that was not previously analyzed, and no new mitigation measures are required.

b) Result in substantial soil erosion or the loss of topsoil?

No Substantial Change from Previous Analysis. Ground disturbance during grading and construction could lead to erosion and topsoil loss during wind or rain events, resulting in a potentially significant impact. As the Project site has over one acre of land area, it would be required to obtain a National Pollutant Discharge Elimination System (NPDES) permit for construction activities or coverage under the NPDES Construction General Permit. The Construction General Permit requires preparation of a Stormwater Pollution Prevention Plan (SWPPP) and implementation of erosion control, sediment control, tracking, waste management, and construction site maintenance best management practices (BMPs) to reduce the potential for soil and wind erosion during construction activities (see MM HYD-1, in Section 3.10). Further, the proposed Project must comply with the City's grading ordinance, which requires preparation of an erosion control plan for City approval prior to issuance of a grading permit. There would be minimal areas of exposed soils following completion of the proposed Project where erosion could occur. Site improvements and landscaping would also prevent long-term erosion, as required by the 2019 CBC design parameter guidelines, or the most current CBC adopted in the City's Municipal Code. Compliance with the NPDES Construction General Permit (MM HYD-1), Section 9.36 of the West Covina Municipal Code, and City of West Covina grading requirements, as outlined in MM GEO-2 from the Certified Final PEIR, would reduce erosion and sedimentation during construction and long-term operations. Therefore, the Project would not create a new significant impact pertaining to storm water quality impacts that was not previously analyzed, and no new mitigation measures are required.

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?

No Substantial Change from Previous Analysis. As discussed above, the Project site is not located in a potential landslide or a potential liquefaction area. Seismic-related ground failure, including liquefaction and settlement, is addressed under Threshold 3.7(a-ii). In addition, as addressed under Threshold 3.7(a-iv), the site is not located within a Landslide Zone and in an area with significant slopes. Lateral spreading is a liquefaction-related phenomenon; as there is no risk of liquefaction, there would be no risk of lateral spreading.

Ground subsidence is the gradual settling or sinking of the ground, usually associated with the extraction of oil, gas, or ground water from below the ground surface, or the organic decomposition of peat deposits, with a resultant loss in volume. The City of West Covina is not located within an area of land subsidence and is therefore not considered a significant source of unstable soil for the proposed Project (USGS 2020). Thus, impacts related to soil instability would be less than significant, consistent with the findings for the Certified Final PEIR.

Further, any potential impacts related to unstable soil would be reduced with implementation of MM GEO-1 from the Certified Final PEIR, requiring site-specific geotechnical investigations, and MM GEO-2, requiring approval of the final grading plan, appropriate certifications, and

compaction reports per the City of West Covina grading requirements. In addition, the proposed Project would comply with applicable local and State regulations. Therefore, the Project would not create a new significant impact pertaining to onsite or offsite landslide, lateral spreading, subsidence, liquefaction, or collapse that was not previously analyzed, and no new mitigation measures are required.

d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?

No Substantial Change from Previous Analysis. The Quaternary age alluvial soils encountered during previous onsite geotechnical exploration consist predominately of gravels and sands, and most of the onsite soils are granular and have low expansion potential (Leighton 2011). Therefore, specialized construction procedures to resist expansive soil activity are not anticipated. However, prior to mitigation, the potential to encounter expansive soil is considered a significant impact, as determined in the Certified Final PEIR. Supplemental investigation of the expansion potential of on-site soils or imported soils during preparation of site-specific geotechnical investigations is required along with subsequent grading plan submittals. MM GEO-1 from the Certified Final PEIR requires that a site-specific Geotechnical Report be prepared for each proposed structure prior to approval of Project plans. MM GEO-2 of the Certified Final PEIR requires that the final Grading Certification shall be prepared, stamped, and signed by the appropriate professional personal prior to the issuance of building permits. These mitigation measures would be required for the proposed Project and would reduce potential impacts related to expansive soils to be less than significant. Therefore, the Project would not create a new significant impact that was not previously analyzed, and no new mitigation measures are required.

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?

No Substantial Change from Previous Analysis. The QVH campus, including the Project site, has an existing piped sewage collection system that conveys wastewater off site for treatment and disposal. No areas on the campus contain existing or past septic systems or improvements; therefore, no impact would occur, and no mitigation is required. Therefore, the Project would not create a new significant impact regarding septic tanks or alternative wastewater disposal systems that was not previously analyzed, and no new mitigation measures are required.

f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

No Substantial Change from Previous Analysis. Policy 7.7 and Action 7.7 in the PlanWC, "Our Creative Community" Section, Sub-Section D, Celebrate and Promote West Covina's Cultural Assets and address the identification and protection of paleontological resources. However, the City's Municipal Code does not contain any specific sections or codes relative to paleontological resources.

According to the PlanWC's Resource Conservation Element, soils and geologic formations within the City, including the Project area, have a low potential to contain significant paleontological resources. Searches of PaleoBioDB, NEOMAP, and a database of Late Pleistocene vertebrate

localities for California indicate that no fossil localities have been previously recorded within one mile of the Project site. Paleontological resources are not anticipated to be discovered during excavations in younger (Holocene) alluvial fan deposits. However, it is possible that grading in older alluvial materials (i.e., Quaternary) could impact previously undiscovered paleontological resources. The proposed Project has the potential to significantly impact unknown paleontological resources. However, implementation of MM CUL-4 from the Certified Final PEIR would reduce this potential impact to a less than significant level, consistent with the City's General Plan policies and actions. Therefore, the Project would not create a new significant impact regarding paleontological resources that was not previously analyzed, and no new mitigation measures are required.

Conclusions

The geology and soils impacts of the proposed Project would be consistent with the impacts identified for the Approved Project, analyzed in the Certified Final PEIR. The proposed Project would not create a new significant impact or a substantial increase in the severity of previously identified effects. In regard to Section 15162 of the State CEQA Guidelines, (1) no substantial changes are proposed as part of the proposed Project that would result in new significant effects or an increase in severity of previous effects; (2) no substantial changes in circumstances have occurred that would result in new significant effects; and (3) no new information has become known that was not previously known that would (a) create new significant impacts, (b) increase the severity of previously examined effects, or (c) determine that mitigation measures or alternatives previously found not to be feasible would, in fact, be feasible; or (4) introduce mitigation measures that are considerably different from those analyzed in the Certified Final PEIR. For these reasons, no major revisions to the geology and soils analysis provided in the Certified Final PEIR nor to the MMRP are required.

3.8 GREENHOUSE GAS EMISSIONS

Certified Final PEIR Environmental Review

The Certified Final PEIR quantified construction and operational GHG emissions for full buildout of the Approved Project. Even with mitigation (MM GHG-1), which requires that the Hospital install solar photovoltaic panels that generate at least 25 percent of the additional electricity demand associated with the proposed structures, emissions were found to exceed the SCAQMD's recommended thresholds. In the absence of adopted thresholds, the Tier 3 threshold (3,000 $MTCO_2e$/year [metric tons of carbon dioxide equivalent/year]) and Tier 4 thresholds were used for this analysis (City of West Covina 2019). The Approved Project was determined to not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs. However, due to the exceedances of the SCAQMD's recommended Tier 3 and Tier 4 thresholds of significance, even with the implementation of MM GHG-1, impacts were determined to be significant and unavoidable.

Mitigation Measures

MM GHG-1 Prior to completion of all new Project-related buildings or structures, the Hospital shall install solar photovoltaic panels that generate at least 25 percent of the additional electricity demand associated with the new Project-related structure(s). The location, size, and other design parameters of the panels shall be at the discretion of the Hospital, This measure shall be implemented to the satisfaction of the City Engineer. **(Applicable)**

Proposed Project Impact Analysis

Environmental Issues	New Significant Impact	More Severe Impacts	New Ability to Substantially Reduce Significant Impact	No Substantial Change From Previous Analysis
GREENHOUSE GAS EMISSIONS – Would the project:				
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 of reducing the emissions of greenhouse gases?	☐	☐	☐	☑

Climate change refers to any significant change in measures of climate (e.g., average temperature, precipitation, or wind patterns) over a period of time. Climate change may result from natural factors, natural processes, and human activities that change the composition of the atmosphere and alter the surface and features of the land. Significant changes in global climate patterns have recently been associated with global warming, which is an average increase in the temperature of the atmosphere near the Earth's surface; this is attributed to an accumulation of greenhouse gas (GHG) emissions in the atmosphere. GHGs trap heat in the atmosphere which, in

turn, increases the Earth's surface temperature. Some GHGs occur naturally and are emitted to the atmosphere through natural processes, while others are created and emitted solely through human activities. The emission of GHGs through fossil fuel combustion in conjunction with other human activities are associated with global warming.

GHGs, as defined under California's Assembly Bill (AB) 32, include carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6). General discussions on climate change often include water vapor, atmospheric ozone, and aerosols in the GHG category. Water vapor and atmospheric ozone are not gases that are formed directly in the construction or operation of development projects, nor can they be controlled in these projects. Aerosols are not gases. While these elements have a role in climate change, they are not considered by either regulatory bodies, such as CARB, or climate change groups, such as the California Climate Action Registry, as gases to be reported or analyzed for control. Therefore, no further discussion of water vapor, atmospheric ozone, or aerosols is provided.

Regulatory Background

On June 1, 2005, Governor Arnold Schwarzenegger signed Executive Order (EO) S-3-05, which calls for a reduction in GHG emissions to the year 2000 level by 2010, to year 1990 levels by 2020, and to 80 percent below 1990 levels by 2050.

The principal overall State plan and policy adopted for the purpose of reducing GHG emissions is Assembly Bill (AB) 32 (California Global Warming Solutions Act of 2006). AB 32 establishes regulatory, reporting, and market mechanisms to achieve quantifiable reductions in GHG emissions and establishes a cap on statewide GHG emissions. AB 32 recognizes that California is the source of substantial amounts of GHG emissions. The statute states the following:

> Global warming poses a serious threat to the economic well-being, public health, natural resources, and the environment of California. The potential adverse impacts of global warming include the exacerbation of air quality problems, a reduction in the quality and supply of water to the state from the Sierra snowpack, a rise in sea levels resulting in the displacement of thousands of coastal businesses and residences, damage to marine ecosystems and the natural environment, and an increase in the incidences of infectious diseases, asthma, and other human health-related problems.

In order to avert these consequences, AB 32 establishes a State goal of reducing GHG emissions to 1990 levels by the year 2020, codifying the goal of EO S-3-05.

CARB approved a Climate Change Scoping Plan as required by AB 32 in 2008; this plan is required to be updated every five years. The Climate Change Scoping Plan proposes a "comprehensive set of actions designed to reduce overall carbon GHG emissions in California, improve our environment, reduce our dependence on oil, diversify our energy sources, save energy, create new jobs, and enhance public health" (CARB 2008). The Climate Change Scoping Plan has a range of GHG-reduction actions, which include direct regulations, alternative compliance mechanisms, monetary and non-monetary incentives, voluntary actions, market-based mechanisms such as a cap-and-trade system, and an AB 32 implementation regulation to fund the program. On February 10, 2014, CARB released the Draft Proposed First Update to the

Climate Change Scoping Plan. The board approved the final First Update to the Climate Change Scoping Plan on May 22, 2014. The first update describes California's progress towards AB 32 goals, stating that "California is on track to meet the near-term 2020 greenhouse gas limit and is well positioned to maintain and continue reductions beyond 2020 as required by AB 32" (CARB 2014). The latest update occurred in January 2017 and incorporates the 40 percent reduction to 1990 emissions levels by 2030.

The Sustainable Communities and Climate Protection Act of 2008, Senate Bill (SB) 375, established a process to coordinate land use planning, regional transportation plans, and funding priorities in order to help California meet the GHG reduction goals established in AB 32. SB 375 required SCAG to incorporate a "sustainable communities strategy" (SCS) into its regional transportation plans (RTPs) that will achieve GHG emission reduction targets through several measures, including land use decisions. SCAG's SCS is included in the SCAG 2016–2040 RTP/SCS (SCAG 2016). The goals and policies of the RTP/SCS that reduce vehicle miles traveled (VMT) focus on transportation and land use planning that include building infill projects; locating residents closer to where they work and play; and designing communities so there is access to high quality transit service.

On April 29, 2015, Governor Brown signed EO B-30-15, which ordered an interim statewide GHG emission reduction target to reduce GHG emissions to 40 percent below 1990 levels by 2030 to ensure California meets its target of reducing GHG emissions to 80 percent below 1990 levels by 2050. Five key goals for reducing GHG emissions through 2030 include (1) increasing renewable electricity to 50 percent; (2) doubling the energy efficiency savings achieved in existing buildings and making heating fuels cleaner; (3) reducing petroleum use in cars and trucks by up to 50 percent; (4) reducing emissions of short-lived climate pollutants; and (5) managing farms, rangelands, forests and wetlands to increasingly store carbon. EO B-30-15 also directs CARB to update the Climate Change Scoping Plan to express the 2030 target in terms of million metric tons of carbon dioxide equivalent.

On September 8, 2016, the Governor signed Senate Bill 32 (SB 32) to codify the GHG reduction goals of EO B-30-15, requiring the State to reduce GHG emissions by 40 percent below 1990 levels by 2030 (Health and Safety Code Section 38566). As stated above, this goal is expected to keep the State on track to meeting the goal set by EO S-3-05 of reducing GHG emissions by 80 percent below 1990 levels by 2050.

AB 197 was signed at the same time to ensure that the SB 32 goals are met by requiring CARB to provide annual reports of GHGs, criteria pollutants, and TACs by facility, City and sub-county level, and sector for stationary sources and at the County level for mobile sources. It also requires the CARB to prioritize specified emission reduction rules and regulations and to identify specified information for emission reduction measures (e.g., alternative compliance mechanism, market-based compliance mechanism, and potential monetary and nonmonetary incentive) when updating the Scoping Plan.

SB 350, signed on October 7, 2015, is the Clean Energy and Pollution Reduction Act of 2015. SB 350 is the implementation of some of the goals of EO B-30-15. The objectives of SB 350 are as follows:

1. To increase from 33 percent to 50 percent, the procurement of our electricity from renewable sources

2. To double the energy efficiency savings in electricity and natural gas final end uses of retail customers through energy efficiency and conservation

The text of SB 350 sets a December 31, 2030, target for 50 percent of electricity to be generated from renewable sources. SB 350 also requires the State to double statewide energy efficiency savings in electricity and natural gas end uses by 2030. Additionally, SB 350 sets requirements for large utilities to develop and submit integrated resources plans (IRPs), which detail how utilities would meet their customers' resource needs, reduce GHG emissions, and integrate clean energy resources (CEC 2020a).

On September 10, 2018, Governor Brown signed SB 100, the 100 Percent Clean Energy Act of 2018. SB 100 requires renewable energy and zero-carbon resources to supply 100 percent of electric retail sales to end-use customers and 100 percent of electricity procured to serve state agencies by December 31, 2045. This policy requires the transition to zero-carbon electric systems that do not cause contributions to increase of GHG emissions elsewhere in the western electricity grid (CEC 2020b). SB 100 also creates new standards for the Renewable Portfolio Standard (RPS) goals established by SB 350 in 2015. Specifically, the bill increases required energy from renewable sources for both investor-owned utilities and publicly owned utilities from 50 percent to 60 percent by 2030.

Further, on September 10, 2018, Governor Brown also signed California EO B-55-18, which sets a new statewide goal of carbon neutrality as soon as possible, and no later than 2045 and achieve net negative emissions thereafter. EO B-55-18 was added to the existing Statewide targets of reducing GHG emissions, including the targets previously established by Governor Brown of reducing emissions to 40 percent below 1990 levels by 2030 (EO B-30-15 and SB 32), and by Governor Schwarzenegger of reducing emissions to 80 percent below 1990 levels by 2040 (EO S-3-05).

The City of West Covina does not currently have a Climate Action Plan; however, the City has adopted an Energy Action Plan (EAP). Therefore, the Project is evaluated against the City's EAP (under Section 3.6, Energy). The purpose of the EAP is to "guide the City of West Covina toward attainable conservation goals that may also significantly reduce the impact of greenhouse gas emissions within the community" (City of West Covina 2011).

SCAQMD Significance Criteria

On December 5, 2008, the SCAQMD Governing Board presented the staff proposal for a tiered threshold approach wherein Tier 1 determines if a project qualifies for an applicable CEQA exemption, Tier 2 determines consistency with GHG reduction plans, and Tier 3 proposes a numerical screening value as a threshold. At their September 28, 2010, meeting, the Working Group suggested a Tier 3 threshold of 3,000 metric tons of carbon dioxide equivalent (MTCO2e) per year for all land use types (SCAQMD 2010). Tier 4 determines if the project meets performance standards. Tier 4 has three options: Option 1—percent emission reduction target; Option 2—early implementation of applicable measures, and Option 3—sector-based standard. Tier 5 determines mitigation for CEQA offsets.

In the absence of adopted thresholds, the Tier 3 standard is used for this analysis (SCAQMD 2008). The development of project-level thresholds in accordance with CEQA is an ongoing effort at the State, Regional, and County levels, and significance thresholds may differ for future

projects based on new or additional data and information that may be available at that time for consideration. The City of West Covina has not officially adopted any GHG CEQA significance threshold. The City defers to assessment methods and significance thresholds developed by the SCAQMD. This impact analysis evaluates consistency with regulatory programs designed to reduce GHG emissions and that contribute to the achievement of AB 32's and SB 32's goals as the primary significance criterion. In addition, this impact analysis also evaluates the Project's estimated emissions compared to the Tier 3 threshold (as discussed above) for impacts related to GHG emissions proposed by staff of the SCAQMD, but not adopted by the SCAQMD Board.

Would the Project:

a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

No Substantial Change from Previous Analysis. In developing methods for GHG impact analyses, there have been suggestions from local air pollution control districts of quantitative thresholds, often referred to as screening levels, which define an emissions level below which it may be presumed that climate change impacts would be less than significant. Neither the SCAQMD, the City of West Covina, nor the County of Los Angeles has adopted a significance threshold for GHG emissions from non-industrial development projects. Consequently, pursuant to the discretion afforded by Sections 15064.4(a) and 15064.4(b) of the State CEQA Guidelines, the impacts of the Project's GHG emissions are assessed based on the methodologies proposed by SCAQMD's GHG CEQA Significance Threshold Working Group, as described above.

Based on the proposed construction activities described above, the principal source of construction related GHG emissions would be from internal combustion engines of construction equipment, on-road construction vehicles, and workers' commuting vehicles. GHG emissions from construction activities were obtained from the CalEEMod model, described above. The estimated construction GHG emissions for the proposed Project would be 1,612 $MTCO_2e$, as shown in Table 3-12, Estimated Greenhouse Gas Emissions from Construction.

TABLE 3-12
ESTIMATED GREENHOUSE GAS EMISSIONS FROM CONSTRUCTION

Year	Emissions ($MTCO_2e$)
2021	849
2022	763
Total	**1,612**

$MTCO_2e$: metric tons of carbon dioxide equivalent

Notes:
- Totals may not add due to rounding variances.
- Detailed calculations in Appendix A, Air Quality and Greenhouse Gas Emissions Modeling Data.

Operational GHG emissions would come primarily from vehicle trips; other sources include electricity and water consumption; natural gas for space and water heating; and gasoline-powered landscaping and maintenance equipment. Table 3-13, Estimated Annual

Greenhouse Gas Emissions from Project Operation, shows the annual GHG emissions from proposed Project's operations for Phase 1A and 1B.

TABLE 3-13
ESTIMATED ANNUAL GREENHOUSE GAS EMISSIONS FROM PROJECT OPERATION

Source	Emissions ($MTCO_2e/yr$)
Area	<1
Energy	566
Mobile	1,840
Stationary	3
Waste	320
Water	61
Total Operational Emissions	**2,788**

$MTCO_2e/yr$: metric tons of carbon dioxide equivalent per year

Notes:
- Totals may not add due to rounding variances.
- Detailed calculations in Appendix A, Air Quality and Greenhouse Gas Emissions Modeling Data.

Because impacts from construction activities occur over a relatively short period of time, they contribute a relatively small portion of the overall lifetime project GHG emissions. In addition, GHG emission reduction measures for construction equipment are relatively limited. The SCAQMD recommends that construction emissions be amortized over a 30-year project lifetime so that GHG reduction measures address construction GHG emissions as part of the operational GHG reduction strategies (SCAQMD 2008). Therefore, construction and operational emissions are combined by amortizing the construction and operations over an assumed 30-year project lifetime. This combination is shown in Table 3-14, Estimated Total Project Annual Greenhouse Gas Emissions, using the proposed Project's amortized construction and operational emissions.

TABLE 3-14
ESTIMATED TOTAL PROJECT ANNUAL GREENHOUSE GAS EMISSIONS

Source	Emissions ($MTCO_2e/yr$[a])
Construction (Amortized)	54[a]
Operations (Table 3-13)	2,788
Total[b]	**2,842**
SCAQMD-Recommended Threshold (Tier 3)	**3,000**
Exceeds Threshold?	**No**

$MTCO_2e/yr$: metric tons of carbon dioxide equivalent per year

[a] Total derived by dividing construction emissions (see Table 3-12) by 30.
[b] Total annual emissions are the sum of amortized construction emissions and operational emissions.

It is noted that there are no established applicable quantitative federal, State, regional, or local CEQA significance criteria for GHG emissions for non-industrial projects in the SoCAB. The SCAQMD has proposed, but not adopted, a threshold of 3,000 $MTCO_2e$ per year for non-industrial land use projects. As shown, the estimated GHG emissions from the Project would be less than this suggested threshold. Therefore, the Project would not create a new significant impact regarding GHG emissions that was not previously analyzed, and no new mitigation measures are required.

b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

No Substantial Change from Previous Analysis. As discussed previously, the City of West Covina has adopted standards for the purpose of reducing energy consumption, which would result in a reduction in GHG emissions. The State policy and standards adopted for the purpose of reducing GHG emissions that are applicable to the proposed Project are EO S-3-05, AB 32, the California Global Warming Solutions Act of 2006, and SB 32. The quantitative goal of these regulations is to reduce GHG emissions to 1990 levels by 2020 to 80 percent below 1990 levels by 2050, and for SB 32, to 40 percent below 1990 levels by 2030. Statewide plans and regulations (such as GHG emissions standards for vehicles, the Low Carbon Fuel Standard, Cap-and-Trade, and renewable energy) are being implemented at the statewide level, and compliance at a project level is not addressed.

The proposed Project would update an existing hospital with consistent uses. The Project site is served by multiple bus stops along Merced Avenue and Sunset Avenue. Public transit availability would reduce vehicle trips and associated GHG emissions when compared with locations without similar transit options. Additionally, the Project would provide bicycle parking and storage areas to encourage reduction of fossil-fueled vehicle use by employees and the associated GHG emissions. Additionally, the Project would provide new facilities for charging of electric vehicles and parking for low-emission vehicles. It would be required to meet the State's latest energy efficiency standards for institutional hospital buildings as well as CALGreen Code. The Project would not generate GHG emissions, either directly or indirectly, that would exceed the Tier 3 interim CEQA significance thresholds. Additionally, as detailed in Section 3.6, Energy, the Project would be consistent with the City's EAP. Therefore, the Project would be consistent with City and State goals and objectives related to the GHG emissions. As such, the Project would not create a new significant impact regarding conflict with an applicable plan, policy, or regulation to reduce GHG emissions that was not previously analyzed, and no new mitigation measures are required.

Conclusion

The GHG emissions impacts of the proposed Project would be consistent with the impacts identified for the Approved Project, analyzed in the Certified Final PEIR. The proposed Project would not create a new significant impact or a substantial increase in the severity of previously identified effects. In regard to Section 15162 of the State CEQA Guidelines, (1) no substantial changes are proposed as part of the proposed Project that would result in new significant effects or an increase in severity of previous effects; (2) no substantial changes in circumstances have occurred that would result in new significant effects; and (3) no new information has become known that was not previously known that would (a) create new significant impacts, (b) increase the severity of previously examined effects, or (c) determine that mitigation measures or

alternatives previously found not to be feasible would, in fact, be feasible; or (4) introduce mitigation measures that are considerably different from those analyzed in the Certified Final PEIR. For these reasons, no major revisions to the GHG emissions analysis provided in the Certified Final PEIR nor to the MMRP are required.

3.9 HAZARDS AND HAZARDOUS MATERIALS

Certified Final PEIR Environmental Review

The Certified Final PEIR determined that the construction and operation of all phases of the Approved Project would involve handling of hazardous materials in limited quantities and typical to hospitals in urban environments. Through compliance with applicable regulations, there would be less than significant impacts associated with the transport, use, or disposal of hazardous materials during construction or operation, and no mitigation was required. It was additionally identified that due to the age of some hospital buildings, it is possible that asbestos-containing materials (ACMs) and/or lead-based paint (LBP) would be present. If present, these materials would need to be remediated prior to demolition or substantial remodeling of any buildings.

Further, the analysis identified that the Approved Project would not result in the accidental release of hazardous materials that would impact the environment or introduce a risk to public health or safety with implementation of Mitigation Measures (MMs HAZ-1 and HAZ-2). Moreover, the analysis in the Certified Final PEIR determined that despite the proximity to Edgewood Middle School and Edgewood High School (within 0.05 mile), the Hospital facilities staff did not identify any recent or historical incidents involving hazardous materials. However, to err on the site of caution, MM HAZ-3 was proposed. Additionally, no impacts pertaining to hazmat sites in or near the Project site on the official "Cortese List", maintained by the Department of Toxic Substances Control (DTSC), pursuant to Government Code Section 65962.5, were identified (City of West Covina 2019). Also, it was indicated that the closest airport to the Approved Project site is the El Monte Airport in the City of El Monte (within 5.1 miles), and no private airstrips are within two miles of the Project site. Thus, no impacts were identified. In addition, the Approved Project site is at the intersection of two major streets in the City that have been fully improved within their rights-of-way. No impacts pertaining to emergency response, evacuation, or disaster plans were identified. Lastly, the Approved Project site is in a fully developed urban area surrounded by development, roads, and freeways. No significant impacts related to wildland fires were identified, and no mitigation was required.

Mitigation Measures

MM HAZ-1 Prior to the start of any grading or excavation during Project-related improvements, the Hospital shall have on staff or retain qualified personnel to be available should any unknown potentially hazardous materials (hazmat) be found during grading or excavation. If any unknown or suspected hazardous materials are found, work in that area shall cease immediately and the qualified hazmat professional shall evaluate/characterize the find and make appropriate recommendations for its safe removal and disposal according to applicable federal and state laws and regulations. The qualified hazmat professional shall also determine if consultation and coordination with the California Department of Toxic Substances Control (DTSC) is necessary to characterize and/or remediate the hazardous material(s). The Hospital shall inform the City Planning Department on the same day such materials are found.

If necessary, the Hospital shall enter into a Voluntary Cleanup Agreement with DTSC for remediation of the hazardous materials. Within two weeks of disposal of the material(s), the qualified hazmat professional shall prepare a closure report on the incident and submit it to the Hospital and City Planning Department. This measure shall be implemented to the satisfaction of the City Planning Department and DTSC if they are involved in the characterization and/or remediation of the material(s). **(Applicable)**

MM HAZ-2 Prior to demolition of any structures or interior remodeling of existing buildings, the hospital shall provide evidence that an assessment for asbestos-containing materials (ACMs) and lead-based paint (LBP) has been performed and any necessary abatement has been conducted in accordance with local, State, and federal guidelines. This measure shall be implemented to the satisfaction of the City Planning Department. **(Applicable)**

MM HAZ-3 Prior to the start of Project construction and at least annually thereafter during the Project construction period, the Hospital Facilities Staff shall meet with the principals of the Edgewood Middle and High Schools and the Superintendent of the West Covina Unified School District to review the planned hospital expansion and discuss health and safety issues relative to hazardous materials at the hospital. The Hospital Staff shall also share their hazmat response and disaster preparedness plans with the school and district personnel so each has an understanding of potential risks, lines of communication and responsibility, and can comment on the plans as they may affect the adjacent school facilities. This measure shall be implemented to the satisfaction of the City Planning Director. **(Applicable)**

Proposed Project Impact Analysis

Environmental Issues	New Significant Impact	More Severe Impacts	New Ability to Substantially Reduce Significant Impact	No Substantial Change From Previous Analysis
HAZARDS AND HAZARDOUS MATERIALS – Would the project:				
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 a public use airport, would the project result in a safety hazard or excessive noise 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 Phase I Environmental Site Assessment (ESA) was prepared by Terracon Consultants, Inc. in March 2020 and is summarized below; the report is included as Appendix D to this Addendum.

Would the Project:

a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

No Substantial Change from Previous Analysis. Demolition and construction activities for the proposed Project would involve the use of chemical substances such as solvents, paints, fuel for equipment, and other potentially hazardous materials. Hazards to the environment or the public would typically occur with the transport, use, storage, or disposal of hazardous materials. Demolition and construction activities would be relatively short-term and the transport, use, and disposal of hazardous materials as part of these activities would be temporary. The contractor would be required to comply with existing regulations for the transport, use, storage and disposal of hazardous materials to prevent public safety hazards. These regulations include the Hazardous Materials Transportation Act, Resource Conservation and Recovery Act (RCRA), California Hazardous Waste Control Act (HWCA), and California Accidental Release Prevention Program (CalARPP), among others.

Hazards to the public or environment through the transport, use, or disposal of hazardous materials are typically associated with operation of commercial or industrial uses but less so with institutional uses like hospitals due to the types of activities the institution normally performs. However, use of all chemicals and other potentially hazardous materials in the hospital would be subject to compliance with applicable federal, State, and City regulations, standards, and guidelines related to the proper use, storage, handling, transport, and disposal of such materials.

A number of existing regulations ensure that hazardous materials/waste users, generators, and transporters provide operational safety and emergency response measures so that no significant threats to public health and safety are created. These include the Hazardous Material Transportation Act, the Resource Conservation and Recovery Act (RCRA), the California Hazardous Waste Control Act, and the California Accidental Release Prevention Program. Also, the County Fire Department monitors businesses in the City to ensure that the use, handling, storage, and transportation of hazardous materials complies with all applicable state laws and that appropriate information is reported to the County Fire Department as the local regulatory authority.

Medical related and maintenance activities associated with hospital operation are likely to utilize hazardous materials typical to medical institutional uses in limited quantities, such as petroleum products (including oil and gasoline), automotive fluids (antifreeze, hydraulic fluid), paint, cleaners (dry cleaning solvents, cleaning fluids), and pesticides. By-products generated as a result of activities using hazardous materials are considered hazardous waste. Contamination usually takes the form of hazardous materials or waste spills in the soil. Such contamination can penetrate soils into the groundwater table, resulting in the pollution of shallow groundwater and/or a local water supply. Institutional uses that have or have had underground storage tanks (USTs) and/or use hazardous materials in their operations, can create such contamination.

In addition to chemicals, drugs, etc., hospital operation would also involve the use of common materials that are technically labeled "hazardous" (e.g., commercial cleansers, chlorine and other water system maintenance chemicals, pesticides, and other landscape maintenance materials). However, the amount of materials that would be handled at any one time is relatively small and would not pose a significant hazard to the public or the environment.

Through compliance with existing applicable hazardous materials regulations, the proposed Project would not create a significant hazard to the public or the environment through the routine transport, storage, use, or disposal of hazardous materials. Therefore, the Project would not create a new significant impact from the routine transport, use, or disposal of hazardous materials that was not previously analyzed, and no new mitigation measures are required.

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?

No Substantial Change from Previous Analysis. As discussed above, construction and operation of the proposed Project would involve the use of hazardous materials that are typically associated with an urban environment. These materials would be transported, used, stored, and disposed of in compliance with applicable regulations and would not create a significant hazard to the public or environment through reasonably foreseeable upset or accident conditions. The

use of chemicals and hazardous materials during construction would cease after completion of the planned hospital improvements.

Current and future operation of the hospital would continue to involve the use of a variety of hazardous materials; however, hospital facilities staff indicated there had been no fires or incidents involving spills or other accidental releases of hazardous materials at the hospital (City of West Covina 2019).

Review of historical information determined that the Project site consisted of undeveloped land from the mid-1890s until the late 1920s, when it was observed to consist of orchards. The orchards were cleared in the late 1930s. By the late 1940s, the site consisted of agricultural land, an agricultural associated building, and staging equipment area. The Project site consisted of vacant land in the mid-1960s. The site was developed with medical office uses in the 1970s through the early 1990s, and since then, the Project site has remained relatively unchanged through the present.

The Phase I ESA identified the following site features at the MOB/PS portion of the Project site: five heating ventilation and air conditioning (HVAC) units, one empty aboveground water storage tank, interior floor drains, one pad-mounted transformer, four paper containing dumpsters, and one former water irrigation well. Based on site observations, these features do not represent a recognized environmental condition (REC) to the site.

According to the Phase I ESA, land uses near the site do not represent a significant environmental concern due to their distances or case status. No evidence of RECs were found on the site. The Project site is not listed as a facility that handled hazardous materials or generated hazardous wastes. Per the Certified Final PEIR, although the potential for accidental release of hazardous materials during grading is low, this issue is potentially significant, and mitigation is recommended. Therefore, MM HAZ-1, from the Certified Final PEIR would be applicable to the Project. MM HAZ-1 requires that, prior to the start of grading or excavation during the Project, qualified personnel be staffed or retained and available should any unknown potentially hazardous materials (hazmat) is found during grading or excavation. If found, all work shall cease and the qualified hazmat professional shall coordinate with the DTSC if necessary, to determine remediation of the site.

In addition, due to the age of construction of some of the onsite hospital buildings, it is possible that asbestos-containing materials (ACMs) and/or lead-based paint (LBP) may be present in Building A, D, and the MRI building. If present, these materials would need to be remediated prior to demolition of Building A, D, and the MRI building . As part of the demolition activities, any potential ACM would be disturbed and contact with these materials would pose hazards to the construction crew and other persons near the construction site. If LBP is encountered, it may also pose hazardous to the construction crew and other persons near the construction site. Demolition, removal, and disposal of ACM and LBP are required to comply with existing regulations, including the Federal and State Occupational Safety and Health Regulations (OSHA and CalOSHA); SCAQMD Regulation X, Subpart M – National Emission Standards For Asbestos and Rule 1403 – Asbestos Emissions; and California Code of Regulations Title 8, Section 1532.1 – Lead and Section 1529 – Asbestos. Compliance with these regulations would be included on the contractor specifications and verified by the City's Community Development Director, or designee in conjunction with the issuance of the Demolition Permit. Compliance with these regulations would reduce impacts. Additionally, MM HAZ-2 from the Certified Final PEIR would

be applicable to the Project. MM HAZ-2 requires that prior to demolition of any structures or interior remodeling of existing buildings, the Applicant shall provide evidence that an assessment for ACM and LBP has been performed and necessary abatement has been conducted. Overall, compliance with applicable regulations and implementation of MM HAZ-1 and MM HAZ-2 would ensure impacts would be less than significant with mitigation. Therefore, the Project would not create a new significant impact pertaining to significant hazards through the release of hazardous materials into the environment that was not previously analyzed, and no new mitigation measures are required.

c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

No Substantial Change from Previous Analysis. The West Covina Unified School District (WCUSD) office is located 500 feet west of the Project site, but this facility does not constitute a school site as referenced in this threshold. However, the Edgewood Middle School and Edgewood High School, both located at 1625 West Durness Street, are approximately 500 feet southwest of the Project site. It is possible that students or staff at these two schools could be affected by emissions or releases at the hospital involving acutely hazardous materials if they were to occur.

Hospital facilities staff have indicated they are not aware of any recent or historical incidents in the buildings or on the grounds of the hospital involving hazardous materials. However, the proximity of the Edgewood Middle and High Schools to the Project site represents a potentially significant impact. Therefore, MM HAZ-3 from the Certified Final PEIR is applicable to this analysis and would reduce impacts to less than significant. MM HAZ-3 requires that, prior to Project construction, and annually during the construction period, the Hospital Facilities staff shall meet with the principals of the above-mentioned schools to review and discuss the Project and discuss health and safety issues relative to hazmat at the Project site.

Additionally, during demolition, any existing hazardous materials and wastes, if present, would be removed and disposed in accordance with pertinent regulations, as discussed above. During construction, a potential exists for the accidental release or spill of hazardous substances such as gasoline, oil, hydraulic fluid, diesel fuel, or other liquids associated with construction equipment operation and maintenance. However, use of these materials would be in limited quantities as typical during the operation and maintenance of construction equipment and would be conducted in compliance with applicable federal, State, and local regulations. Further, the contractor would be required to use standard construction controls and safety procedures, which would avoid and minimize the potential for accidental release or spill of such substances into the environment. With implementation of MM HAZ-3 and compliance with applicable regulations, impacts would be less than significant with mitigation. Therefore, the Project would not create a new significant impact regarding hazardous materials near schools that was not previously analyzed, and no new mitigation measures are required.

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?

No Substantial Change from Previous Analysis. According to the Phase I ESA and review of the DTSC Hazardous Waste and Substances Site List – Site Cleanup (Cortese List) (DTSC 2020), the Project site is not included on a list of hazardous material sites compiled pursuant to

California Government Code Section 65962.5. Therefore, the Project would not create a new significant impact regarding hazardous materials sites that was not previously analyzed, and no new mitigation measures are required.

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 or excessive noise for people residing or working in the project area?

No Substantial Change from Previous Analysis. The Project site is not located within two miles of an airport. The nearest public airport is the San Gabriel Valley Airport (formerly El Monte Airport), located 5.1 miles northwest of the Project site.

West Covina is not within the San Gabriel Valley Airport Influence Area, as defined by the Los Angeles County Airport Land Use Plan (Los Angeles County ALUC 1991). Thus, the Project would not result in a safety hazard or excessive noise for people residing on the site, as it relates to exposure to airport or aircraft hazards in areas within an airport land use plan or within two miles of a public airport. Therefore, the Project would not create a new significant impact regarding excessive noise that was not previously analyzed, and no new mitigation measures are required.

f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

No Substantial Change from Previous Analysis. The City of West Covina has a Natural Hazard Mitigation Plan (NHMP) which addresses natural hazards, risks, and mitigation actions for the City. It establishes a framework for proactive local planning for natural hazard mitigation, per the federal Disaster Mitigation Act of 2000. The nearest designated disaster route to the Project site is Sunset Avenue, which is approximately 250 feet southeast of the site (Public Works 2008). The nearest designated freeway disaster route is I-10 freeway, located 2,100 feet, or 0.4-mile north of the Project site. Project construction would be staged onsite and would not require temporary or permanent lane closures on adjacent streets. Implementation of traffic control measures during construction in accordance with Chapter 19, Article X, Section 19-302, Standard Specifications for Public Works Construction, of the Municipal Code, which adopts the Greenbook by reference, would further reduce the potential for traffic hazards and the obstruction of access to adjacent parcels.

In addition, the QVH has prepared and maintains emergency and disaster preparedness plans that are regularly coordinated with City staff since the Hospital provides critical public services on an ongoing basis and during emergencies and disasters. The Project would expand medical services available to City residents and surrounding communities. Therefore, the Project would not create a new significant impact related to emergency response, evacuation, or disaster plans that was not previously analyzed, and no new mitigation measures are required.

g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

No Substantial Change from Previous Analysis. The Project site is located in a highly urbanized area of the City, and there are no large, undeveloped areas on or near the site that may

pose wildfire hazards. The site and the surrounding areas are not located in designated Very High Fire Hazard Severity Zones (VHFHSZ), as identified by the California Department of Forestry and Fire Prevention (CalFire). Rather, the site is within a Non-VHFHSZ area. Implementation of the proposed Project would not expose people or structures directly or indirectly to a significant risk of loss or death associated wildland fires. Additionally, the Project uses would assist the City by providing critical medical services in the event of local urban, suburban, or wildland fires in the surrounding area. Therefore, the Project would not create a new significant impact related to exposure of people or structures to injury or death involving wildland fires that was not previously analyzed, and no new mitigation measures are required.

Conclusions

The hazards and hazardous materials impacts of the proposed Project would be consistent with the impacts identified for the Approved Project, analyzed in the Certified Final PEIR. The proposed Project would not create a new significant impact or a substantial increase in the severity of previously identified effects. In regard to Section 15162 of the State CEQA Guidelines, (1) no substantial changes are proposed as part of the proposed Project that would result in new significant effects or an increase in severity of previous effects; (2) no substantial changes in circumstances have occurred that would result in new significant effects; and (3) no new information has become known that was not previously known that would (a) create new significant impacts, (b) increase the severity of previously examined effects, or (c) determine that mitigation measures or alternatives previously found not to be feasible would, in fact, be feasible; or (4) introduce mitigation measures that are considerably different from those analyzed in the Certified Final PEIR. For these reasons, no major revisions to the hazards and hazardous materials analysis provided in the Certified Final PEIR nor to the MMRP are required.

3.10 HYDROLOGY AND WATER QUALITY

Certified Final PEIR Environmental Review

The Certified Final PEIR determined that the Approve Project's construction and operation activities would contribute to violations of water quality standards and the degradation of storm water quality. Compliance with the requirements of the NPDES Construction General Permit, including preparation of a SWPPP as outlined in Mitigation Measure HYD-1, would ensure impacts to receiving waters would be reduced to less than significant levels. In addition, implementation of onsite BMPs would remove pollutants in the storm water from the campus and prevent pollutants from entering Walnut Creek Wash and San Gabriel River. The analysis concluded that both short- and long-term potential water quality-related impacts would be reduced to less than significant levels with implementation of MMs HYD-1 and HYD-2. Further, the implementation of the Approved Project could cause potential changes in surface runoff that would degrade water quality; however, with implementation of MM HYD-3, potential changes in drainage patterns on site that could lead to erosion, siltation, or flooding at downstream facilities would be reduced to less than significant levels. Additionally, regarding flood hazards, the Certified Final PEIR indicated that the Approved Project would not place any structures within a 100-year flood zone or impede or redirect flood flows. Further, the analysis in the Certified Final PEIR identified that expansion of the QVH and associated services would increase potable water use, but the increase was not expected to have significant impact on local water supplies, including the use of local groundwater. Implementation of the Approved Project would result in an incremental increase of offsite runoff and incrementally reduce recharge of the local groundwater by reducing infiltration flow from the former park site. However, implementation of the recommended MM HYD-3 would help reduce this potential impact to a less than significant level. Lastly, the analysis concluded that the Approved Project would not experience significant impacts related to flooding from dam failure, seiches, tsunamis, or mudflows, as the Santa Fe Dam did not impound enough water to represent a significant flooding threat; there were no enclosed bodies of water within a half mile upstream to result in a seiche; the QVH is 29 miles inland from the Pacific Ocean that would be impacted by a tsunami; and the QVH campus is not proximate to any steep slopes that would cause mud flow.

Mitigation Measures

MM HYD-1 Prior to issuance of any grading or building permit, the Queen of the Valley Hospital shall comply with the National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated with Construction Activity (Construction General Permit) applicable at the time the grading or building permit is issued. The Queen of the Valley Hospital shall prepare and implement a Storm Water Pollution Prevention Plan (SWPPP) during construction of any Project-related improvements. The SWPPP must include erosion- and sediment-control Best Management Practices (BMPs) that will meet or exceed measures required by the determined risk level of the Construction General Permit, as well as BMPs that control the other potential construction-related pollutants. A Construction Site Monitoring Program that identifies monitoring and sampling requirements during construction is a required component of the SWPPP. Evidence of compliance with the NPDES Construction General Permit shall be provided to the City's Building and Safety

Services Director prior to issuance of a grading permit. This measure shall be implemented to the satisfaction of the City Engineer. **(Applicable)**

MM HYD-2 Prior to issuance of any grading or building permit, the Queen of the Valley Hospital shall submit a Water Quality Management Plan (WQMP) for review and approval by the City's Engineering Department. The WQMP shall identify all BMPs to be incorporated into the Project to control storm water and non-storm water pollutants during and after construction (i.e., ongoing operations of the hospital). This measure shall be implemented to the satisfaction of the City Engineer. **(Applicable)**

MM HYD-3 Prior to issuance of any building permits, the Queen of the Valley Hospital, its engineer, and/or its contractor shall demonstrate that all applicable Low Impact Development (LID) design requirements have been included in Project plans and shall be implemented in each phase of the Project, as appropriate. LID design aspects of each facility of the Project shall include an evaluation of the use of permeable pavement and other infiltration enhancement techniques. This measure shall be implemented to the satisfaction of the City Engineer. **(Applicable)**

Proposed Project Impact Analysis

Environmental Issues	New Significant Impact	More Severe Impacts	New Ability to Substantially Reduce Significant Impact	No Substantial Change From Previous Analysis
HYDROLOGY AND WATER QUALITY – Would the project:				
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water 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 stormwater 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?	☐	☐	☐	☑

This section identifies and evaluates the proposed Project's potential to have adverse hydrology and water quality effects. Information presented in this section is primarily based on the existing and proposed drainage conditions.

Would the Project:

a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

No Substantial Change from Previous Analysis. The Project would involve demolition and construction activities that would generate pollutants (e.g., sediments, building materials and wastes) and other onsite materials that could enter the storm water drainage system. Construction-related activities that are primarily responsible for sediment releases are related to exposing previously stabilized soils to potential mobilization by rainfall/runoff and wind. Such activities include removing vegetation from the site, grading the site, and trenching for

infrastructure improvements. Environmental factors that affect erosion include topographic, soil, and rainfall characteristics. Non-sediment-related pollutants of concern during construction are associated with construction materials and non-storm water flows and generally include construction materials (e.g., paint and stucco); chemicals, liquid products, petroleum products used in building construction or the maintenance of heavy equipment; and concrete and related cutting or curing residues.

Without appropriate storm water management, construction site runoff would enter adjacent storm drain lines and contribute to pollutants in the storm water. The Clean Water Act (CWA) establishes a framework for regulating potential water quality impacts from construction activities through the NPDES program. Construction contractors would be required to obtain coverage under the NPDES Construction General Permit, as detailed in MM HYD-1. This permit requires the discharger to perform a risk assessment for the proposed development (with differing requirements based upon the determined level) and to prepare and implement a SWPPP, which must include erosion-control and sediment-control BMPs; wind and water tracking controls; hazardous material management practices; and other site-management BMPs that would meet or exceed measures required by the determined risk level of the Construction General Permit. A Construction Site Monitoring Program that identifies monitoring and sampling requirements during construction is also a required component of the SWPPP.

Erosion-control BMPs are designed to prevent erosion, whereas sediment controls are designed to trap or filter sediment once it has been mobilized. In addition to erosion- and sediment-control BMPs, the following types of BMPs would be implemented, as needed, during construction: waste and materials management; non-storm water management; training and education; and inspections, maintenance, monitoring, and sampling. The construction-phase BMPs would ensure effective control of not only sediment discharge, but also of pollutants associated with sediments (e.g., nutrients, heavy metals, and certain pesticides, including legacy pesticides).

The proposed Project does not propose any improvements or construction to the Walnut Creek Wash; however, it is in the vicinity of the wash and runoff from the site may eventually reach the wash and ultimately the San Gabriel River. In addition, both short- and long-term water quality documentation is required by state regulations to cover Project construction and operation. Therefore, short-term water quality impacts of the Project are potentially significant, and mitigation is recommended. Compliance with the requirements of the NPDES Construction General Permit, including preparation of an SWPPP as outlined in MM HYD-1, would ensure impacts from the proposed Project to receiving waters from storm water and non-storm water discharges during construction would be reduced to less than significant levels.

The Project uses, during operation, are expected to be a source of bacteria/pathogens, nutrients, and suspended solids that may enter the storm water. These pollutants would add to existing impairments of bacteria/pathogens and metals for Walnut Creek Wash and eventually the San Gabriel River downstream of the site. While the existing storm drain facilities are adequate to handle storm water runoff from the Project site, there are no defined, downstream regional storm water quality facilities specifically designed to mitigate the pollutants in the runoff from the proposed Project. Therefore, all storm water quality mitigation would need to be accomplished onsite.

A number of BMP concepts would be utilized to address storm water quality mitigation requirements. LID and BMP systems would generally be sized to handle the two-year water

quality storm event, per County requirements. The conceptual water quality management system includes the following:

- **Hydrologic Source-Control Low Impact Development Best Management Practices.** BMPs could be a hydrologic source-control LID, where runoff is directed to landscaped areas and retained. In some cases, this retention would be in the form of a depressed area such as a basin, but more commonly it would be an area that is held a few inches below the surrounding street, parking area, or storm drain inlet.
- **Infiltration Low Impact Development Best Management Practice.** Where retention of runoff or pervious pavement installations are not feasible, BMPs consisting of injection drywells, underground perforated pipe storage and infiltration trenches could be used. These infiltration BMPs can be installed almost anywhere (including in landscaped areas and under pavement) but should be avoided within five feet of buildings and walls.
- **Bioretention Systems.** In locations where the other LID BMPs are not feasible or unable to mitigate the full design capture volume (DCV), or where filtration and/or clarification of inflows is not feasible, bioretention systems would be installed. These volume-based systems include engineered soil bioretention BMPs, such as manufactured parkway planter or street tree well systems. Bioretention BMPs installed in public street right-of-way would only treat runoff from the public streets.

As required, source-control BMPs would also be implemented and involve prohibitions or restrictions on activities that can lead to pollution, including trash control, landscape maintenance, painting, car washing, hazardous chemicals, and wastes. Details of the specific source-control BMPs to be used for this Project would be included in the project-specific WQMPs.

Long-term water quality impacts of the Project are potentially significant, and mitigation is recommended. Implementation of onsite BMPs would remove pollutants in the storm water from the site and prevent contributions to water pollution to Walnut Creek Wash and ultimately to the San Gabriel River. Compliance with MM HYD-1 and MM HYD-2 from the Certified Final PEIR would prevent violations of water quality standards and the degradation of storm water quality. Therefore, the Project would not create a new significant impact pertaining to short- and long-term potential water quality-related impacts that was not previously analyzed, and no new mitigation measures are required.

b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project impede sustainable groundwater management of the basin?

No Substantial Change from Previous Analysis. The City of West Covina is underlain by the San Gabriel Valley Groundwater Basin, which consists of water-bearing sediments that underlie most of the San Gabriel Valley and a portion of the upper Santa Ana Valley. Concerns about the sustainability of groundwater supply in the basin led to the adjudication of water rights and the establishment of a Main San Gabriel Basin Watermaster in 1973. Approximately 80 percent of West Covina's potable water is from the local groundwater basin, which is supplied by several water agencies. The Basin contains several contaminant plumes including nitrates, volatile organic compounds, and perchlorate from past industrial processes. Cleanup of these contaminants continues today. Despite their presence, the overall groundwater quality of the Basin for potable use is high.

Implementation of the Project would result in an increase in potable water use (for more details, see Section 3.19, Utilities and Service Systems). This increase in hospital services is not expected to have significant impact on local water supplies, including the use of local groundwater, as outlined in the Urban Water Master Plan (UWMP), prepared for Suburban Water Systems (SWS 2016), which in turn serves the Project area with potable water. In addition, the Upper San Gabriel Valley Municipal Water District (USGVMWD) provides groundwater to local serving entities and has its own UWMP (USGVMWD 2016). Both of the UWMPs allow for planned growth under PlanWC, including the QVH, as well as various worst-case drought year scenarios.

Development of the proposed Project would also result in an increase in impervious surfaces. However, implementation of the MM HYD-3 from the Certified Final PEIR would help reduce this potential impact to a less than significant level. MM HYD-3 would require the entire Project to implement LID designs and improvements to help allow for onsite infiltration of runoff. Therefore, the Project would not create a new significant impact pertaining to groundwater that was not previously analyzed, and no new mitigation measures are required.

c) Substantially alter the existing drainage pattern of the site or area, including 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;

iv) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or

No Substantial Change from Previous Analysis. Due to its relatively flat topography, runoff in the City typically forms as sheet flow that is then intercepted by stormwater conveyance systems. Major drainages in the area such as the San Gabriel River flow to the southwest and eventually drain to the Pacific Ocean. There are five major drainages within the City, including Big Dalton Wash, Charter Oak Creek, Puente Creek, Vine Creek, and Walnut Creek (General Plan EIR Figure 4.8-1, *Major Drainages*). The Walnut Creek Channel runs east to west through the middle of the City, south of and roughly parallel to I-10. This channel is just north of the Project site and flows west into the San Gabriel River, approximately two miles west of the City. According to Federal Emergency Management Agency (FEMA), most of the City would be subject to flooding from a 500-year storm, but only a few small areas, not including the Project site, would be subject to flooding from a 100-year storm (General Plan EIR Figure 4.8-3, *Flood Hazard Zones,* City West Covina 2016a). Surface water quality in the City is governed by the Los Angeles RWQCB, which sets water quality standards in the Water Quality Control Plan for the Los Angeles Region. Common sources of stormwater pollution in the City include litter, trash, pet waste, paint residue, organic material (yard waste), fertilizers, pesticides, sediments, construction debris, metals from automobile brake pad dust, air pollutants that settle on the ground or attach to rainwater, cooking grease, illegally dumped motor oil, and other harmful fluids.

The Project site is already fully improved with impervious surfaces. The proposed Project would maintain the existing drainage patterns. According to FEMA FIRM map number 06037C1700F, the site is outside of the 100-year flood plain. The site is in an area of 0.2 percent annual chance of flood (i.e., 500-year storm event). Structural or Treatment Control BMPs are required for this Project under the LID conditions required by the City. The evaluation of Project hydrology

indicates that volume-based or flow-based design standards may be used separately or in combination for more detailed Project design (i.e., volume-based criteria are used in the sizing of detention or infiltration structures while flow-based criteria are used on swales, catch basin devices) (City of West Covina 2019). LID requirements, approved by the RWQCB, call for the treatment of the peak mitigation flow rate or volume of runoff produced by a 0.75-inch 24-hour rainfall event. Various stormwater treatment facilities are to be provided throughout the site to capture and treat stormwater runoff from the site. These specific improvements would be identified in actual grading and building plans, as appropriate, for each phase of development. To prevent potential changes in surface runoff that would degrade water quality, MM HYD-3 would be implemented. This mitigation would reduce the potential impacts from changes in drainage patterns on site that could lead to erosion, siltation, or flooding at downstream facilities to less than significant levels. Therefore, the Project would not create a new significant impact pertaining to substantial erosion or runoff water that was not previously analyzed, and no new mitigation measures are required.

ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;

iii) impede or redirect flood flows?

No Substantial Change from Previous Analysis. As identified above, current FEMA flood mapping indicates the Project site is outside of the 100-year flood plain and is only in an area of 0.2 percent annual chance of flood (i.e., 500-year storm event). Structural or Treatment Control BMPs are required for this Project under the LID conditions required by the City as part of the regional MS4 permit administered by the RWQCB. Therefore, the Project would not create a new significant impact pertaining to surface runoff or flood flows that was not previously analyzed, and no new mitigation measures are required.

d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

No Substantial Change from Previous Analysis. A seiche is the resonant oscillation of a body of water caused by earthquake shaking (waves). Seiche hazards exist where groundshaking causes water to splash out of the body of water and inundate nearby areas and structures. The site is not located near a large body of water that may be subject to seiche. Additionally, tsunamis are seismic sea waves generated by undersea earthquakes or landslides. The City of West Covina is not located along the coast, and the Project site is approximately 24 miles from the Pacific Ocean. Further, the Project site is relatively flat. There are no hillside areas on site or in the surrounding area that could generate flooding. Therefore, the Project would not create a new significant impact pertaining to seiche, tsunami, or flood hazards that was not previously analyzed, and no new mitigation measures are required.

e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

No Substantial Change from Previous Analysis. As discussed above under Threshold 3.10a, the Project would comply with applicable water quality regulations for short-term and long-term impacts. Specifically, the Project would have coverage under the NPDES Construction General Permit and implementation of the Project's SWPPP (see MM HYD-1) would reduce short-term,

construction-related water quality impacts to less than significant. For long-term water quality impacts, in accordance with the NPDES program and Section 9.36, Control of Pollutants from New Developments/Redevelopment Projects, of the West Covina Municipal Code, the Project would be constructed and operated in accordance with the standard urban stormwater mitigation plan (SUSMP), prepared for the Project and approved by the City. Thus, with implementation of permanent BMPs in the SUSMP, the Project site would generate less stormwater pollutants than under existing conditions.

As detailed in Phase I ESA prepared for this Project, during the site reconnaissance, one former water irrigation well was observed. This well was originally part of the former agricultural activities at the Project site. The water well was maintained until the water table dropped below 180 feet bgs, at which point, in 2010, a diverter system was instated for the site's landscape irrigation, and the well was discontinued (Terracon 2020).

There are no groundwater wells on the Project site, and no wells are proposed as part of the Project. The proposed Project would not involve direct withdrawals of groundwater, nor would it interfere with groundwater recharge such that it would result in a net deficit in aquifer volume or lowering of the local groundwater table levels. Excavation activities would not extend into the underlying groundwater. Therefore, the Project would not create a new significant impact pertaining to sustainable groundwater management plan that was not previously analyzed, and no new mitigation measures are required.

Conclusion

The hydrology and water quality impacts of the proposed Project would be consistent with the impacts identified for the Approved Project, analyzed in the Certified Final PEIR. The proposed Project would not create a new significant impact or a substantial increase in the severity of previously identified effects. In regard to Section 15162 of the State CEQA Guidelines, (1) no substantial changes are proposed as part of the proposed Project that would result in new significant effects or an increase in severity of previous effects; (2) no substantial changes in circumstances have occurred that would result in new significant effects; and (3) no new information has become known that was not previously known that would (a) create new significant impacts, (b) increase the severity of previously examined effects, or (c) determine that mitigation measures or alternatives previously found not to be feasible would, in fact, be feasible; or (4) introduce mitigation measures that are considerably different from those analyzed in the Certified Final PEIR. For these reasons, no major revisions to the hydrology and water quality analysis provided in the Certified Final PEIR nor to the MMRP are required.

3.11 LAND USE AND PLANNING

Certified Final PEIR Environmental Review

The Certified Final PEIR identified that the Approved Project would not physically divide an established community, as the QVH campus was developed with hospital-related uses and facilities, and no established community existed within campus. Thus, no impacts would result. Additionally, with approval of the General Plan Amendment, Zone Change, and Specific Plan, the Approved Project would be consistent with short- and long-range goals, policies, and actions outlined in PlanWC and with regional planning goals developed by the Southern California Association of Government (SCAG). With implementation of MM LUP-1, potential land use or planning impacts of the Project would be less than significant. Lastly, the Certified Final PEIR determined that the Approved Project would not result in any conflicts with HCP or NCCP, as none exits in the vicinity of the site.

Mitigation Measures

LUP-1 Except for surface parking, any improved uses placed adjacent to the residential uses to the northeast of the QVHSP property, including the former Sunset Field site, shall be located and designed to minimize impacts related to views, lighting, and noise on local residents. In addition to the required noticing for precise plans per the Municipal Code, property owners and residents living northeast of the site (i.e., Torrey Pines Apartment Homes) shall be notified of a public hearing at least 30 days prior to the hearing for any buildings in the portions of Specific Plan Zones 1 or 3, adjacent to these residences. This process is in addition to the Municipal Code's requirement to hold a public hearing for new buildings and to notify owners and residents within 300 feet of the proposed building of the public hearing. This measure shall be implemented to the satisfaction of the City Community Development Director. **(Applicable)**

Proposed Project Impact Analysis

Environmental Issues	New Significant Impact	More Severe Impacts	New Ability to Substantially Reduce Significant Impact	No Substantial Change From Previous Analysis
LAND USE AND PLANNING – Would the project:				
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?	☐	☐	☐	☑

This section identifies and evaluates the proposed Project's potential impacts on Land Use and Planning. Information presented in this section is based on the existing conditions outlined in Section 3.9, *Land Use and Planning* of the QVHSP (City of West Covina 2019).

Would the Project:

a) Physically divide an established community?

No Substantial Change from Previous Analysis. The QVH campus is located in a mixed-use neighborhood with a variety of residential (single family and multi-family), commercial, and office uses along Sunset Avenue, and institutional uses (schools) along Merced Avenue. The QVH campus is fully developed with various hospital-related uses and facilities, parking lots, landscaping, and related improvements. There are existing uses at the Project site that would be demolished or moved to a different location within the campus. The proposed Project is Phase 1 of a four-phase expansion of the Hospital campus. Given the proposed uses, the Project is compatible with the surrounding hospital facilities.

The QVH campus does not have any residential uses or an established community, such that would be divided by the proposed Project. The proposed facilities would replace the existing buildings and result in hospital related uses. The closest residential uses to the site are the Torrey Pines Apartment that are adjacent to the campus and would not be impacted by the proposed Project. Therefore, the Project would not physically divide an existing community during short-term construction or long-term operation of the Project. No new impacts would occur, and no new mitigation is required.

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?

No Substantial Change from Previous Analysis. With respect to regional planning, Southern California Association of Governments (SCAG) is the metropolitan planning organization (MPO) for Los Angeles, Orange, San Bernardino, Riverside, Ventura, and Imperial counties. As the designated MPO, the federal government mandates SCAG to prepare plans for growth management, transportation, air quality, and hazardous waste management. In addition, SCAG reviews projects of regional significance for consistency with the existing plans. As discussed in the Certified Final PEIR, the QVHSP is consistent with the SCAG's guiding policies for the region outlined in the 2016–2040 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS). The proposed Project is Phase 1 of a four-phase expansion of the QVH, as identified and discussed in the Certified Final PEIR (City of West Covina 2019). Therefore, as a component of the Specific Plan, the proposed Project is also consistent with SCAG's 2016–2040 RTP/SCS. No new impact would result, and no mitigation is required.

City of West Covina General Plan

The City of West Covina General Plan, adopted by City Council in December 2016, is organized into the following elements: (1) Our Natural Community (Conservation/Open Space), (2) Our Prosperous Community (Economic Development), (3) Our Well Planned Community (Land Use/Design, Housing, Parks and Recreation), (4) Our Accessible Community (Circulation), (5) Our Resilient Community (Land Use), (6) Our Healthy and Safe Community (Public Health, Safety,

Noise, and Land Use), (7) Our Active Community (Land Use, Open Space, Parks and Recreation), and (8) Our Creative Community (Culture). The housing element (2014-2021 Housing Element) was adopted under a separate cover on October 1, 2013 and was amended on December 20, 2016. Each element contains the City's goals and policies related to that element. An analysis of Project's consistency with applicable goals and policies of the General Plan elements is provided in Table 3-15, Proposed Project General Plan Consistency Analysis.

TABLE 3-15
PROPOSED PROJECT GENERAL PLAN CONSISTENCY ANALYSIS

General Plan Policy		Consistency Analysis
Our Natural Community – Our goal is to live in balance with our natural environment by preserving the existing open spaces; improving the quality of natural resources; and greater access to open space.		
Air/GHG Emissions Policy 1.3	Minimize the adverse impacts of growth and development on air quality and climate.	**Consistent**. As discussed in Section 3.3, Air Quality, and 3.8, Greenhouse Gas Emissions, the Project's emissions would be less than the SCAQMD's thresholds for air quality and GHG emissions. Through compliance with SCAQMD Rule 403, for fugitive dust control, SCAQMD Rule 402, for nuisance emissions, and Title 24 Energy Efficiency Standards, the Project would minimize adverse impacts of the Project on air quality and climate.
Water Policy 1.5	Where appropriate, new development shall minimize impervious area, minimize runoff and pollution, and incorporate best management practices.	**Consistent**. As discussed in Section 3.10, Hydrology and Water Quality, the Project would minimize runoff and pollution of water through the preparation of a Standard Urban Stormwater Mitigation Plan (SUSMP), Stormwater Pollution Prevention Plan (SWPPP) and implementation of erosion control, sediment control, tracking, waste management, and construction site maintenance Best Management Practices (BMPs) to reduce the potential for soil and wind erosion and pollution during construction activities and long-term operations. Compliance with RRs GEO-2, HYD-1 and MMs HYD-1, HYD-2, and HYD-3 would ensure the Project would be consistent with this Policy.
Lighting Policy 1.10	To preserve nighttime views within and immediately adjacent to single family residential zones, require property owners within the directly adjacent to these zones to utilize shielding and directional lighting methods to direct lighting away from adjoining properties.	**Consistent.** The QVH campus is currently subject to nighttime lighting from existing buildings and surrounding land use as described in Section 3.1 Aesthetics. During construction, temporary security lighting would likely be used within the construction areas (notably the construction staging areas) to provide security for construction equipment and materials. MM AES-1 requires that construction staging areas be located as far as possible from the residential developments near the Project site to minimize light intrusion. Additionally, MM AES-4 requires that temporary nighttime security lighting be downward facing and hooded or shielded to prevent security lighting from spilling outside the staging area or from directly broadcasting security lighting into the sky or onto adjacent residential properties. Further, a comprehensive lighting plan would be prepared for the operation of the proposed Project which would adhere to the lighting design requirements outlined in the City Municipal Code and QVHSP and would ensure that on-site development does not significantly affect adjacent uses in

TABLE 3-15
PROPOSED PROJECT GENERAL PLAN CONSISTENCY ANALYSIS

General Plan Policy		Consistency Analysis
		terms of light spillover. Adherence with the City's development review and permit process and implementation of MMs AES-1 and AES-4 would ensure consistency with this Policy.
Our Prosperous Community – Our goal is to maintain and monitor West Covina's fiscal health, reinforce the West Covina's image as a great place to Live, Work and Play in the San Gabriel Valley, and nurture local businesses and attract non-retail jobs.		
Policy 2.7	Target employment based uses to downtown. Explore health/medical campus opportunities	**Consistent.** As a phased development of the QVHSP, the Project would further implement the expansion of the Hospital campus thereby increasing health-care related employment at the hospital by approximately 50 percent over 10-15 years. The presence of an expanded community hospital would also increase the potential for the City to attract other medical-related uses to the City.
Our Well Planned Community - Our goal is to direct new growth to the downtown area where development pressures are the greatest and change is desired, while protecting the stable residential areas; target housing and job growth in strategic areas along the corridor; and encourage pedestrian-oriented mixed-use development, while providing vibrant public gathering places.		
Policy 3.5	Support the growth of Queen of the Valley Hospital while developing a unifying vision and code for Sunset Avenue.	**Consistent.** The proposed Project, as a component of the QVHSP, implements Phase 1 of the plan by constructing the MOB, PS, and ED/ICU. In consistency with the vision of the QVHSP, the Project expands and redevelop the existing uses and associated improvements. Furthermore, the implementation of the Project would not impact the City's ability to create a future Sunset Avenue Corridor Plan.
Policy 3.6	Reduce West Covina's production of greenhouse gas emissions and contribution to climate change, and adapt to the effects of climate change.	**Consistent**. As discussed in Section 3.8, Greenhouse Gas Emissions, the Project's emissions would be less than the SCAQMD's recommended thresholds for GHG emissions. Through compliance with Title 24 Energy Efficiency Standards, the Project would minimize GHG emissions. The Project would comply with the City's EAP. This reduction of energy use would consequently reduce GHG emissions, thereby reducing West Covina's contribution to climate change.
Our Resilient Community – Our goal is to support development pattern and support systems that yield a resilient low-carbon built environment.		
Energy Policy 5.6	Continue existing beneficial energy conservation programs, including adhering to the California Energy Code in new construction & major renovations.	**Consistent**. The Project would comply with Title 24 of the CEC code. Additionally, per MM GHG-1 of the Certified Final PEIR, the Project would be required to install solar photovoltaic panels that generate at least 25 percent of the additional electricity demand associated with the proposed structures.

TABLE 3-15
PROPOSED PROJECT GENERAL PLAN CONSISTENCY ANALYSIS

General Plan Policy		Consistency Analysis
Our Healthy and Safe Community – Our goal is to create environmental that encourage safe and healthy lifestyles and maximize the opportunities for physical activity. Well-designed public and semi-public realm foster social interaction, and good programming can draw people out of their homes and into their community.		
Active Living Policy 6.2	New and renovated buildings should be designed and constructed to improve the health of the residents, workers, and visitors.	**Consistent**. The QVHSP establishes a clear plan for growth of local medical services on the hospital campus over the next 20 years. Therefore, as a component of the Specific Plan, the proposed Project is also consistent with this Policy.
Natural Hazard—Policy 6.15	Limit the exposure to potential natural hazards through adoption and enforcement of appropriate building standards, land use controls, and environmental review.	**Consistent**. Adherence to regulations, as detailed in Section 3.7, Geology and Soils, would ensure consistency with this policy. The Project would comply with the provisions of the latest adopted California Building Code. Impacts from seismic fires, and other hazards are analyzed in Section 3.7 *Geology and Soils* in this Addendum.
Emergency Services Policy 6.20	Engage in and support inter-agency coordination regarding emergency services and response, and critical facilities.	**Consistent.** As detailed in Section 3.15 Public Services, development of the Project uses would increase the demand for fire protection and emergency services and the associated demand on fire protection and emergency service apparatus, equipment, and personnel compared to existing levels. MM PS-1 requires the Hospital shall be responsible for payment of the City's Development Impact Fees (DIFs) which includes police and fire facilities prior to each building permit. Further, the Hospital is a critical care facility and its expansion under the proposed Project will help serve the health care needs of City residents in the future. Therefore, the proposed Project as Phase 1 of the Hospital expansion and adherence to MM PS-1 ensures consistency with this Policy.
Noise—Policy 6.24	Ensure that new development does not expose surrounding land uses to excessive noise.	**Consistent**. As detailed in Section 3.13, Noise, the Project would not subject surrounding land uses to excessive noise. Construction and operational noise was analyzed for the Project. Generation of temporary or permanent increases in ambient noise levels would be less than significant.
Noise—Policy 6.25	Minimize noise conflicts between local noise generators and sensitive receivers.	**Consistent**. As described in Section 3.13, Noise, the Project would have less than significant impacts for generation of noise in excess of noise standards. Sensitive receptors to the including residential (apartments) to the northeast would not be subject to significant noise or vibration impacts. Additionally, the Project is subject to the City's noise ordinance, and would be comply with its requirements.

TABLE 3-15
PROPOSED PROJECT GENERAL PLAN CONSISTENCY ANALYSIS

General Plan Policy		Consistency Analysis
Our Creative Community – Our goal is to become a vibrant cultural center by weaving the arts and local heritage into everyday life.		
Cultural Assets Policy 7.7	Assess, avoid, and mitigate potential impacts to archeological, paleontological, and tribal resources through the CEQA review process for development projects carried out within the City. Comply with existing regulations relating to Native American resources, including California Environmental Quality Act Section 15064.5(d) and (e) and Public Resources Code §5097.98 concerning burial grounds, and Assembly Bill 52 and Senate Bill 18 for consultation with Native American tribes for development projects carried out within the City.	**Consistent**. The Project is subject to the CEQA process. Through this Addendum, potential impacts to archeological, paleontological, and tribal resources are mitigated to less than significant impacts, as described in Sections 3.5, 3.7, and 3.18, respectively. The Project would be subject to existing regulations, including CEQA Section 15064.5(d) and (e) and Public Resources Code §5097.98 concerning burial grounds, and Assembly Bill 52 for consultation with Native American tribes. The Project's impacts to these resources would be less than significant with implementation of MM CUL-1 through MM CUL-3, MM TCR-1, MM TCR-2
Source: City of West Covina 2016a, 2016c.		

As demonstrated in Table 3-15, the proposed Project, as Phase 1 of the QVH expansion would be consistent with the General Plan's applicable goals and policies. Therefore, in light of the above, there would be no conflict with the goals and policies of the General Plan. No significant impacts would result, and no mitigation is required.

West Covina Zoning Code

The West Covina Zoning Code is the primary tool for implementing the General Plan. The Zoning Code provides development standards for development in all areas of the City. The QVH property, including proposed Project site, is currently zoned "Specific Plan" (SP-1), consistent with the Zoning Code, with the QVHSP adoption on November 6, 2019. The QVHSP has been developed as both a regulatory and land use policy document and constitutes the zoning for the proposed Project site. As part of the adoption of the QVHSP, future development plans or agreements, tract or parcel maps, site plans, and any other actions requiring ministerial or discretionary approval must be consistent with the Specific Plan and its development standards. In light of consistency with the Zoning Code, the proposed Project would not result in a significant impact, and no mitigation is required.

Compatibility with Surrounding Land Uses

The Hospital property is surrounded by a variety of land uses including residential (apartments) to the northeast, institutional and commercial to the east and southeast, institutional to the west and southwest, and Walnut Creek Wash and single-family residential uses to the north. The apartments to the northeast of the hospital site are considered the most sensitive land uses in

terms of visual quality, lighting, shade/shadow, air pollutants, and noise. But, the QVHSP provides development standards and design guidelines that address the potential impacts related to adjacency to sensitive uses.

It should be noted, however, that the proposed MOB, PS, and ED/ICU uses are not planned adjacent to the Torrey Pine Apartments. There is a surface parking lot between the MOB and Parking Structure and the apartments, which would create a large buffer between the uses. This separation would help reduce the potential impacts pertaining to visual quality, lighting, air quality, and noise on the apartments (for specific discussions on these topics, please refer to Sections 3.1, Aesthetics, 3.3, Air Quality, and 3.13, Noise). Additionally, the MOB site is currently developed, and the proposed use will replace the existing uses on the site. Even though less than significant impacts are anticipated, MM LUP-1 from the Certified Final PEIR is applicable and would help avoid further impacts. Therefore, the Project would not create a new significant impact pertaining to land use that was not previously analyzed, and no new mitigation measures are required.

Conclusion

The land use and planning impacts of the proposed Project would be consistent with the impacts identified for the Approved Project, analyzed in the Certified Final PEIR. The proposed Project would not create a new significant impact or a substantial increase in the severity of previously identified effects. In regard to Section 15162 of the State CEQA Guidelines, (1) no substantial changes are proposed as part of the proposed Project that would result in new significant effects or an increase in severity of previous effects; (2) no substantial changes in circumstances have occurred that would result in new significant effects; and (3) no new information has become known that was not previously known that would (a) create new significant impacts, (b) increase the severity of previously examined effects, or (c) determine that mitigation measures or alternatives previously found not to be feasible would, in fact, be feasible; or (4) introduce mitigation measures that are considerably different from those analyzed in the Certified Final PEIR. For these reasons, no major revisions to the land use and planning analysis provided in the Certified Final PEIR nor to the MMRP are required.

3.12 MINERAL RESOURCES

This topic was focused out from analysis in the Certified Final PEIR. According to the California Geological Survey (CGS) mapping website, a portion of the City, including all of the Hospital campus, including the proposed Project site, is in an MRZ-2 zone, which contains known mineral resources. However, the entire City, including the proposed Project site, is developed with various urban uses, so implementation of the proposed Project would have no significant impacts on available mineral resources. Therefore, this issue will not be evaluated further in this Addendum document.

3.13 NOISE

Certified Final PEIR Environmental Review

The Certified Final PEIR determined that the Approved Project would not result in a substantial permanent increase in ambient noise levels in the Project vicinity above existing levels, and therefore, there would be less than significant impact. The Approved Project would not generate or expose persons or structures to excessive groundborne vibration from the construction; all Project-related vibration levels would be below the annoyance and structural damage thresholds at nearby offsite structures. Approved Project-related noise would not exceed established thresholds relative to offsite noise generated by onsite traffic as well as from future onsite sources and would therefore have less than significant impact. It was also determined that the Approved Project would not result in exposure of people residing or working in the Project area to excessive noise levels from either airport or airstrip-related activities.

Mitigation Measures

No mitigation measures were required.

Proposed Project Impact Analysis

Environmental Issues	New Significant Impact	More Severe Impacts	New Ability to Substantially Reduce Significant Impact	No Substantial Change From Previous Analysis
NOISE – Would the project result in:				
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project 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 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?	☐	☐	☐	☑

Several rating scales (or noise "metrics") are used to analyze the effects of noise on a community. These scales include the equivalent noise level (Leq) and the community noise equivalent level (CNEL). Average noise levels over a period of minutes or hours are usually expressed as A-weighted decibels (dBA) Leq, which is the equivalent noise level for that period of time. The period of time averaging may be specified; where Leq (3) would be a 3-hour average. When no period is specified, a 1-hour average is assumed. Noise of short duration (i.e., substantially less than the averaging period) is averaged into ambient noise during the period of interest. Thus, a loud noise lasting several seconds or a few minutes may have minimal effect on the measured sound level averaged over a one-hour period.

To evaluate community noise impacts, CNEL was developed to account for human sensitivity to evening and nighttime noise. CNEL separates a 24-hour day into three periods: daytime (7:00 AM to 7:00 PM), evening (7:00 PM to 10:00 PM), and nighttime (10:00 PM to 7:00 AM). The evening sound levels are assigned a 5-dBA penalty, and the nighttime sound levels are assigned a 10-dBA penalty prior to averaging them with daytime hourly sound levels.

Several statistical descriptors are also often used to describe noise, including Lmax and Lmin, which are the highest and lowest A-weighted sound levels that occur during a noise event, respectively.

Vibration amplitudes are commonly expressed in peak particle velocity (PPV) or root-mean square (RMS) vibration velocity. PPV is defined as the maximum instantaneous positive or negative peak of a vibration signal. Ppv and RMS vibration velocity are normally described in inches per second. Similar to airborne sound, vibration velocity can be expressed in decibel notation as vibration decibels (VdB).

Existing Conditions

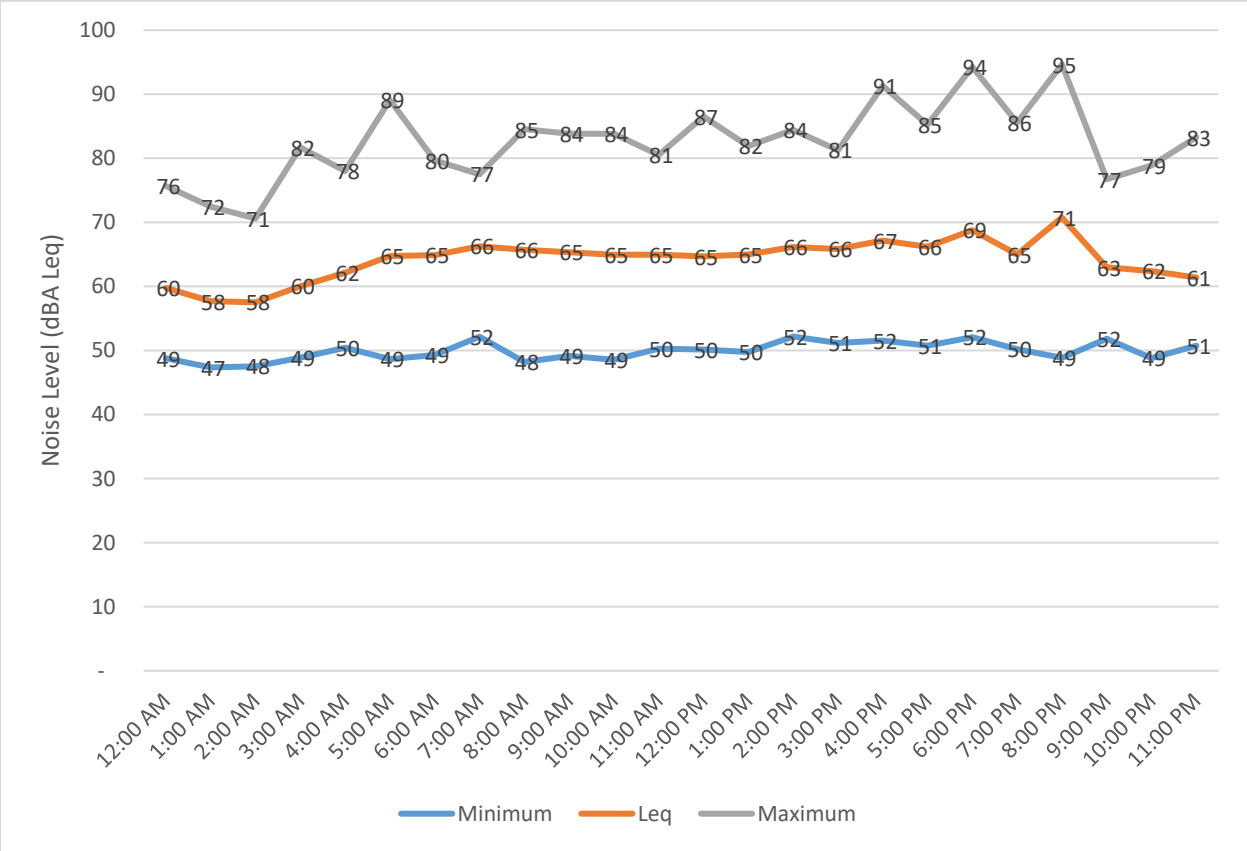
The existing noise environment in the Project area is influenced by traffic noise on nearby roads. The Project site is located at the intersection of South Sunset Avenue and West Merced Avenue. South Sunset Avenue is a roadway that runs northeast/southwest with two lanes in each direction. Current traffic volumes are estimated to be approximately 24,000 trips per day. West Merced Avenue runs northwest/southeast with two lanes in each direction. Current traffic volumes are estimated to be approximately 14,000 trips per day. For the purpose of this noise analysis, the study area includes the Project site; the areas immediately adjacent to the Project site; and the land uses adjacent to the roadway segments where the Project adds vehicular trips to the roadway system.

Psomas conducted ambient noise surveys on December 11 and 12, 2018, for the Queen of the Valley Specific Plan. Noise level measurements were taken using a Larson Davis Laboratories SoundTrack LxT sound level meter (LD LxT) and a Larson Davis Laboratories Model 831 integrating sound level meter (LD 831). These sound level meters were placed at each of the Project's property lines. The LD LxT and LD 831 meters were calibrated before and after use with a Larson Davis Model CAL200 acoustical calibrator to ensure that the measurements would be accurate. The sound level meters were programmed to record noise levels in "slow" mode in A-weighted form. Meteorological conditions during all measurement periods were favorable, with clear skies.

The noise level measurements were collected for 24 hours at each location. The energy average (L_{eq}), maximum noise level (L_{max}), and minimum noise level (L_{min}) values taken at each ambient noise measurement location are presented in Figures 1 through 4 for the respective noise monitoring locations.

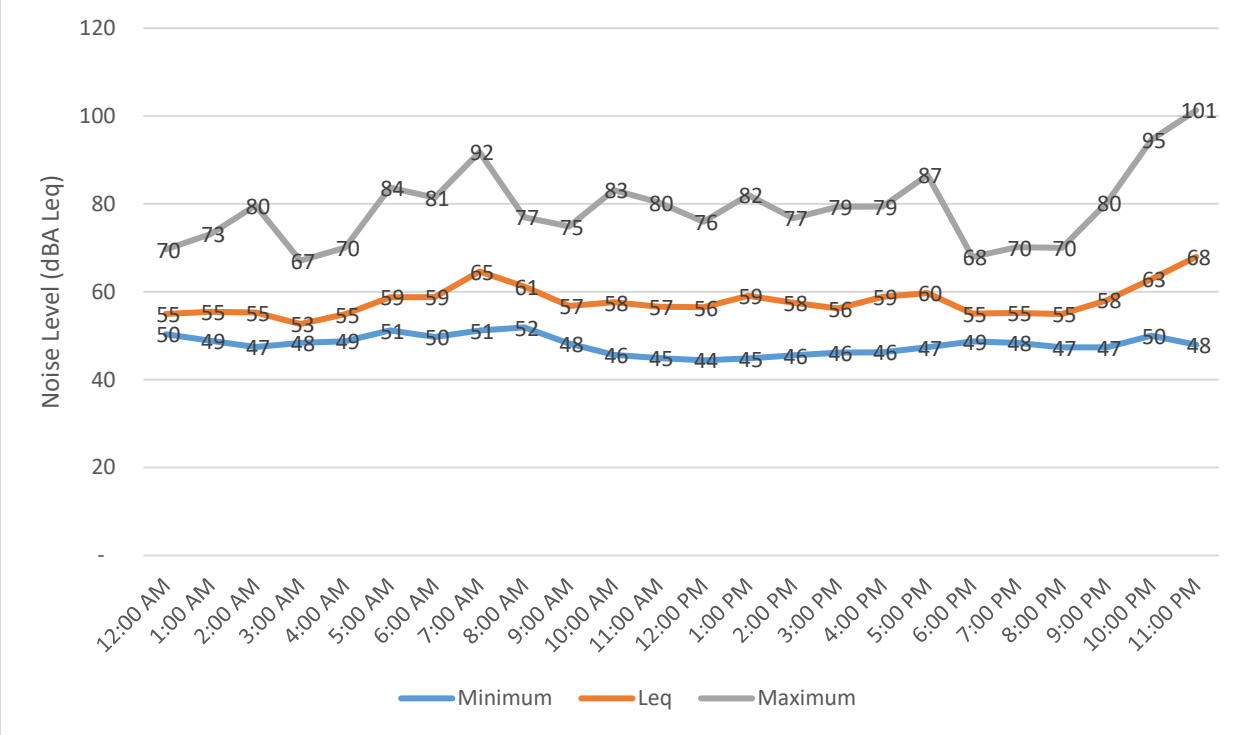
Noise Monitoring Location 1 recorded noise levels along South Sunset Avenue. Noise levels were measured at this location to characterize traffic noise levels. As shown in Figure 1, average daytime noise levels at Location 1 range from 58 to 71 dBA L_{eq}. The 24-hour weighted noise level at this location is 70 dBA CNEL. The measured noise levels are representative of a busy roadway arterial.

FIGURE 1
HOURLY NOISE LEVELS AT NOISE MONITORING LOCATION 1



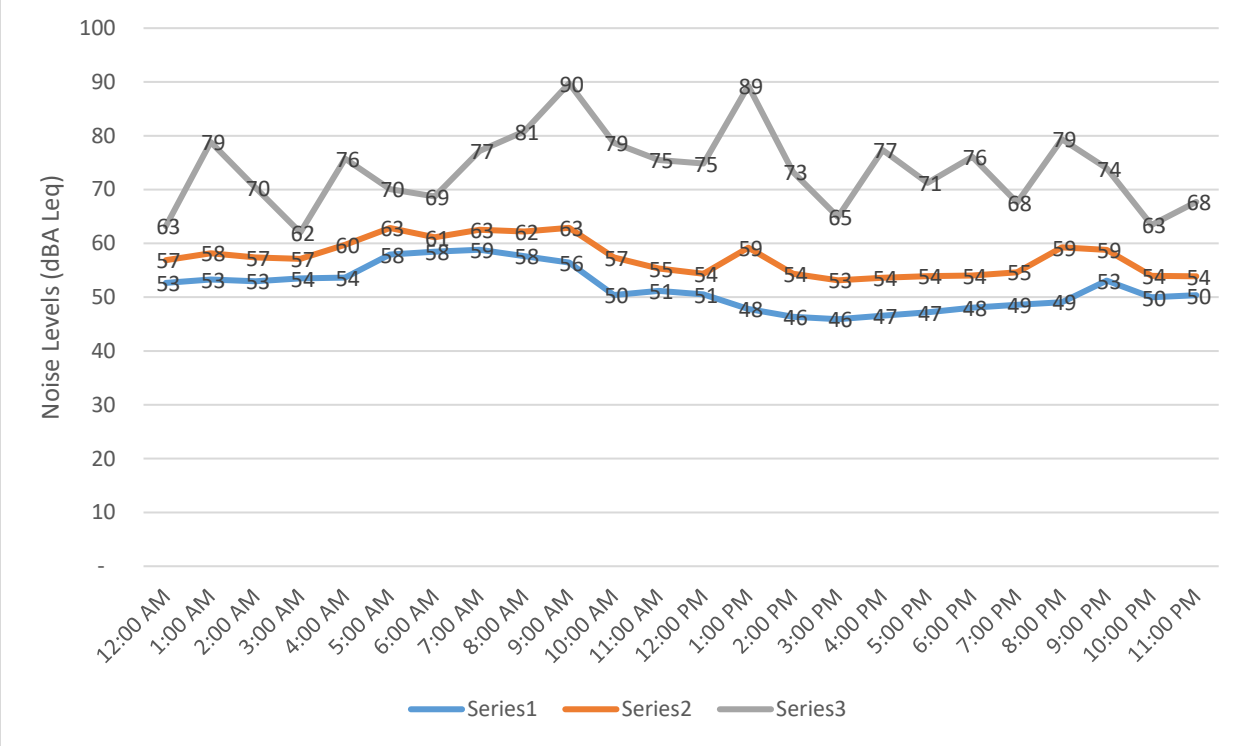
Noise Monitoring Location 2 is proximate to West Merced Avenue. As shown in Figure 2, Hourly Noise Levels at Noise Monitoring Location 2, average daytime noise levels in the study area range from 53 to 68 dBA L_{eq}. The 24-hour weighted noise level at this location is 67 dBA CNEL.

FIGURE 2
HOURLY NOISE LEVELS AT NOISE MONITORING LOCATION 2



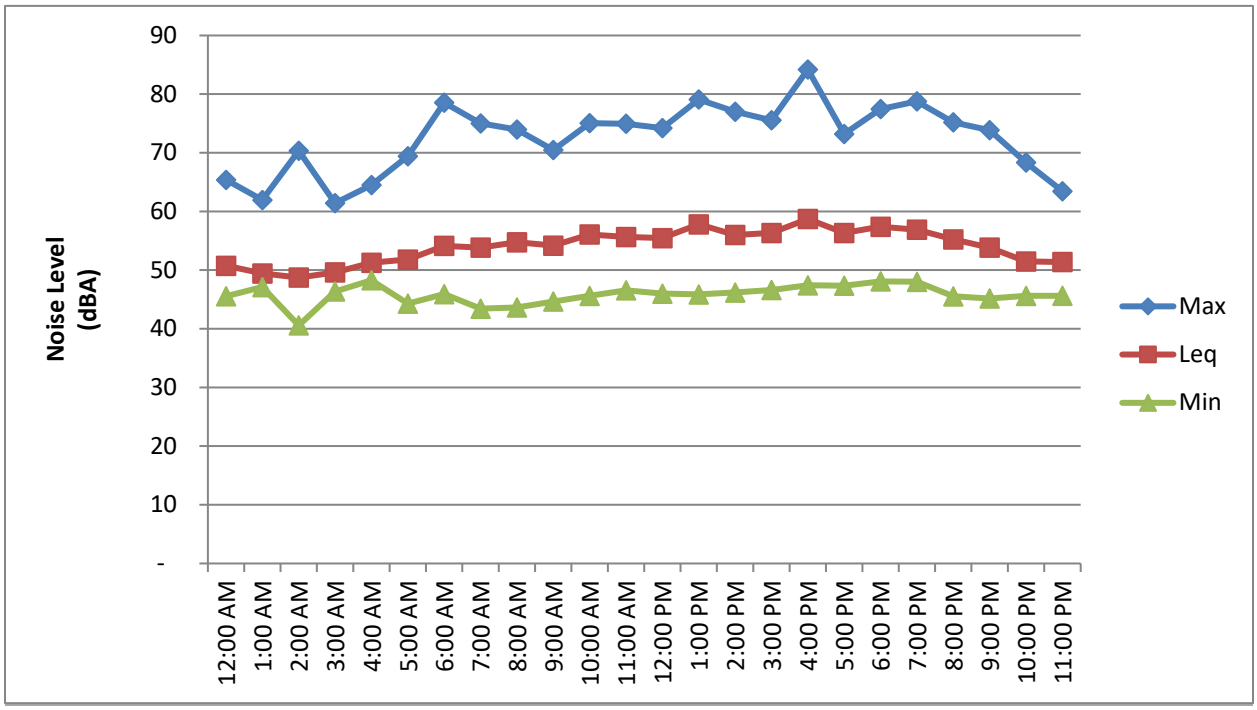
Noise Monitoring Location 3 is located adjacent to Orangewood Park. As shown in Figure 3, Hourly Noise Levels at Noise Monitoring Location 3, average daytime noise levels in the study area range from 53 to 63 dBA L_{eq}. The 24-hour weighted noise level at this location is 65 dBA CNEL.

FIGURE 3
HOURLY NOISE LEVELS AT NOISE MONITORING LOCATION 3



Noise Monitoring Location 4 is located proximate to the adjacent Torrey Pines Apartment Homes. As shown in Figure 4, Hourly Noise Levels at Noise Monitoring Location 4, average daytime noise levels in the study area range from 52 to 66 dBA L_{eq}. The 24-hour weighted noise level at this location is 63.8 dBA CNEL.

FIGURE 4
HOURLY NOISE LEVELS AT NOISE MONITORING LOCATION 4



Sensitive Receptors

Noise-sensitive receptors are generally considered to be humans who are engaged in activities that may be subject to the stress of significant interference from noise. These would include patients within the Project site that may be sleeping, resting, or involved in other activities that are not conducive to loud noise. Noise-sensitive receptors closest to the Project site include residences in the vicinity of the Project site in addition to the Edgewood High School located to the south of the Project site.

City of West Covina General Plan

The City of West Covina is affected by several different sources of noise, including automobile traffic, commercial activity, and periodic nuisances such as construction, loud parties, and other events. The Noise Element of the City's General Plan (PlanWC) is intended to identify these sources and provide objectives and policies that ensure that noise from these sources does not create an unacceptable noise environment (City of West Covina 2016a). Consistency with the applicable noise-related Policies and Actions of the General Plan are demonstrated in Table 3-15 of Section 3.11, Land Use and Planning. The section of the PlanWC entitled "Our Healthy and Safe Community", Sub-Section E, comprises the City's "Noise Element" and contains guidelines for noise compatible land uses for long-term operations as shown in Table 3-16, General Plan Land Use/Noise Computability Matrix.

TABLE 3-16
GENERAL PLAN LAND USE/NOISE COMPATIBILITY MATRIX

Land Use Category	Community Noise Exposure L_{dn} or CNEL, DBA						
	55	60	65	70	75	80	85
Residential – Low density single family, duplex, mobile homes							
Residential – Multi-family							
Transient Lodging – Motels, Hotels							
Schools, Libraries, Churches, Hospitals, Nursing Homes							
Auditoriums, Concert Halls, Amphitheaters							
Sports Arena, Outdoor Spectator Sports							
Playgrounds, Neighborhood Parks							
Golf Courses, Riding Stables, Water Recreation, Cemeteries							
Office Buildings, Business Commercial and Professional							
Industrial, Manufacturing, Utilities, Agriculture							

Normally Acceptable

Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirement.

Normally Unacceptable

If new construction or development proceeds, an analysis of the noise reduction requirements should be made and needed noise insulation features included in the design.

Conditionally Acceptable

New construction or development should be undertaken after an analysis of the noise reduction requirements is made and needed noise insulation features included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning will normally suffice.

Clearly Unacceptable

New construction or development should generally not be undertaken, unless it can be demonstrated that an interior level of 45 dBA can be achieved.

Source: City of West Covina 2016a.

City of West Covina Development Code

The City Municipal Code (Chapter 15, Article IV, Noise Regulations) is the City's Noise Ordinance. It is the City's policy "…in the exercise of its police power, to regulate and control annoying noise levels from all sources. At certain levels noises are detrimental to the health and welfare of the citizenry and in the public interest shall be systematically proscribed." The following sections of the Noise Ordinance are applicable to the proposed Project:

Sec. 15-85 – Loud, unnecessary noise prohibited generally.

Notwithstanding any other provision of this article, it shall be unlawful for any person within any residential zone of the city to willfully make or continue or cause to be made or continued, any loud, unnecessary or unusual noise which unreasonably disturbs the peace and quiet of any residential neighborhood or which causes discomfort or annoyance to any reasonable person of normal sensitiveness residing in the area. If the noise which is being created is plainly audible at a distance of fifty (50) feet from the property line of any property (or if a condominium or apartment house, within any adjoining unit or apartment), building, structure or vehicle in which it is located, it shall be presumed that the noise being created is in violation of the provisions of this section.

Sec. 15-94 – Radios, television sets, and similar devices.

Between the hours of 10:00 p.m. on one day and 7:00 a.m. of the following day, it shall be unlawful for any person within any residential zone of the city to use or operate any radio receiving set, musical instrument, phonograph, television set, or other machine or device for the producing or reproducing of sound or any device by which voice, music, or any other sound is amplified, in such a manner as to create any noise which causes the noise level at the property line of any property (or if a condominium or apartment house, within any adjoining unit or apartment), building, structure or vehicle to be plainly audible at a distance of fifty (50) feet therefrom.

Sec. 15-95 – Construction and building projects.

(a) Regulation. Between the hours of 8:00 p.m. of one day and 7:00 a.m. of the next day, it shall be unlawful for any person within a residential zone, or within a radius of five hundred (500) feet therefrom, to operate equipment or perform any outside construction or repair work on buildings, structures, or projects or to operate any pile driver, steam shovel, pneumatic hammer, derrick, steam or electric hoist, or other construction type device in such manner as to create any noise which causes the noise level at the property line to exceed the ambient noise level by more than five (5) decibels unless a permit therefor has been duly obtained in accordance with paragraph (b) of this section. No permit shall be required to perform emergency work as defined in section 15-83 of this article.

(b) Permit procedure. A permit may be issued authorizing noises prohibited by this section whenever it is found that the public interest will be served thereby. Applications for permits shall be in writing, shall be accompanied by an application fee in the amount of five dollars ($5.00), and shall set forth in detail facts showing that the public interest will be served by the issuance of such permit. Applications shall be made to the building

director; provided, however, that, with respect to work upon or involving the use of a public street, alley, building, or other public place under the jurisdiction of the engineering department, applications shall be made to the city engineer. Anyone dissatisfied with the denial of a permit may appeal to the council.

(c) Unloading and Loading. Between the hours of 8:00 p.m. of one day and 6:00 a.m. of the next day, it shall be unlawful for any person within the radius of five hundred (500) feet of generally occupied residences to unload, load or otherwise perform duties preparatory to the commencement of construction or repair work on buildings or structures. Generally occupied residences shall include, but not be limited to, areas in which there is a reasonable probability of occupancy within the area.

Sec. 15-97 – Restrictions on the operation of two- and four-stroke engines.

(a) Regulation. Between the hours of 8:00 p.m. and 8:00 a.m. of the next day, it shall be unlawful for any person within a residential zone to operate any gasoline-powered two- or four-stroke engine such as a leaf blower, lawn mower, edger, chain saw, roto-tiller, and other such devices for the purpose of maintaining a lawn or property.

Would the Project:

a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

No Substantial Change from Previous Analysis.

Project Related Temporary Noise Increases

Construction activities are anticipated to involve demolition of existing structures and pavement, grading and excavation for utilities and building foundations, and building construction. Construction activities are anticipated to occur in 2021 and 2022 for Phases 1A and 1B. All construction activities would occur within the hours specified by the Noise Ordinance. Nighttime is not anticipated unless required for specific utility shutdowns, concrete placement, or deliveries where that work would be a burden or significant impact to Hospital activities and operations. If nighttime activities are required, activities will comply with the 5 dBA noise level limits established within Section 15-95 – Construction and building projects or obtain a permit for nighttime work.

It is estimated that a total of approximately 1,606 tons of demolition debris would be exported off-site during Phase 1A, and that 4,280 tons of demolition debris would be exported off site during Phase 1B. During the demolition and grading activities, trucks are expected to enter and leave the Project site on a regular basis during working hours. Total earthwork proposed is approximately 1,000 cubic yards (cy) of soil imported during Phase 1A, and 5,900 cy of soil exported during Phase 1B. Demolition debris removal from the Project site would generate an estimated 582 trips over an estimated 57-day demolition phase. On average, it is anticipated that there would be 10 truck hauls per day. The addition of 10 haul truck trips per day would increase traffic noise levels by less than 3 dBA, which would not result in a substantial change in noise levels. The grading phase of the Project is estimated to result in 863 truck trips over a 64-day

period when grading activities would occur. This would result in an average of 13 truck trips per day which would also not contribute a substantial number of trips along West Merced Avenue which currently has approximately 14,000 trips per day and Sunset Avenue with 26,000 trips per day. Thus, the Project would not create a new significant impact pertaining to construction traffic noise that was not previously analyzed and no new mitigation measures are required.

In typical construction projects (such as the proposed Project), demolition and grading activities generate the highest noise levels since they involve the use of the largest equipment. During demolition and grading, persons in the immediate vicinity of the construction site would experience short-term noise impacts related to the operation of heavy construction equipment such as bulldozers, hoe-rams, excavators, and dump trucks. Noise levels would fluctuate depending on equipment type, duration of use, and distance between noise source and receiver. The operation of heavy equipment may occur as close as 200 feet to the residences to the northeast of the Project site. Noise from localized point sources, such as construction equipment, decreases by approximately 6 dBA with each doubling of distance from the source to receptor.

Local residents would be subject to elevated noise levels due to the operation of Project-related construction equipment. Construction activities are carried out in discrete steps, each of which has its own mix of equipment and, consequently, its own noise characteristics. These various sequential phases would change the character of the noise levels surrounding the construction site as work progresses. Construction noise levels reported in the USEPA's *Noise from Construction Equipment and Operations, Building Equipment, and Home Appliances* were used to estimate future construction noise levels for the Project (USEPA 1971). Typically, the estimated construction noise levels are governed primarily by equipment that produces the highest noise levels. Construction noise levels for each generalized construction phase (ground-clearing/demolition, excavation, foundation construction, building construction, paving, and site cleanup) are based on a typical construction equipment mix for a hospital project and do not include use of atypical, very loud, and vibration-intensive equipment (e.g., pile drivers). In lieu of pile driving activities, foundation construction will be developed with pre-drilled caissons which result in noise levels comparable to other typical construction activities.

The degree to which noise-sensitive receptors are affected by construction activities depends heavily on their proximity. Estimated noise levels attributable to the development of the proposed Project are shown in Table 3-17, Construction Noise Levels at Noise-Sensitive Uses, and calculations are included in Appendix E, Noise Calculations.

TABLE 3-17
CONSTRUCTION NOISE LEVELS AT NOISE-SENSITIVE USES

Construction Phase	Noise Levels (L_{eq} dBA)							
	Receptors to the Northwest – Athletic Fields at Orangewood Park		Residents to the Northeast – Multifamily Residential (Torrey Pines)		Receptors to the Southeast – Single Family Residential Uses		Receptors to the Southwest – Edgewood High School	
	Max (90 ft)	Avg (275 ft)	Max (200 ft)	Avg (300 ft)	Max (650 ft)	Avg (800 ft)	Max (1,000 ft)	Avg (1150 ft)
Ground Clearing/Demolition	79	69	72	68	62	60	58	57
Excavation	84	74	77	73	67	65	63	62
Foundation Construction	73	63	66	62	56	54	52	51
Building Construction	82	72	75	71	65	63	61	60
Paving and Site Cleanup	84	74	77	73	67	65	63	62
Construction Noise Threshold	**NA**	**NA**	**80**	**80**	**80**	**80**	**80**	**80**
Exceeds Threshold?	**No**	**No**	**No**	**No**	**No**	**No**	**No**	**No**

L_{eq} dBA: Average noise energy level; Max: maximum; avg: average; ft: feet

NA – Not Applicable. The City's noise threshold applies to noise sensitive residential uses and not athletic fields (soccer), where yelling and cheering would occur as a normal activity associated with this use.

Note: Noise levels from construction activities do not take into account attenuation provided by intervening structures.

Source: USEPA 1971.

Table 3-17 shows both the maximum and average noise levels for construction equipment. Maximum noise levels represent the noise levels from construction equipment occurring nearest to the noise sensitive use/receptor. Average noise levels represent the noise exposure to sensitive uses based on the distance to the center of the Project site. Noise levels from general Project-related construction activities would range from 52 to 84 dBA L_{eq} for the maximum noise levels and 51 to 74 dBA L_{eq} for average noise levels.

The City of West Covina uses a significance threshold of 80 dBA Leq for construction activities at residential uses. This threshold can be found in the Federal Transit Administration's *Transit Noise and Vibration Impact Assessment Manual* (FTA 2018) specifically for residential uses.

The development of the proposed Project would comply with West Covina Municipal Code Section 15-95, which establishes restrictions for when construction activities are allowed to occur. In addition, the Project's construction activities would not result in unusually noisy activities such as impact pile driving. With the incorporation of the restrictions in West Covina Municipal Code Section 15-95 to limit noise levels to the least noise sensitive portions of the day and noise levels being below the construction noise significance threshold, the Project would not create a new significant impact that was not previously analyzed and no new mitigation measures are required.

Permanent Project Related Noise Increases

Permanent sources of noise associated with the Project involves vehicle trips traveling to and from the Project site, property maintenance activities (landscaping), and mechanical sources of noise.

Noise Generated by Project Traffic

Operation of the proposed Project would generate traffic along roadways in the Project vicinity. The Project is anticipated to generate an additional 2,579 trips per day with 208 AM peak-hour trips and 251 PM peak-hour trips (Appendix F, Traffic Impact Analysis). West Merced Avenue currently has approximately 14,000 trips per day and Sunset Avenue with 26,000 trips per day. Table 3-18, Project-Related Offsite Traffic Noise Increases, shows that the corresponding increase in offsite traffic noise would range from 0.0 to 0.1 dBA for the analyzed roadway segments. Due to the small contribution of Project-related traffic along local roadways, traffic noise increases from the Project would not be perceptible or substantial. As such, the Project would not create a new significant impact pertaining to traffic noise that was not previously analyzed and no new mitigation measures are required.

TABLE 3-18
PROJECT-RELATED OFFSITE TRAFFIC NOISE INCREASES

Roadway	Segment	CNEL at 100 feet from roadway centerline (dBA)			
		No Project	With Project	Project Contribution	Potential Impact?
Merced Avenue	Orange Ave to N. Hospital Dr.	72.0	72.1	0.1	No
	N. Hospital Dr. to Sunset Ave	72.0	72.0	0.1	No
Sunset Avenue	Merced Ave to E. Hospital Dr.	74.6	74.7	0.1	No
	E. Hospital Dr. to Vine Ave	74.6	74.6	0.1	No

CNEL: community noise equivalency level; dBA: A-weighted decibels.
Source: Psomas 2020.

The development of additional emergency room capacity would also allow for an increased number of emergency room patients at the Project site. This may lead to an increase in total ambulance usage from 900 trips (without Project) to 1,200 trips (with Project) per month. On a daily basis, this would increase the average number of trips from 30 to 40 trips per day. On certain conditions, these ambulances would sound their sirens to accelerate the transport of patients requiring emergency care within the City and perhaps other cities local to the Queen of the Valley Hospital. It is estimated that a quarter of these ambulance trips would occur at nighttime when people are most sensitive to noise. A quarter of the daily trips amounts to an increase from approximately 8 existing ambulance trips to an estimated 10 projected ambulance trips occurring at nighttime with the Project. It is estimated that the Project would result in two additional ambulance trips transporting emergency care patients to the hospital at nighttime. The two additional nighttime trips would be distributed along the multiple roadways located proximate to the Project site and access the site through either Merced Avenue or Sunset Avenue. Due to the relatively low increase in the number of ambulance trips, the Project would not create a new significant impact pertaining to noise related to emergency transportation that was not previously analyzed and no new mitigation measures are required.

Noise Generated by On-Site Sources

The primary noise sources generated by operation of the proposed Project would be heating, ventilation, and air conditioning (HVAC) equipment, landscape maintenance, and trash collection. The Project would comply with the applicable Title 24 interior noise standards, which require that residential structures have interior noise levels that do not exceed 45 dBA CNEL in any habitable room . Noise generated by HVAC equipment and trash collection is not regulated by the Municipal Code. These sources of noise are common with land use development. Noise generated by landscaping activities is regulated by Section 15-97, which prohibits these activities between the hours of 8:00 p.m. and 8:00 a.m. within residential areas . These sources of noise are typical and not of sufficient magnitude and frequency of occurrence to be considered by the City. Consequently, the Project would not create a new significant impact pertaining to stationary sources of noise that was not previously analyzed and no new mitigation measures are required.

b) Generation of excessive groundborne vibration or groundborne noise levels?

No Substantial Change from Previous Analysis. There are no applicable City standards for structural damage from vibration. The California Department of Transportation (Caltrans) vibration damage potential guideline thresholds are shown in Table 3-19.

TABLE 3-19
VIBRATION DAMAGE THRESHOLD CRITERIA

Structure and Condition	Maximum PPV (in/sec)	
	Transient Sources	Continuous/Frequent Intermittent Sources
Extremely fragile historic buildings, ruins, ancient monuments	0.12	0.08
Fragile buildings	0.20	0.10
Historic and some old buildings	0.50	0.25
Older residential structures	0.50	0.30
New residential structures	1.00	0.50
Modern industrial/commercial buildings	2.00	0.50

PPV: peak particle velocity; in/sec: inch(es) per second.
Note: Transient sources create a single isolated vibration event, such as blasting or drop balls. Continuous/frequent intermittent sources include impact pile drivers, pogo-stick compactors, crack-and-seat equipment, vibratory pile drivers, and vibratory compaction equipment.
Source: Caltrans 2013.

The nearest offsite structures to the Project site are the residences located within 200 feet from the Project's northeastern property line. In terms of classifications in Table 3-19, the structures to the west, south and north are considered "older residential structures" for purposes of this analysis. Therefore, the criterion for a significant impact for continuous/frequency intermittent sources is 0.30 PPV in/sec.

Similar to structural damage from vibration, there are no applicable standards in the City's Municipal Code for human annoyance from construction vibration. The Caltrans vibration

annoyance potential guideline thresholds are shown in Table 3-20. Based on the guidance in Table 3-20, the "strongly perceptible" vibration level of 0.9 PPV in/sec is used in this analysis as the threshold for a potentially significant vibration impact for human annoyance.

TABLE 3-20
VIBRATION ANNOYANCE CRITERIA

Average Human Response	PPV (in/sec)
Severe	2.000
Strongly perceptible	0.900
Distinctly perceptible	0.240
Barely perceptible	0.035
PPV: peak particle velocity; in/sec: inch(es) per second. Source: Caltrans 2013.	

Conventional construction equipment would be used for demolition and grading activities, with no pile driving or blasting equipment. Construction of foundations would occur through the use of predrilled caissons without the need for pile driving. Table 3-21 summarizes typical vibration levels measured during construction activities for various vibration-inducing equipment at a distance of 25 feet.

TABLE 3-21
VIBRATION LEVELS FOR CONSTRUCTION EQUIPMENT

Equipment	PPV at 25 ft (in/sec)
Vibratory roller	0.210
Large bulldozer	0.089
Caisson drilling	0.089
Loaded trucks	0.076
Jackhammer	0.035
Small bulldozer	0.003
PPV: peak particle velocity; ft: feet; in/sec: inches per second. Source: Caltrans 2013; FTA 2006.	

Demolition, grading, and construction would occur up to the property lines and, as noted above, off-site land uses are relatively close to the property lines. Table 3-22, Project Vibration Impacts, shows the vibration annoyance criteria from construction-generated vibration activities proposed at the Project site. Specifically, it shows the PPV relative to uses proximate to the Project site.

TABLE 3-22
PROJECT VIBRATION IMPACTS

	Vibration Levels (PPV)			
	Receptors to the Northwest – Orangewood Park	**Residents to the Northeast – Multifamily Residential (Torrey Pines)**	**Receptors to the Southeast – Single Family Residential Uses**	**Receptors to the Southwest – Edgewood High School**
Equipment	**(PPV @ 415 ft)**	**(PPV @ 200 ft)**	**(PPV @ 650 ft)**	**(PPV @ 1000 ft)**
Vibratory roller	0.00	0.01	0.00	0.00
Caisson Drill	0.00	0.00	0.00	0.00
Large bulldozer	0.00	0.00	0.00	0.00
Small bulldozer	0.00	0.00	0.00	0.00
Jackhammer	0.00	0.00	0.00	0.00
Loaded trucks	0.00	0.00	0.00	0.00
Annoyance Criteria	**0.9**	**0.9**	**0.9**	**0.9**
Exceeds Annoyance Criteria?	**No**	**No**	**No**	**No**
Building Damage Criteria	**0.3**	**0.3**	**0.3**	**0.3**
Exceeds Building Damage Criteria?	**No**	**No**	**No**	**No**

PPV: peak particle velocity; Max: maximum; avg: average; ft: feet
Note: Calculations can be found in Appendix E.
Source: FTA 2006

As shown in Table 3-22, PPV would not exceed the criteria thresholds for annoyance and building damage for existing residential, park and school uses located proximate to the Project site when construction activities occur under maximum (i.e., closest to the receptor) exposure conditions. These vibration levels represent conditions when construction activities occur closest to receptor locations. Construction-related vibration would be substantially less under average conditions when construction activities are located further away. Because vibration levels would be below the significance thresholds, vibration generated by the Project's construction equipment would not be expected to generate strongly perceptible levels of vibration at the nearest uses. As such, the Project would not create a new significant impact pertaining to construction related vibration that was not previously analyzed and no new mitigation measures are required.

c) For a project located within the vicinity of a private airstrip or 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?

No Substantial Change from Previous Analysis. The nearest public airport is the San Gabriel Valley Airport (formerly El Monte Airport), located 5.1 miles northwest of the Project site. The Project site is also located well outside the existing and projected 65 dBA CNEL noise contour, which would occur within 2 miles of an airport. Aircraft overflights do not significantly contribute to the noise environment at the Project site, and the Project would not expose future

Project residents to excessive noise levels. In addition, the Project site is not located within the vicinity of a private airstrip. Therefore, the Project would not create a new significant impact pertaining to aircraft noise exposure that was not previously analyzed and no new mitigation measures are required.

Conclusion

The noise impacts of the proposed Project would be consistent with the impacts identified for the Approved Project, analyzed in the Certified Final PEIR. The proposed Project would not create a new significant impact or a substantial increase in the severity of previously identified effects. In regard to Section 15162 of the State CEQA Guidelines, (1) no substantial changes are proposed as part of the proposed Project that would result in new significant effects or an increase in severity of previous effects; (2) no substantial changes in circumstances have occurred that would result in new significant effects; and (3) no new information has become known that was not previously known that would (a) create new significant impacts, (b) increase the severity of previously examined effects, or (c) determine that mitigation measures or alternatives previously found not to be feasible would, in fact, be feasible; or (4) introduce mitigation measures that are considerably different from those analyzed in the Certified Final PEIR. For these reasons, no major revisions to the noise analysis provided in the Certified Final PEIR nor to the MMRP are required.

3.14 POPULATION AND HOUSING

Certified Final PEIR Environmental Review

The Certified Final PEIR identified that the Approved Project would not induce population growth, either directly or indirectly, as no residential units were proposed as part of the Approved Project and the potential increase in employment would be negligible and would not result in a significant impact. Additionally, it was identified that the Approved Project would not displace existing housing or people, necessitating the construction of housing elsewhere, as no housing existed within the campus.

Mitigation Measures

No mitigation measures were required.

Proposed Project Impact Analysis

Environmental Issues	New Significant Impact	More Severe Impacts	New Ability to Substantially Reduce Significant Impact	No Substantial Change From Previous Analysis
POPULATION AND HOUSING–Would the project:				
a) Induce substantial unplanned 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 number of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☑

This section identifies and evaluates the proposed Project's potential impacts on Population and Housing. Information presented in this section is based on the existing conditions outlined in Section 3.11, *Population and Housing* of the QVHSP (City of West Covina 2019).

Would the Project:

a) Induce substantial unplanned 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)?

No Substantial Change from Previous Analysis. The proposed Project consists of MOB, PS, ED/ICU and associated improvements. The proposed Project site never provided residential housing, and no existing nearby homes would be removed or relocated as a result of the proposed Project. The Project does not involve construction of habitable structures; therefore, it would not induce substantial population growth directly.

The proposed Project is anticipated to create both short-term construction and long-term operation related employment on campus. Construction jobs would be typically filled by existing

residents of the region and would not induce housing demand near the construction site due to the temporary nature of construction jobs. In terms of long-term and permanent jobs, as discussed in the Certified Final PEIR, the QVH campus currently provides 1,687 jobs, and implementation of the QVHSP would provide a net increase of approximately 1,000 jobs (with the Hospital after all Phased development is complete) in the City that can be filled by the local labor force. This employment projection includes the addition of 100 employees for the MOB and 280 employees for the ED/ICU. However, the Project's estimated jobs would represent a negligible amount of the total employment growth projected in the City and County. The employment growth accounts for approximately six percent of total employment within the City of West Covina in the year 2040 (34,300) (City of West Covina 2019). Therefore, while the Project would result in new employment on campus, the growth is not such that would induce new population growth in the City. As indicated above, the local labor force residing in the City of West Covina or adjacent cities would provide employees for both short-term construction and long-term operation positions. Thus, employment growth associated with the proposed Project would not result in a significant impact, and no mitigation is required.

Additionally, the proposed Project and the QVH campus as a whole function as an infill development due to the fact that all required infrastructure is at the site, and the campus is surrounded by existing development with their infrastructure in place. The proposed on-site infrastructure improvements would address the needs of the Project and would not be extended off-site such that would result in indirect population growth. Therefore, no direct or indirect population growth as a result of the proposed Project would occur, and no mitigation is required. Therefore, the Project would not create a new significant impact pertaining population growth that was not previously analyzed, and no new mitigation measures are required.

b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

No Substantial Change from Previous Analysis. As indicated above and in the Section 3.11, Land Use and Planning, the proposed Project is development of a MOB, PS, and ED/ICU. There is no existing housing and associated population on the Project site that would be displaced as a result of Project implementation. Therefore, construction of replacement housing elsewhere would not be required. Therefore, the Project would not create a new significant impact pertaining to displacement of people or housing that was not previously analyzed, and no new mitigation measures are required.

Conclusion

The population and housing impacts of the proposed Project would be consistent with the impacts identified for the Approved Project, analyzed in the Certified Final PEIR. The proposed Project would not create a new significant impact or a substantial increase in the severity of previously identified effects. In regard to Section 15162 of the State CEQA Guidelines, (1) no substantial changes are proposed as part of the proposed Project that would result in new significant effects or an increase in severity of previous effects; (2) no substantial changes in circumstances have occurred that would result in new significant effects; and (3) no new information has become known that was not previously known that would (a) create new significant impacts, (b) increase the severity of previously examined effects, or (c) determine that mitigation measures or alternatives previously found not to be feasible would, in fact, be feasible; or (4) introduce mitigation measures that are considerably different from those

analyzed in the Certified Final PEIR. For these reasons, no major revisions to the population and housing analysis provided in the Certified Final PEIR nor to the MMRP are required.

3.15 PUBLIC SERVICES

Certified Final PEIR Environmental Review

The Certified Final PEIR identified that no new, expanded, or altered fire protection services or facilities would be required to provide fire protection service in the future for the Approved Project. Implementation of MMs PS-1 and PS-2 would help ensure that impacts related to increased demand for fire protection services would be reduced to less than significant levels. Further, the Approved Project would comply with all applicable codes, ordinances, and requirements related to safety in addition to payment of development impact fees (DIFs). The Approved Project would not require new or physically altered police facilities that would result in significant environmental impacts. With implementation of MMs PS-1 and PS-3, impacts related to police protection services would be less than significant. Additionally, the Approved Project would not increase demand on the existing school system in the area. The Certified Final PEIR identified that hospital associated uses would not involve development of a residential component that would result in a direct increase/generation of population. With implementation of MM PS-4, the potential impacts would be reduced to less than significant. Further, implementation of the Approved Project would not require new or physically altered parks or recreation facilities. The Certified Final PEIR identified the City would continue to be in compliance with the Quimby Act despite the conversion of the Sunset Field property to hospital-related uses, and impacts would be less than significant. Lastly, the Approved Project would not result in generation of population such that would increase demand on the existing libraries serving the City. The Approved Project would not result in construction of new or physically altered library facilities. No physical impacts would occur.

Mitigation Measures

MM PS-1 Pursuant to Chapter 17, Article IV, Development Impact Fees of the City's Municipal Code, prior to issuance of each building permit, the Queen of the Valley Hospital shall be responsible for payment of the City's Development Impact Fees (DIFs) including police facilities, fire facilities, park facilities, administration facilities, and public works facilities, as appropriate and in amounts established by City Council Resolution. The fees paid shall be those in effect at the time of issuance of the building permit, subject to applicable fee credits for community facilities provided as part of the Project. **(Applicable)**

MM PS-2 The Queen of the Valley Hospital shall verify that all Project-related improvements comply with applicable codes, ordinances and standard conditions, including the current edition of the California Fire Code and the West Covina Fire Department regarding fire prevention and suppression measures, fire hydrants, automatic fire extinguishing systems, access, water availability, and fire sprinkler system, among other measures. Prior to issuance of building permits, the Planning Department and West Covina Fire Department shall verify compliance with applicable codes and that appropriate fire safety measures are included in the project design. All such codes shall be complied with and all measures shall be implemented prior to issuance of a certificate of occupancy. **(Applicable)**

MM PS-3 The Hospital shall comply with PlanWC appropriate Crime Prevention Through Environmental Design (CPTED) features as determined by West Covina Police Department (WCPD) for all improvements related to the proposed Project. CPTED features incorporated into the design of spaces shall include, but not be limited to, territorial reinforcement, strategic natural surveillance, well-lit spaces, and appropriate maintenance. CPTED review of each proposed development shall be completed by the WCPD prior to issuance of building permits. **(Applicable)**

MM PS-4 Prior to the issuance of each building permit, the Property Owner/Developer shall pay applicable developer's fees to the impacted school district(s) pursuant to Section 65995 of the *California Government Code.* Under State law, payment of the developer fees provides full and complete mitigation of the project's impacts on school facilities. Evidence that these fees have been paid shall be submitted to the Planning Department. **(Applicable)**

Proposed Project Impact Analysis

Environmental Issues	New Significant Impact	More Severe Impacts	New Ability to Substantially Reduce Significant Impact	No Substantial Change From Previous Analysis
PUBLIC SERVICES–Would the project:				
a) 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:				
Fire protection?	☐	☐	☐	☑
Police protection?	☐	☐	☐	☑
Schools?	☐	☐	☐	☑
Parks?	☐	☐	☐	☑
Other public facilities?	☐	☐	☐	☑

Would the Project:

a) 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?

No Substantial Change from Previous Analysis. Fire protection and paramedic services for the Project site are provided by the West Covina Fire Department (WCFD), which maintains and operates five stations in the City. The WCFD currently has 77 professionals and 6 community volunteer members. The 24-hour protection is provided daily by trained and qualified personnel on duty through the 5 fire stations serving the City. Each station is staffed with trained paramedics, and the five engine companies, the truck company, and the three ambulances are staffed by California-licensed paramedics and certified Emergency Medical Technicians (City of West Covina 2020c). Fire Station 1, located at 819 South Sunset Avenue, is the closest station and would provide fire response to the Project site.

Development of the Project uses would increase the demand for fire protection and emergency services and the associated demand on fire protection and emergency service apparatus, equipment, and personnel compared to existing levels. However, as described in Section 3.14, Population and Housing, the proposed Project does not include a residential component and would not directly or indirectly induce population growth. In addition, the proposed Project uses are not anticipated to change the types or substantially increase the number of service calls at Project site.

Implementation of the Project would result in an increase in hospital services; however, it is not expected to have significant impact on fire protection services. To ensure adequate provision of fire protection and emergency services/access to the campus and surrounding areas, the proposed Project would be designed in compliance with West Covina Fire Code (MM PS-2) and in accordance with all applicable code, ordinances, fire and life safety requirements, provision of adequate fire flow, and access to the Project site. Additionally, with construction of new structures, the impacts related to fire prevention and suppression would further be avoided as new technology would be incorporated into the design of the proposed buildings.

Further, the proposed Project would be required to pay all applicable development impact fees (DIFs), including fire facilities, as outlined in MM PS-1. Therefore, with implementation of MM PS-1 and MM PS-2, the Project's potential impacts on public services regarding fire protection would be less than significant, and no new mitigation is required.

ii) Police protection?

No Substantial Change from Previous Analysis. The West Covina Police Department (WCPD) provides law enforcement services to the City of West Covina. The WCPD provides a full range of police services within two Divisions, the Patrol Division and the Investigative and Support Services Division (ISSD). The WCPD headquarters is in the West Covina City Hall at 1444 West Garvey Avenue. The City is organized into four service areas, Service Area 1 (North), Service Area 2 (East), Service Area 3, (Central), and Service Area 4 (South). The Project site is located within the WCPD Service Area 3. The WCPD currently has an authorized workforce of 100 sworn officers, and patrols within the City are organized in a beat system for strategic deployment. Based on the City's 2016 population of 107,873, the WCPD has a ratio of 0.93 sworn officers for each 1,000 residents in the City (City of West Covina 2016b).

During construction, emergency access to the site by police/security vehicles may be impeded; however, the proposed Project would be required to implement a Traffic Control Plan (refer to Section 3.17, Transportation), and required on-site emergency access to structures would be in compliance with applicable codes, ordinances, and standard conditions, including the current

edition of the California Fire Code. In addition, the proposed Project would add new structures, which would increase demand on existing police protection services. However, with compliance with City standard requirements related to safety (MM PS-3), such as installation of security systems and crime prevention design, the impacts would be less than significant, and no new mitigation is required.

As described in Section 3.14, Population and Housing, the proposed Project does not include a residential component and is not anticipated to induce population growth in the City. The proposed Project would result in an increase in employees but would not result in substantial changes in the type or the number of service calls to the hospital campus. Thus, there would not be a substantial increase in the demand for police protection services compared to existing levels, such that would result in a significant impact.

In light of the above, implementation of the proposed Project would not require new or physically altered WCPD facilities that would cause significant environmental impacts, and no mitigation is required. In addition, the proposed Project would comply with all applicable codes, ordinances, and requirements related to safety and payment of DIFs (see MM PS-1). The Project would not require new or physically altered WCPD facilities that would cause significant environmental impacts. With implementation of MM PS-1 and MM PS-3, impacts related to police protection services would be less than significant, and no new mitigation is required.

iii) Schools?

No Substantial Change from Previous Analysis. The proposed Project would not involve development of a residential component that would result in a direct increase/generation of population, such that would increase demand on the existing school system in the area. However, the Project would generate a relatively small number of employees, including short-term construction and long-term hospital workers. However, as discussed in Section 3.14, Population and Housing, these positions would likely be filled by the local labor pool. Therefore, it is not expected that schools in the vicinity of the Project site would be impacted by increased demand during construction and operation of the proposed Project. Further, similar to other developments in the area, the proposed Project would be required to pay all applicable school impact fees (MM PS-4). The Project would pay school development fees to the WCUSD for the improvement of school facilities. As provided under Section 17620 of the *California Education Code* and Section 65970 of the *California Government Code,* the payment of statutory school development fees would fully mitigate a project's impacts on schools. Thus, impacts would be less than significant with implementation of MM PS-4, and no new mitigation is required.

i) Parks?

No Substantial Change from Previous Analysis. The proposed Project does not involve the development of new residential uses or include a housing component that would result in a direct increase/generation of population, and thus, would not increase demand on the existing parks and recreational uses serving the City. However, the proposed Project would generate a relatively small number of employees, including short-term construction and long-term hospital workers. As discussed in Section 3.14, Population and Housing, these positions would likely be filled by the local labor pool. Therefore, it is not expected that parks and recreation facilities in the vicinity of the Project site would be impacted by construction and operation of the proposed Project. This impact is less than significant, and no mitigation is required.

vi) Other public facilities?

No Substantial Change from Previous Analysis. The West Covina Library provides library services in the City of West Covina and is located at 1601 West Covina Parkway. This library has book and media collections for children, teens, and adults (LA County Library 2020). West Covina Library is part of the Los Angeles County libraries. Library members are also able to access other nearby Los Angeles County Public Libraries (City of West Covina 2016b). Members of the West Covina Public Library have access to the resources of the entire Los Angeles County Public Library system.

The proposed Project does not include a residential component that would increase/generate population, such that would result in increased demand on the existing libraries serving the City. However, the proposed Project would generate a relatively small number of employees, including short-term construction and long-term hospital workers. As discussed in Section 3.14, Population and Housing, these positions would likely be filled by the local labor pool. Therefore, it is not expected that libraries in the vicinity of the Project site would be impacted by construction and operation of the proposed Project. The proposed Project would not result in construction of new or physically altered library facilities. There would be a less than significant impact, and no mitigation is required.

Conclusion

The public services impacts of the proposed Project would be consistent with the impacts identified for the Approved Project, analyzed in the Certified Final PEIR. The proposed Project would not create a new significant impact or a substantial increase in the severity of previously identified effects. In regard to Section 15162 of the State CEQA Guidelines, (1) no substantial changes are proposed as part of the proposed Project that would result in new significant effects or an increase in severity of previous effects; (2) no substantial changes in circumstances have occurred that would result in new significant effects; and (3) no new information has become known that was not previously known that would (a) create new significant impacts, (b) increase the severity of previously examined effects, or (c) determine that mitigation measures or alternatives previously found not to be feasible would, in fact, be feasible; or (4) introduce mitigation measures that are considerably different from those analyzed in the Certified Final PEIR. For these reasons, no major revisions to the public services analysis provided in the Certified Final PEIR nor to the MMRP are required.

3.16 RECREATION

Certified Final PEIR

Implementation of the Approved Project would not require new or physically altered parks or recreation facilities. The Certified Final PEIR identified the City would continue to be in compliance with the Quimby Act despite the conversion of the Sunset Field property to hospital-related uses, and impacts would be less than significant.

Mitigation Measures

MM PS-1 Pursuant to Chapter 17, Article IV, Development Impact Fees of the City's Municipal Code, prior to issuance of each building permit, the Queen of the Valley Hospital shall be responsible for payment of the City's Development Impact Fees (DIFs) including police facilities, fire facilities, park facilities, administration facilities, and public works facilities, as appropriate and in amounts established by City Council Resolution. The fees paid shall be those in effect at the time of issuance of the building permit, subject to applicable fee credits for community facilities provided as part of the Project. **(Applicable)**

Proposed Project Impact Analysis

Environmental Issues	New Significant Impact	More Severe Impacts	New Ability to Substantially Reduce Significant Impact	No Substantial Change From Previous Analysis
RECREATION–Would the project:				
(a) 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) Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☐	☑

This section identifies and evaluates the proposed Project's potential impacts on Recreation. Information presented in this section is based on the existing conditions that was included in Section 3.12, *Public Services and Recreation* of the QVHSP (City of West Covina 2019).

Would the Project:

a) 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?

No Substantial Change from Previous Analysis. The City's Community Services Division provides for the protection and enhancement of City parks, recreation facilities, and community services. The City of West Covina contains a range of park types that include two small pocket parkettes, eight neighborhood parks, three community parks, two wilderness areas, specialized sports facilities, paseos, and two conservation areas. The proposed Project does not involve the development of new residential uses or include a housing component that would result in a direct population growth, and thus, would not increase demand on the existing parks and recreational uses serving the City. However, the proposed Project would generate a relatively small number of employees for the QVH, including short-term construction and long-term hospital workers. As discussed in Section 3.11, *Population and Housing* (City of West Covina 2019), these positions would likely be filled by the local labor pool. Therefore, it is not expected that parks and recreation facilities within the vicinity of the proposed Project site would be impacted by construction and operation of the Project. Additionally, the Project would not require the need for new or physically altered facilities. Therefore, no significant impacts pertaining to use of existing parks causing their deterioration would occur, and no mitigation is required. However, MM PS-1 (i.e., paying of park facilities impact fees) from the Certified Final PEIR is applicable to the proposed Project. No new mitigation is required.

b) Include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?

No Substantial Change from Previous Analysis. As described above, the proposed Project does not involve the development of new residential uses or include a housing component that would result in a direct population growth, and thus, would not increase demand on the existing parks and recreational uses serving the City. Additionally, the proposed uses are hospital related uses, and the Project does not include recreational facilities, nor does it require construction or expansion of recreational facilities. However, as indicated above, MM PS-1 regarding payment of park facilities impact fees, from the Certified Final PEIR would apply to the Project. No new mitigation is required.

Conclusion

The recreation impacts of the proposed Project would be consistent with the impacts identified for the Approved Project, analyzed in the Certified Final PEIR. The proposed Project would not create a new significant impact or a substantial increase in the severity of previously identified effects. In regard to Section 15162 of the State CEQA Guidelines, (1) no substantial changes are proposed as part of the proposed Project that would result in new significant effects or an increase in severity of previous effects; (2) no substantial changes in circumstances have occurred that would result in new significant effects; and (3) no new information has become known that was not previously known that would (a) create new significant impacts, (b) increase the severity of previously examined effects, or (c) determine that mitigation measures or

alternatives previously found not to be feasible would, in fact, be feasible; or (4) introduce mitigation measures that are considerably different from those analyzed in the Certified Final PEIR. For these reasons, no major revisions to the recreation analysis provided in the Certified Final PEIR nor to the MMRP are required.

3.17 TRANSPORTATION

Certified Final PEIR Environmental Review

The Certified Final PEIR estimated that at buildout, the project would generate 9,587 total average daily trips (ADT) with 776 total AM peak hour trips and 924 total PM peak hour trips. With implementation of MMs TRA-1 through TRA-9, the Approved Project would have less than significant impacts regarding traffic impacts during all phases of construction and operation, parking, and General Plan consistency. However, even after implementing MMs TRA-1 through TRA-3, there would still be significant adverse traffic impacts at the following intersections: Merced Avenue/Sunset Avenue (ROW constraints); Cameron Avenue/Sunset Avenue (PM Peak); and West Covina Parkway/Sunset Avenue (PM Peak). These impacts required adoption of a Statement of Overriding Considerations.

The Certified Final PEIR identified that eight intersections would have significant traffic impacts that require mitigation at the end of the Approved Project buildout. However, implementation of the improvements outlined in MM TRA-1 would reduce the traffic impacts of the Approved Project after buildout to less than significant levels except for Vine Avenue/Sunset Avenue. MM TRA-3 was therefore deemed necessary to reduce traffic impacts at Vine Ave/Sunset Avenue under buildout conditions to less than significant levels.

Regarding vehicle miles traveled (VMT) analyses, at time of the Certified Final PEIR, the State Office of Planning and Research (OPR) had not yet issued formal guidelines for calculating traffic impacts for projects under CEQA using VMT instead of level of service (LOS) as a metric to determine significant impacts. Therefore, the impacts for this project were determined based on LOS.

The QVH site and immediate surrounding area do not include any roadway or other design features, which are or would produce significant traffic hazards. Therefore, the Approved Project would not have any significant impacts in this regard, and no mitigation was required. Additionally, emergency vehicle access was deemed sufficient for the existing and future needs of the hospital, and thus there would be no significant impacts in this regard, and no mitigation was deemed necessary.

As demonstrated in the Certified Final PEIR, the Approved Project was consistent with the goals and policies of PlanWC relative to alternative transportation. The Approved Project would not conflict with adopted policies regarding alternative (i.e., non-vehicular) transportation, so there would be no impacts in this regard, and no mitigation was required.

The closest airport to the QVH site is the El Monte Airport located at 4233 Santa Anita Avenue, El Monte, which is 5.1 miles northwest of the hospital property. It was determined that activities at the hospital would not influence air traffic patterns at El Monte or any other airport in the region. Impacts would be less than significant, and no mitigation was required.

Mitigation Measures

MM TRA-1 Prior to the issuance of building permits for improvements identified under Phase 1 of the Project, the Queen of the Valley Hospital shall make fair share contributions towards the installation of the following improvements:

- **Cameron Ave/Sunset Ave**
  - Convert the outside lane on Sunset Avenue to a shared thru-right turn lane in both directions. This will require additional striping on the downstream side of the intersection in both directions and will require that parking be prohibited on Sunset Avenue within the improvement area.
- **Merced Ave/Dalewood St/Garvey Ave**
  - Restripe the eastbound approach to include one thru lane and one exclusive right turn lane.
  - Convert the intersection to two-way stop control, with free eastbound and westbound movements.
- **Merced Ave/California Ave**
  - Restripe both approaches on Merced Avenue to include one exclusive left turn lane, one thru lane, and one shared thru-right turn lane.
- **Cameron Ave/Orange Ave**
  - Restripe both approaches on Orange Avenue to include one exclusive left turn lane and a shared thru-right turn lane.

Prior to issuance of any building permits beyond Phase 1, identified improvements at these intersections will need to be physically in place to mitigate potential impacts of Project-related traffic. This measure shall be implemented to the satisfaction of the City Engineer. **(Applicable)**

MM TRA-2 Prior to the issuance of building permits for any improvements identified under Phase 2 of the Project, the Queen of the Valley Hospital shall make a fair share contribution toward the installation of the following improvements:

- **West Covina Pkwy/I-10 WB Ramps**
  - Restripe the northwest-bound West Covina Parkway approach to include two left turn lanes, one thru lane, and a shared thru-right turn lane.

Prior to completion of construction under Phase 2, these improvements shall be physically in place to mitigate Project-related traffic impacts. This measure shall be implemented to the satisfaction of the City Engineer. **(Not Applicable)**

MM TRA-3 Prior to issuance of building permits for any improvements identified beyond Phase 2 of the Project, the Queen of the Valley Hospital shall make fair share contributions towards the installation of the following improvements:

- **Vine Avenue/Sunset Avenue**
  - Restripe both approaches of Sunset Avenue to include two thru lanes and a shared thru-right turn lane. This will require additional striping on the downstream side of the intersection in both directions and will require that parking be prohibited on Sunset Avenue in the improvement area.
  - Widen the project driveway across from Vine Avenue to provide two left turn lanes and a shared thru-right turn lane for traffic exiting the hospital campus.
- **West Covina Pkwy/Sunset Ave**
  - Restripe both approaches of West Covina Parkway to include two thru lanes and an exclusive right turn lane. This should only require restriping, but if needed, right-of-way is available.

Prior to certification of Project completion, these improvements shall be physically in place to mitigate Project-related traffic impacts. This measure shall be implemented to the satisfaction of the City Engineer. **(Not Applicable)**

MM TRA-4 Prior to the start of any major construction activity or improvement on the Project site, the Queen of the Valley Hospital shall discuss planned activities with the City and prepare a Traffic Control Plan (TCP) for City review and approval. The TCP shall provide for appropriate temporary control measures, including barricades, warning signs, speed control devices, flaggers, and other measures to mitigate potential traffic hazards and protect public safety. The TCP would also ensure coordination with emergency response providers to provide sufficient emergency response access to the Project site and to surrounding areas. This measure shall be implemented to the satisfaction of the City Engineer and City Planning Department, as appropriate. **(Applicable)**

MM TRA-5 Prior to completion of Phase 1 improvements, the Hospital shall document to the City that it has provided at least the following based on the Project Parking Study:

- Provide 85 parking spaces for the new/expanded Emergency Room (per parking generation rate based on the existing campus), either as surface parking or on the ground level of the nearest planned parking structure.
- Maintain existing parking spaces designated for maternal and child health center in existing location adjacent to the Family Birth & Newborn Center. **(Applicable)**

MM TRA-6 Prior to the start of any phase of Project improvements that contains a parking structure, the Queen of the Valley Hospital shall provide documentation as to the location, need, and appropriate size of the structure, to the satisfaction of the City Engineer and the City Planning Department. **(Applicable)**

MM TRA-7 Any parking structure constructed as part of the Project shall be opened and available for parking prior to the completion of the phase within which it is being constructed. **(Applicable)**

MM TRA-8 During all phases of construction, signs shall be posted, and information placed on the Queen of the Valley Hospital's website on where complaints regarding parking, noise, etc. during construction should be directed. The Queen of the Valley Hospital shall make a good faith effort to resolve complaints by local neighbors regarding parking or other construction-related issues. **(Applicable)**

MM TRA-9 During all phases of Project construction, the Queen of the Valley Hospital shall provide sufficient onsite or designated offsite parking for construction workers to prevent parking in adjacent residential areas. Construction workers will be given information in writing on specific parking locations they can use if offsite parking is needed. This measure shall be implemented to the satisfaction of the Planning Department. **(Applicable)**

MM TRA-10 At least twice a year the Queen of the Valley Hospital shall provide printed information to its employees regarding carpooling and ridesharing. Copies of this information shall be transmitted to the City Planning Department. **(Applicable)**

Proposed Project Impact Analysis

Environmental Issues	New Significant Impact	More Severe Impacts	New Ability to Substantially Reduce Significant Impact	No Substantial Change From Previous Analysis
TRANSPORTATION – Would the project:				
a) Conflict with a program 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 Traffic Impact Study (TIS) was prepared by Psomas for the Project (Psomas 2020). The findings of the TIS are incorporated in the following analyses, and the report is included as Appendix F to this Addendum document.

It should be noted given that the proposed Project is smaller than what was previously analyzed in the Certified Final PEIR, it is considered to be consistent with the prior analysis, and no further

operational assessment is required. However, the TIA evaluated the Project driveways to ensure that sufficient turn-lane storage is available.

The TIS conducted analyses for conditions with the Project at the completion of Phase 1A and Phase 1B, assumed to occur in 2022.

The study area includes the four site access points:

- Merced Avenue/North Driveway (unsignalized)
- Medical Office Driveway/Sunset Avenue (unsignalized)
- East Driveway/Sunset Avenue (unsignalized)
- Vine Avenue/Sunset Avenue (signalized)

The above intersections were identified in the Certified Final PEIR as requiring mitigation measures at the completion of Phase 1A and Phase 1B.

Methodology

The LOS is the typical measure used to characterize the quality of traffic operations at an intersection or roadway segment. LOS A represents relatively free operating conditions, whereas LOS F represents unstable flow and congestion with volumes at or near the capacity of the facility. Excessive delays and queues can occur when the LOS is not acceptable.

To assess the potential need to incorporate the mitigation measures previously identified for the completion of Phase 1, conditions for 2022 with and without the Project were evaluated for the four signalized intersections listed above. To evaluate the queues and potential need for additional turn lane storage, conditions for 2022 with the Project were evaluated.

Signalized intersections were evaluated using the Intersection Capacity Utilization (ICU) methodology to maintain consistency with the Certified Final PEIR. For the unsignalized intersections, operational analyses were based on the Highway Capacity Manual (HCM) methodology per the *Los Angeles County Public Works Transportation Impact Analysis Guidelines*. Per direction from the City of West Covina, VMT analyses are not required because the Project is consistent with the Certified Final PEIR.

Intersection Capacity Utilization

The ICU methodology is used to determine the operating LOS of signalized intersections. This methodology requires the calculation of the intersection volume/capacity (V/C) ratio, which is the summation of critical lane group flow ratios with a yellow clearance adjustment. The LOS estimated by the ICU methodology is directly related to the intersection V/C ratio.

The impact related to the Project is considered significant if the increase in the V/C ratio with the Project equals or exceeds the values shown in Table 3-23, below.

TABLE 3-23
SIGNIFICANT IMPACT THRESHOLDS – ICU METHODOLOGY

Intersection Conditions Pre-Project		
LOS	**V/C**	**Project V/C Increase**
C	0.71 to 0.80	0.04 or more
D	0.81 to 0.90	0.02 or more
E/F	0.91 or more	0.01 or more

Highway Capacity Manual

Per the Los Angeles County guidelines, this TIS applied the HCM methodology to evaluate unsignalized intersections using the software *Synchro*. The significant impact for the unsignalized intersection of Merced Avenue/Dalewood Street/Garvey Avenue was based on the Los Angeles Department of Transportation (LADOT) guidelines, which evaluate unsignalized intersections using the HCM methodology to determine the need for the installation of a traffic signal or other traffic control devices. Based on the delay estimates, if the LOS is E or F in the "Future with Project" scenario, it is recommended that a traffic signal warrant analysis be conducted.

It should be noted that the LOS was not evaluated at the study intersections; instead, the analysis focused on the queuing at the intersections, particularly the queues on Merced Avenue and Sunset Avenue for vehicles turning into the site.

Existing Conditions

There are four existing site access locations, all of which are anticipated to remain as the QVH expansion and improvements occur.

- **Merced Avenue/North Driveway** – This unsignalized intersection operates with two-way stop control on the driveway. There is no northwest-bound right turn lane on Merced Avenue, but the existing two-way left turn lane provides storage for vehicles turning left into the site. The driveway has one inbound and one outbound lane and allows both left and right turns onto Merced Avenue.
- **Medical Office Driveway/Sunset Avenue** – This unsignalized intersection operates with two-way stop control on the driveway. The driveway only allows right turns into and out of the site, but there is no exclusive right turn lane on Sunset Avenue. The driveway has one inbound and one outbound lane.
- **East Driveway/Sunset Avenue** – This unsignalized intersection operates with two-way stop control on the driveway. There is no right turn lane on Sunset Avenue into the site, but there is an existing left turn lane with approximately 95 feet of storage. The driveway has one inbound and one outbound lane, and left turns are not permitted from the driveway onto Sunset Avenue.
- **Vine Avenue/Sunset Avenue** – This signalized intersection includes left turn lanes on Sunset Avenue and operates with permissive left turns only. Both existing left turn lanes on Sunset Avenue have approximately 140 feet of storage. There are no right turn lanes

on Sunset Avenue. On Vine Avenue, both approaches include a shared through-left turn lane and an exclusive right turn lane. For the Project site, Vine Avenue has two inbound lanes.

Traffic Volumes

Due to the ongoing Covid-19 pandemic, traffic volumes at the study intersections could not be collected. Therefore, the 2018 volumes collected for the Certified Final PEIR were used for the signalized intersections.

Driveway volumes were estimated based on the 2018 volumes and the estimated trip generation was calculated using Institute of Transportation Engineers (ITE) *Trip Generation Manual* for the site. Table 3-24 shows the estimated site trip generation in 2018 for reference. An additional medical/dental office unrelated to the Hospital also has access from the Vine Avenue/Sunset Avenue intersection; the estimated trip generation for that building is shown in Table 3-25.

TABLE 3-24
ESTIMATED EXISTING (2018) QVHSP TRIP GENERATION

Existing						
ITE LU 610 (10th Edition) - Hospital						
1,000 SF			**355.380**			
Period	**Trips/Unit**	**Trips**	**% In**	**% Out**	**Trips In**	**Trips Out**
AM Peak	0.89	316	68%	32%	215	101
PM Peak	0.97	345	32%	68%	110	234
Daily	10.72	3,810	50%	50%	1,905	1,905

Existing						
ITE LU 720 (10th Edition) – Medical-Dental Office Building						
1,000 SF			**88.786**			
Period	**Trips/Unit**	**Trips**	**% In**	**% Out**	**Trips In**	**Trips Out**
AM Peak	2.78	247	78%	22%	193	54
PM Peak	3.46	307	28%	72%	86	221
Daily	34.80	3,090	50%	50%	1,545	1,545

TABLE 3-25
ESTIMATED EXISTING (2018) MEDICAL/DENTAL OFFICE TRIP GENERATION

Unrelated Existing Medical/Dental Office						
ITE LU 720 (10th Edition) – Medical-Dental Office Building						
1,000 SF			45			
Period	**Trips/Unit**	**Trips**	**% In**	**% Out**	**Trips In**	**Trips Out**
AM Peak	2.78	125	78%	22%	98	28
PM Peak	3.46	156	28%	72%	44	112
Daily	34.80	1,566	50%	50%	783	783

Based on the layout of the facility, it was assumed that 100 percent of the Queen of the Valley medical office building traffic uses the Medical Office Building driveway located along Sunset Avenue between Merced Avenue and Vine Avenue (study intersection #2).

The QVH traffic was assumed to be split between the North Driveway, the East Driveway, and the Vine Avenue/Sunset Avenue intersection. Because volumes were collected at the latter intersection, no adjustments were required. It is also assumed that 100 percent of the unrelated medical/dental office traffic volumes use the same intersection.

For the remaining Hospital traffic, it was assumed that 70 percent enters the site using the North Driveway and 30 percent enters the site via the East Driveway. Exiting traffic is slightly different due to the turning movement restrictions and location of on-site parking, with 75 percent using the North Driveway and 25 percent using the East Driveway.

Would the project:

a) Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?

No Substantial Change from Previous Analysis

Construction Traffic

Construction of the Project would generate temporary trips associated with construction activities, which would begin in 2021 for a period of 18 months for Phase 1A and would begin in 2021 for a period of 19 months for Phase 1B. Construction-related traffic would primarily be associated with delivery of building materials and construction equipment, removal of construction debris, and construction workers commuting to/from the Project site. It is anticipated that construction traffic volumes would be lower than the volumes at completion of the Project; hence, no significant impacts are anticipated from the construction traffic. Additionally, the Project has direct access to two arterial roadways in Merced Avenue and Sunset Avenue, including signalized access at Vine Avenue and Sunset Avenue; therefore, construction traffic would not impact residential areas.

Construction trips would be consistent with the analysis in the Certified Final PEIR, and MM TRA-4 regarding preparation of a Traffic Control Plan (TCP); MM TRA-8 regarding posting

of signs during all phases of construction; and MM TRA-9 regarding parking for construction workers would apply.

Projected Traffic Volumes

Cumulative Growth and Traffic Volumes

The cumulative traffic volumes are the anticipated traffic volumes in a future year without the Project traffic. The anticipated annual growth for the Certified Final PEIR TIS was 1.4 percent per year and was maintained for this TIS for the proposed Project. Exhibit 3-2, 2022 Cumulative Traffic Volumes, shows the anticipated traffic volumes for 2022 without the Project.

Project Traffic Volumes

Project Trip Generation

The anticipated traffic generation for the Project was estimated using the ITE Trip Generation Manual for morning and afternoon weekday peak hour trips. The resulting Project trip generation is shown in Table 3-26. For comparison, note that the Project as evaluated in the Certified Final PEIR TIS was expected to generate 3,625 new daily trips including 291 new AM peak hour trips and 356 new PM peak hour trips.

TABLE 3-26
PROJECT TRIP GENERATION

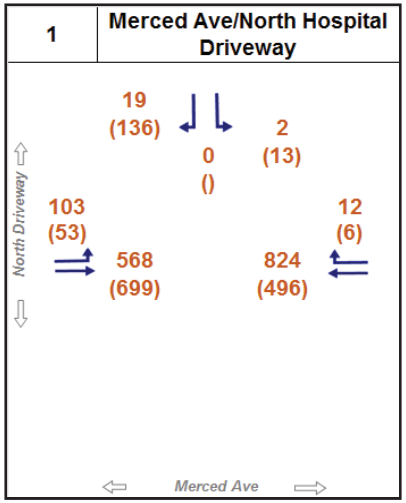
Development Type	Units	Number of Units	Daily	AM		PM	
				In	Out	In	Out
Immediate Improvements							
Hospital area to be demolished	1,000 SF	9	-101	-6	-3	-3	-6
Phase 1A (2022)							
Addition of Hospital uses	1,000 SF	59	631	36	18	18	39
Phase 1B (2022)							
New Medical Office Building	1,000 SF	59	2,049	128	57	57	147
Total New Trips at the End of Phase 1			2,579	158	72	72	179
Source: Psomas 2020.							

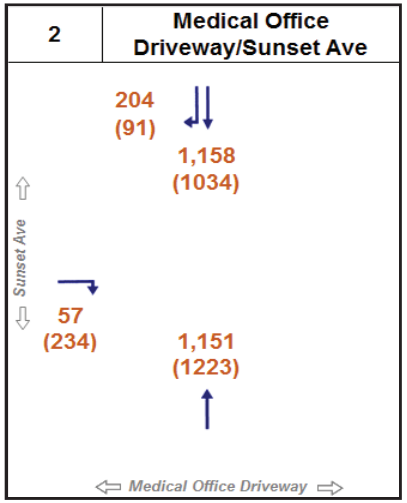
Project Trip Distribution

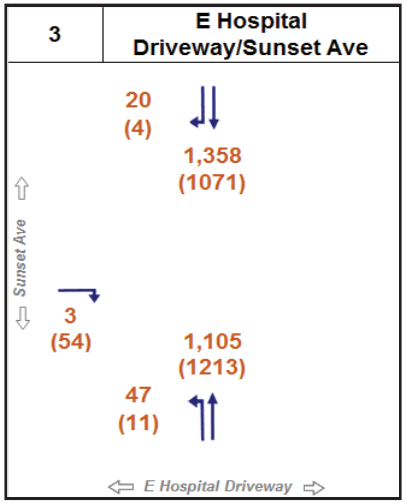
The Project trip distribution is shown in Exhibit 3-3, Project Trip Distribution. The distribution matches what was shown in the Certified Final PEIR TIS to maintain consistency.

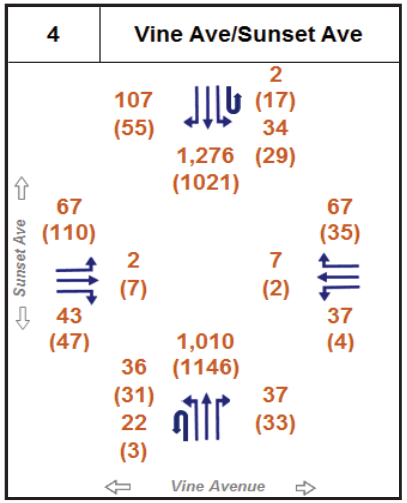
Project Traffic Volumes

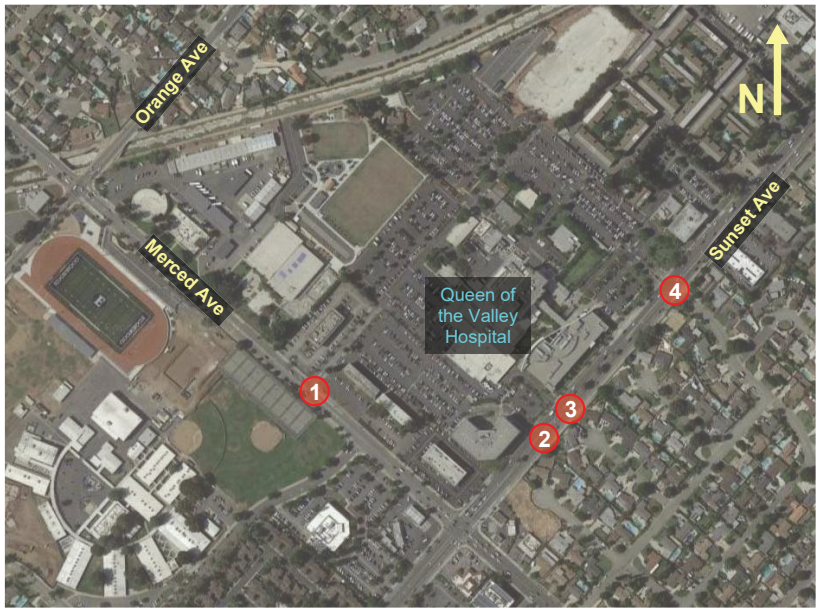
Using the Project trip generation and trip distribution, the Project traffic volumes were calculated and are shown in Exhibit 3-4, Project Traffic Volumes.











LEGEND

xx	AM Peak Hour Traffic Volume (veh/hr)
(xx)	PM Peak Hour Traffic Volume (veh/hr)

Source: Psomas, 2020

2022 Cumulative Traffic Volumes

Exhibit 3-2

Medical Office Building, Parking Structure, Emergency Department/Intensive Care Unit
Addendum to the Certified Final PEIR

PSOMAS

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Source: Psomas, 2020

Project Trip Distribution

Exhibit 3-3

Medical Office Building, Parking Structure, Emergency Department/Intensive Care Unit
Addendum to the Certified Final PEIR

PSOMAS

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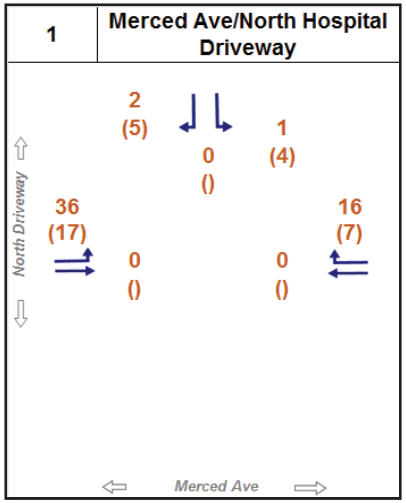

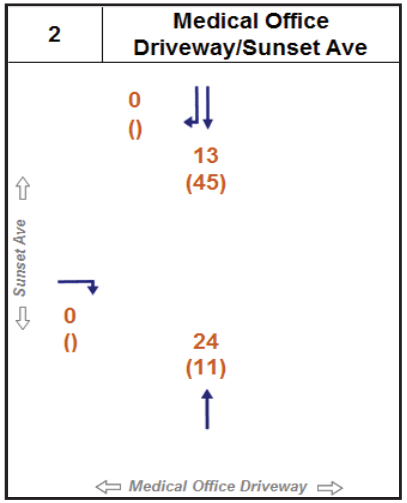

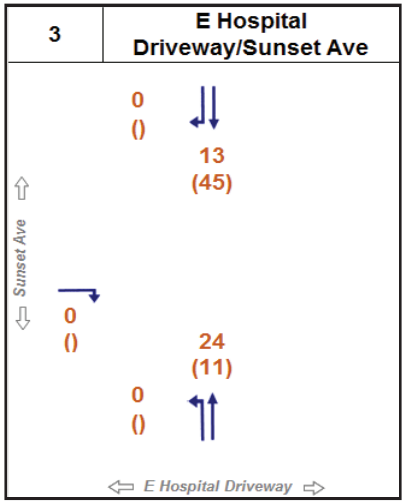

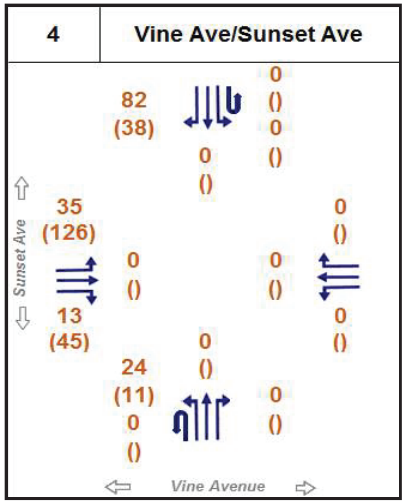

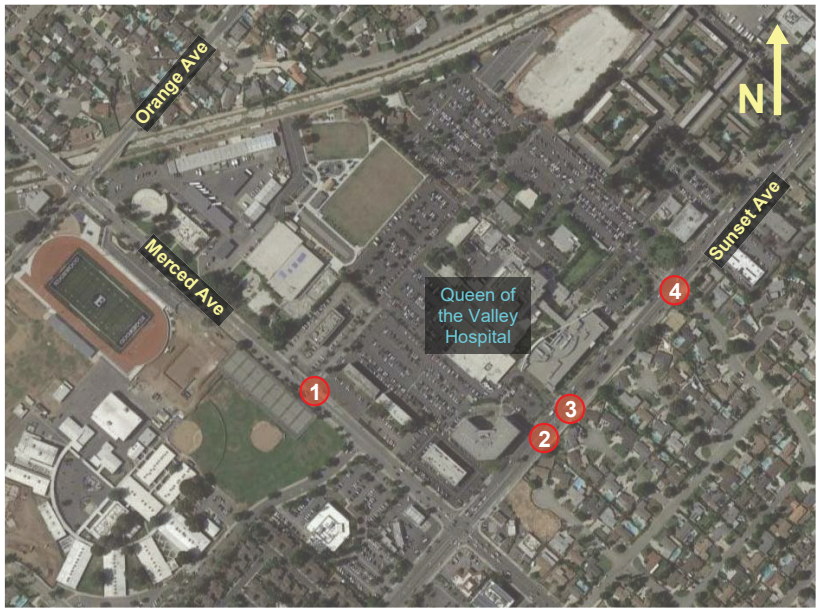

LEGEND

xx	AM Peak Hour Traffic Volume (veh/hr)
(xx)	PM Peak Hour Traffic Volume (veh/hr)

Source: Psomas, 2020

Project Traffic Volumes

Exhibit 3-4

Medical Office Building, Parking Structure, Emergency Department/Intensive Care Unit
Addendum to the Certified Final PEIR

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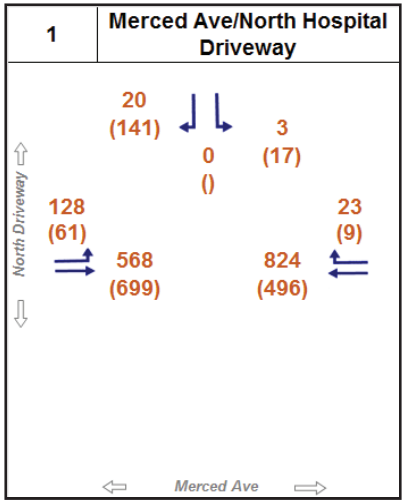
Existing Plus Cumulative Plus Project Traffic Volumes

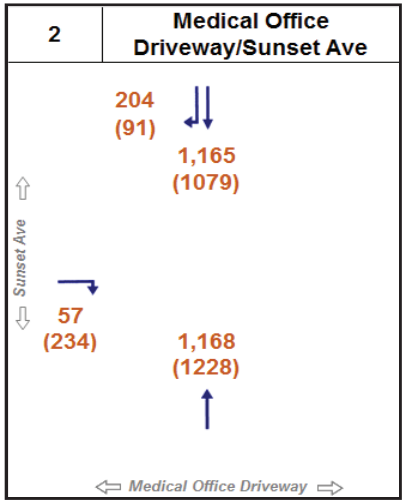
Future traffic volumes with the Project is generally calculated by adding the cumulative growth and Project traffic volumes. However, adjustments had to be made in this case to account for the growth rate assumptions in the West Covina General Plan. The 1.4 percent annual growth rate in the General Plan includes approximately 290,000 square feet of new "commercial" land uses on the QVH site that would be in place by 2035. Details concerning the adjustments can be found in the Certified Final PEIR TIS, and Table 3-27 shows the adjusted Project trips.

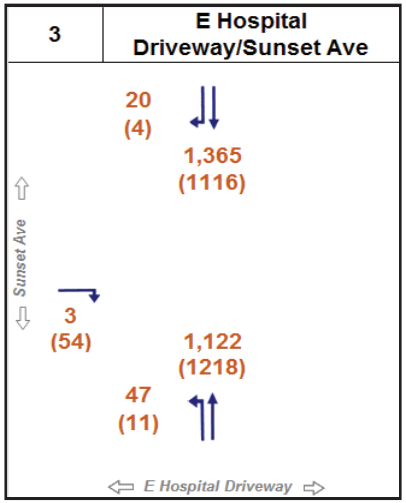
TABLE 3-27
ADJUSTED PROJECT TRIPS

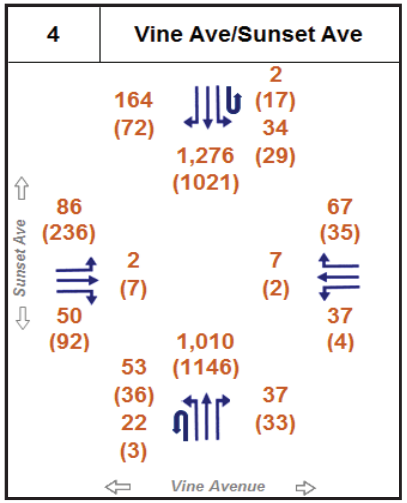
Development Type	Daily	AM		PM	
		In	Out	In	Out
Phase 1 (2022)					
New Project Trips	2,579	158	50	72	179
Estimated General Plan Trips on Project Site	-1,068	-49	-23	-40	-64
Adjusted new site trips at the end of Phase 1	**1,512**	**109**	**27**	**32**	**115**
Source: Psomas 2020					

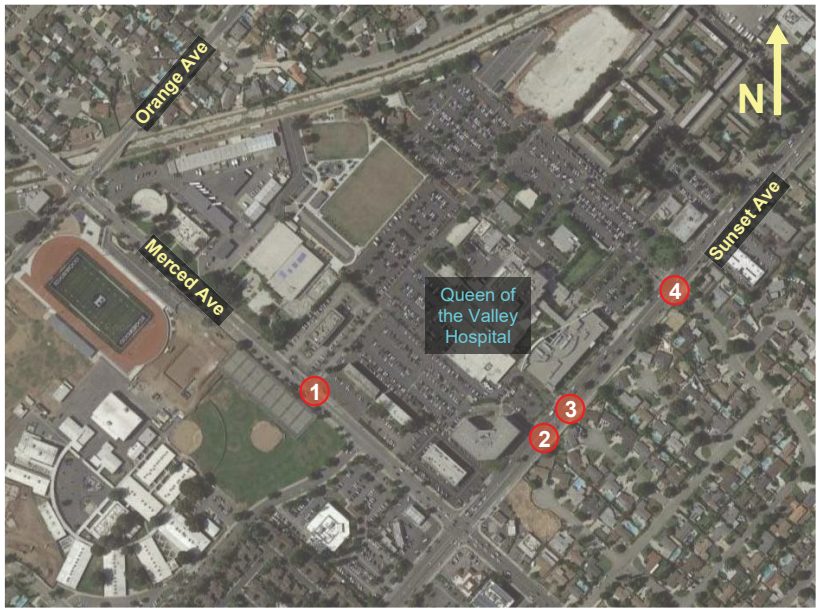
As indicated above, the signalized intersections were evaluated using the ICU methodology and the unsignalized intersections were evaluated using the HCM methodology. Table 3-28, below, shows the resulting LOS for each of the four intersections, which were previously expected to require mitigation in 2022 with the Project. This is shown in Exhibit 3-5.











LEGEND

xx	AM Peak Hour Traffic Volume (veh/hr)
(xx)	PM Peak Hour Traffic Volume (veh/hr)

Source: Psomas, 2020

Existing Plus Cumulative Plus Project Traffic Volumes (2022)

Exhibit 3-5

Medical Office Building, Parking Structure, Emergency Department/Intensive Care Unit
Addendum to the Certified Final PEIR

PSOMAS

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TABLE 3-28
EXISTING + CUMULATIVE + PROJECT SIGNIFICANT IMPACTS

Intersection	Existing Plus Interim Year 2022						Existing Plus Interim Year 2022 Plus Project Phases 1A and 1B						Increase in Delay (E or F only)		Increase in V/C		Significant Impact?	
	AM Peak Hour			PM Peak Hour			AM Peak Hour			PM Peak Hour								
	Delay	V/C	LOS	Delay	V/C	LOS	Delay	V/C	LOS	Delay	V/C	LOS	AM	PM	AM	PM	AM	PM
Cameron Ave/ Sunset Ave		0.840	D		0.767	C		0.860	D		0.794	C			0.02	0.03	YES	NO
Merced Ave/ Dalewood St/Garvey Ave	51.9		F	30.2		D	55.3		F	31.9		D	3.4	N/A			YES	NO
Merced Ave/ California Ave		1.012	F		1.007	F		1.024	F		1.019	F			0.01	0.01	YES	YES
Cameron Ave/ Orange Ave		0.889	D		0.889	D		0.900	E		0.893	D			0.01	0.00	NO	NO

As seen in the table, three of the intersections, consistent with the analysis in the Certified Final PEIR, are still expected to have significant impacts with the proposed Project. The intersection of Cameron Avenue and Orange Avenue would no longer require mitigation at the completion of Phase 1 of the overall QVH improvements/expansions.

The recommended improvements for Cameron Avenue/Sunset Avenue; Merced Avenue/Dalewood Street/Garvey Avenue; and Merced Avenue/California Avenue intersections are identified in mitigation measure (MM) TRA-1, above, consistent with the Final Certified PEIR.

Site Driveway Analysis

Queuing

As previously discussed, the TIS includes an evaluation of anticipated queuing at the Project access locations to ensure that Project traffic does not interfere with other traffic in the area. The anticipated 95th percentile queues were taken from Synchro. The 95th percentile queues are only exceeded 5 percent of the time and are typically used to determine turn lane storage needs. The queues for the turn lanes are shown in Table 3-29 along with the existing turn lane storage. The Synchro reports are included in Appendix B of the TIS (Appendix F of this Addendum).

TABLE 3-29
95TH PERCENTILE QUEUES WITH PROJECT (FEET)

Scenario		2022 + Project		
Peak Hour		AM	PM	Storage
Merced Ave and North Driveway	SE LT (Merced Avenue)	13	5	N/A*
	SW LT-RT (Driveway)	3	25	140**
Medical Office Driveway and Sunset Avenue	SW RT (Driveway)	15	95	110**
East Driveway and Sunset Avenue	NE LT (Sunset Avenue)	10	0	95
	SW RT (Driveway)	0	13	160**
Vine Ave and Sunset Avenue	NE LT (Sunset Avenue)	65	27	140
	SW LT (Sunset Avenue)	27	38	140
	SE LT (Vine Avenue)	44	115	125**
	SE RT (Vine Avenue)	23	31	125**

Source: Psomas 2020.
*Two-Way Left Turn Lane
**Distance is to nearest driveway or turn in driveway throat.

As seen in the table, above, all of the queues would be adequately served by the existing turn lane storages. Therefore, no improvements are required.

Fair Share Contribution

It is anticipated that the Project would contribute its fair share towards the cost of the mitigation measures for the intersections listed above. The Project fair share was calculated for each of the intersections requiring mitigation based on the Caltrans methodology for equitable mitigation measures, which indicates that the fair share percentage is equal to the percentage of total new trips, which are generated by the Project.

Table 3-30 shows the Project fair share contribution; for instances where an intersection has impacts in both peak hours, the fair share is assumed to be an average of the two peak hour calculations. If the significant impact is only in one peak hour, the fair share contribution for the intersection is equal to the percentage calculated for the affected peak hour. The table also includes the fair share percentage that was calculated for the three intersections in the Certified Final PEIR TIS for reference. As the Project is reduced in size and would therefore generate less traffic than originally expected, the fair share responsibility for the Project has also decreased proportionally.

TABLE 3-30
PROJECT FAIR SHARE CONTRIBUTION

Intersection	AM Peak Hour	PM Peak Hour	Fair Share	Fair Share in Certified Final PEIR
Cameron Ave/Sunset Ave	27%	33%	30%	41%
Merced Ave/Dalewood St/Garvey Ave	32%	N/A	32%	43%
Merced Ave/California Ave	17%	18%	18%	25%

Parking

The trip-generating land uses analyzed within the Certified Final PEIR required implementation of several mitigation measures. The proposed Project implements MM TRA-5, which requires that prior to completion of Approved Project Phase 1 improvements, the QVH shall provide 85 parking spaces for the new/expanded Emergency Department, either as surface parking or on the ground level of the nearest planned parking structure. The Project would accommodate parking for existing and proposed uses at the QVH campus, as required by MM TRA-6. The Parking Structure proposed in Phase 1A would be completed and open prior to completion of construction activities for Phases 1A and 1B, as required by MM TRA-7, to ensure adequate parking for operation of Phases 1A and 1B. Additionally, MM TRA-10, regarding providing information to employees about carpooling and ridesharing that would help reduce parking demand, would apply. Therefore, the Project would not create a new significant impact pertaining to parking that was not previously analyzed, and no new mitigation measures are required.

Additionally, consistent with the Approved Project, implementation of the proposed Project would not create a demand for alternative transportation systems and would not affect public

transit services. No demand for public transit, bicycle, or pedestrian facilities would be created by the Project since there would be no change to land uses in the Project area. Therefore, the proposed Project would not create a new significant impact pertaining to conflict with alternative transportation systems that was not previously analyzed, and no new mitigation measures are required.

b) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?

No Substantial Change from Previous Analysis. Section 15064.3(b)(1) of the State CEQA Guidelines refers to evaluating transportation impacts using vehicle miles traveled (VMT) for land use projects. Generally, VMT is the most appropriate measure of transportation impacts, and it refers to the amount and distance of automobile travel attributable to a project. The City of West Covina recently adopted the use of Vehicle Miles Traveled (VMT) analysis methodology for evaluating potential traffic impacts for development projects.

While the MOB and ED/ICU are land use projects, the PS component of the Project is not a land use project; it is rather a short-term, construction-based activity and would not generate any long-term change in traffic conditions.

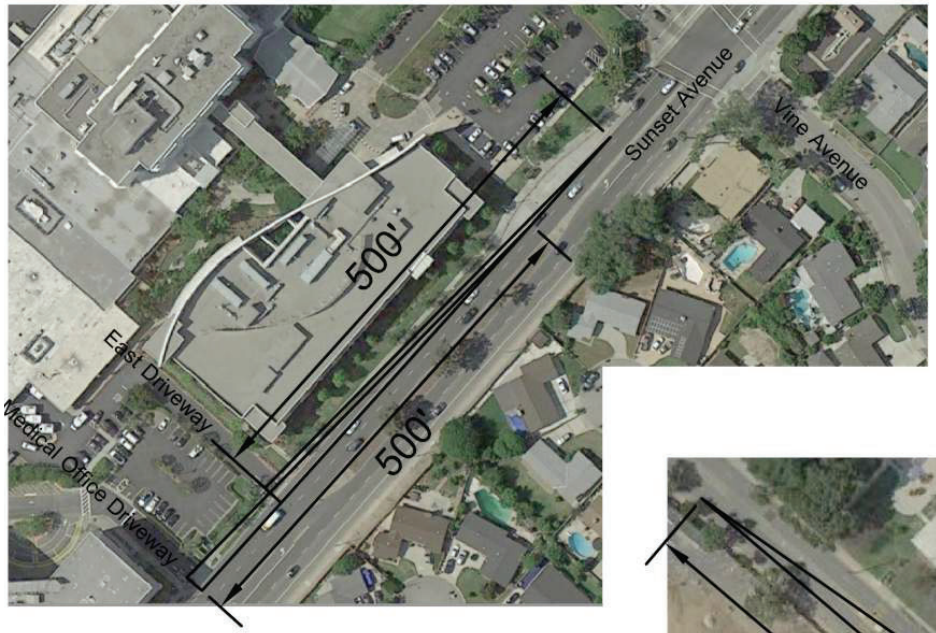
The proposed Project is smaller in scope than what was originally evaluated in the Certified Final PEIR and is considered to be consistent with the previous analysis as part of the Approved Project. In light of the consistency and per direction from the City of West Covina, VMT analysis is not required for the proposed Project. As such, the Project would not conflict or be inconsistent with Section 15064.3(b) of the State CEQA Guidelines. Therefore, the proposed Project would not create a new significant impact that was not previously analyzed, and no mitigation measures are required.

c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses?

Consistent with the analysis in the Certified Final PEIR, the proposed Project site and immediate surrounding area do not contain any roadway or other design features, which are or would produce significant traffic hazards.

Per the scoping agreement, the sight distance for both driveways was evaluated using the requirements in the California Highway Design Manual. Per the requirements of the manual, the corner sight distance is longer than the stopping sight distance for both Merced and Sunset Avenues, which have a posted speed of 40 mph. Exhibit 3-6, Site Visibility Triangles, depicts the sight visibility triangles for all three driveways.

As seen in the figure, on-street parking should continue to be prohibited along the frontage of the Project site on Sunset Avenue from the Medical Office Driveway to Vine Avenue. The same is true for the northeast side of Merced Avenue. The Project would not change the existing geometric design within the area. Additionally, for all three driveways, the sight distance triangles are free of objects except for an existing bus shelter; therefore, visibility would not be impeded by Project implementation. Therefore, the proposed Project would not create a new significant impact pertaining to site geometry that was not previously analyzed, and no mitigation measures are required.



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Source: Psomas, 2020

Sight Visibility Triangles

Exhibit 3-6

Medical Office Building, Parking Structure, Emergency Department/Intensive Care Unit
Addendum to the Certified Final PEIR

PSOMAS

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d) Result in inadequate emergency access?

No Substantial Change from Previous Analysis. The QVH in general and the Project site in particular have sufficient regional access given that the Hospital is located adjacent to two major roadways and has relatively direct freeway access to I-10 Freeway.

At the local level, emergency vehicles can access the site at two points, the main hospital entrance at Sunset Avenue/Vine Street and a secondary access on Merced Avenue at the northwest corner of the campus. In light of the nature of the Project, which includes the proposed ED/ICU, it is critical to provide adequate and swift emergency vehicle (i.e., ambulance, fire, and police) access into the campus and to the Project site. As indicated above and consistent with the Approved Project, emergency vehicles can sufficiently access the site at two points. Therefore, the Project would not create a new significant impact pertaining to emergency access that was not previously analyzed, and no mitigation measures are required.

Conclusion

The transportation impacts of the proposed Project would be consistent with the impacts identified for the Approved Project, analyzed in the Certified Final PEIR. The proposed Project would not create a new significant impact or a substantial increase in the severity of previously identified effects. In regard to Section 15162 of the State CEQA Guidelines, (1) no substantial changes are proposed as part of the proposed Project that would result in new significant effects or an increase in severity of previous effects; (2) no substantial changes in circumstances have occurred that would result in new significant effects; and (3) no new information has become known that was not previously known that would (a) create new significant impacts, (b) increase the severity of previously examined effects, or (c) determine that mitigation measures or alternatives previously found not to be feasible would, in fact, be feasible; or (4) introduce mitigation measures that are considerably different from those analyzed in the Certified Final PEIR. For these reasons, no major revisions to the transportation analysis provided in the Certified Final PEIR nor to the MMRP are required.

3.18 TRIBAL CULTURAL RESOURCES

Certified Final PEIR Environmental Review

The Certified Final PEIR identified that the Approved Project could potentially result in an impact to unknown tribal cultural resources. However, it was concluded that implementation of MMs CUL-1 through CUL-5 and TCR-1 through TCR-2 would reduce the impact to a less than significant level, consistent with PlanWC policies and actions.

Additionally, it was identified that there are no known historical sites within the Hospital campus or in the immediately surrounding area. Therefore, the proposed Project would not result in any impacts on the closest historic property, located within a half mile of the Hospital campus.

Regarding archaeological resource as defined in Section 15064.5, the Certified Final PEIR indicated that even though there are no known archaeological sites located within the QVH area or in the immediately surrounding area and the potential for grading to have significant impacts on archaeological resources is considered low, there is a possibility that unknown archaeological artifacts or resources would be encountered during grading. As such MMs CUL-1 through CUL-3 were proposed to reduce the impacts to less than significant level.

In terms of paleontological resources, it was indicated that according to the *PlanWC's* Resource Conservation Element, soils and geologic formations within the City, including the QVH campus, have a low potential to contain significant paleontological resources. Searches of databases identified that no fossil localities have been previously recorded within one mile of the site. Although not anticipated to be discovered, it would be possible that grading in older alluvial materials (i.e., Quaternary) could impact previously undiscovered paleontological resources. As such, MM CUL-4 was proposed to reduce the potential impact to less than significant.

Lastly, the analysis in the Certified Final PEIR indicated that if human remains are found, state law requires proper treatment for the remain in accordance with applicable regulations. Section 7050.5 of the *California Health and Safety Code* describes the protocols to be followed in the event that human remains are accidentally discovered during excavation of a site. In addition, the requirements and procedures set forth in Section 5097.98 of the *California Public Resources Code* would be implemented. Although there was no indication that human remains would be present, it was stated that grading would have the potential to unearth previously undiscovered human remains. As such MM CUL-5 was proposed to reduce the potential impact to less than significant level.

Mitigation Measures

MM TCR-1 Prior to the start of grading for each phase of the Project, the Queen of the Valley Hospital shall enter into a Cultural Resources Monitoring Agreement with qualified Tribal representatives, and that a professional archaeological monitor meeting Secretary of Interior standards has been retained to conduct monitoring of all grading activities and has the authority to temporarily halt and redirect earthmoving activities in the event that suspected archaeological resources are unearthed during Project construction. The Project Archaeologist and Tribal representatives shall attend any pre-grading meetings with the City and

contractors to explain and coordinate the requirements of the monitoring program for each phase of Project work as appropriate. **(Applicable)**

MM TCR-2 During all Project-related grading activities, the City, Queen of the Valley Hospital representatives, Project Archaeologist, and the Tribal representative(s) shall be allowed to monitor and have received a minimum of 30 days advance notice of all grading and trenching activities. The Project Archaeological Monitor shall observe all mass grading and trenching activities per the Cultural Resources Monitoring Agreement. If the Tribal representatives suspect that an archaeological resource may have been unearthed, the archaeologist, in consultation with the tribal representative, shall immediately halt and redirect grading operations in a 100-foot radius around the find to allow identification and evaluation of the suspected resource. In consultation with the appropriate Native American Tribe(s), the archaeological monitor shall evaluate the suspected resource and make a determination of significance pursuant to California Public Resources Code Section 21083.2. **(Applicable)**

See Cultural Resources for Mitigation Measures CUL-1 through CUL-3 and CUL-5.

Proposed Project Impact Analysis

Environmental Issues	New Significant Impact	More Severe Impacts	New Ability to Substantially Reduce Significant Impact	No Substantial Change From Previous Analysis
TRIBAL CULTURAL RESOURCES – Would the project:				
a) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 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.	☐	☐	☐	☑

Analysis of impacts to tribal cultural resources is required for projects requiring a publicly circulated CEQA document, such as an EIR, MND, or ND. The present Addendum does not require circulation for public review; thus, analysis of impacts to tribal cultural resources is not required here. However, for informational purposes, an analysis is provided below.

Would the Project:

Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 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:

a) 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)?

No Substantial Change from Previous Analysis. The Project site consists of existing buildings and uses and has been disturbed. Consistent with the Certified Final PEIR, the California Register of Historic Places (CRHP) database does not indicate any archaeological or historic resources within West Covina; however, the City has listed 31 built structures, which it considers historically significant in a survey commissioned by the City (City of West Covina 2019). These resources are considered eligible to be listed on the CRHP based on local significance. Of these 31 structures, one property, 1127 West Merced Avenue, is located within a half mile of the Proposed Project area. None of these structures are within or immediately adjacent to the Project site, so criteria (a) under Threshold 15.1 is not met; therefore, no new significant impacts that was not previously analyzed would occur in this regard, and no mitigation is required.

b) 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.

No Substantial Change from Previous Analysis. Consistent with the Certified Final PEIR and as discussed above in Section 3.5, Cultural Resources, the potential for the proposed Project-related grading to have significant impacts on archaeological and paleontological resources is considered low. However, the proposed construction activities could potentially disturb native soils, and therefore, archaeological or tribal cultural resources may be uncovered at the site. Although the likelihood of encountering archaeological and paleontological resources in the APE is considered low, the *California Health and Safety Code* and the *California Public Resources Code* describes procedures for monitoring and protocols to be followed in the event that archaeological and/or tribal cultural resources are discovered during construction activities. As such, MMs CUL-1, MM CUL-2, MM CUL-3, MM TCR-1, and MM TCR-2 would ensure impacts would be less than significant. Therefore, the Project would not create a new significant impact related to tribal cultural resources that was not previously analyzed, and no new mitigation measures are required.

Conclusion

The tribal cultural resources impacts of the proposed Project would be consistent with the impacts identified for the Approved Project, analyzed in the Certified Final PEIR. The proposed Project would not create a new significant impact or a substantial increase in the severity of

previously identified effects. In regard to Section 15162 of the State CEQA Guidelines, (1) no substantial changes are proposed as part of the proposed Project that would result in new significant effects or an increase in severity of previous effects; (2) no substantial changes in circumstances have occurred that would result in new significant effects; and (3) no new information has become known that was not previously known that would (a) create new significant impacts, (b) increase the severity of previously examined effects, or (c) determine that mitigation measures or alternatives previously found not to be feasible would, in fact, be feasible; or (4) introduce mitigation measures that are considerably different from those analyzed in the Certified Final PEIR. For these reasons, no major revisions to the tribal cultural resources analysis provided in the Certified Final PEIR nor to the MMRP are required.

3.19 UTILITIES AND SERVICE SYSTEMS

Certified Final PEIR Environmental Review

The Certified Final PEIR identified that the Approved Project would incrementally increase demand for wastewater treatment services with completion of each of the four phases of the Specific Plan. Implementation of the Approved Project would comply with applicable Sanitation Districts of Los Angeles County (LACSD) requirements and would not exceed wastewater treatment requirements of the LARWQCB. Impacts would be less than significant and no mitigation required.

Additionally, it was identified that the Approved Project would require the construction of new water, recycled water, and sewer lines on site. However, no off-site improvements would be needed. Construction of infrastructure improvements within and immediately adjacent to the QVH area would result in short-term impacts related to air quality and traffic. These impacts were addressed in the Certified Final PEIR. Further, MMs UTL-1 through UTL-3 were proposed to ensure water, sewer, and landscape plans would be in compliance with applicable City municipal codes and plans.

Furthermore, it was determined that the Approved Project would not require the construction of new storm water drainage facilities or expansion of existing facilities. The storm water runoff from the Approved Project site would not exceed the capacity of the storm drain system, and no infrastructure improvements would be required beyond the installation of onsite storm drain facilities. In addition, LID and BMP systems would be implemented to ensure water quality standards and storm water runoff would not exceed capacity of the existing storm drains. Impacts would be less than significant and no mitigation required.

In addition, the analysis identified that the Approved Project's increased demand for water Would be met by Suburban Water Systems through 2040. Any future development meeting the applicable requirements would comply with the City's water conservation requirements (MMs UTL-3 and UTL-4). Thus, impacts would be less than significant with implementation of the above mitigation measures. The Approved Project would not require off-site improvements in regard to wastewater treatment. Wastewater generated by non-residential and associated uses would be treated at the San Jose Creek Water Reclamation Plant, which had available treatment capacity. Impacts would be less than significant and no mitigation required.

Further, the Approved Project would result in generation of solid waste during construction and operation. The Approved Project site would be accommodated by the Victorville Sanitary Landfill with an anticipated closure date of October 1, 2047 and available capacity for the QVH's short-term construction and demolition waste as well as on-going operational waste. Impacts would be less than significant, and no mitigation was required. Lastly, construction and operation associated with implementation the Approved Project would be conducted in compliance with applicable statutes and regulations related to solid waste, as described in the Certified Final PEIR. Implementation of MMs UTL-4 and UTL-5 would ensure impacts would be less than significant.

Mitigation Measures

MM UTL-1 Water and sewer plans shall be designed and constructed to meet the applicable requirements of Suburban Water Systems and City of West Covina Municipal Code. Approval of the plans by the Suburban Water Systems shall be required prior to final map approval or issuance of permits, whichever occurs first. **(Applicable)**

MM UTL-2 Landscaping associated with future development in the Queen of the Valley Hospital Specific Plan (QVHSP) area shall be implemented in compliance with Section 26-515, *Landscape Criteria,* of the City of West Covina Development Standards, which sets landscape standards and water conservation requirements. In addition, all landscape areas and irrigations systems shall be subject to the water efficiency provisions contained in Division 1, of Article XIV of Chapter 26 of the Municipal Code, and the Planning Commission Guidelines for Water Efficient Landscaping, unless otherwise exempted. and Section 26.750 of the West Covina Municipal Code includes the requirements and standards of the Model Water Efficient Landscape Ordinance or MWELO. **(Applicable)**

MM UTL-3 Landscape plans prepared for future development in the QVHSP area shall be developed in compliance with Section 26.708, *Landscape Plans*, of the City of West Covina Development Code, which requires final map landscaping plans including planting design and an irrigation system to be prepared by a licensed landscape architect and submitted by the applicant for review and approval by the planning director or duly authorized representative. **(Applicable)**

MM UTL-4 Demolition and construction activities during implementation of the Queen of the Valley Hospital Specific Plan shall be conducted in compliance with requirements of Chapter 7, Article XVI, *Waste Reduction, Reuse and Recycling of Construction and Demolition Debris*, of the West Covina Municipal Code, which requires diversion of construction waste into landfills for every "covered project" as set forth in section 7-261(a) and (b). Construction and demolition wastes shall be made available for deconstruction, salvage, and recovery prior to demolition. Further, demolition and construction waste requires the recycling or salvage for re-use of a minimum of 65 percent of the construction and demolition debris in compliance with State and local statutory goals and policies. Prior to permit issuance, the Project applicant shall submit a "Waste Diversion Plan" shall be submitted to the Department of Public Works. The Project Applicant may be exempt from meeting the 65 percent diversion requirement if the applicant uses the city franchised hauler/collector pursuant to section 12-17 of the West Covina Municipal Code and provides the completed documentation as required by Section 7-262 including receipts and/other documentation from the waste hauler/collector bearing the name(s) of the City of West Covina franchised hauler/collector. **(Applicable)**

MM UTL-5 Development in the QVHSP area shall comply with Chapter 12, *Garbage and Rubbish Collection*, of the West Covina Municipal Code, which requires that collection and disposal of refuse, recyclables or green waste shall only be conducted by entities contracted by the City to do so (either through its own

employees or through an entity under exclusive franchise with the City), as identified in the Municipal Code. In addition, the Project shall comply with Article III, *Trash Enclosure District,* of the West Covina Municipal Code, outlining the regulations pertaining to proper storage and disposal of solid waste in commercial areas of the City. **(Applicable)**

Proposed Project Impact Analysis

Environmental Issues	New Significant Impact	More Severe Impacts	New Ability to Substantially Reduce Significant Impact	No Substantial Change From Previous Analysis
UTILITIES AND SERVICE SYSTEMS – Would the project:				
a) Require or result in the relocation or construction of new or expanded water, or wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications 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 provider's existing commitments?	☐	☐	☐	☑
d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	☐	☐	☐	☑
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	☐	☐	☐	☑

Would the Project:

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, the construction or relocation of which could cause significant environmental effects?

No Substantial Change from Previous Analysis.

Water Infrastructure

Domestic Water and Sewer

Water service for the Project would be provided by Suburban Water Systems. Approximately 80 percent of water from Suburban Water Systems is supplied from wells within the San Gabriel Valley and Central Basins. The proposed Project uses would be served by a new domestic water lateral connected to the existing 12-inch public water line in Sunset Avenue. The proposed

central plant would be serviced by a new domestic water line that would run from the central plant southwest in the access road and connect to the existing public 12-inch water line in Merced Avenue. Each new domestic water lateral would require a meter as it comes off the public mainline. The proposed MOB, PS, ED/ICU would be served by a new fire water lateral connected to the existing 12-inch public water line in Sunset Avenue.

Physical impacts related to installation of onsite infrastructure are addressed as part of the Project. The primary environmental impacts associated with onsite infrastructure installation and adjacent connections to existing facilities would be related to air quality and traffic, as this component of construction mainly involves grading, excavation, and movement and placement of the infrastructure materials. Implementation of MM UTL-1 would address potential significant impacts associated with construction of utilities. MM UTL-1 requires that water and sewer plans be designed and constructed to meet the applicable requirements of Suburban Water Systems and the City's Municipal Code, with plans approved by Suburban Water Systems prior to final map approval or issuance of permits.

Water used for irrigation and landscape purposes would comply with Section 26-515, Landscape Criteria of the City of West Covina Development Standards Article XIV, Division 1, Water Efficient Landscaping, of the Development Code, which includes landscape design guidelines that would reduce irrigation demands, promote recycled water use, and minimize irrigation runoff. In addition, Section 26-750 of the West Covina Municipal Code includes requirements and standards of the Model Water Efficient Landscape Ordinance (MWELO), as required through implementation of MM UTL-2 from the Certified Final PEIR. Preliminary and final landscape and irrigation plans are required to be prepared as part of the design review process for compliance with standards and approved by the Community Development Director or his/her designee. Further, all landscape areas and irrigations systems would be subject to the water efficiency provisions contained in Division 1, of Article XIV of Chapter 26 of the Municipal Code, and the Planning Commission Guidelines for Water Efficient Landscaping, unless otherwise exempted (refer to MM UTL-2 and MM UTL-3). Impacts would be less than significant for domestic water infrastructure with implementation of MMs UTL-1 through UTL-3 from the Certified Final PEIR.

The proposed MOB, PS, ED/ICU Project would be served by a new sewer lateral connecting to the existing 8-inch sewer lateral in the southeast half of the site. While new water and sewer infrastructure are constructed on site, no off-site improvements would be necessary. Final water and sewer plans would be designed, and infrastructure installed in compliance with applicable requirements of the Suburban Water Systems, LACSD, West Covina Municipal Code, and Development Standards of the QVHSP in compliance with West Covina Development Standards, per MM UTL-1. A letter of compliance from Suburban Water Systems would be required to show compliance of proposed water and sewer infrastructure plans with Suburban Water Systems requirements. The impact of the proposed Project related to additional demand for domestic water and the generation of additional wastewater would be less than significant with mitigation. No new mitigation is required.

The wastewater collection system would be designed to provide adequate capacity to transmit the estimated flows. Additionally, with incorporation of the City standard requirements related to wastewater generation, the Projects' impacts on wastewater generation would be less than significant with mitigation. Therefore, the Project would not create a new significant impact pertaining to domestic water and sewer that was not previously analyzed, and no new mitigation measures are required.

Storm Drainage

The proposed Project would maintain the existing drainage patterns. According to the FEMA Flood Insurance Rate Map (FIRM) map number 06037C1700F, the site is outside of the 100-year flood plain and in an area of 0.2 percent annual chance of flood. Structural or Treatment Control BMPs are required for the proposed Project under the SUSMP conditions assigned by the City. Volume-based or flow-based design standards may be used separately or in combination. Volume-based criteria are used in the sizing of detention or infiltration structures while flow-based criteria are used on swales, catch basin devices or wetlands. The SUSMP requirements, approved by the RWQCB, call for the treatment of the peak mitigation flow rate or volume of runoff produced by a 0.75 inch 24-hour rainfall event. Various stormwater treatment facilities would be provided throughout the site to capture and treat stormwater runoff from the site.

As identified in Section 3.10, Hydrology and Water Quality, the Project site is already fully improved with impervious surfaces. While the proposed Project would increase impervious areas on the site, the proposed storm drainage system would reduce the off-site flows through the use of onsite LID and BMP systems that would generally be sized to handle the two-year water quality storm event, per County requirements including, hydrologic source-control, infiltration, and biorientation systems. Therefore, the proposed Project would not require construction of a new storm water drainage facility or expansion of existing facilities that would result in significant impacts. The storm water runoff from the Project site would not exceed the capacity of the storm drain system, and no infrastructure improvements would be required beyond the installation of onsite storm drain facilities.

An infrastructure plan would be prepared to ensure that essential services and systems would have enough capacity and would be available in time for implementation of the new facilities. The design of new site improvement and buildings would comply with the Los Angeles County storm water quality management program and LID ordinance. Infiltration systems that treat and percolate storm water to recharge the local aquifer would be highly prioritized, followed by storm water capture and reuse and high-removal-efficiency biofiltration.

Construction activities associated with the proposed onsite storm drain facilities would be within the physical impact area identified for the proposed Project. No additional impacts associated with construction of onsite storm drains or connections to existing facilities would occur. Therefore, the Project would not create a new significant impact pertaining to storm drainage that was not previously analyzed, and no new mitigation measures are required.

Electricity

Southern California Edison (SCE) currently provides electricity to the City of West Covina, including the Project site (SCE 2020). The Project's projected electricity usage is shown in Table 3-10, Energy Use During Operations. Electrical service to the Project site would be provided in accordance with SCE's policies and extension rules on file with the California Public Utilities Commission (CPUC). Therefore, a significant impact related to the need for new systems or supplies or substantial alterations related to electricity would not occur. Additionally, the Project Applicant will coordinate with SCE to ensure avoidance of any notable service disruptions during the extension of, relocation of, upgrade of, or connection to services. Therefore, the Project would not create a new significant impact pertaining to electricity that was not previously analyzed, and no new mitigation measures are required.

Natural Gas

The Southern California Gas Company (SCGC) currently provides natural gas service to the City of West Covina, including the Project site (SCGC 2020). The Project's projected natural gas usage is shown in Table 3-10, Energy Use During Operations. The service would be provided in accordance with SCGC's policies and extension rules on file with the CPUC. Therefore, a significant impact related to the need for new systems or supplies or substantial alterations related to natural gas would not occur. Additionally, the Project Applicant would coordinate with SCGC to ensure avoidance of any notable service disruptions during the extension of, relocation of, upgrade of, or connection to services. Therefore, the Project would not create a new significant impact pertaining to natural gas that was not previously analyzed, and no new mitigation measures are required.

Telecommunications

Verizon provides telecommunications service to the area, including the Project site. The service would be provided in accordance with Verizon's policies and extension rules on file with the CPUC. Therefore, a significant impact related to the need for new systems or supplies or substantial alterations related to telecommunications would not occur. Additionally, the Project Applicant would coordinate with Verizon to ensure avoidance of any notable service disruptions during the extension of, relocation of, upgrade of, or connection to services. Impacts to telecommunications are considered less than significant, and mitigation is not required.

Therefore, the Project would not create a new significant impact pertaining to relocation or construction of new or expanded water, wastewater, stormwater, electric power, natural gas or telecommunication facilities that were not previously analyzed, and no new mitigation measures are required.

b) Have sufficient water supplies available to serve the Project and reasonably foreseeable future development during normal, dry and multiple years?

No Substantial Change from Previous Analysis.

Projected Water Demand

As detailed in the Certified Final PEIR, the existing hospital (1.1 million square feet) has 1,687 staff and 160 patients per day (based on 58,400 annual patients) for a total of 1,847 persons per day at the existing hospital use. If each person consumed 150 gallons per day, the existing Hospital uses would consume approximately 277,050 gallons per day. The demand from the proposed Project was included within the assumptions of the Certified Final PEIR. The Certified Final PEIR included increases in the Hospital's square footage by 45 percent, so the Project's estimated consumption (assuming 45 percent of 277,050 gallons) would be 124,673 gallons per day. The threshold for a preparing a project-level Water Supply Assessment is 500 homes, based on a 2.5 persons per unit at 500 units and an individual consumption rate of 150 gallons per day. Using this rate, this projected estimated consumption for the Project would be well below the amount for 500 homes as estimated at 187,500 gallons per day or 68.4 million gallons per year (based on 2.5 persons per unit at 500 units and an individual consumption rate of 150 gallons per person per day). Therefore, no Water Supply Assessment was required for the QVHSP, and no Water Supply Assessment is required for the proposed Project.

The 2016 UWMP indicates that the Suburban Water Systems would have adequate water supplies to meet demands during normal, single-dry, and multiple-dry years to 2040 (City of West Covina 2019). Further, compliance with the City's water conservation requirements MM UTL-3 and MM UTL-4 regarding water efficient landscaping and irrigation systems and water conservation measures in the CALGreen Code, and water efficiency guidelines within the QVHSP would also reduce water demand. Thus, with implementation of the above mitigation measures, the potential impact on water supplies would be less than significant. No new mitigation is required.

Projected Supplies

Suburban Water Systems has historically met all of its water demands through various water supply sources available (groundwater, imported water, purchased water, and recycled water) to meet demands during normal, single-dry, and multiple-dry years. Primary sources of groundwater water supplying the Suburban's service area are from the Main Basin and the Central Basin. Both basins are managed under adjudications and are anticipated to support the same levels of water through 2040. As of 2015, Suburban Water Systems water supply portfolio for the San Jose Hills region was comprised of approximately 70 percent purchased or imported water (17,066 af), 26 percent self-produced groundwater (6,304 af), and 4 percent recycled water (743 af). This supply mix would remain consistent through 2040, which is sufficient to meet future projected potable water demands within its system, including the demand from the Project (City of West Covina 2019).

Suburban Water Systems has available water supplies to meet the water demands of the Approved Project through 2040, including demands during normal, single dry and multiple dry years (City of West Covina 2019). The Project would be required to comply with MM UTL-1, which requires water and sewer plans be designed and constructed to meet the applicable requirements of the Suburban Water Systems and City's Municipal Code. As such, the Project would not create a new significant impact pertaining to sufficient water supplies that was not previously analyzed, and no new mitigation measures are required.

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 provider's existing commitments?

No Substantial Change from Previous Analysis. While new water and sewer infrastructure would be constructed on site for the Project, no off-site improvements are necessary. Final water plans would be designed, and infrastructure would be installed in compliance with applicable requirements of the Suburban Water Systems, LACSD, West Covina Municipal Code, and Development Standards of the QVHSP in compliance with West Covina Development Standards (refer to MM UTL-2). A letter of compliance from Suburban Water Systems would be required to show compliance of proposed water and sewer infrastructure plans with Suburban Water Systems requirements. With implementation of MM UTL-2, the impact of the proposed Project related to additional demand for domestic water and recycled water and the generation of additional wastewater would be less than significant. No new mitigation is required.

Although the proposed Project would be expected to generate additional wastewater into the existing system, the Project would not include additional water quality concerns beyond those already enforced and being met by the San Jose Creek Water Reclamation Plan (WRP). The San

Jose Creek WRP has supported wastewater treatment and flows from the QVH campus and will continue to do so, including for the proposed Project. The Project would connect to the existing wastewater system and would not include the development of major new sewer lines.

The LACSD 27-inch diameter truck sewer has a capacity of 14.4 mgd and conveyed peak flow of 5.2 mgd (City of West Covina 2019). The San Jose Creek WRP has a capacity of 100 mgd and currently processes an average flow of 63.8 mgd. LACSD is anticipated to have sufficient capacity in the San Jose Creek WRP to treat wastewater flows from the QVH campus with implementation of the Project, resulting in a less than significant impact. Also, consistent with the Connection Fee program of LACSD's Wastewater Ordinance, all new users of the LACSD sewerage system or existing dischargers who increase their discharge must pay their fair share of the costs for providing additional conveyance, treatment, and disposal facilities. No off-site facility upgrades are needed to serve the proposed Project

The Project's uses would comply with the LACSD's Rates, Rules, and Regulations for Sewer Services and Non-Domestic Wastewater Discharge Regulations. Thus, the proposed Project would pay connection fees and service charges to the LACSD for the operation and maintenance of the sewer collection system, which includes capital capacity reimbursement fees for San Jose Creek WRP treatment services. The Project would not exceed the capacities of the wastewater treatment facilities with implementation of MM UTL-2, as described above. As such, the Project would not create a new significant impact pertaining to wastewater treatment providers that was not previously analyzed, and no new mitigation measures are required.

d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

No Substantial Change from Previous Analysis. The proposed Project would result in generation of solid waste during construction and operation. Collected wastes are brought to the City of Industry Materials Recovery Facility (MRF), where recyclables are sorted and processed. Solid waste that is not diverted is disposed of at the Victorville Sanitary Landfill, a Class III (i.e., municipal waste) landfill.

The onsite structures, paved surfaces, and landscape vegetation would be demolished/removed during construction of the proposed Project. Chapter 7, Article XVI, Waste Reduction, Reuse and Recycling of Construction and Demolition Debris, of the City's Municipal Code, outlines the requirements for diverting construction waste into landfills for every "covered project" as set forth in section 7-261(a) and (b), as described in MM UTL-4 of the Certified Final PEIR. Construction and demolition wastes are required to be made available for deconstruction, salvage, and recovery prior to demolition. Further, a minimum of 65 percent of the demolition and construction waste would be diverted in compliance with state and local statutory goals and policies.

Long-term solid waste generation associated with operation of maximum development of the Certified Final PEIR uses, which includes the proposed Project uses, amounted to 23.7 tons per day, for 2,687 employees and 160 patients (City of West Covina 2019). The Victorville Sanitary Landfill, with remaining capacity of 81,510,000 tons and an anticipated closure date of October 1, 2047, would accommodate the short-term disposal of construction and demolition wastes from the proposed Project. The Approved Project estimated additional solid waste requiring

disposal (23.7 tons per day) represents 0.79 percent of the County landfill's daily capacity,[1] and one year's waste represents 0.011 percent of the remaining permitted capacity. As such, it is not anticipated that the waste generated by the Project, which was included in the Certified Final PEIR projections, would exceed the capacity of the Victorville Landfill. Therefore, the Project would not create a new significant impact pertaining to solid waste reduction goals that was not previously analyzed, and no new mitigation measures are required.

e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

No Substantial Change from Previous Analysis*.* The City's waste generation factors are below the 50 percent disposal rate targets sets for the City by CalRecycle (4.3 pounds per day [ppd] per capita and 16.7 pounds per day per employee), in compliance with AB 939 and SB 1016 (City of West Covina 2019). The City's 2016 calculated disposal rate was 3.5 ppd for residences and 12.7 ppd for businesses. The City is in compliance with AB 939 goals and uses several programs for diversion of solid waste from landfills including programs for self-haul of waste and greenwaste, food waste composting, waste exchange, business waste reduction program, and special waste materials such as construction and demolition debris to achieve the diversion goal (City of West Covina 2019). The QVH participates in waste diversion programs implemented by the City and is currently in the process of developing an expanded waste management and recycling program for the campus. Operationally, the QVH campus would continue to comply with recycling programs in compliance with applicable policies and those that have been adopted to comply with solid waste regulations such as the California Integrated Waste Management Act (AB 939). These programs would continue to be implemented by the appropriate agencies and organizations, including Athens Services, the only entity permitted to haul solid waste in the City (pursuant to Chapter 12 of the City's Municipal Code). Implementation of the Project would comply with ongoing waste management programs/requirements implemented by the City (refer to MM UTL-4). Additionally, during development of the Project, the Project shall comply with Chapter 12, Garbage of Rubbish Collection, of the West Covina Municipal Code, per MM UTL-5 of the Certified Final PEIR. MM UTL-5 also details that the Project shall comply with Article III, Trash Enclosure District, of the West Covina Municipal Code, which outlines the regulations pertaining to proper storage and disposal of solid waste in commercial areas within the City.

As discussed in Section 3.9, Hazards and Hazardous Materials, hazardous wastes generated during demolition and construction would be disposed of in accordance with existing regulations. Similarly, hazardous material use during construction and operation, including maintenance activities, would be conducted in compliance with applicable regulations.

Athens Services is contracted by the City for collection of solid waste and recyclables, and the Project would be required to comply with ongoing waste management programs/requirements implemented by the City, as well as comply with applicable regulations, as described above. The waste recycler is also required to meet or exceed the diversion requirements set forth in AB 939. Therefore, impacts related to solid waste regulations would be less than significant with implementation of MM UTL-4 and MM UTL-5. Therefore, the Project would not create a new significant impact pertaining to solid waste that was not previously analyzed, and no new mitigation measures are required.

[1] Permitted Maximum Tonnage per day = 3,000. 23.7 tons per day/3,000 tons per day = 0.79 percent (CalRecycle 2018a)

Conclusion

The utilities and service systems impacts of the proposed Project would be consistent with the impacts identified for the Approved Project, analyzed in the Certified Final PEIR. The proposed Project would not create a new significant impact or a substantial increase in the severity of previously identified effects. In regard to Section 15162 of the State CEQA Guidelines, (1) no substantial changes are proposed as part of the proposed Project that would result in new significant effects or an increase in severity of previous effects; (2) no substantial changes in circumstances have occurred that would result in new significant effects; and (3) no new information has become known that was not previously known that would (a) create new significant impacts, (b) increase the severity of previously examined effects, or (c) determine that mitigation measures or alternatives previously found not to be feasible would, in fact, be feasible; or (4) introduce mitigation measures that are considerably different from those analyzed in the Certified Final PEIR. For these reasons, no major revisions to the utilities and service systems analysis provided in the Certified Final PEIR nor to the MMRP are required.

3.20 WILDFIRE

Certified Final PEIR Environmental Review

Effective December 28, 2018, the State adopted amendments to the State CEQA Guidelines requiring the analysis and mitigation of wildfire as a separate topic in draft CEQA documents. The issues of interference with an adopted emergency response or evacuations plans and exposure of people to a significant risk of loss, injury, or death involving wildfire were discussed in the Hazards and Hazardous Materials section of the Certified Final PEIR.

For a summary and discussion of impacts pertaining to risk of wildfire from the Certified Final PEIR, please refer to Section 3.9, Hazards and Hazardous Materials of this document.

Mitigation Measures

No mitigation measures were required.

Proposed Project Impact Analysis

Environmental Issues	New Significant Impact	More Severe Impacts	New Ability to Substantially Reduce Significant Impact	No Substantial Change From Previous Analysis
WILDFIRE– If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
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?	☐	☐	☐	☑
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?	☐	☐	☐	☑

This section identifies and evaluates the proposed Project's potential impacts on Wildfire. Effective December 28, 2018, the State adopted amendments to the State CEQA Guidelines requiring the analysis and mitigation of wildfire as a separate topic in draft CEQA documents. The issues of interference with an adopted emergency response or evacuations plans and exposure of people to a significant risk of loss, injury, or death involving wildfire were discussed in Section 3.7, *Hazards and Hazardous Materials* of the QVHSP (City of West Covina 2019).

For a summary and discussion of impacts pertaining to risk of wildfire from the Certified Final PEIR, please refer to Section 3.8, Hazards and Hazardous Materials of this document

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the Project:

a) Substantially impair an adopted emergency response plan or emergency evacuation plan?

No Substantial Change from Previous Analysis. The proposed Project, as is the QVH campus proper, is not located in a Very High Fire Hazard Severity Zone (VHFHSZ) as defined by the California Department of Forestry and Fire Prevention (CalFire) (CAL FIRE 2011) nor is it in a State Responsibility Area (SRA) (CAL FIRE 2019).

The QVH campus proper is at the intersection of two major streets in the City that have been fully improved within their rights-of-way. The most distant point of the QVH campus (i.e., north end of the former Sunset Field property) is 1,350 feet from South Sunset Avenue and 1,800 feet from Merced Avenue, and there are driveways and travel routes onsite that directly access the MOB, Parking Structure, and ED/ICU sites, so the entire QVH campus has relatively immediate access from both adjacent roadways. The nearest emergency response and emergency evacuation access, east of the proposed Project, is a QVH campus entrance/exit driveway located on South Sunset Avenue, approximately 0.25 mile in either direction between Merced Avenue and West Cameron Avenue. Additional QVH campus emergency access providing a direct route is located on Merced Avenue 0.14 mile southwest from South Sunset Avenue; the entrance is approximately 0.25 mile from the west side of the proposed Project site. In addition, the Hospital has multiple internal driveways that provide access to the campus buildings.

In addition, the Hospital has prepared and maintains emergency and disaster preparedness plans that are regularly coordinated with City staff since the Hospital provides critical public services on an ongoing basis and during emergencies and disasters. The Project would expand medical services available to City residents and surrounding communities. Therefore, the proposed Project would not have significant impacts related to emergency response or evacuation plans, and no mitigation is required. Additionally, because Checklist Response thresholds 4.18a through 4.18d apply only to those projects that are "located in or near state responsibility areas or lands classified as very high fire hazard severity zones", no impacts related to these thresholds would occur requiring mitigation. Therefore, the Project would not create a new significant impact pertaining to wildfires that was not previously analyzed, and no new mitigation measures are required. Therefore, the Project would not create a new significant impact pertaining to wildfire that was not previously analyzed, and no new mitigation measures are required.

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?

No Substantial Change from Previous Analysis. As indicated in sections above, , the QVH campus is in a highly urbanized area of the City, and there are no large, undeveloped areas and/or steep slopes on or near the site that would exacerbate fire risks such that would expose the Project and its employees to wildfire related hazards. The site and the surrounding areas are

not located in designated VHFHSZ, as identified by CalFire. Rather, the site is within a Non-VHFHSZ area. Additionally, based on review of the Natural Hazard Mitigation Plan, the Project site is not located within designated Wildland Very High Fire Hazard Areas or Wildland High Fire Hazard Areas (West Covina 2011). Therefore, the Project is not expected to exacerbate wildfire risks and create pollutants associated with wildfire or uncontrolled spread of wildfire. Additionally, because Checklist Responses to thresholds 3.18a through 3.18d apply only to those projects that are "located in or near state responsibility areas or lands classified as very high fire hazard severity zones", no impacts related to these thresholds would occur, and no mitigation is required.

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?

No Substantial Change from Previous Analysis. As previously described, the proposed Project is not within a designated VHFHSZ as defined by CalFire. As discussed in Section 2.0, Project Description and Setting, the site is located in a highly urbanized area and surrounded by developed land and the Walnut Creek Wash generally to the North. While Project construction may result in temporary lane closures, it would not involve full closure of any public roadway during construction. Implementation of traffic control measures during construction, would reduce the potential for traffic hazards and the obstruction of access to adjacent parcels. All proposed structures would be constructed to meet current building and fire codes. Implementation of the proposed Project would not expose people or structures to a significant risk of loss, injury, or death involving wildland fires. Therefore, the proposed Project would not have significant impacts pertaining to exacerbation of fire as a result of installation or maintenance of associated infrastructure, and no mitigation is required. Additionally, because Checklist Responses to thresholds 3.18a through 3.18d apply only to those projects that are "located in or near state responsibility areas or lands classified as very high fire hazard severity zones", no impacts related to these thresholds would occur requiring mitigation.

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?

No Substantial Change from Previous Analysis. As previously described, the proposed Project is not within a designated VHFHSZ as defined by CalFire. The Project is in a highly urbanized area that is in a generally flat topographical area away from downslope or landslide areas. Proposed drainage changes are described in Section 3.9, Hydrology and Water Quality. Specifically, implementation of the 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. Therefore, the proposed Project would not have significant impacts related to downslope or downstream flooding or landslides, post-fire slope instability or drainage changes, and no mitigation is required. Additionally, because Checklist Responses to thresholds 3.18a through 3.18d apply only to those projects that are "located in or near state responsibility areas or lands classified as very high fire hazard severity zones", no impacts related to these thresholds would occur requiring mitigation.

Conclusion

The wildfire impacts of the proposed Project would be consistent with the impacts identified for the Approved Project, analyzed in the Certified Final PEIR. The proposed Project would not create a new significant impact or a substantial increase in the severity of previously identified effects. In regard to Section 15162 of the State CEQA Guidelines, (1) no substantial changes are proposed as part of the proposed Project that would result in new significant effects or an increase in severity of previous effects; (2) no substantial changes in circumstances have occurred that would result in new significant effects; and (3) no new information has become known that was not previously known that would (a) create new significant impacts, (b) increase the severity of previously examined effects, or (c) determine that mitigation measures or alternatives previously found not to be feasible would, in fact, be feasible; or (4) introduce mitigation measures that are considerably different from those analyzed in the Certified Final PEIR. For these reasons, no major revisions to the wildfire analysis provided in the Certified Final PEIR nor to the MMRP are required.

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4.0 CONCLUSIONS

Based on the analysis provided in this Addendum, there is substantial evidence to determine that (1) the proposed Project does not represent a substantial change from the previously approved project evaluated in the Certified Final PEIR; (2) no substantial changes have occurred with respect to the circumstances under which the proposed Project is undertaken; and (3) the proposed Project has not introduced new information of substantial importance that was not previously known. The proposed Project would not have any new or substantially more severe impacts than what was evaluated in the Certified Final PEIR. No new Mitigation Measures are recommended in addition to those adopted at the time the Certified Final PEIR was certified that would further reduce Project impacts. The Certified Final PEIR, when considered in conjunction with this Addendum, provides adequate documentation, pursuant to the CEQA for the MOB, PS, ED/ICU Project.

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Appendix A

Air Quality and Greenhouse Gas Emissions Modeling Data

Queen MOB, Parking, ED, ICU

Los Angeles-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Hospital	58.90	1000sqft	1.35	58,900.00	0
Medical Office Building	58.87	1000sqft	1.35	58,868.00	0
Unenclosed Parking with Elevator	398.00	Space	3.58	159,200.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	9			**Operational Year**	2022
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	399.04	**CH4 Intensity (lb/MWhr)**	0	**N2O Intensity (lb/MWhr)**	0

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Updated SCE factor for 2019 CO2equivalent Intensity Factor.

Land Use - information from Precise Plan Combined

Construction Phase - .

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - crane, forklift, 2 aerial lifts, 3 welders, backhoe, 1 drill

Off-road Equipment - 1 backhoe, 1 concrete pump, 2 cranes, 1 forklift

Off-road Equipment - 1 backhoe

Off-road Equipment - 1 backhoe, 1 excavator, 1 rubber tired loader, 1 dozer, 1 skid steer loader

Off-road Equipment - excavator, blade (grader)

Off-road Equipment - 2 backoes, 1 excavator, 2 grades, 1 loader, 1 rubber tired dozer, 1 skid steer loader, 1 compactor, 2 scrapers

Off-road Equipment - pavers, rollers, grader, compactor

Off-road Equipment - default

Off-road Equipment - 1 backhoe, excavator, 2 graders, rubber tired loader, dozer, skids, compactor

Off-road Equipment - backhoe.

Trips and VMT - .

Demolition - .

Grading - .

Architectural Coating - Apportioned to correct phases. MM AIR-1 from QVHSP EIR for 10 g/L paints

Vehicle Trips - Traffic Study.

Area Coating - MM AIR-1 from QVHSP EIR

Energy Use -

Water And Wastewater - .

Construction Off-road Equipment Mitigation - .MM AIR-2 from QVHSP EIR

Energy Mitigation - MM GHG from QVHSP PEIR

Waste Mitigation -

Stationary Sources - Emergency Generators and Fire Pumps - natural gas per MM AIR-3 from QVHSP EIR

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tblArchitecturalCoating	ConstArea_Nonresidential_Interior	176,652.00	88,302.00
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tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	10.00
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tblAreaCoating	Area_EF_Parking	100	10
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tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	3.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0
tblProjectCharacteristics	CO2IntensityFactor	702.44	399.04
tblProjectCharacteristics	N2OIntensityFactor	0.006	0
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	800.00
tblStationaryGeneratorsPumpsUse	HoursPerDay	0.00	1.00
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	12.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblTripsAndVMT	VendorTripNumber	45.00	36.00
tblTripsAndVMT	VendorTripNumber	45.00	10.00
tblTripsAndVMT	WorkerTripNumber	21.00	14.00
tblTripsAndVMT	WorkerTripNumber	105.00	70.00
tblTripsAndVMT	WorkerTripNumber	105.00	19.00
tblTripsAndVMT	WorkerTripNumber	21.00	4.00
tblVehicleTrips	CC_TL	8.40	6.40
tblVehicleTrips	CNW_TL	6.90	6.40
tblVehicleTrips	ST_TR	10.18	7.60
tblVehicleTrips	ST_TR	8.96	8.42
tblVehicleTrips	SU_TR	8.91	6.65
tblVehicleTrips	SU_TR	1.55	1.46
tblVehicleTrips	WD_TR	13.22	9.86
tblVehicleTrips	WD_TR	36.13	33.94

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	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					
2021	9.9405	110.9584	65.8838	0.1687	16.0331	4.2895	20.3226	7.3572	3.9629	11.3201	0.0000	16,595.4134	16,595.4134	4.1565	0.0000	16,699.3272
2022	5.5320	32.6884	32.3722	0.0747	1.3340	1.2925	2.6266	0.3605	1.2237	1.5842	0.0000	7,236.8887	7,236.8887	1.5290	0.0000	7,271.1144
Maximum	**9.9405**	**110.9584**	**65.8838**	**0.1687**	**16.0331**	**4.2895**	**20.3226**	**7.3572**	**3.9629**	**11.3201**	**0.0000**	**16,595.4134**	**16,595.4134**	**4.1565**	**0.0000**	**16,699.3272**

Mitigated Construction

	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					
2021	4.1135	73.2992	83.6993	0.1687	7.4052	2.9339	10.3391	3.1800	2.9320	6.1120	0.0000	16,595.4134	16,595.4134	4.1565	0.0000	16,699.3272
2022	3.9968	32.3014	39.0273	0.0747	1.3340	1.5785	2.8726	0.3605	1.5780	1.8981	0.0000	7,236.8887	7,236.8887	1.5290	0.0000	7,271.1144
Maximum	**4.1135**	**73.2992**	**83.6993**	**0.1687**	**7.4052**	**2.9339**	**10.3391**	**3.1800**	**2.9320**	**6.1120**	**0.0000**	**16,595.4134**	**16,595.4134**	**4.1565**	**0.0000**	**16,699.3272**

	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	**47.58**	**26.49**	**-24.90**	**0.00**	**49.68**	**19.16**	**42.43**	**54.13**	**13.05**	**37.93**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

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	2.4242	4.8000e-004	0.0527	0.0000		1.9000e-004	1.9000e-004		1.9000e-004	1.9000e-004		0.1129	0.1129	3.0000e-004		0.1203
Energy	0.1308	1.1891	0.9989	7.1300e-003		0.0904	0.0904		0.0904	0.0904		1,426.9718	1,426.9718	0.0274	0.0262	1,435.4515
Mobile	3.4288	8.3056	42.3017	0.1337	14.5245	0.1302	14.6547	3.8744	0.1209	3.9953		13,493.8090	13,493.8090	0.6931		13,511.1363
Stationary	7.0384	0.5421	18.3314	2.4500e-003		0.0388	0.0388		0.0388	0.0388		449.6876	449.6876	0.9403		473.1940
Total	**13.0223**	**10.0374**	**61.6847**	**0.1433**	**14.5245**	**0.2596**	**14.7841**	**3.8744**	**0.2503**	**4.1247**		**15,370.5812**	**15,370.5812**	**1.6610**	**0.0262**	**15,419.9021**

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	2.4242	4.8000e-004	0.0527	0.0000		1.9000e-004	1.9000e-004		1.9000e-004	1.9000e-004		0.1129	0.1129	3.0000e-004		0.1203
Energy	0.1308	1.1891	0.9989	7.1300e-003		0.0904	0.0904		0.0904	0.0904		1,426.9718	1,426.9718	0.0274	0.0262	1,435.4515
Mobile	3.4288	8.3056	42.3017	0.1337	14.5245	0.1302	14.6547	3.8744	0.1209	3.9953		13,493.8090	13,493.8090	0.6931		13,511.1363
Stationary	7.0384	0.5421	18.3314	2.4500e-003		0.0388	0.0388		0.0388	0.0388		449.6876	449.6876	0.9403		473.1940
Total	**13.0223**	**10.0374**	**61.6847**	**0.1433**	**14.5245**	**0.2596**	**14.7841**	**3.8744**	**0.2503**	**4.1247**		**15,370.5812**	**15,370.5812**	**1.6610**	**0.0262**	**15,419.9021**

	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	2/10/2021	3/23/2021	6	36	MOB-PS
2	Site Preparation MOB-PS	Site Preparation	3/24/2021	3/31/2021	6	7	MOB-PS
3	Grading-Excavation MOB-PS	Grading	4/1/2021	4/30/2021	6	26	MOB-PS
4	Demolition ED-ICU	Demolition	5/1/2021	5/25/2021	6	21	ED-ICU
5	Building Construction MOB-PS	Building Construction	5/1/2021	6/1/2022	6	340	MOB-PS
6	Site Preparation ED-ICU	Site Preparation	6/1/2021	6/30/2021	6	26	ED-ICU
7	Grading/Excavation ED-ICU	Grading	6/1/2021	7/14/2021	6	38	ED-ICU
8	Building Construction ED-ICU	Building Construction	7/15/2021	11/30/2022	6	432	ED-ICU
9	Architectural Coating ED-ICU	Architectural Coating	1/1/2022	2/28/2022	6	50	ED-ICU
10	Paving MOB-PS	Paving	6/10/2022	7/10/2022	6	26	MOB-PS
11	Architectural Coating MOB-PS	Architectural Coating	6/10/2022	7/10/2022	6	26	MOB-PS
12	Paving ED-ICU	Paving	9/1/2022	11/30/2022	6	78	ED-ICU

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 3.58

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 88,352; Non-Residential Outdoor: 29,451; Striped Parking Area: 0

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition	Excavators	0	8.00	158	0.38
Demolition	Rubber Tired Dozers	0	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Site Preparation MOB-PS	Rubber Tired Dozers	0	8.00	247	0.40
Site Preparation MOB-PS	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading-Excavation MOB-PS	Excavators	1	8.00	158	0.38
Grading-Excavation MOB-PS	Graders	1	8.00	187	0.41
Grading-Excavation MOB-PS	Rubber Tired Dozers	0	8.00	247	0.40
Grading-Excavation MOB-PS	Tractors/Loaders/Backhoes	0	8.00	97	0.37

Demolition ED-ICU	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition ED-ICU	Excavators	1	8.00	158	0.38
Demolition ED-ICU	Rubber Tired Dozers	1	8.00	247	0.40
Demolition ED-ICU	Rubber Tired Loaders	1	8.00	203	0.36
Demolition ED-ICU	Skid Steer Loaders	1	8.00	65	0.37
Demolition ED-ICU	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Building Construction MOB-PS	Cranes	2	7.00	231	0.29
Building Construction MOB-PS	Forklifts	1	8.00	89	0.20
Building Construction MOB-PS	Generator Sets	0	8.00	84	0.74
Building Construction MOB-PS	Pumps	1	8.00	84	0.74
Building Construction MOB-PS	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Building Construction MOB-PS	Welders	0	8.00	46	0.45
Site Preparation ED-ICU	Excavators	1	8.00	158	0.38
Site Preparation ED-ICU	Graders	2	8.00	187	0.41
Site Preparation ED-ICU	Plate Compactors	1	8.00	8	0.43
Site Preparation ED-ICU	Rubber Tired Dozers	1	8.00	247	0.40
Site Preparation ED-ICU	Rubber Tired Loaders	1	8.00	203	0.36
Site Preparation ED-ICU	Skid Steer Loaders	1	8.00	65	0.37
Site Preparation ED-ICU	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading/Excavation ED-ICU	Excavators	1	8.00	158	0.38
Grading/Excavation ED-ICU	Graders	2	8.00	187	0.41
Grading/Excavation ED-ICU	Plate Compactors	1	8.00	8	0.43
Grading/Excavation ED-ICU	Rubber Tired Dozers	1	8.00	247	0.40
Grading/Excavation ED-ICU	Rubber Tired Loaders	1	8.00	203	0.36
Grading/Excavation ED-ICU	Scrapers	2	8.00	367	0.48
Grading/Excavation ED-ICU	Skid Steer Loaders	1	8.00	65	0.37
Grading/Excavation ED-ICU	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction ED-ICU	Aerial Lifts	2	8.00	63	0.31
Building Construction ED-ICU	Bore/Drill Rigs	1	8.00	221	0.50
Building Construction ED-ICU	Cranes	1	7.00	231	0.29

Building Construction ED-ICU	Forklifts	1	8.00	89	0.20
Building Construction ED-ICU	Generator Sets	0	8.00	84	0.74
Building Construction ED-ICU	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Building Construction ED-ICU	Welders	3	8.00	46	0.45
Architectural Coating ED-ICU	Air Compressors	1	6.00	78	0.48
Paving MOB-PS	Pavers	2	8.00	130	0.42
Paving MOB-PS	Paving Equipment	2	8.00	132	0.36
Paving MOB-PS	Rollers	2	8.00	80	0.38
Architectural Coating MOB-PS	Air Compressors	1	6.00	78	0.48
Paving ED-ICU	Graders	1	8.00	187	0.41
Paving ED-ICU	Pavers	2	8.00	130	0.42
Paving ED-ICU	Paving Equipment	0	8.00	132	0.36
Paving ED-ICU	Plate Compactors	1	8.00	8	0.43
Paving ED-ICU	Rollers	2	8.00	80	0.38

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	1	3.00	0.00	159.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation MOB-PS	1	3.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading-Excavation MOB-PS	2	5.00	0.00	125.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Demolition ED-ICU	5	13.00	0.00	423.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction MOB-PS	5	70.00	36.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation ED-ICU	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading/Excavation ED-ICU	11	28.00	0.00	738.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction ED-ICU	9	19.00	10.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating ED-ICU	1	4.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving MOB-PS	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating MOB-PS	1	14.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving ED-ICU	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

3.2 Demolition - 2021

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					0.9546	0.0000	0.9546	0.1445	0.0000	0.1445			0.0000			0.0000
Off-Road	0.1873	1.8958	2.2602	3.1100e-003		0.1118	0.1118		0.1028	0.1028		300.9001	300.9001	0.0973		303.3330
Total	**0.1873**	**1.8958**	**2.2602**	**3.1100e-003**	**0.9546**	**0.1118**	**1.0664**	**0.1445**	**0.1028**	**0.2474**		**300.9001**	**300.9001**	**0.0973**		**303.3330**

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	0.0377	1.1993	0.2946	3.3900e-003	0.0772	3.6900e-003	0.0809	0.0212	3.5300e-003	0.0247		367.3709	367.3709	0.0263		368.0275
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
Worker	0.0143	9.7800e-003	0.1105	3.2000e-004	0.0335	2.7000e-004	0.0338	8.8900e-003	2.5000e-004	9.1400e-003		32.1675	32.1675	9.5000e-004		32.1912
Total	**0.0520**	**1.2090**	**0.4050**	**3.7100e-003**	**0.1108**	**3.9600e-003**	**0.1147**	**0.0301**	**3.7800e-003**	**0.0338**		**399.5384**	**399.5384**	**0.0272**		**400.2187**

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					0.3723	0.0000	0.3723	0.0564	0.0000	0.0564			0.0000			0.0000
Off-Road	0.0760	1.7344	2.3421	3.1100e-003		0.1215	0.1215		0.1215	0.1215	0.0000	300.9001	300.9001	0.0973		303.3330
Total	**0.0760**	**1.7344**	**2.3421**	**3.1100e-003**	**0.3723**	**0.1215**	**0.4938**	**0.0564**	**0.1215**	**0.1779**	**0.0000**	**300.9001**	**300.9001**	**0.0973**		**303.3330**

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	0.0377	1.1993	0.2946	3.3900e-003	0.0772	3.6900e-003	0.0809	0.0212	3.5300e-003	0.0247		367.3709	367.3709	0.0263		368.0275
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
Worker	0.0143	9.7800e-003	0.1105	3.2000e-004	0.0335	2.7000e-004	0.0338	8.8900e-003	2.5000e-004	9.1400e-003		32.1675	32.1675	9.5000e-004		32.1912
Total	**0.0520**	**1.2090**	**0.4050**	**3.7100e-003**	**0.1108**	**3.9600e-003**	**0.1147**	**0.0301**	**3.7800e-003**	**0.0338**		**399.5384**	**399.5384**	**0.0272**		**400.2187**

3.3 Site Preparation MOB-PS - 2021

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					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.1873	1.8958	2.2602	3.1100e-003		0.1118	0.1118		0.1028	0.1028		300.9001	300.9001	0.0973		303.3330
Total	**0.1873**	**1.8958**	**2.2602**	**3.1100e-003**	**0.0000**	**0.1118**	**0.1118**	**0.0000**	**0.1028**	**0.1028**		**300.9001**	**300.9001**	**0.0973**		**303.3330**

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
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
Worker	0.0143	9.7800e-003	0.1105	3.2000e-004	0.0335	2.7000e-004	0.0338	8.8900e-003	2.5000e-004	9.1400e-003		32.1675	32.1675	9.5000e-004		32.1912
Total	**0.0143**	**9.7800e-003**	**0.1105**	**3.2000e-004**	**0.0335**	**2.7000e-004**	**0.0338**	**8.8900e-003**	**2.5000e-004**	**9.1400e-003**		**32.1675**	**32.1675**	**9.5000e-004**		**32.1912**

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					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000

Off-Road	0.0760	1.7344	2.3421	3.1100e-003		0.1215	0.1215		0.1215	0.1215	0.0000	300.9001	300.9001	0.0973		303.3330
Total	**0.0760**	**1.7344**	**2.3421**	**3.1100e-003**	**0.0000**	**0.1215**	**0.1215**	**0.0000**	**0.1215**	**0.1215**	**0.0000**	**300.9001**	**300.9001**	**0.0973**		**303.3330**

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
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
Worker	0.0143	9.7800e-003	0.1105	3.2000e-004	0.0335	2.7000e-004	0.0338	8.8900e-003	2.5000e-004	9.1400e-003		32.1675	32.1675	9.5000e-004		32.1912
Total	**0.0143**	**9.7800e-003**	**0.1105**	**3.2000e-004**	**0.0335**	**2.7000e-004**	**0.0338**	**8.8900e-003**	**2.5000e-004**	**9.1400e-003**		**32.1675**	**32.1675**	**9.5000e-004**		**32.1912**

3.4 Grading-Excavation MOB-PS - 2021

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					0.4122	0.0000	0.4122	0.0447	0.0000	0.0447			0.0000			0.0000
Off-Road	0.6822	8.0780	5.0390	0.0118		0.2921	0.2921		0.2688	0.2688		1,141.8761	1,141.8761	0.3693		1,151.1087
Total	**0.6822**	**8.0780**	**5.0390**	**0.0118**	**0.4122**	**0.2921**	**0.7044**	**0.0447**	**0.2688**	**0.3135**		**1,141.8761**	**1,141.8761**	**0.3693**		**1,151.1087**

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	0.0411	1.3054	0.3206	3.6900e-003	0.0841	4.0200e-003	0.0881	0.0230	3.8400e-003	0.0269		399.8957	399.8957	0.0286		400.6105
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
Worker	0.0238	0.0163	0.1841	5.4000e-004	0.0559	4.5000e-004	0.0563	0.0148	4.2000e-004	0.0152		53.6126	53.6126	1.5800e-003		53.6520
Total	**0.0649**	**1.3217**	**0.5048**	**4.2300e-003**	**0.1400**	**4.4700e-003**	**0.1444**	**0.0379**	**4.2600e-003**	**0.0421**		**453.5083**	**453.5083**	**0.0302**		**454.2625**

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					0.1608	0.0000	0.1608	0.0174	0.0000	0.0174			0.0000			0.0000
Off-Road	0.2893	5.5939	7.4338	0.0118		0.2376	0.2376		0.2376	0.2376	0.0000	1,141.8761	1,141.8761	0.3693		1,151.1087
Total	**0.2893**	**5.5939**	**7.4338**	**0.0118**	**0.1608**	**0.2376**	**0.3984**	**0.0174**	**0.2376**	**0.2550**	**0.0000**	**1,141.8761**	**1,141.8761**	**0.3693**		**1,151.1087**

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	0.0411	1.3054	0.3206	3.6900e-003	0.0841	4.0200e-003	0.0881	0.0230	3.8400e-003	0.0269		399.8957	399.8957	0.0286		400.6105
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
Worker	0.0238	0.0163	0.1841	5.4000e-004	0.0559	4.5000e-004	0.0563	0.0148	4.2000e-004	0.0152		53.6126	53.6126	1.5800e-003		53.6520
Total	**0.0649**	**1.3217**	**0.5048**	**4.2300e-003**	**0.1400**	**4.4700e-003**	**0.1444**	**0.0379**	**4.2600e-003**	**0.0421**		**453.5083**	**453.5083**	**0.0302**		**454.2625**

3.5 Demolition ED-ICU - 2021

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					4.3613	0.0000	4.3613	0.6603	0.0000	0.6603			0.0000			0.0000
Off-Road	1.8813	19.8878	12.5585	0.0251		0.9183	0.9183		0.8449	0.8449		2,433.8688	2,433.8688	0.7872		2,453.5479
Total	**1.8813**	**19.8878**	**12.5585**	**0.0251**	**4.3613**	**0.9183**	**5.2797**	**0.6603**	**0.8449**	**1.5052**		**2,433.8688**	**2,433.8688**	**0.7872**		**2,453.5479**

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	0.1720	5.4694	1.3434	0.0154	0.3522	0.0168	0.3690	0.0966	0.0161	0.1127		1,675.4488	1,675.4488	0.1198		1,678.4435
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

Worker	0.0620	0.0424	0.4787	1.4000e-003	0.1453	1.1700e-003	0.1465	0.0385	1.0800e-003	0.0396		139.3926	139.3926	4.1000e-003		139.4952
Total	**0.2340**	**5.5118**	**1.8221**	**0.0168**	**0.4975**	**0.0180**	**0.5155**	**0.1351**	**0.0172**	**0.1523**		**1,814.8415**	**1,814.8415**	**0.1239**		**1,817.9386**

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					1.7009	0.0000	1.7009	0.2575	0.0000	0.2575			0.0000			0.0000
Off-Road	0.6177	12.3863	15.7113	0.0251		0.5883	0.5883		0.5883	0.5883	0.0000	2,433.8688	2,433.8688	0.7872		2,453.5479
Total	**0.6177**	**12.3863**	**15.7113**	**0.0251**	**1.7009**	**0.5883**	**2.2893**	**0.2575**	**0.5883**	**0.8459**	**0.0000**	**2,433.8688**	**2,433.8688**	**0.7872**		**2,453.5479**

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	0.1720	5.4694	1.3434	0.0154	0.3522	0.0168	0.3690	0.0966	0.0161	0.1127		1,675.4488	1,675.4488	0.1198		1,678.4435
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
Worker	0.0620	0.0424	0.4787	1.4000e-003	0.1453	1.1700e-003	0.1465	0.0385	1.0800e-003	0.0396		139.3926	139.3926	4.1000e-003		139.4952
Total	**0.2340**	**5.5118**	**1.8221**	**0.0168**	**0.4975**	**0.0180**	**0.5155**	**0.1351**	**0.0172**	**0.1523**		**1,814.8415**	**1,814.8415**	**0.1239**		**1,817.9386**

3.6 Building Construction MOB-PS - 2021

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	1.3962	14.5343	10.3562	0.0209		0.7037	0.7037		0.6616	0.6616		2,012.1469	2,012.1469	0.4833		2,024.2282
Total	**1.3962**	**14.5343**	**10.3562**	**0.0209**		**0.7037**	**0.7037**		**0.6616**	**0.6616**		**2,012.1469**	**2,012.1469**	**0.4833**		**2,024.2282**

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
Vendor	0.1149	3.4880	1.0108	9.0100e-003	0.2305	7.3800e-003	0.2379	0.0664	7.0500e-003	0.0734		962.4439	962.4439	0.0621		963.9972
Worker	0.3338	0.2283	2.5778	7.5300e-003	0.7824	6.3200e-003	0.7888	0.2075	5.8200e-003	0.2133		750.5758	750.5758	0.0221		751.1279
Total	**0.4487**	**3.7163**	**3.5886**	**0.0165**	**1.0129**	**0.0137**	**1.0266**	**0.2739**	**0.0129**	**0.2867**		**1,713.0197**	**1,713.0197**	**0.0842**		**1,715.1251**

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	0.4838	10.1786	12.6431	0.0209		0.5591	0.5591		0.5591	0.5591	0.0000	2,012.1469	2,012.1469	0.4833		2,024.2282
Total	**0.4838**	**10.1786**	**12.6431**	**0.0209**		**0.5591**	**0.5591**		**0.5591**	**0.5591**	**0.0000**	**2,012.1469**	**2,012.1469**	**0.4833**		**2,024.2282**

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
Vendor	0.1149	3.4880	1.0108	9.0100e-003	0.2305	7.3800e-003	0.2379	0.0664	7.0500e-003	0.0734		962.4439	962.4439	0.0621		963.9972
Worker	0.3338	0.2283	2.5778	7.5300e-003	0.7824	6.3200e-003	0.7888	0.2075	5.8200e-003	0.2133		750.5758	750.5758	0.0221		751.1279
Total	**0.4487**	**3.7163**	**3.5886**	**0.0165**	**1.0129**	**0.0137**	**1.0266**	**0.2739**	**0.0129**	**0.2867**		**1,713.0197**	**1,713.0197**	**0.0842**		**1,715.1251**

3.6 Building Construction MOB-PS - 2022

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	1.2624	12.8124	10.1554	0.0209		0.6084	0.6084		0.5722	0.5722		2,012.6026	2,012.6026	0.4812		2,024.6328
Total	**1.2624**	**12.8124**	**10.1554**	**0.0209**		**0.6084**	**0.6084**		**0.5722**	**0.5722**		**2,012.6026**	**2,012.6026**	**0.4812**		**2,024.6328**

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
Vendor	0.1078	3.3149	0.9568	8.9200e-003	0.2305	6.4500e-003	0.2369	0.0664	6.1700e-003	0.0725		953.8930	953.8930	0.0600		955.3917
Worker	0.3135	0.2062	2.3742	7.2700e-003	0.7824	6.1200e-003	0.7886	0.2075	5.6400e-003	0.2132		724.1986	724.1986	0.0199		724.6971
Total	**0.4213**	**3.5210**	**3.3310**	**0.0162**	**1.0129**	**0.0126**	**1.0255**	**0.2739**	**0.0118**	**0.2857**		**1,678.0916**	**1,678.0916**	**0.0799**		**1,680.0889**

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	0.4838	10.1786	12.6431	0.0209		0.5591	0.5591		0.5591	0.5591	0.0000	2,012.6026	2,012.6026	0.4812		2,024.6328
Total	**0.4838**	**10.1786**	**12.6431**	**0.0209**		**0.5591**	**0.5591**		**0.5591**	**0.5591**	**0.0000**	**2,012.6026**	**2,012.6026**	**0.4812**		**2,024.6328**

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
Vendor	0.1078	3.3149	0.9568	8.9200e-003	0.2305	6.4500e-003	0.2369	0.0664	6.1700e-003	0.0725		953.8930	953.8930	0.0600		955.3917
Worker	0.3135	0.2062	2.3742	7.2700e-003	0.7824	6.1200e-003	0.7886	0.2075	5.6400e-003	0.2132		724.1986	724.1986	0.0199		724.6971
Total	**0.4213**	**3.5210**	**3.3310**	**0.0162**	**1.0129**	**0.0126**	**1.0255**	**0.2739**	**0.0118**	**0.2857**		**1,678.0916**	**1,678.0916**	**0.0799**		**1,680.0889**

3.7 Site Preparation ED-ICU - 2021

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					6.4300	0.0000	6.4300	3.3543	0.0000	3.3543			0.0000			0.0000
Off-Road	2.8274	31.9882	16.3033	0.0389		1.3035	1.3035		1.2000	1.2000		3,751.7165	3,751.7165	1.2058		3,781.8617
Total	**2.8274**	**31.9882**	**16.3033**	**0.0389**	**6.4300**	**1.3035**	**7.7335**	**3.3543**	**1.2000**	**4.5543**		**3,751.7165**	**3,751.7165**	**1.2058**		**3,781.8617**

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
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
Worker	0.0954	0.0652	0.7365	2.1500e-003	0.2236	1.8100e-003	0.2254	0.0593	1.6600e-003	0.0610		214.4502	214.4502	6.3100e-003		214.6080
Total	**0.0954**	**0.0652**	**0.7365**	**2.1500e-003**	**0.2236**	**1.8100e-003**	**0.2254**	**0.0593**	**1.6600e-003**	**0.0610**		**214.4502**	**214.4502**	**6.3100e-003**		**214.6080**

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					2.5077	0.0000	2.5077	1.3082	0.0000	1.3082			0.0000			0.0000
Off-Road	0.9823	18.9119	22.9533	0.0389		0.8361	0.8361		0.8361	0.8361	0.0000	3,751.7165	3,751.7165	1.2058		3,781.8617
Total	**0.9823**	**18.9119**	**22.9533**	**0.0389**	**2.5077**	**0.8361**	**3.3438**	**1.3082**	**0.8361**	**2.1443**	**0.0000**	**3,751.7165**	**3,751.7165**	**1.2058**		**3,781.8617**

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
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
Worker	0.0954	0.0652	0.7365	2.1500e-003	0.2236	1.8100e-003	0.2254	0.0593	1.6600e-003	0.0610		214.4502	214.4502	6.3100e-003		214.6080

Total	**0.0954**	**0.0652**	**0.7365**	**2.1500e-003**	**0.2236**	**1.8100e-003**	**0.2254**	**0.0593**	**1.6600e-003**	**0.0610**		**214.4502**	**214.4502**	**6.3100e-003**		**214.6080**

3.8 Grading/Excavation ED-ICU - 2021

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					7.7141	0.0000	7.7141	3.4937	0.0000	3.4937			0.0000			0.0000
Off-Road	4.8736	55.2896	32.5729	0.0723		2.2480	2.2480		2.0690	2.0690		6,988.4396	6,988.4396	2.2526		7,044.7554
Total	**4.8736**	**55.2896**	**32.5729**	**0.0723**	**7.7141**	**2.2480**	**9.9622**	**3.4937**	**2.0690**	**5.5627**		**6,988.4396**	**6,988.4396**	**2.2526**		**7,044.7554**

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	0.1658	5.2734	1.2953	0.0149	0.3396	0.0162	0.3558	0.0931	0.0155	0.1086		1,615.4103	1,615.4103	0.1155		1,618.2977
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
Worker	0.1335	0.0913	1.0311	3.0100e-003	0.3130	2.5300e-003	0.3155	0.0830	2.3300e-003	0.0853		300.2303	300.2303	8.8300e-003		300.4512
Total	**0.2993**	**5.3647**	**2.3264**	**0.0179**	**0.6526**	**0.0188**	**0.6713**	**0.1761**	**0.0179**	**0.1940**		**1,915.6406**	**1,915.6406**	**0.1243**		**1,918.7488**

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					3.0085	0.0000	3.0085	1.3625	0.0000	1.3625			0.0000			0.0000
Off-Road	1.8040	35.0625	41.4514	0.0723		1.5045	1.5045		1.5045	1.5045	0.0000	6,988.4396	6,988.4396	2.2526		7,044.7553
Total	**1.8040**	**35.0625**	**41.4514**	**0.0723**	**3.0085**	**1.5045**	**4.5130**	**1.3625**	**1.5045**	**2.8670**	**0.0000**	**6,988.4396**	**6,988.4396**	**2.2526**		**7,044.7553**

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	0.1658	5.2734	1.2953	0.0149	0.3396	0.0162	0.3558	0.0931	0.0155	0.1086		1,615.4103	1,615.4103	0.1155		1,618.2977
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
Worker	0.1335	0.0913	1.0311	3.0100e-003	0.3130	2.5300e-003	0.3155	0.0830	2.3300e-003	0.0853		300.2303	300.2303	8.8300e-003		300.4512
Total	**0.2993**	**5.3647**	**2.3264**	**0.0179**	**0.6526**	**0.0188**	**0.6713**	**0.1761**	**0.0179**	**0.1940**		**1,915.6406**	**1,915.6406**	**0.1243**		**1,918.7488**

3.9 Building Construction ED-ICU - 2021

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	1.8956	15.8318	14.2991	0.0298		0.6907	0.6907		0.6532	0.6532		2,759.9501	2,759.9501	0.7724		2,779.2592
Total	**1.8956**	**15.8318**	**14.2991**	**0.0298**		**0.6907**	**0.6907**		**0.6532**	**0.6532**		**2,759.9501**	**2,759.9501**	**0.7724**		**2,779.2592**

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
Vendor	0.0319	0.9689	0.2808	2.5000e-003	0.0640	2.0500e-003	0.0661	0.0184	1.9600e-003	0.0204		267.3455	267.3455	0.0173		267.7770
Worker	0.0906	0.0620	0.6997	2.0400e-003	0.2124	1.7200e-003	0.2141	0.0563	1.5800e-003	0.0579		203.7277	203.7277	5.9900e-003		203.8776
Total	**0.1225**	**1.0309**	**0.9805**	**4.5400e-003**	**0.2764**	**3.7700e-003**	**0.2802**	**0.0748**	**3.5400e-003**	**0.0783**		**471.0732**	**471.0732**	**0.0233**		**471.6546**

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	0.8624	16.2563	18.0054	0.0298		0.8680	0.8680		0.8680	0.8680	0.0000	2,759.9501	2,759.9501	0.7724		2,779.2592
Total	**0.8624**	**16.2563**	**18.0054**	**0.0298**		**0.8680**	**0.8680**		**0.8680**	**0.8680**	**0.0000**	**2,759.9501**	**2,759.9501**	**0.7724**		**2,779.2592**

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
Vendor	0.0319	0.9689	0.2808	2.5000e-003	0.0640	2.0500e-003	0.0661	0.0184	1.9600e-003	0.0204		267.3455	267.3455	0.0173		267.7770
Worker	0.0906	0.0620	0.6997	2.0400e-003	0.2124	1.7200e-003	0.2141	0.0563	1.5800e-003	0.0579		203.7277	203.7277	5.9900e-003		203.8776
Total	**0.1225**	**1.0309**	**0.9805**	**4.5400e-003**	**0.2764**	**3.7700e-003**	**0.2802**	**0.0748**	**3.5400e-003**	**0.0783**		**471.0732**	**471.0732**	**0.0233**		**471.6546**

3.9 Building Construction ED-ICU - 2022

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	1.7105	13.9580	14.0843	0.0298		0.5860	0.5860		0.5544	0.5544		2,761.8252	2,761.8252	0.7664		2,780.9852
Total	**1.7105**	**13.9580**	**14.0843**	**0.0298**		**0.5860**	**0.5860**		**0.5544**	**0.5544**		**2,761.8252**	**2,761.8252**	**0.7664**		**2,780.9852**

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
Vendor	0.0300	0.9208	0.2658	2.4800e-003	0.0640	1.7900e-003	0.0658	0.0184	1.7100e-003	0.0202		264.9703	264.9703	0.0167		265.3866
Worker	0.0851	0.0560	0.6444	1.9700e-003	0.2124	1.6600e-003	0.2140	0.0563	1.5300e-003	0.0579		196.5682	196.5682	5.4100e-003		196.7035
Total	**0.1151**	**0.9768**	**0.9102**	**4.4500e-003**	**0.2764**	**3.4500e-003**	**0.2799**	**0.0748**	**3.2400e-003**	**0.0780**		**461.5385**	**461.5385**	**0.0221**		**462.0901**

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	0.8624	16.2563	18.0054	0.0298		0.8680	0.8680		0.8680	0.8680	0.0000	2,761.8252	2,761.8252	0.7664		2,780.9852
Total	**0.8624**	**16.2563**	**18.0054**	**0.0298**		**0.8680**	**0.8680**		**0.8680**	**0.8680**	**0.0000**	**2,761.8252**	**2,761.8252**	**0.7664**		**2,780.9852**

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

Vendor	0.0300	0.9208	0.2658	2.4800e-003	0.0640	1.7900e-003	0.0658	0.0184	1.7100e-003	0.0202		264.9703	264.9703	0.0167		265.3866
Worker	0.0851	0.0560	0.6444	1.9700e-003	0.2124	1.6600e-003	0.2140	0.0563	1.5300e-003	0.0579		196.5682	196.5682	5.4100e-003		196.7035
Total	**0.1151**	**0.9768**	**0.9102**	**4.4500e-003**	**0.2764**	**3.4500e-003**	**0.2799**	**0.0748**	**3.2400e-003**	**0.0780**		**461.5385**	**461.5385**	**0.0221**		**462.0901**

3.10 Architectural Coating ED-ICU - 2022

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	1.0920					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.9062
Total	**1.2966**	**1.4085**	**1.8136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**		**281.4481**	**281.4481**	**0.0183**		**281.9062**

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
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
Worker	0.0179	0.0118	0.1357	4.2000e-004	0.0447	3.5000e-004	0.0451	0.0119	3.2000e-004	0.0122		41.3828	41.3828	1.1400e-003		41.4113
Total	**0.0179**	**0.0118**	**0.1357**	**4.2000e-004**	**0.0447**	**3.5000e-004**	**0.0451**	**0.0119**	**3.2000e-004**	**0.0122**		**41.3828**	**41.3828**	**1.1400e-003**		**41.4113**

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	1.0920					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0594	1.3570	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951	0.0000	281.4481	281.4481	0.0183		281.9062
Total	**1.1515**	**1.3570**	**1.8324**	**2.9700e-003**		**0.0951**	**0.0951**		**0.0951**	**0.0951**	**0.0000**	**281.4481**	**281.4481**	**0.0183**		**281.9062**

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
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
Worker	0.0179	0.0118	0.1357	4.2000e-004	0.0447	3.5000e-004	0.0451	0.0119	3.2000e-004	0.0122		41.3828	41.3828	1.1400e-003		41.4113
Total	**0.0179**	**0.0118**	**0.1357**	**4.2000e-004**	**0.0447**	**3.5000e-004**	**0.0451**	**0.0119**	**3.2000e-004**	**0.0122**		**41.3828**	**41.3828**	**1.1400e-003**		**41.4113**

3.11 Paving MOB-PS - 2022

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	1.1028	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225		2,207.6603	2,207.6603	0.7140		2,225.5104
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.1028**	**11.1249**	**14.5805**	**0.0228**		**0.5679**	**0.5679**		**0.5225**	**0.5225**		**2,207.6603**	**2,207.6603**	**0.7140**		**2,225.5104**

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
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
Worker	0.0672	0.0442	0.5088	1.5600e-003	0.1677	1.3100e-003	0.1690	0.0445	1.2100e-003	0.0457		155.1854	155.1854	4.2700e-003		155.2922
Total	**0.0672**	**0.0442**	**0.5088**	**1.5600e-003**	**0.1677**	**1.3100e-003**	**0.1690**	**0.0445**	**1.2100e-003**	**0.0457**		**155.1854**	**155.1854**	**4.2700e-003**		**155.2922**

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	0.5609	11.2952	17.2957	0.0228		0.6093	0.6093		0.6093	0.6093	0.0000	2,207.6603	2,207.6603	0.7140		2,225.5104

Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.5609**	**11.2952**	**17.2957**	**0.0228**		**0.6093**	**0.6093**		**0.6093**	**0.6093**	**0.0000**	**2,207.6603**	**2,207.6603**	**0.7140**		**2,225.5104**

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
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
Worker	0.0672	0.0442	0.5088	1.5600e-003	0.1677	1.3100e-003	0.1690	0.0445	1.2100e-003	0.0457		155.1854	155.1854	4.2700e-003		155.2922
Total	**0.0672**	**0.0442**	**0.5088**	**1.5600e-003**	**0.1677**	**1.3100e-003**	**0.1690**	**0.0445**	**1.2100e-003**	**0.0457**		**155.1854**	**155.1854**	**4.2700e-003**		**155.2922**

3.12 Architectural Coating MOB-PS - 2022

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	2.2692					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.9062
Total	**2.4737**	**1.4085**	**1.8136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**		**281.4481**	**281.4481**	**0.0183**		**281.9062**

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
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
Worker	0.0627	0.0412	0.4749	1.4500e-003	0.1565	1.2200e-003	0.1577	0.0415	1.1300e-003	0.0426		144.8397	144.8397	3.9900e-003		144.9394
Total	**0.0627**	**0.0412**	**0.4749**	**1.4500e-003**	**0.1565**	**1.2200e-003**	**0.1577**	**0.0415**	**1.1300e-003**	**0.0426**		**144.8397**	**144.8397**	**3.9900e-003**		**144.9394**

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	2.2692					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0594	1.3570	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951	0.0000	281.4481	281.4481	0.0183		281.9062
Total	**2.3286**	**1.3570**	**1.8324**	**2.9700e-003**		**0.0951**	**0.0951**		**0.0951**	**0.0951**	**0.0000**	**281.4481**	**281.4481**	**0.0183**		**281.9062**

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
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
Worker	0.0627	0.0412	0.4749	1.4500e-003	0.1565	1.2200e-003	0.1577	0.0415	1.1300e-003	0.0426		144.8397	144.8397	3.9900e-003		144.9394
Total	**0.0627**	**0.0412**	**0.4749**	**1.4500e-003**	**0.1565**	**1.2200e-003**	**0.1577**	**0.0415**	**1.1300e-003**	**0.0426**		**144.8397**	**144.8397**	**3.9900e-003**		**144.9394**

3.13 Paving ED-ICU - 2022

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	1.2015	13.1585	11.4207	0.0218		0.5753	0.5753		0.5301	0.5301		2,094.4818	2,094.4818	0.6698		2,111.2275
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.2015**	**13.1585**	**11.4207**	**0.0218**		**0.5753**	**0.5753**		**0.5301**	**0.5301**		**2,094.4818**	**2,094.4818**	**0.6698**		**2,111.2275**

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
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

Worker	0.0672	0.0442	0.5088	1.5600e-003	0.1677	1.3100e-003	0.1690	0.0445	1.2100e-003	0.0457		155.1854	155.1854	4.2700e-003		155.2922
Total	**0.0672**	**0.0442**	**0.5088**	**1.5600e-003**	**0.1677**	**1.3100e-003**	**0.1690**	**0.0445**	**1.2100e-003**	**0.0457**		**155.1854**	**155.1854**	**4.2700e-003**		**155.2922**

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	0.5622	10.7949	14.8199	0.0218		0.5504	0.5504		0.5504	0.5504	0.0000	2,094.4818	2,094.4818	0.6698		2,111.2275
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.5622**	**10.7949**	**14.8199**	**0.0218**		**0.5504**	**0.5504**		**0.5504**	**0.5504**	**0.0000**	**2,094.4818**	**2,094.4818**	**0.6698**		**2,111.2275**

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
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
Worker	0.0672	0.0442	0.5088	1.5600e-003	0.1677	1.3100e-003	0.1690	0.0445	1.2100e-003	0.0457		155.1854	155.1854	4.2700e-003		155.2922
Total	**0.0672**	**0.0442**	**0.5088**	**1.5600e-003**	**0.1677**	**1.3100e-003**	**0.1690**	**0.0445**	**1.2100e-003**	**0.0457**		**155.1854**	**155.1854**	**4.2700e-003**		**155.2922**

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	3.4288	8.3056	42.3017	0.1337	14.5245	0.1302	14.6547	3.8744	0.1209	3.9953		13,493.8090	13,493.8090	0.6931		13,511.1363
Unmitigated	3.4288	8.3056	42.3017	0.1337	14.5245	0.1302	14.6547	3.8744	0.1209	3.9953		13,493.8090	13,493.8090	0.6931		13,511.1363

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Hospital	580.75	447.64	391.69	2,073,055	2,073,055
Medical Office Building	1,998.05	495.69	85.95	3,500,706	3,500,706
Unenclosed Parking with Elevator	0.00	0.00	0.00		
Total	2,578.80	943.33	477.64	5,573,762	5,573,762

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
Hospital	16.60	8.40	6.90	64.90	16.10	19.00	73	25	2
Medical Office Building	16.60	6.40	6.40	29.60	51.40	19.00	60	30	10
Unenclosed Parking with Elevator	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Hospital	0.770213	0.060017	0.040011	0.060017	0.020006	0.020006	0.010003	0.010003	0.001637	0.001633	0.004831	0.000583	0.001041

Medical Office Building	0.889880	0.029663	0.029663	0.019775	0.004944	0.004944	0.004944	0.004944	0.002364	0.002441	0.004860	0.000664	0.000915
Unenclosed Parking with Elevator	0.546501	0.044961	0.204016	0.120355	0.015740	0.006196	0.020131	0.030678	0.002515	0.002201	0.005142	0.000687	0.000876

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Percent of Electricity Use Generated with Renewable Energy

	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	0.1308	1.1891	0.9989	7.1300e-003		0.0904	0.0904		0.0904	0.0904		1,426.9718	1,426.9718	0.0274	0.0262	1,435.4515
NaturalGas Unmitigated	0.1308	1.1891	0.9989	7.1300e-003		0.0904	0.0904		0.0904	0.0904		1,426.9718	1,426.9718	0.0274	0.0262	1,435.4515

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					
Hospital	10450.3	0.1127	1.0245	0.8606	6.1500e-003		0.0779	0.0779		0.0779	0.0779		1,229.4485	1,229.4485	0.0236	0.0225	1,236.7545
Medical Office Building	1678.95	0.0181	0.1646	0.1383	9.9000e-004		0.0125	0.0125		0.0125	0.0125		197.5233	197.5233	3.7900e-003	3.6200e-003	198.6970

Unenclosed Parking with Elevator	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
Total		**0.1308**	**1.1891**	**0.9989**	**7.1400e-003**		**0.0904**	**0.0904**		**0.0904**	**0.0904**		**1,426.9718**	**1,426.9718**	**0.0274**	**0.0262**	**1,435.4515**

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					
Hospital	10.4503	0.1127	1.0245	0.8606	6.1500e-003		0.0779	0.0779		0.0779	0.0779		1,229.4485	1,229.4485	0.0236	0.0225	1,236.7545
Medical Office Building	1.67895	0.0181	0.1646	0.1383	9.9000e-004		0.0125	0.0125		0.0125	0.0125		197.5233	197.5233	3.7900e-003	3.6200e-003	198.6970
Unenclosed Parking with Elevator	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
Total		**0.1308**	**1.1891**	**0.9989**	**7.1400e-003**		**0.0904**	**0.0904**		**0.0904**	**0.0904**		**1,426.9718**	**1,426.9718**	**0.0274**	**0.0262**	**1,435.4515**

6.0 Area Detail

6.1 Mitigation Measures Area

	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	2.4242	4.8000e-004	0.0527	0.0000		1.9000e-004	1.9000e-004		1.9000e-004	1.9000e-004		0.1129	0.1129	3.0000e-004		0.1203
Unmitigated	2.4242	4.8000e-004	0.0527	0.0000		1.9000e-004	1.9000e-004		1.9000e-004	1.9000e-004		0.1129	0.1129	3.0000e-004		0.1203

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	0.0311					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.3882					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	4.9100e-003	4.8000e-004	0.0527	0.0000		1.9000e-004	1.9000e-004		1.9000e-004	1.9000e-004		0.1129	0.1129	3.0000e-004		0.1203
Total	**2.4242**	**4.8000e-004**	**0.0527**	**0.0000**		**1.9000e-004**	**1.9000e-004**		**1.9000e-004**	**1.9000e-004**		**0.1129**	**0.1129**	**3.0000e-004**		**0.1203**

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	0.0311					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.3882					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	4.9100e-003	4.8000e-004	0.0527	0.0000		1.9000e-004	1.9000e-004		1.9000e-004	1.9000e-004		0.1129	0.1129	3.0000e-004		0.1203
Total	**2.4242**	**4.8000e-004**	**0.0527**	**0.0000**		**1.9000e-004**	**1.9000e-004**		**1.9000e-004**	**1.9000e-004**		**0.1129**	**0.1129**	**3.0000e-004**		**0.1203**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

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
Emergency Generator	1	1	12	800	0.73	CNG

Boilers

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

User Defined Equipment

Equipment Type	Number

10.1 Stationary Sources

Unmitigated/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
Equipment Type	lb/day										lb/day					
Emergency Generator - CNG (500 - 9999 HP)	7.0384	0.5421	18.3314	2.4500e-003		0.0388	0.0388		0.0388	0.0388		449.6876	449.6876	0.9403		473.1940

Total	**7.0384**	**0.5421**	**18.3314**	**2.4500e-003**		**0.0388**	**0.0388**		**0.0388**	**0.0388**		**449.6876**	**449.6876**	**0.9403**		**473.1940**

11.0 Vegetation

Queen MOB, Parking, ED, ICU

Los Angeles-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Hospital	58.90	1000sqft	1.35	58,900.00	0
Medical Office Building	58.87	1000sqft	1.35	58,868.00	0
Unenclosed Parking with Elevator	398.00	Space	3.58	159,200.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	9			**Operational Year**	2022
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	399.04	**CH4 Intensity (lb/MWhr)**	0	**N2O Intensity (lb/MWhr)**	0

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Updated SCE factor for 2019 CO2equivalent Intensity Factor.

Land Use - information from Precise Plan Combined

Construction Phase - .

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - crane, forklift, 2 aerial lifts, 3 welders, backhoe, 1 drill

Off-road Equipment - 1 backhoe, 1 concrete pump, 2 cranes, 1 forklift

Off-road Equipment - 1 backhoe

Off-road Equipment - 1 backhoe, 1 excavator, 1 rubber tired loader, 1 dozer, 1 skid steer loader

Off-road Equipment - excavator, blade (grader)

Off-road Equipment - 2 backoes, 1 excavator, 2 grades, 1 loader, 1 rubber tired dozer, 1 skid steer loader, 1 compactor, 2 scrapers

Off-road Equipment - pavers, rollers, grader, compactor

Off-road Equipment - default

Off-road Equipment - 1 backhoe, excavator, 2 graders, rubber tired loader, dozer, skids, compactor

Off-road Equipment - backhoe.

Trips and VMT - .

Demolition - .

Grading - .

Architectural Coating - Apportioned to correct phases. MM AIR-1 from QVHSP EIR for 10 g/L paints

Vehicle Trips - Traffic Study.

Area Coating - MM AIR-1 from QVHSP EIR

Energy Use -

Water And Wastewater - .

Construction Off-road Equipment Mitigation - .MM AIR-2 from QVHSP EIR

Energy Mitigation - MM GHG from QVHSP PEIR

Waste Mitigation -

Stationary Sources - Emergency Generators and Fire Pumps - natural gas per MM AIR-3 from QVHSP EIR

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	58,884.00	29,451.00
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	58,884.00	29,434.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	176,652.00	88,352.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	176,652.00	88,302.00
tblArchitecturalCoating	ConstArea_Parking	9,552.00	0.00
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	10.00
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	10.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	10.00

tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	10.00
tblArchitecturalCoating	EF_Parking	100.00	10.00
tblArchitecturalCoating	EF_Parking	100.00	10.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	100	10
tblAreaCoating	Area_EF_Nonresidential_Interior	100	10
tblAreaCoating	Area_EF_Parking	100	10
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
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tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	8.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
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tblConstEquipMitigation	Tier	No Change	Tier 3
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tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3

tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
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tblConstructionPhase	NumDays	230.00	432.00
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tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00

tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblFleetMix	HHD	0.03	0.01
tblFleetMix	HHD	0.03	4.9440e-003
tblFleetMix	LDA	0.55	0.77
tblFleetMix	LDA	0.55	0.89
tblFleetMix	LDT1	0.04	0.06
tblFleetMix	LDT1	0.04	0.03
tblFleetMix	LDT2	0.20	0.04
tblFleetMix	LDT2	0.20	0.03
tblFleetMix	LHD1	0.02	0.02
tblFleetMix	LHD1	0.02	4.9440e-003
tblFleetMix	LHD2	6.1960e-003	0.02
tblFleetMix	LHD2	6.1960e-003	4.9440e-003
tblFleetMix	MCY	5.1420e-003	4.8310e-003
tblFleetMix	MCY	5.1420e-003	4.8600e-003
tblFleetMix	MDV	0.12	0.06
tblFleetMix	MDV	0.12	0.02
tblFleetMix	MH	8.7600e-004	1.0410e-003
tblFleetMix	MH	8.7600e-004	9.1500e-004
tblFleetMix	MHD	0.02	0.01
tblFleetMix	MHD	0.02	4.9440e-003
tblFleetMix	OBUS	2.5150e-003	1.6370e-003
tblFleetMix	OBUS	2.5150e-003	2.3640e-003
tblFleetMix	SBUS	6.8700e-004	5.8300e-004
tblFleetMix	SBUS	6.8700e-004	6.6400e-004
tblFleetMix	UBUS	2.2010e-003	1.6330e-003

tblFleetMix	UBUS	2.2010e-003	2.4410e-003
tblGrading	AcresOfGrading	13.00	10.00
tblGrading	AcresOfGrading	114.00	60.00
tblGrading	AcresOfGrading	26.00	10.00
tblGrading	MaterialImported	0.00	1,000.00
tblGrading	MaterialImported	0.00	5,900.00
tblLandUse	LandUseSquareFeet	58,870.00	58,868.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	3.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0
tblProjectCharacteristics	CO2IntensityFactor	702.44	399.04
tblProjectCharacteristics	N2OIntensityFactor	0.006	0
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	800.00
tblStationaryGeneratorsPumpsUse	HoursPerDay	0.00	1.00
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	12.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblTripsAndVMT	VendorTripNumber	45.00	36.00
tblTripsAndVMT	VendorTripNumber	45.00	10.00
tblTripsAndVMT	WorkerTripNumber	21.00	14.00
tblTripsAndVMT	WorkerTripNumber	105.00	70.00
tblTripsAndVMT	WorkerTripNumber	105.00	19.00
tblTripsAndVMT	WorkerTripNumber	21.00	4.00
tblVehicleTrips	CC_TL	8.40	6.40
tblVehicleTrips	CNW_TL	6.90	6.40
tblVehicleTrips	ST_TR	10.18	7.60
tblVehicleTrips	ST_TR	8.96	8.42
tblVehicleTrips	SU_TR	8.91	6.65
tblVehicleTrips	SU_TR	1.55	1.46
tblVehicleTrips	WD_TR	13.22	9.86
tblVehicleTrips	WD_TR	36.13	33.94

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	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					
2021	9.8743	110.8646	66.1204	0.1700	16.0331	4.2890	20.3221	7.3572	3.9625	11.3197	0.0000	16,729.5094	16,729.5094	4.1512	0.0000	16,833.2880
2022	5.5083	32.6736	32.5022	0.0757	1.3340	1.2923	2.6263	0.3605	1.2235	1.5840	0.0000	7,331.1134	7,331.1134	1.5289	0.0000	7,365.2649
Maximum	**9.8743**	**110.8646**	**66.1204**	**0.1700**	**16.0331**	**4.2890**	**20.3221**	**7.3572**	**3.9625**	**11.3197**	**0.0000**	**16,729.5094**	**16,729.5094**	**4.1512**	**0.0000**	**16,833.2880**

Mitigated Construction

	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					
2021	4.0473	73.2054	83.9358	0.1700	7.4052	2.9334	10.3386	3.1800	2.9316	6.1115	0.0000	16,729.5094	16,729.5094	4.1512	0.0000	16,833.2880
2022	3.9731	32.2866	39.1573	0.0757	1.3340	1.5784	2.8723	0.3605	1.5780	1.8978	0.0000	7,331.1134	7,331.1134	1.5289	0.0000	7,365.2649
Maximum	**4.0473**	**73.2054**	**83.9358**	**0.1700**	**7.4052**	**2.9334**	**10.3386**	**3.1800**	**2.9316**	**6.1115**	**0.0000**	**16,729.5094**	**16,729.5094**	**4.1512**	**0.0000**	**16,833.2880**

	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	**47.86**	**26.51**	**-24.81**	**0.00**	**49.68**	**19.16**	**42.43**	**54.13**	**13.04**	**37.93**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

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	2.4242	4.8000e-004	0.0527	0.0000		1.9000e-004	1.9000e-004		1.9000e-004	1.9000e-004		0.1129	0.1129	3.0000e-004		0.1203
Energy	0.1308	1.1891	0.9989	7.1300e-003		0.0904	0.0904		0.0904	0.0904		1,426.9718	1,426.9718	0.0274	0.0262	1,435.4515
Mobile	3.5688	7.9453	44.6457	0.1412	14.5245	0.1300	14.6545	3.8744	0.1207	3.9951		14,244.4986	14,244.4986	0.7024		14,262.0591
Stationary	7.0384	0.5421	18.3314	2.4500e-003		0.0388	0.0388		0.0388	0.0388		449.6876	449.6876	0.9403		473.1940
Total	**13.1623**	**9.6770**	**64.0288**	**0.1508**	**14.5245**	**0.2594**	**14.7839**	**3.8744**	**0.2501**	**4.1245**		**16,121.2708**	**16,121.2708**	**1.6703**	**0.0262**	**16,170.8250**

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	2.4242	4.8000e-004	0.0527	0.0000		1.9000e-004	1.9000e-004		1.9000e-004	1.9000e-004		0.1129	0.1129	3.0000e-004		0.1203
Energy	0.1308	1.1891	0.9989	7.1300e-003		0.0904	0.0904		0.0904	0.0904		1,426.9718	1,426.9718	0.0274	0.0262	1,435.4515
Mobile	3.5688	7.9453	44.6457	0.1412	14.5245	0.1300	14.6545	3.8744	0.1207	3.9951		14,244.4986	14,244.4986	0.7024		14,262.0591
Stationary	7.0384	0.5421	18.3314	2.4500e-003		0.0388	0.0388		0.0388	0.0388		449.6876	449.6876	0.9403		473.1940
Total	**13.1623**	**9.6770**	**64.0288**	**0.1508**	**14.5245**	**0.2594**	**14.7839**	**3.8744**	**0.2501**	**4.1245**		**16,121.2708**	**16,121.2708**	**1.6703**	**0.0262**	**16,170.8250**

	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	2/10/2021	3/23/2021	6	36	MOB-PS
2	Site Preparation MOB-PS	Site Preparation	3/24/2021	3/31/2021	6	7	MOB-PS
3	Grading-Excavation MOB-PS	Grading	4/1/2021	4/30/2021	6	26	MOB-PS
4	Demolition ED-ICU	Demolition	5/1/2021	5/25/2021	6	21	ED-ICU
5	Building Construction MOB-PS	Building Construction	5/1/2021	6/1/2022	6	340	MOB-PS
6	Site Preparation ED-ICU	Site Preparation	6/1/2021	6/30/2021	6	26	ED-ICU
7	Grading/Excavation ED-ICU	Grading	6/1/2021	7/14/2021	6	38	ED-ICU
8	Building Construction ED-ICU	Building Construction	7/15/2021	11/30/2022	6	432	ED-ICU
9	Architectural Coating ED-ICU	Architectural Coating	1/1/2022	2/28/2022	6	50	ED-ICU
10	Paving MOB-PS	Paving	6/10/2022	7/10/2022	6	26	MOB-PS
11	Architectural Coating MOB-PS	Architectural Coating	6/10/2022	7/10/2022	6	26	MOB-PS
12	Paving ED-ICU	Paving	9/1/2022	11/30/2022	6	78	ED-ICU

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 3.58

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 88,352; Non-Residential Outdoor: 29,451; Striped Parking Area: 0

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition	Excavators	0	8.00	158	0.38
Demolition	Rubber Tired Dozers	0	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Site Preparation MOB-PS	Rubber Tired Dozers	0	8.00	247	0.40
Site Preparation MOB-PS	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading-Excavation MOB-PS	Excavators	1	8.00	158	0.38
Grading-Excavation MOB-PS	Graders	1	8.00	187	0.41
Grading-Excavation MOB-PS	Rubber Tired Dozers	0	8.00	247	0.40
Grading-Excavation MOB-PS	Tractors/Loaders/Backhoes	0	8.00	97	0.37

Demolition ED-ICU	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition ED-ICU	Excavators	1	8.00	158	0.38
Demolition ED-ICU	Rubber Tired Dozers	1	8.00	247	0.40
Demolition ED-ICU	Rubber Tired Loaders	1	8.00	203	0.36
Demolition ED-ICU	Skid Steer Loaders	1	8.00	65	0.37
Demolition ED-ICU	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Building Construction MOB-PS	Cranes	2	7.00	231	0.29
Building Construction MOB-PS	Forklifts	1	8.00	89	0.20
Building Construction MOB-PS	Generator Sets	0	8.00	84	0.74
Building Construction MOB-PS	Pumps	1	8.00	84	0.74
Building Construction MOB-PS	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Building Construction MOB-PS	Welders	0	8.00	46	0.45
Site Preparation ED-ICU	Excavators	1	8.00	158	0.38
Site Preparation ED-ICU	Graders	2	8.00	187	0.41
Site Preparation ED-ICU	Plate Compactors	1	8.00	8	0.43
Site Preparation ED-ICU	Rubber Tired Dozers	1	8.00	247	0.40
Site Preparation ED-ICU	Rubber Tired Loaders	1	8.00	203	0.36
Site Preparation ED-ICU	Skid Steer Loaders	1	8.00	65	0.37
Site Preparation ED-ICU	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading/Excavation ED-ICU	Excavators	1	8.00	158	0.38
Grading/Excavation ED-ICU	Graders	2	8.00	187	0.41
Grading/Excavation ED-ICU	Plate Compactors	1	8.00	8	0.43
Grading/Excavation ED-ICU	Rubber Tired Dozers	1	8.00	247	0.40
Grading/Excavation ED-ICU	Rubber Tired Loaders	1	8.00	203	0.36
Grading/Excavation ED-ICU	Scrapers	2	8.00	367	0.48
Grading/Excavation ED-ICU	Skid Steer Loaders	1	8.00	65	0.37
Grading/Excavation ED-ICU	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction ED-ICU	Aerial Lifts	2	8.00	63	0.31
Building Construction ED-ICU	Bore/Drill Rigs	1	8.00	221	0.50
Building Construction ED-ICU	Cranes	1	7.00	231	0.29

Building Construction ED-ICU	Forklifts	1	8.00	89	0.20
Building Construction ED-ICU	Generator Sets	0	8.00	84	0.74
Building Construction ED-ICU	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Building Construction ED-ICU	Welders	3	8.00	46	0.45
Architectural Coating ED-ICU	Air Compressors	1	6.00	78	0.48
Paving MOB-PS	Pavers	2	8.00	130	0.42
Paving MOB-PS	Paving Equipment	2	8.00	132	0.36
Paving MOB-PS	Rollers	2	8.00	80	0.38
Architectural Coating MOB-PS	Air Compressors	1	6.00	78	0.48
Paving ED-ICU	Graders	1	8.00	187	0.41
Paving ED-ICU	Pavers	2	8.00	130	0.42
Paving ED-ICU	Paving Equipment	0	8.00	132	0.36
Paving ED-ICU	Plate Compactors	1	8.00	8	0.43
Paving ED-ICU	Rollers	2	8.00	80	0.38

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	1	3.00	0.00	159.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation MOB-PS	1	3.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading-Excavation MOB-PS	2	5.00	0.00	125.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Demolition ED-ICU	5	13.00	0.00	423.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction MOB-PS	5	70.00	36.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation ED-ICU	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading/Excavation ED-ICU	11	28.00	0.00	738.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction ED-ICU	9	19.00	10.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating ED-ICU	1	4.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving MOB-PS	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating MOB-PS	1	14.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving ED-ICU	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

3.2 Demolition - 2021

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					0.9546	0.0000	0.9546	0.1445	0.0000	0.1445			0.0000			0.0000
Off-Road	0.1873	1.8958	2.2602	3.1100e-003		0.1118	0.1118		0.1028	0.1028		300.9001	300.9001	0.0973		303.3330
Total	**0.1873**	**1.8958**	**2.2602**	**3.1100e-003**	**0.9546**	**0.1118**	**1.0664**	**0.1445**	**0.1028**	**0.2474**		**300.9001**	**300.9001**	**0.0973**		**303.3330**

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	0.0368	1.1847	0.2778	3.4500e-003	0.0772	3.6400e-003	0.0809	0.0212	3.4800e-003	0.0247		373.8471	373.8471	0.0254		374.4814
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
Worker	0.0129	8.8400e-003	0.1208	3.4000e-004	0.0335	2.7000e-004	0.0338	8.8900e-003	2.5000e-004	9.1400e-003		34.1631	34.1631	1.0100e-003		34.1883
Total	**0.0497**	**1.1936**	**0.3986**	**3.7900e-003**	**0.1108**	**3.9100e-003**	**0.1147**	**0.0301**	**3.7300e-003**	**0.0338**		**408.0102**	**408.0102**	**0.0264**		**408.6696**

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					0.3723	0.0000	0.3723	0.0564	0.0000	0.0564			0.0000			0.0000
Off-Road	0.0760	1.7344	2.3421	3.1100e-003		0.1215	0.1215		0.1215	0.1215	0.0000	300.9001	300.9001	0.0973		303.3330
Total	**0.0760**	**1.7344**	**2.3421**	**3.1100e-003**	**0.3723**	**0.1215**	**0.4938**	**0.0564**	**0.1215**	**0.1779**	**0.0000**	**300.9001**	**300.9001**	**0.0973**		**303.3330**

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	0.0368	1.1847	0.2778	3.4500e-003	0.0772	3.6400e-003	0.0809	0.0212	3.4800e-003	0.0247		373.8471	373.8471	0.0254		374.4814
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
Worker	0.0129	8.8400e-003	0.1208	3.4000e-004	0.0335	2.7000e-004	0.0338	8.8900e-003	2.5000e-004	9.1400e-003		34.1631	34.1631	1.0100e-003		34.1883
Total	**0.0497**	**1.1936**	**0.3986**	**3.7900e-003**	**0.1108**	**3.9100e-003**	**0.1147**	**0.0301**	**3.7300e-003**	**0.0338**		**408.0102**	**408.0102**	**0.0264**		**408.6696**

3.3 Site Preparation MOB-PS - 2021

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					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.1873	1.8958	2.2602	3.1100e-003		0.1118	0.1118		0.1028	0.1028		300.9001	300.9001	0.0973		303.3330
Total	**0.1873**	**1.8958**	**2.2602**	**3.1100e-003**	**0.0000**	**0.1118**	**0.1118**	**0.0000**	**0.1028**	**0.1028**		**300.9001**	**300.9001**	**0.0973**		**303.3330**

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
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
Worker	0.0129	8.8400e-003	0.1208	3.4000e-004	0.0335	2.7000e-004	0.0338	8.8900e-003	2.5000e-004	9.1400e-003		34.1631	34.1631	1.0100e-003		34.1883
Total	**0.0129**	**8.8400e-003**	**0.1208**	**3.4000e-004**	**0.0335**	**2.7000e-004**	**0.0338**	**8.8900e-003**	**2.5000e-004**	**9.1400e-003**		**34.1631**	**34.1631**	**1.0100e-003**		**34.1883**

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					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000

Off-Road	0.0760	1.7344	2.3421	3.1100e-003		0.1215	0.1215		0.1215	0.1215	0.0000	300.9001	300.9001	0.0973		303.3330
Total	**0.0760**	**1.7344**	**2.3421**	**3.1100e-003**	**0.0000**	**0.1215**	**0.1215**	**0.0000**	**0.1215**	**0.1215**	**0.0000**	**300.9001**	**300.9001**	**0.0973**		**303.3330**

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
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
Worker	0.0129	8.8400e-003	0.1208	3.4000e-004	0.0335	2.7000e-004	0.0338	8.8900e-003	2.5000e-004	9.1400e-003		34.1631	34.1631	1.0100e-003		34.1883
Total	**0.0129**	**8.8400e-003**	**0.1208**	**3.4000e-004**	**0.0335**	**2.7000e-004**	**0.0338**	**8.8900e-003**	**2.5000e-004**	**9.1400e-003**		**34.1631**	**34.1631**	**1.0100e-003**		**34.1883**

3.4 Grading-Excavation MOB-PS - 2021

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					0.4122	0.0000	0.4122	0.0447	0.0000	0.0447			0.0000			0.0000
Off-Road	0.6822	8.0780	5.0390	0.0118		0.2921	0.2921		0.2688	0.2688		1,141.8761	1,141.8761	0.3693		1,151.1087
Total	**0.6822**	**8.0780**	**5.0390**	**0.0118**	**0.4122**	**0.2921**	**0.7044**	**0.0447**	**0.2688**	**0.3135**		**1,141.8761**	**1,141.8761**	**0.3693**		**1,151.1087**

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	0.0401	1.2896	0.3024	3.7500e-003	0.0841	3.9600e-003	0.0880	0.0230	3.7900e-003	0.0268		406.9453	406.9453	0.0276		407.6357
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
Worker	0.0214	0.0147	0.2014	5.7000e-004	0.0559	4.5000e-004	0.0563	0.0148	4.2000e-004	0.0152		56.9385	56.9385	1.6800e-003		56.9804
Total	**0.0615**	**1.3044**	**0.5038**	**4.3200e-003**	**0.1400**	**4.4100e-003**	**0.1444**	**0.0379**	**4.2100e-003**	**0.0421**		**463.8838**	**463.8838**	**0.0293**		**464.6162**

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					0.1608	0.0000	0.1608	0.0174	0.0000	0.0174			0.0000			0.0000
Off-Road	0.2893	5.5939	7.4338	0.0118		0.2376	0.2376		0.2376	0.2376	0.0000	1,141.8761	1,141.8761	0.3693		1,151.1087
Total	**0.2893**	**5.5939**	**7.4338**	**0.0118**	**0.1608**	**0.2376**	**0.3984**	**0.0174**	**0.2376**	**0.2550**	**0.0000**	**1,141.8761**	**1,141.8761**	**0.3693**		**1,151.1087**

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	0.0401	1.2896	0.3024	3.7500e-003	0.0841	3.9600e-003	0.0880	0.0230	3.7900e-003	0.0268		406.9453	406.9453	0.0276		407.6357
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
Worker	0.0214	0.0147	0.2014	5.7000e-004	0.0559	4.5000e-004	0.0563	0.0148	4.2000e-004	0.0152		56.9385	56.9385	1.6800e-003		56.9804
Total	**0.0615**	**1.3044**	**0.5038**	**4.3200e-003**	**0.1400**	**4.4100e-003**	**0.1444**	**0.0379**	**4.2100e-003**	**0.0421**		**463.8838**	**463.8838**	**0.0293**		**464.6162**

3.5 Demolition ED-ICU - 2021

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					4.3613	0.0000	4.3613	0.6603	0.0000	0.6603			0.0000			0.0000
Off-Road	1.8813	19.8878	12.5585	0.0251		0.9183	0.9183		0.8449	0.8449		2,433.8688	2,433.8688	0.7872		2,453.5479
Total	**1.8813**	**19.8878**	**12.5585**	**0.0251**	**4.3613**	**0.9183**	**5.2797**	**0.6603**	**0.8449**	**1.5052**		**2,433.8688**	**2,433.8688**	**0.7872**		**2,453.5479**

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	0.1680	5.4032	1.2669	0.0157	0.3522	0.0166	0.3688	0.0966	0.0159	0.1124		1,704.9846	1,704.9846	0.1157		1,707.8773
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

Worker	0.0557	0.0383	0.5236	1.4900e-003	0.1453	1.1700e-003	0.1465	0.0385	1.0800e-003	0.0396		148.0401	148.0401	4.3600e-003		148.1491
Total	**0.2237**	**5.4415**	**1.7905**	**0.0172**	**0.4975**	**0.0178**	**0.5153**	**0.1351**	**0.0170**	**0.1520**		**1,853.0247**	**1,853.0247**	**0.1201**		**1,856.0264**

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					1.7009	0.0000	1.7009	0.2575	0.0000	0.2575			0.0000			0.0000
Off-Road	0.6177	12.3863	15.7113	0.0251		0.5883	0.5883		0.5883	0.5883	0.0000	2,433.8688	2,433.8688	0.7872		2,453.5479
Total	**0.6177**	**12.3863**	**15.7113**	**0.0251**	**1.7009**	**0.5883**	**2.2893**	**0.2575**	**0.5883**	**0.8459**	**0.0000**	**2,433.8688**	**2,433.8688**	**0.7872**		**2,453.5479**

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	0.1680	5.4032	1.2669	0.0157	0.3522	0.0166	0.3688	0.0966	0.0159	0.1124		1,704.9846	1,704.9846	0.1157		1,707.8773
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
Worker	0.0557	0.0383	0.5236	1.4900e-003	0.1453	1.1700e-003	0.1465	0.0385	1.0800e-003	0.0396		148.0401	148.0401	4.3600e-003		148.1491
Total	**0.2237**	**5.4415**	**1.7905**	**0.0172**	**0.4975**	**0.0178**	**0.5153**	**0.1351**	**0.0170**	**0.1520**		**1,853.0247**	**1,853.0247**	**0.1201**		**1,856.0264**

3.6 Building Construction MOB-PS - 2021

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	1.3962	14.5343	10.3562	0.0209		0.7037	0.7037		0.6616	0.6616		2,012.1469	2,012.1469	0.4833		2,024.2282
Total	**1.3962**	**14.5343**	**10.3562**	**0.0209**		**0.7037**	**0.7037**		**0.6616**	**0.6616**		**2,012.1469**	**2,012.1469**	**0.4833**		**2,024.2282**

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
Vendor	0.1094	3.4952	0.9137	9.2600e-003	0.2305	7.1500e-003	0.2376	0.0664	6.8400e-003	0.0732		989.5703	989.5703	0.0583		991.0277
Worker	0.3001	0.2063	2.8194	8.0000e-003	0.7824	6.3200e-003	0.7888	0.2075	5.8200e-003	0.2133		797.1389	797.1389	0.0235		797.7261
Total	**0.4095**	**3.7015**	**3.7332**	**0.0173**	**1.0129**	**0.0135**	**1.0264**	**0.2739**	**0.0127**	**0.2865**		**1,786.7092**	**1,786.7092**	**0.0818**		**1,788.7538**

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	0.4838	10.1786	12.6431	0.0209		0.5591	0.5591		0.5591	0.5591	0.0000	2,012.1469	2,012.1469	0.4833		2,024.2282
Total	**0.4838**	**10.1786**	**12.6431**	**0.0209**		**0.5591**	**0.5591**		**0.5591**	**0.5591**	**0.0000**	**2,012.1469**	**2,012.1469**	**0.4833**		**2,024.2282**

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
Vendor	0.1094	3.4952	0.9137	9.2600e-003	0.2305	7.1500e-003	0.2376	0.0664	6.8400e-003	0.0732		989.5703	989.5703	0.0583		991.0277
Worker	0.3001	0.2063	2.8194	8.0000e-003	0.7824	6.3200e-003	0.7888	0.2075	5.8200e-003	0.2133		797.1389	797.1389	0.0235		797.7261
Total	**0.4095**	**3.7015**	**3.7332**	**0.0173**	**1.0129**	**0.0135**	**1.0264**	**0.2739**	**0.0127**	**0.2865**		**1,786.7092**	**1,786.7092**	**0.0818**		**1,788.7538**

3.6 Building Construction MOB-PS - 2022

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	1.2624	12.8124	10.1554	0.0209		0.6084	0.6084		0.5722	0.5722		2,012.6026	2,012.6026	0.4812		2,024.6328
Total	**1.2624**	**12.8124**	**10.1554**	**0.0209**		**0.6084**	**0.6084**		**0.5722**	**0.5722**		**2,012.6026**	**2,012.6026**	**0.4812**		**2,024.6328**

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
Vendor	0.1027	3.3239	0.8645	9.1700e-003	0.2305	6.2500e-003	0.2367	0.0664	5.9800e-003	0.0723		980.9492	980.9492	0.0563		982.3565
Worker	0.2811	0.1863	2.6012	7.7200e-003	0.7824	6.1200e-003	0.7886	0.2075	5.6400e-003	0.2132		769.0986	769.0986	0.0212		769.6293
Total	**0.3838**	**3.5102**	**3.4658**	**0.0169**	**1.0129**	**0.0124**	**1.0253**	**0.2739**	**0.0116**	**0.2855**		**1,750.0478**	**1,750.0478**	**0.0775**		**1,751.9858**

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	0.4838	10.1786	12.6431	0.0209		0.5591	0.5591		0.5591	0.5591	0.0000	2,012.6026	2,012.6026	0.4812		2,024.6328
Total	**0.4838**	**10.1786**	**12.6431**	**0.0209**		**0.5591**	**0.5591**		**0.5591**	**0.5591**	**0.0000**	**2,012.6026**	**2,012.6026**	**0.4812**		**2,024.6328**

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
Vendor	0.1027	3.3239	0.8645	9.1700e-003	0.2305	6.2500e-003	0.2367	0.0664	5.9800e-003	0.0723		980.9492	980.9492	0.0563		982.3565
Worker	0.2811	0.1863	2.6012	7.7200e-003	0.7824	6.1200e-003	0.7886	0.2075	5.6400e-003	0.2132		769.0986	769.0986	0.0212		769.6293
Total	**0.3838**	**3.5102**	**3.4658**	**0.0169**	**1.0129**	**0.0124**	**1.0253**	**0.2739**	**0.0116**	**0.2855**		**1,750.0478**	**1,750.0478**	**0.0775**		**1,751.9858**

3.7 Site Preparation ED-ICU - 2021

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					6.4300	0.0000	6.4300	3.3543	0.0000	3.3543			0.0000			0.0000
Off-Road	2.8274	31.9882	16.3033	0.0389		1.3035	1.3035		1.2000	1.2000		3,751.7165	3,751.7165	1.2058		3,781.8617
Total	**2.8274**	**31.9882**	**16.3033**	**0.0389**	**6.4300**	**1.3035**	**7.7335**	**3.3543**	**1.2000**	**4.5543**		**3,751.7165**	**3,751.7165**	**1.2058**		**3,781.8617**

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
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
Worker	0.0857	0.0589	0.8056	2.2900e-003	0.2236	1.8100e-003	0.2254	0.0593	1.6600e-003	0.0610		227.7540	227.7540	6.7100e-003		227.9217
Total	**0.0857**	**0.0589**	**0.8056**	**2.2900e-003**	**0.2236**	**1.8100e-003**	**0.2254**	**0.0593**	**1.6600e-003**	**0.0610**		**227.7540**	**227.7540**	**6.7100e-003**		**227.9217**

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					2.5077	0.0000	2.5077	1.3082	0.0000	1.3082			0.0000			0.0000
Off-Road	0.9823	18.9119	22.9533	0.0389		0.8361	0.8361		0.8361	0.8361	0.0000	3,751.7165	3,751.7165	1.2058		3,781.8617
Total	**0.9823**	**18.9119**	**22.9533**	**0.0389**	**2.5077**	**0.8361**	**3.3438**	**1.3082**	**0.8361**	**2.1443**	**0.0000**	**3,751.7165**	**3,751.7165**	**1.2058**		**3,781.8617**

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
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
Worker	0.0857	0.0589	0.8056	2.2900e-003	0.2236	1.8100e-003	0.2254	0.0593	1.6600e-003	0.0610		227.7540	227.7540	6.7100e-003		227.9217

Total	**0.0857**	**0.0589**	**0.8056**	**2.2900e-003**	**0.2236**	**1.8100e-003**	**0.2254**	**0.0593**	**1.6600e-003**	**0.0610**		**227.7540**	**227.7540**	**6.7100e-003**		**227.9217**

3.8 Grading/Excavation ED-ICU - 2021

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					7.7141	0.0000	7.7141	3.4937	0.0000	3.4937			0.0000			0.0000
Off-Road	4.8736	55.2896	32.5729	0.0723		2.2480	2.2480		2.0690	2.0690		6,988.4396	6,988.4396	2.2526		7,044.7554
Total	**4.8736**	**55.2896**	**32.5729**	**0.0723**	**7.7141**	**2.2480**	**9.9622**	**3.4937**	**2.0690**	**5.5627**		**6,988.4396**	**6,988.4396**	**2.2526**		**7,044.7554**

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	0.1619	5.2096	1.2215	0.0152	0.3396	0.0160	0.3556	0.0931	0.0153	0.1084		1,643.8878	1,643.8878	0.1116		1,646.6768
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
Worker	0.1200	0.0825	1.1278	3.2000e-003	0.3130	2.5300e-003	0.3155	0.0830	2.3300e-003	0.0853		318.8556	318.8556	9.4000e-003		319.0904
Total	**0.2820**	**5.2921**	**2.3493**	**0.0184**	**0.6526**	**0.0185**	**0.6711**	**0.1761**	**0.0176**	**0.1937**		**1,962.7433**	**1,962.7433**	**0.1210**		**1,965.7672**

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					3.0085	0.0000	3.0085	1.3625	0.0000	1.3625			0.0000			0.0000
Off-Road	1.8040	35.0625	41.4514	0.0723		1.5045	1.5045		1.5045	1.5045	0.0000	6,988.4396	6,988.4396	2.2526		7,044.7553
Total	**1.8040**	**35.0625**	**41.4514**	**0.0723**	**3.0085**	**1.5045**	**4.5130**	**1.3625**	**1.5045**	**2.8670**	**0.0000**	**6,988.4396**	**6,988.4396**	**2.2526**		**7,044.7553**

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	0.1619	5.2096	1.2215	0.0152	0.3396	0.0160	0.3556	0.0931	0.0153	0.1084		1,643.8878	1,643.8878	0.1116		1,646.6768
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
Worker	0.1200	0.0825	1.1278	3.2000e-003	0.3130	2.5300e-003	0.3155	0.0830	2.3300e-003	0.0853		318.8556	318.8556	9.4000e-003		319.0904
Total	**0.2820**	**5.2921**	**2.3493**	**0.0184**	**0.6526**	**0.0185**	**0.6711**	**0.1761**	**0.0176**	**0.1937**		**1,962.7433**	**1,962.7433**	**0.1210**		**1,965.7672**

3.9 Building Construction ED-ICU - 2021

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	1.8956	15.8318	14.2991	0.0298		0.6907	0.6907		0.6532	0.6532		2,759.9501	2,759.9501	0.7724		2,779.2592
Total	**1.8956**	**15.8318**	**14.2991**	**0.0298**		**0.6907**	**0.6907**		**0.6532**	**0.6532**		**2,759.9501**	**2,759.9501**	**0.7724**		**2,779.2592**

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
Vendor	0.0304	0.9709	0.2538	2.5700e-003	0.0640	1.9900e-003	0.0660	0.0184	1.9000e-003	0.0203		274.8806	274.8806	0.0162		275.2855
Worker	0.0814	0.0560	0.7653	2.1700e-003	0.2124	1.7200e-003	0.2141	0.0563	1.5800e-003	0.0579		216.3663	216.3663	6.3800e-003		216.5257
Total	**0.1118**	**1.0269**	**1.0191**	**4.7400e-003**	**0.2764**	**3.7100e-003**	**0.2801**	**0.0748**	**3.4800e-003**	**0.0782**		**491.2469**	**491.2469**	**0.0226**		**491.8111**

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	0.8624	16.2563	18.0054	0.0298		0.8680	0.8680		0.8680	0.8680	0.0000	2,759.9501	2,759.9501	0.7724		2,779.2592
Total	**0.8624**	**16.2563**	**18.0054**	**0.0298**		**0.8680**	**0.8680**		**0.8680**	**0.8680**	**0.0000**	**2,759.9501**	**2,759.9501**	**0.7724**		**2,779.2592**

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
Vendor	0.0304	0.9709	0.2538	2.5700e-003	0.0640	1.9900e-003	0.0660	0.0184	1.9000e-003	0.0203		274.8806	274.8806	0.0162		275.2855
Worker	0.0814	0.0560	0.7653	2.1700e-003	0.2124	1.7200e-003	0.2141	0.0563	1.5800e-003	0.0579		216.3663	216.3663	6.3800e-003		216.5257
Total	**0.1118**	**1.0269**	**1.0191**	**4.7400e-003**	**0.2764**	**3.7100e-003**	**0.2801**	**0.0748**	**3.4800e-003**	**0.0782**		**491.2469**	**491.2469**	**0.0226**		**491.8111**

3.9 Building Construction ED-ICU - 2022

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	1.7105	13.9580	14.0843	0.0298		0.5860	0.5860		0.5544	0.5544		2,761.8252	2,761.8252	0.7664		2,780.9852
Total	**1.7105**	**13.9580**	**14.0843**	**0.0298**		**0.5860**	**0.5860**		**0.5544**	**0.5544**		**2,761.8252**	**2,761.8252**	**0.7664**		**2,780.9852**

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
Vendor	0.0285	0.9233	0.2402	2.5500e-003	0.0640	1.7400e-003	0.0658	0.0184	1.6600e-003	0.0201		272.4859	272.4859	0.0156		272.8768
Worker	0.0763	0.0506	0.7060	2.1000e-003	0.2124	1.6600e-003	0.2140	0.0563	1.5300e-003	0.0579		208.7553	208.7553	5.7600e-003		208.8994
Total	**0.1048**	**0.9739**	**0.9462**	**4.6500e-003**	**0.2764**	**3.4000e-003**	**0.2798**	**0.0748**	**3.1900e-003**	**0.0779**		**481.2412**	**481.2412**	**0.0214**		**481.7762**

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	0.8624	16.2563	18.0054	0.0298		0.8680	0.8680		0.8680	0.8680	0.0000	2,761.8252	2,761.8252	0.7664		2,780.9852
Total	**0.8624**	**16.2563**	**18.0054**	**0.0298**		**0.8680**	**0.8680**		**0.8680**	**0.8680**	**0.0000**	**2,761.8252**	**2,761.8252**	**0.7664**		**2,780.9852**

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

Vendor	0.0285	0.9233	0.2402	2.5500e-003	0.0640	1.7400e-003	0.0658	0.0184	1.6600e-003	0.0201		272.4859	272.4859	0.0156		272.8768
Worker	0.0763	0.0506	0.7060	2.1000e-003	0.2124	1.6600e-003	0.2140	0.0563	1.5300e-003	0.0579		208.7553	208.7553	5.7600e-003		208.8994
Total	**0.1048**	**0.9739**	**0.9462**	**4.6500e-003**	**0.2764**	**3.4000e-003**	**0.2798**	**0.0748**	**3.1900e-003**	**0.0779**		**481.2412**	**481.2412**	**0.0214**		**481.7762**

3.10 Architectural Coating ED-ICU - 2022

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	1.0920					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.9062
Total	**1.2966**	**1.4085**	**1.8136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**		**281.4481**	**281.4481**	**0.0183**		**281.9062**

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
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
Worker	0.0161	0.0107	0.1486	4.4000e-004	0.0447	3.5000e-004	0.0451	0.0119	3.2000e-004	0.0122		43.9485	43.9485	1.2100e-003		43.9788
Total	**0.0161**	**0.0107**	**0.1486**	**4.4000e-004**	**0.0447**	**3.5000e-004**	**0.0451**	**0.0119**	**3.2000e-004**	**0.0122**		**43.9485**	**43.9485**	**1.2100e-003**		**43.9788**

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	1.0920					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0594	1.3570	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951	0.0000	281.4481	281.4481	0.0183		281.9062
Total	**1.1515**	**1.3570**	**1.8324**	**2.9700e-003**		**0.0951**	**0.0951**		**0.0951**	**0.0951**	**0.0000**	**281.4481**	**281.4481**	**0.0183**		**281.9062**

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
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
Worker	0.0161	0.0107	0.1486	4.4000e-004	0.0447	3.5000e-004	0.0451	0.0119	3.2000e-004	0.0122		43.9485	43.9485	1.2100e-003		43.9788
Total	**0.0161**	**0.0107**	**0.1486**	**4.4000e-004**	**0.0447**	**3.5000e-004**	**0.0451**	**0.0119**	**3.2000e-004**	**0.0122**		**43.9485**	**43.9485**	**1.2100e-003**		**43.9788**

3.11 Paving MOB-PS - 2022

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	1.1028	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225		2,207.6603	2,207.6603	0.7140		2,225.5104
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.1028**	**11.1249**	**14.5805**	**0.0228**		**0.5679**	**0.5679**		**0.5225**	**0.5225**		**2,207.6603**	**2,207.6603**	**0.7140**		**2,225.5104**

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
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
Worker	0.0602	0.0399	0.5574	1.6500e-003	0.1677	1.3100e-003	0.1690	0.0445	1.2100e-003	0.0457		164.8069	164.8069	4.5500e-003		164.9206
Total	**0.0602**	**0.0399**	**0.5574**	**1.6500e-003**	**0.1677**	**1.3100e-003**	**0.1690**	**0.0445**	**1.2100e-003**	**0.0457**		**164.8069**	**164.8069**	**4.5500e-003**		**164.9206**

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	0.5609	11.2952	17.2957	0.0228		0.6093	0.6093		0.6093	0.6093	0.0000	2,207.6603	2,207.6603	0.7140		2,225.5104

Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.5609**	**11.2952**	**17.2957**	**0.0228**		**0.6093**	**0.6093**		**0.6093**	**0.6093**	**0.0000**	**2,207.6603**	**2,207.6603**	**0.7140**		**2,225.5104**

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
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
Worker	0.0602	0.0399	0.5574	1.6500e-003	0.1677	1.3100e-003	0.1690	0.0445	1.2100e-003	0.0457		164.8069	164.8069	4.5500e-003		164.9206
Total	**0.0602**	**0.0399**	**0.5574**	**1.6500e-003**	**0.1677**	**1.3100e-003**	**0.1690**	**0.0445**	**1.2100e-003**	**0.0457**		**164.8069**	**164.8069**	**4.5500e-003**		**164.9206**

3.12 Architectural Coating MOB-PS - 2022

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	2.2692					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.9062
Total	**2.4737**	**1.4085**	**1.8136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**		**281.4481**	**281.4481**	**0.0183**		**281.9062**

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
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
Worker	0.0562	0.0373	0.5202	1.5400e-003	0.1565	1.2200e-003	0.1577	0.0415	1.1300e-003	0.0426		153.8197	153.8197	4.2500e-003		153.9259
Total	**0.0562**	**0.0373**	**0.5202**	**1.5400e-003**	**0.1565**	**1.2200e-003**	**0.1577**	**0.0415**	**1.1300e-003**	**0.0426**		**153.8197**	**153.8197**	**4.2500e-003**		**153.9259**

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	2.2692					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0594	1.3570	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951	0.0000	281.4481	281.4481	0.0183		281.9062
Total	**2.3286**	**1.3570**	**1.8324**	**2.9700e-003**		**0.0951**	**0.0951**		**0.0951**	**0.0951**	**0.0000**	**281.4481**	**281.4481**	**0.0183**		**281.9062**

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
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
Worker	0.0562	0.0373	0.5202	1.5400e-003	0.1565	1.2200e-003	0.1577	0.0415	1.1300e-003	0.0426		153.8197	153.8197	4.2500e-003		153.9259
Total	**0.0562**	**0.0373**	**0.5202**	**1.5400e-003**	**0.1565**	**1.2200e-003**	**0.1577**	**0.0415**	**1.1300e-003**	**0.0426**		**153.8197**	**153.8197**	**4.2500e-003**		**153.9259**

3.13 Paving ED-ICU - 2022

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	1.2015	13.1585	11.4207	0.0218		0.5753	0.5753		0.5301	0.5301		2,094.4818	2,094.4818	0.6698		2,111.2275
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.2015**	**13.1585**	**11.4207**	**0.0218**		**0.5753**	**0.5753**		**0.5301**	**0.5301**		**2,094.4818**	**2,094.4818**	**0.6698**		**2,111.2275**

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
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

Worker	0.0602	0.0399	0.5574	1.6500e-003	0.1677	1.3100e-003	0.1690	0.0445	1.2100e-003	0.0457		164.8069	164.8069	4.5500e-003		164.9206
Total	**0.0602**	**0.0399**	**0.5574**	**1.6500e-003**	**0.1677**	**1.3100e-003**	**0.1690**	**0.0445**	**1.2100e-003**	**0.0457**		**164.8069**	**164.8069**	**4.5500e-003**		**164.9206**

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	0.5622	10.7949	14.8199	0.0218		0.5504	0.5504		0.5504	0.5504	0.0000	2,094.4818	2,094.4818	0.6698		2,111.2275
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.5622**	**10.7949**	**14.8199**	**0.0218**		**0.5504**	**0.5504**		**0.5504**	**0.5504**	**0.0000**	**2,094.4818**	**2,094.4818**	**0.6698**		**2,111.2275**

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
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
Worker	0.0602	0.0399	0.5574	1.6500e-003	0.1677	1.3100e-003	0.1690	0.0445	1.2100e-003	0.0457		164.8069	164.8069	4.5500e-003		164.9206
Total	**0.0602**	**0.0399**	**0.5574**	**1.6500e-003**	**0.1677**	**1.3100e-003**	**0.1690**	**0.0445**	**1.2100e-003**	**0.0457**		**164.8069**	**164.8069**	**4.5500e-003**		**164.9206**

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	3.5688	7.9453	44.6457	0.1412	14.5245	0.1300	14.6545	3.8744	0.1207	3.9951		14,244.4986	14,244.4986	0.7024		14,262.0591
Unmitigated	3.5688	7.9453	44.6457	0.1412	14.5245	0.1300	14.6545	3.8744	0.1207	3.9951		14,244.4986	14,244.4986	0.7024		14,262.0591

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Hospital	580.75	447.64	391.69	2,073,055	2,073,055
Medical Office Building	1,998.05	495.69	85.95	3,500,706	3,500,706
Unenclosed Parking with Elevator	0.00	0.00	0.00		
Total	2,578.80	943.33	477.64	5,573,762	5,573,762

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
Hospital	16.60	8.40	6.90	64.90	16.10	19.00	73	25	2
Medical Office Building	16.60	6.40	6.40	29.60	51.40	19.00	60	30	10
Unenclosed Parking with Elevator	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Hospital	0.770213	0.060017	0.040011	0.060017	0.020006	0.020006	0.010003	0.010003	0.001637	0.001633	0.004831	0.000583	0.001041

Medical Office Building	0.889880	0.029663	0.029663	0.019775	0.004944	0.004944	0.004944	0.004944	0.002364	0.002441	0.004860	0.000664	0.000915
Unenclosed Parking with Elevator	0.546501	0.044961	0.204016	0.120355	0.015740	0.006196	0.020131	0.030678	0.002515	0.002201	0.005142	0.000687	0.000876

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Percent of Electricity Use Generated with Renewable Energy

	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	0.1308	1.1891	0.9989	7.1300e-003		0.0904	0.0904		0.0904	0.0904		1,426.9718	1,426.9718	0.0274	0.0262	1,435.4515
NaturalGas Unmitigated	0.1308	1.1891	0.9989	7.1300e-003		0.0904	0.0904		0.0904	0.0904		1,426.9718	1,426.9718	0.0274	0.0262	1,435.4515

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					
Hospital	10450.3	0.1127	1.0245	0.8606	6.1500e-003		0.0779	0.0779		0.0779	0.0779		1,229.4485	1,229.4485	0.0236	0.0225	1,236.7545
Medical Office Building	1678.95	0.0181	0.1646	0.1383	9.9000e-004		0.0125	0.0125		0.0125	0.0125		197.5233	197.5233	3.7900e-003	3.6200e-003	198.6970

Unenclosed Parking with Elevator	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
Total		**0.1308**	**1.1891**	**0.9989**	**7.1400e-003**		**0.0904**	**0.0904**		**0.0904**	**0.0904**		**1,426.9718**	**1,426.9718**	**0.0274**	**0.0262**	**1,435.4515**

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					
Hospital	10.4503	0.1127	1.0245	0.8606	6.1500e-003		0.0779	0.0779		0.0779	0.0779		1,229.4485	1,229.4485	0.0236	0.0225	1,236.7545
Medical Office Building	1.67895	0.0181	0.1646	0.1383	9.9000e-004		0.0125	0.0125		0.0125	0.0125		197.5233	197.5233	3.7900e-003	3.6200e-003	198.6970
Unenclosed Parking with Elevator	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
Total		**0.1308**	**1.1891**	**0.9989**	**7.1400e-003**		**0.0904**	**0.0904**		**0.0904**	**0.0904**		**1,426.9718**	**1,426.9718**	**0.0274**	**0.0262**	**1,435.4515**

6.0 Area Detail

6.1 Mitigation Measures Area

	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	2.4242	4.8000e-004	0.0527	0.0000		1.9000e-004	1.9000e-004		1.9000e-004	1.9000e-004		0.1129	0.1129	3.0000e-004		0.1203
Unmitigated	2.4242	4.8000e-004	0.0527	0.0000		1.9000e-004	1.9000e-004		1.9000e-004	1.9000e-004		0.1129	0.1129	3.0000e-004		0.1203

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	0.0311					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.3882					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	4.9100e-003	4.8000e-004	0.0527	0.0000		1.9000e-004	1.9000e-004		1.9000e-004	1.9000e-004		0.1129	0.1129	3.0000e-004		0.1203
Total	**2.4242**	**4.8000e-004**	**0.0527**	**0.0000**		**1.9000e-004**	**1.9000e-004**		**1.9000e-004**	**1.9000e-004**		**0.1129**	**0.1129**	**3.0000e-004**		**0.1203**

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	0.0311					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.3882					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	4.9100e-003	4.8000e-004	0.0527	0.0000		1.9000e-004	1.9000e-004		1.9000e-004	1.9000e-004		0.1129	0.1129	3.0000e-004		0.1203
Total	**2.4242**	**4.8000e-004**	**0.0527**	**0.0000**		**1.9000e-004**	**1.9000e-004**		**1.9000e-004**	**1.9000e-004**		**0.1129**	**0.1129**	**3.0000e-004**		**0.1203**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

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
Emergency Generator	1	1	12	800	0.73	CNG

Boilers

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

User Defined Equipment

Equipment Type	Number

10.1 Stationary Sources

Unmitigated/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
Equipment Type	lb/day										lb/day					
Emergency Generator - CNG (500 - 9999 HP)	7.0384	0.5421	18.3314	2.4500e-003		0.0388	0.0388		0.0388	0.0388		449.6876	449.6876	0.9403		473.1940

Total	**7.0384**	**0.5421**	**18.3314**	**2.4500e-003**		**0.0388**	**0.0388**		**0.0388**	**0.0388**		**449.6876**	**449.6876**	**0.9403**		**473.1940**

11.0 Vegetation

Queen MOB, Parking, ED, ICU

Los Angeles-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Hospital	58.90	1000sqft	1.35	58,900.00	0
Medical Office Building	58.87	1000sqft	1.35	58,868.00	0
Unenclosed Parking with Elevator	398.00	Space	3.58	159,200.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	9			**Operational Year**	2022
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	399.04	**CH4 Intensity (lb/MWhr)**	0	**N2O Intensity (lb/MWhr)**	0

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Updated SCE factor for 2019 CO2equivalent Intensity Factor.

Land Use - information from Precise Plan Combined

Construction Phase - .

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - crane, forklift, 2 aerial lifts, 3 welders, backhoe, 1 drill

Off-road Equipment - 1 backhoe, 1 concrete pump, 2 cranes, 1 forklift

Off-road Equipment - 1 backhoe

Off-road Equipment - 1 backhoe, 1 excavator, 1 rubber tired loader, 1 dozer, 1 skid steer loader

Off-road Equipment - excavator, blade (grader)

Off-road Equipment - 2 backoes, 1 excavator, 2 grades, 1 loader, 1 rubber tired dozer, 1 skid steer loader, 1 compactor, 2 scrapers

Off-road Equipment - pavers, rollers, grader, compactor

Off-road Equipment - default

Off-road Equipment - 1 backhoe, excavator, 2 graders, rubber tired loader, dozer, skids, compactor

Off-road Equipment - backhoe.

Trips and VMT - .

Demolition - .

Grading - .

Architectural Coating - Apportioned to correct phases. MM AIR-1 from QVHSP EIR for 10 g/L paints

Vehicle Trips - Traffic Study.

Area Coating - MM AIR-1 from QVHSP EIR

Energy Use -

Water And Wastewater - .

Construction Off-road Equipment Mitigation - .MM AIR-2 from QVHSP EIR

Energy Mitigation - MM GHG from QVHSP PEIR

Waste Mitigation -

Stationary Sources - Emergency Generators and Fire Pumps - natural gas per MM AIR-3 from QVHSP EIR

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	58,884.00	29,451.00
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	58,884.00	29,434.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	176,652.00	88,352.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	176,652.00	88,302.00
tblArchitecturalCoating	ConstArea_Parking	9,552.00	0.00
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	10.00
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	10.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	10.00

tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	10.00
tblArchitecturalCoating	EF_Parking	100.00	10.00
tblArchitecturalCoating	EF_Parking	100.00	10.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	100	10
tblAreaCoating	Area_EF_Nonresidential_Interior	100	10
tblAreaCoating	Area_EF_Parking	100	10
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	8.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3

tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	20.00	26.00
tblConstructionPhase	NumDays	20.00	50.00
tblConstructionPhase	NumDays	230.00	340.00
tblConstructionPhase	NumDays	230.00	432.00
tblConstructionPhase	NumDays	20.00	36.00
tblConstructionPhase	NumDays	20.00	21.00
tblConstructionPhase	NumDays	20.00	26.00
tblConstructionPhase	NumDays	20.00	38.00
tblConstructionPhase	NumDays	20.00	26.00
tblConstructionPhase	NumDays	20.00	78.00
tblConstructionPhase	NumDays	10.00	7.00
tblConstructionPhase	NumDays	10.00	26.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00

tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblFleetMix	HHD	0.03	0.01
tblFleetMix	HHD	0.03	4.9440e-003
tblFleetMix	LDA	0.55	0.77
tblFleetMix	LDA	0.55	0.89
tblFleetMix	LDT1	0.04	0.06
tblFleetMix	LDT1	0.04	0.03
tblFleetMix	LDT2	0.20	0.04
tblFleetMix	LDT2	0.20	0.03
tblFleetMix	LHD1	0.02	0.02
tblFleetMix	LHD1	0.02	4.9440e-003
tblFleetMix	LHD2	6.1960e-003	0.02
tblFleetMix	LHD2	6.1960e-003	4.9440e-003
tblFleetMix	MCY	5.1420e-003	4.8310e-003
tblFleetMix	MCY	5.1420e-003	4.8600e-003
tblFleetMix	MDV	0.12	0.06
tblFleetMix	MDV	0.12	0.02
tblFleetMix	MH	8.7600e-004	1.0410e-003
tblFleetMix	MH	8.7600e-004	9.1500e-004
tblFleetMix	MHD	0.02	0.01
tblFleetMix	MHD	0.02	4.9440e-003
tblFleetMix	OBUS	2.5150e-003	1.6370e-003
tblFleetMix	OBUS	2.5150e-003	2.3640e-003
tblFleetMix	SBUS	6.8700e-004	5.8300e-004
tblFleetMix	SBUS	6.8700e-004	6.6400e-004
tblFleetMix	UBUS	2.2010e-003	1.6330e-003

tblFleetMix	UBUS	2.2010e-003	2.4410e-003
tblGrading	AcresOfGrading	13.00	10.00
tblGrading	AcresOfGrading	114.00	60.00
tblGrading	AcresOfGrading	26.00	10.00
tblGrading	MaterialImported	0.00	1,000.00
tblGrading	MaterialImported	0.00	5,900.00
tblLandUse	LandUseSquareFeet	58,870.00	58,868.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	3.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0
tblProjectCharacteristics	CO2IntensityFactor	702.44	399.04
tblProjectCharacteristics	N2OIntensityFactor	0.006	0
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	800.00
tblStationaryGeneratorsPumpsUse	HoursPerDay	0.00	1.00
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	12.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblTripsAndVMT	VendorTripNumber	45.00	36.00
tblTripsAndVMT	VendorTripNumber	45.00	10.00
tblTripsAndVMT	WorkerTripNumber	21.00	14.00
tblTripsAndVMT	WorkerTripNumber	105.00	70.00
tblTripsAndVMT	WorkerTripNumber	105.00	19.00
tblTripsAndVMT	WorkerTripNumber	21.00	4.00
tblVehicleTrips	CC_TL	8.40	6.40
tblVehicleTrips	CNW_TL	6.90	6.40
tblVehicleTrips	ST_TR	10.18	7.60
tblVehicleTrips	ST_TR	8.96	8.42
tblVehicleTrips	SU_TR	8.91	6.65
tblVehicleTrips	SU_TR	1.55	1.46
tblVehicleTrips	WD_TR	13.22	9.86
tblVehicleTrips	WD_TR	36.13	33.94

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	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					
2021	0.5092	5.1807	3.7457	9.5100e-003	0.4467	0.2022	0.6489	0.1602	0.1889	0.3491	0.0000	844.7734	844.7734	0.1775	0.0000	849.2102
2022	0.4970	3.9188	3.7637	8.7000e-003	0.1150	0.1577	0.2727	0.0311	0.1484	0.1795	0.0000	758.3875	758.3875	0.1682	0.0000	762.5935
Maximum	**0.5092**	**5.1807**	**3.7637**	**9.5100e-003**	**0.4467**	**0.2022**	**0.6489**	**0.1602**	**0.1889**	**0.3491**	**0.0000**	**844.7734**	**844.7734**	**0.1775**	**0.0000**	**849.2102**

Mitigated Construction

	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					
2021	0.2349	4.0855	4.5776	9.5100e-003	0.2646	0.1758	0.4404	0.0870	0.1757	0.2626	0.0000	844.7727	844.7727	0.1775	0.0000	849.2095
2022	0.2876	3.9843	4.6547	8.7000e-003	0.1150	0.1949	0.3099	0.0311	0.1948	0.2259	0.0000	758.3868	758.3868	0.1682	0.0000	762.5928
Maximum	**0.2876**	**4.0855**	**4.6547**	**9.5100e-003**	**0.2646**	**0.1949**	**0.4404**	**0.0870**	**0.1948**	**0.2626**	**0.0000**	**844.7727**	**844.7727**	**0.1775**	**0.0000**	**849.2095**

	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	**48.07**	**11.32**	**-22.94**	**0.00**	**32.42**	**-3.00**	**18.59**	**38.29**	**-9.84**	**7.58**	**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	**2-10-2021**	**5-9-2021**	0.8760	0.6213
2	**5-10-2021**	**8-9-2021**	2.8777	1.9719
3	**8-10-2021**	**11-9-2021**	1.5352	1.3035
4	**11-10-2021**	**2-9-2022**	1.5117	1.3437
5	**2-10-2022**	**5-9-2022**	1.3477	1.2713
6	**5-10-2022**	**8-9-2022**	1.0540	1.0700
7	**8-10-2022**	**9-30-2022**	0.5591	0.5528
		Highest	2.8777	1.9719

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	0.4421	6.0000e-005	6.5900e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0128	0.0128	3.0000e-005	0.0000	0.0136
Energy	0.0239	0.2170	0.1823	1.3000e-003		0.0165	0.0165		0.0165	0.0165	0.0000	673.8479	673.8479	4.5300e-003	4.3300e-003	675.2518
Mobile	0.4881	1.2595	6.3312	0.0201	2.0995	0.0192	2.1187	0.5610	0.0178	0.5788	0.0000	1,837.2257	1,837.2257	0.0925	0.0000	1,839.5387
Stationary	0.0422	3.2500e-003	0.1100	1.0000e-005		2.3000e-004	2.3000e-004		2.3000e-004	2.3000e-004	0.0000	2.4477	2.4477	5.1200e-003	0.0000	2.5757
Waste						0.0000	0.0000		0.0000	0.0000	258.1883	0.0000	258.1883	15.2585	0.0000	639.6505
Water						0.0000	0.0000		0.0000	0.0000	4.6883	40.4891	45.1775	0.4815	0.0114	60.6042
Total	**0.9963**	**1.4798**	**6.6301**	**0.0214**	**2.0995**	**0.0359**	**2.1354**	**0.5610**	**0.0346**	**0.5955**	**262.8766**	**2,554.0232**	**2,816.8998**	**15.8422**	**0.0157**	**3,217.6344**

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	0.4421	6.0000e-005	6.5900e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0128	0.0128	3.0000e-005	0.0000	0.0136
Energy	0.0239	0.2170	0.1823	1.3000e-003		0.0165	0.0165		0.0165	0.0165	0.0000	564.4487	564.4487	4.5300e-003	4.3300e-003	565.8526
Mobile	0.4881	1.2595	6.3312	0.0201	2.0995	0.0192	2.1187	0.5610	0.0178	0.5788	0.0000	1,837.2257	1,837.2257	0.0925	0.0000	1,839.5387
Stationary	0.0422	3.2500e-003	0.1100	1.0000e-005		2.3000e-004	2.3000e-004		2.3000e-004	2.3000e-004	0.0000	2.4477	2.4477	5.1200e-003	0.0000	2.5757

Waste						0.0000	0.0000		0.0000	0.0000	129.0941	0.0000	129.0941	7.6292	0.0000	319.8253
Water						0.0000	0.0000		0.0000	0.0000	4.6883	40.4891	45.1775	0.4815	0.0114	60.6042
Total	**0.9963**	**1.4798**	**6.6301**	**0.0214**	**2.0995**	**0.0359**	**2.1354**	**0.5610**	**0.0346**	**0.5955**	**133.7825**	**2,444.6240**	**2,578.4065**	**8.2130**	**0.0157**	**2,788.4100**

	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**	**49.11**	**4.28**	**8.47**	**48.16**	**0.00**	**13.34**

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	2/10/2021	3/23/2021	6	36	MOB-PS
2	Site Preparation MOB-PS	Site Preparation	3/24/2021	3/31/2021	6	7	MOB-PS
3	Grading-Excavation MOB-PS	Grading	4/1/2021	4/30/2021	6	26	MOB-PS
4	Demolition ED-ICU	Demolition	5/1/2021	5/25/2021	6	21	ED-ICU
5	Building Construction MOB-PS	Building Construction	5/1/2021	6/1/2022	6	340	MOB-PS
6	Site Preparation ED-ICU	Site Preparation	6/1/2021	6/30/2021	6	26	ED-ICU
7	Grading/Excavation ED-ICU	Grading	6/1/2021	7/14/2021	6	38	ED-ICU
8	Building Construction ED-ICU	Building Construction	7/15/2021	11/30/2022	6	432	ED-ICU
9	Architectural Coating ED-ICU	Architectural Coating	1/1/2022	2/28/2022	6	50	ED-ICU
10	Paving MOB-PS	Paving	6/10/2022	7/10/2022	6	26	MOB-PS
11	Architectural Coating MOB-PS	Architectural Coating	6/10/2022	7/10/2022	6	26	MOB-PS
12	Paving ED-ICU	Paving	9/1/2022	11/30/2022	6	78	ED-ICU

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 3.58

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 88,352; Non-Residential Outdoor: 29,451; Striped Parking Area: 0

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition	Excavators	0	8.00	158	0.38
Demolition	Rubber Tired Dozers	0	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Site Preparation MOB-PS	Rubber Tired Dozers	0	8.00	247	0.40
Site Preparation MOB-PS	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading-Excavation MOB-PS	Excavators	1	8.00	158	0.38
Grading-Excavation MOB-PS	Graders	1	8.00	187	0.41
Grading-Excavation MOB-PS	Rubber Tired Dozers	0	8.00	247	0.40
Grading-Excavation MOB-PS	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Demolition ED-ICU	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition ED-ICU	Excavators	1	8.00	158	0.38
Demolition ED-ICU	Rubber Tired Dozers	1	8.00	247	0.40
Demolition ED-ICU	Rubber Tired Loaders	1	8.00	203	0.36
Demolition ED-ICU	Skid Steer Loaders	1	8.00	65	0.37
Demolition ED-ICU	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Building Construction MOB-PS	Cranes	2	7.00	231	0.29
Building Construction MOB-PS	Forklifts	1	8.00	89	0.20
Building Construction MOB-PS	Generator Sets	0	8.00	84	0.74
Building Construction MOB-PS	Pumps	1	8.00	84	0.74
Building Construction MOB-PS	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Building Construction MOB-PS	Welders	0	8.00	46	0.45
Site Preparation ED-ICU	Excavators	1	8.00	158	0.38
Site Preparation ED-ICU	Graders	2	8.00	187	0.41
Site Preparation ED-ICU	Plate Compactors	1	8.00	8	0.43
Site Preparation ED-ICU	Rubber Tired Dozers	1	8.00	247	0.40
Site Preparation ED-ICU	Rubber Tired Loaders	1	8.00	203	0.36

Site Preparation ED-ICU	Skid Steer Loaders	1	8.00	65	0.37
Site Preparation ED-ICU	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading/Excavation ED-ICU	Excavators	1	8.00	158	0.38
Grading/Excavation ED-ICU	Graders	2	8.00	187	0.41
Grading/Excavation ED-ICU	Plate Compactors	1	8.00	8	0.43
Grading/Excavation ED-ICU	Rubber Tired Dozers	1	8.00	247	0.40
Grading/Excavation ED-ICU	Rubber Tired Loaders	1	8.00	203	0.36
Grading/Excavation ED-ICU	Scrapers	2	8.00	367	0.48
Grading/Excavation ED-ICU	Skid Steer Loaders	1	8.00	65	0.37
Grading/Excavation ED-ICU	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction ED-ICU	Aerial Lifts	2	8.00	63	0.31
Building Construction ED-ICU	Bore/Drill Rigs	1	8.00	221	0.50
Building Construction ED-ICU	Cranes	1	7.00	231	0.29
Building Construction ED-ICU	Forklifts	1	8.00	89	0.20
Building Construction ED-ICU	Generator Sets	0	8.00	84	0.74
Building Construction ED-ICU	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Building Construction ED-ICU	Welders	3	8.00	46	0.45
Architectural Coating ED-ICU	Air Compressors	1	6.00	78	0.48
Paving MOB-PS	Pavers	2	8.00	130	0.42
Paving MOB-PS	Paving Equipment	2	8.00	132	0.36
Paving MOB-PS	Rollers	2	8.00	80	0.38
Architectural Coating MOB-PS	Air Compressors	1	6.00	78	0.48
Paving ED-ICU	Graders	1	8.00	187	0.41
Paving ED-ICU	Pavers	2	8.00	130	0.42
Paving ED-ICU	Paving Equipment	0	8.00	132	0.36
Paving ED-ICU	Plate Compactors	1	8.00	8	0.43
Paving ED-ICU	Rollers	2	8.00	80	0.38

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	1	3.00	0.00	159.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation MOB-PS	1	3.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading-Excavation MOB-PS	2	5.00	0.00	125.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Demolition ED-ICU	5	13.00	0.00	423.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction MOB-PS	5	70.00	36.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation ED-ICU	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading/Excavation ED-ICU	11	28.00	0.00	738.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction ED-ICU	9	19.00	10.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating ED-ICU	1	4.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving MOB-PS	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating MOB-PS	1	14.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving ED-ICU	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

3.2 Demolition - 2021

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					0.0172	0.0000	0.0172	2.6000e-003	0.0000	2.6000e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.3700e-003	0.0341	0.0407	6.0000e-005		2.0100e-003	2.0100e-003		1.8500e-003	1.8500e-003	0.0000	4.9135	4.9135	1.5900e-003	0.0000	4.9532
Total	**3.3700e-003**	**0.0341**	**0.0407**	**6.0000e-005**	**0.0172**	**2.0100e-003**	**0.0192**	**2.6000e-003**	**1.8500e-003**	**4.4500e-003**	**0.0000**	**4.9135**	**4.9135**	**1.5900e-003**	**0.0000**	**4.9532**

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	6.7000e-004	0.0220	5.1300e-003	6.0000e-005	1.3700e-003	7.0000e-005	1.4300e-003	3.8000e-004	6.0000e-005	4.4000e-004	0.0000	6.0603	6.0603	4.2000e-004	0.0000	6.0708
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	2.3000e-004	1.8000e-004	2.0400e-003	1.0000e-005	5.9000e-004	0.0000	6.0000e-004	1.6000e-004	0.0000	1.6000e-004	0.0000	0.5340	0.5340	2.0000e-005	0.0000	0.5344
Total	**9.0000e-004**	**0.0222**	**7.1700e-003**	**7.0000e-005**	**1.9600e-003**	**7.0000e-005**	**2.0300e-003**	**5.4000e-004**	**6.0000e-005**	**6.0000e-004**	**0.0000**	**6.5943**	**6.5943**	**4.4000e-004**	**0.0000**	**6.6052**

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					6.7000e-003	0.0000	6.7000e-003	1.0100e-003	0.0000	1.0100e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.3700e-003	0.0312	0.0422	6.0000e-005		2.1900e-003	2.1900e-003		2.1900e-003	2.1900e-003	0.0000	4.9135	4.9135	1.5900e-003	0.0000	4.9532
Total	**1.3700e-003**	**0.0312**	**0.0422**	**6.0000e-005**	**6.7000e-003**	**2.1900e-003**	**8.8900e-003**	**1.0100e-003**	**2.1900e-003**	**3.2000e-003**	**0.0000**	**4.9135**	**4.9135**	**1.5900e-003**	**0.0000**	**4.9532**

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	6.7000e-004	0.0220	5.1300e-003	6.0000e-005	1.3700e-003	7.0000e-005	1.4300e-003	3.8000e-004	6.0000e-005	4.4000e-004	0.0000	6.0603	6.0603	4.2000e-004	0.0000	6.0708
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	2.3000e-004	1.8000e-004	2.0400e-003	1.0000e-005	5.9000e-004	0.0000	6.0000e-004	1.6000e-004	0.0000	1.6000e-004	0.0000	0.5340	0.5340	2.0000e-005	0.0000	0.5344
Total	**9.0000e-004**	**0.0222**	**7.1700e-003**	**7.0000e-005**	**1.9600e-003**	**7.0000e-005**	**2.0300e-003**	**5.4000e-004**	**6.0000e-005**	**6.0000e-004**	**0.0000**	**6.5943**	**6.5943**	**4.4000e-004**	**0.0000**	**6.6052**

3.3 Site Preparation MOB-PS - 2021

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					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.6000e-004	6.6400e-003	7.9100e-003	1.0000e-005		3.9000e-004	3.9000e-004		3.6000e-004	3.6000e-004	0.0000	0.9554	0.9554	3.1000e-004	0.0000	0.9631
Total	**6.6000e-004**	**6.6400e-003**	**7.9100e-003**	**1.0000e-005**	**0.0000**	**3.9000e-004**	**3.9000e-004**	**0.0000**	**3.6000e-004**	**3.6000e-004**	**0.0000**	**0.9554**	**0.9554**	**3.1000e-004**	**0.0000**	**0.9631**

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	5.0000e-005	4.0000e-005	4.0000e-004	0.0000	1.2000e-004	0.0000	1.2000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.1038	0.1038	0.0000	0.0000	0.1039
Total	**5.0000e-005**	**4.0000e-005**	**4.0000e-004**	**0.0000**	**1.2000e-004**	**0.0000**	**1.2000e-004**	**3.0000e-005**	**0.0000**	**3.0000e-005**	**0.0000**	**0.1038**	**0.1038**	**0.0000**	**0.0000**	**0.1039**

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					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.7000e-004	6.0700e-003	8.2000e-003	1.0000e-005		4.3000e-004	4.3000e-004		4.3000e-004	4.3000e-004	0.0000	0.9554	0.9554	3.1000e-004	0.0000	0.9631
Total	**2.7000e-004**	**6.0700e-003**	**8.2000e-003**	**1.0000e-005**	**0.0000**	**4.3000e-004**	**4.3000e-004**	**0.0000**	**4.3000e-004**	**4.3000e-004**	**0.0000**	**0.9554**	**0.9554**	**3.1000e-004**	**0.0000**	**0.9631**

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	5.0000e-005	4.0000e-005	4.0000e-004	0.0000	1.2000e-004	0.0000	1.2000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.1038	0.1038	0.0000	0.0000	0.1039
Total	**5.0000e-005**	**4.0000e-005**	**4.0000e-004**	**0.0000**	**1.2000e-004**	**0.0000**	**1.2000e-004**	**3.0000e-005**	**0.0000**	**3.0000e-005**	**0.0000**	**0.1038**	**0.1038**	**0.0000**	**0.0000**	**0.1039**

3.4 Grading-Excavation MOB-PS - 2021

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					5.3600e-003	0.0000	5.3600e-003	5.8000e-004	0.0000	5.8000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	8.8700e-003	0.1050	0.0655	1.5000e-004		3.8000e-003	3.8000e-003		3.4900e-003	3.4900e-003	0.0000	13.4666	13.4666	4.3600e-003	0.0000	13.5755
Total	**8.8700e-003**	**0.1050**	**0.0655**	**1.5000e-004**	**5.3600e-003**	**3.8000e-003**	**9.1600e-003**	**5.8000e-004**	**3.4900e-003**	**4.0700e-003**	**0.0000**	**13.4666**	**13.4666**	**4.3600e-003**	**0.0000**	**13.5755**

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	5.3000e-004	0.0173	4.0300e-003	5.0000e-005	1.0700e-003	5.0000e-005	1.1300e-003	2.9000e-004	5.0000e-005	3.4000e-004	0.0000	4.7644	4.7644	3.3000e-004	0.0000	4.7726
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	2.8000e-004	2.2000e-004	2.4600e-003	1.0000e-005	7.1000e-004	1.0000e-005	7.2000e-004	1.9000e-004	1.0000e-005	1.9000e-004	0.0000	0.6428	0.6428	2.0000e-005	0.0000	0.6433
Total	**8.1000e-004**	**0.0175**	**6.4900e-003**	**6.0000e-005**	**1.7800e-003**	**6.0000e-005**	**1.8500e-003**	**4.8000e-004**	**6.0000e-005**	**5.3000e-004**	**0.0000**	**5.4072**	**5.4072**	**3.5000e-004**	**0.0000**	**5.4159**

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					2.0900e-003	0.0000	2.0900e-003	2.3000e-004	0.0000	2.3000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.7600e-003	0.0727	0.0966	1.5000e-004		3.0900e-003	3.0900e-003		3.0900e-003	3.0900e-003	0.0000	13.4666	13.4666	4.3600e-003	0.0000	13.5755
Total	**3.7600e-003**	**0.0727**	**0.0966**	**1.5000e-004**	**2.0900e-003**	**3.0900e-003**	**5.1800e-003**	**2.3000e-004**	**3.0900e-003**	**3.3200e-003**	**0.0000**	**13.4666**	**13.4666**	**4.3600e-003**	**0.0000**	**13.5755**

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	5.3000e-004	0.0173	4.0300e-003	5.0000e-005	1.0700e-003	5.0000e-005	1.1300e-003	2.9000e-004	5.0000e-005	3.4000e-004	0.0000	4.7644	4.7644	3.3000e-004	0.0000	4.7726
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	2.8000e-004	2.2000e-004	2.4600e-003	1.0000e-005	7.1000e-004	1.0000e-005	7.2000e-004	1.9000e-004	1.0000e-005	1.9000e-004	0.0000	0.6428	0.6428	2.0000e-005	0.0000	0.6433
Total	**8.1000e-004**	**0.0175**	**6.4900e-003**	**6.0000e-005**	**1.7800e-003**	**6.0000e-005**	**1.8500e-003**	**4.8000e-004**	**6.0000e-005**	**5.3000e-004**	**0.0000**	**5.4072**	**5.4072**	**3.5000e-004**	**0.0000**	**5.4159**

3.5 Demolition ED-ICU - 2021

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					0.0458	0.0000	0.0458	6.9300e-003	0.0000	6.9300e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Off-Road	0.0198	0.2088	0.1319	2.6000e-004		9.6400e-003	9.6400e-003		8.8700e-003	8.8700e-003	0.0000	23.1837	23.1837	7.5000e-003	0.0000	23.3711
Total	**0.0198**	**0.2088**	**0.1319**	**2.6000e-004**	**0.0458**	**9.6400e-003**	**0.0554**	**6.9300e-003**	**8.8700e-003**	**0.0158**	**0.0000**	**23.1837**	**23.1837**	**7.5000e-003**	**0.0000**	**23.3711**

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	1.7800e-003	0.0586	0.0137	1.6000e-004	3.6300e-003	1.8000e-004	3.8100e-003	1.0000e-003	1.7000e-004	1.1700e-003	0.0000	16.1226	16.1226	1.1200e-003	0.0000	16.1505
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	5.9000e-004	4.6000e-004	5.1600e-003	1.0000e-005	1.5000e-003	1.0000e-005	1.5100e-003	4.0000e-004	1.0000e-005	4.1000e-004	0.0000	1.3499	1.3499	4.0000e-005	0.0000	1.3509
Total	**2.3700e-003**	**0.0590**	**0.0188**	**1.7000e-004**	**5.1300e-003**	**1.9000e-004**	**5.3200e-003**	**1.4000e-003**	**1.8000e-004**	**1.5800e-003**	**0.0000**	**17.4724**	**17.4724**	**1.1600e-003**	**0.0000**	**17.5014**

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					0.0179	0.0000	0.0179	2.7000e-003	0.0000	2.7000e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.4900e-003	0.1301	0.1650	2.6000e-004		6.1800e-003	6.1800e-003		6.1800e-003	6.1800e-003	0.0000	23.1836	23.1836	7.5000e-003	0.0000	23.3711
Total	**6.4900e-003**	**0.1301**	**0.1650**	**2.6000e-004**	**0.0179**	**6.1800e-003**	**0.0240**	**2.7000e-003**	**6.1800e-003**	**8.8800e-003**	**0.0000**	**23.1836**	**23.1836**	**7.5000e-003**	**0.0000**	**23.3711**

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	1.7800e-003	0.0586	0.0137	1.6000e-004	3.6300e-003	1.8000e-004	3.8100e-003	1.0000e-003	1.7000e-004	1.1700e-003	0.0000	16.1226	16.1226	1.1200e-003	0.0000	16.1505
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	5.9000e-004	4.6000e-004	5.1600e-003	1.0000e-005	1.5000e-003	1.0000e-005	1.5100e-003	4.0000e-004	1.0000e-005	4.1000e-004	0.0000	1.3499	1.3499	4.0000e-005	0.0000	1.3509
Total	**2.3700e-003**	**0.0590**	**0.0188**	**1.7000e-004**	**5.1300e-003**	**1.9000e-004**	**5.3200e-003**	**1.4000e-003**	**1.8000e-004**	**1.5800e-003**	**0.0000**	**17.4724**	**17.4724**	**1.1600e-003**	**0.0000**	**17.5014**

3.6 Building Construction MOB-PS - 2021

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	0.1466	1.5261	1.0874	2.2000e-003		0.0739	0.0739		0.0695	0.0695	0.0000	191.6658	191.6658	0.0460	0.0000	192.8166
Total	**0.1466**	**1.5261**	**1.0874**	**2.2000e-003**		**0.0739**	**0.0739**		**0.0695**	**0.0695**	**0.0000**	**191.6658**	**191.6658**	**0.0460**	**0.0000**	**192.8166**

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	0.0117	0.3730	0.1011	9.6000e-004	0.0238	7.6000e-004	0.0246	6.8700e-003	7.3000e-004	7.6000e-003	0.0000	93.1757	93.1757	5.7200e-003	0.0000	93.3186
Worker	0.0316	0.0246	0.2780	8.0000e-004	0.0805	6.6000e-004	0.0812	0.0214	6.1000e-004	0.0220	0.0000	72.6854	72.6854	2.1400e-003	0.0000	72.7389
Total	**0.0434**	**0.3977**	**0.3791**	**1.7600e-003**	**0.1044**	**1.4200e-003**	**0.1058**	**0.0283**	**1.3400e-003**	**0.0296**	**0.0000**	**165.8611**	**165.8611**	**7.8600e-003**	**0.0000**	**166.0575**

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	0.0508	1.0688	1.3275	2.2000e-003		0.0587	0.0587		0.0587	0.0587	0.0000	191.6656	191.6656	0.0460	0.0000	192.8164
Total	**0.0508**	**1.0688**	**1.3275**	**2.2000e-003**		**0.0587**	**0.0587**		**0.0587**	**0.0587**	**0.0000**	**191.6656**	**191.6656**	**0.0460**	**0.0000**	**192.8164**

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	0.0117	0.3730	0.1011	9.6000e-004	0.0238	7.6000e-004	0.0246	6.8700e-003	7.3000e-004	7.6000e-003	0.0000	93.1757	93.1757	5.7200e-003	0.0000	93.3186

Worker	0.0316	0.0246	0.2780	8.0000e-004	0.0805	6.6000e-004	0.0812	0.0214	6.1000e-004	0.0220	0.0000	72.6854	72.6854	2.1400e-003	0.0000	72.7389
Total	**0.0434**	**0.3977**	**0.3791**	**1.7600e-003**	**0.1044**	**1.4200e-003**	**0.1058**	**0.0283**	**1.3400e-003**	**0.0296**	**0.0000**	**165.8611**	**165.8611**	**7.8600e-003**	**0.0000**	**166.0575**

3.6 Building Construction MOB-PS - 2022

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	0.0821	0.8328	0.6601	1.3600e-003		0.0396	0.0396		0.0372	0.0372	0.0000	118.6772	118.6772	0.0284	0.0000	119.3865
Total	**0.0821**	**0.8328**	**0.6601**	**1.3600e-003**		**0.0396**	**0.0396**		**0.0372**	**0.0372**	**0.0000**	**118.6772**	**118.6772**	**0.0284**	**0.0000**	**119.3865**

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	6.8200e-003	0.2194	0.0592	5.9000e-004	0.0147	4.1000e-004	0.0152	4.2500e-003	3.9000e-004	4.6500e-003	0.0000	57.1736	57.1736	3.4100e-003	0.0000	57.2590
Worker	0.0184	0.0138	0.1585	4.8000e-004	0.0499	4.0000e-004	0.0503	0.0132	3.7000e-004	0.0136	0.0000	43.4140	43.4140	1.2000e-003	0.0000	43.4439
Total	**0.0252**	**0.2332**	**0.2178**	**1.0700e-003**	**0.0646**	**8.1000e-004**	**0.0654**	**0.0175**	**7.6000e-004**	**0.0183**	**0.0000**	**100.5876**	**100.5876**	**4.6100e-003**	**0.0000**	**100.7029**

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	0.0315	0.6616	0.8218	1.3600e-003		0.0363	0.0363		0.0363	0.0363	0.0000	118.6770	118.6770	0.0284	0.0000	119.3864
Total	**0.0315**	**0.6616**	**0.8218**	**1.3600e-003**		**0.0363**	**0.0363**		**0.0363**	**0.0363**	**0.0000**	**118.6770**	**118.6770**	**0.0284**	**0.0000**	**119.3864**

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	6.8200e-003	0.2194	0.0592	5.9000e-004	0.0147	4.1000e-004	0.0152	4.2500e-003	3.9000e-004	4.6500e-003	0.0000	57.1736	57.1736	3.4100e-003	0.0000	57.2590
Worker	0.0184	0.0138	0.1585	4.8000e-004	0.0499	4.0000e-004	0.0503	0.0132	3.7000e-004	0.0136	0.0000	43.4140	43.4140	1.2000e-003	0.0000	43.4439
Total	**0.0252**	**0.2332**	**0.2178**	**1.0700e-003**	**0.0646**	**8.1000e-004**	**0.0654**	**0.0175**	**7.6000e-004**	**0.0183**	**0.0000**	**100.5876**	**100.5876**	**4.6100e-003**	**0.0000**	**100.7029**

3.7 Site Preparation ED-ICU - 2021

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					0.0836	0.0000	0.0836	0.0436	0.0000	0.0436	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0368	0.4159	0.2119	5.1000e-004		0.0170	0.0170		0.0156	0.0156	0.0000	44.2455	44.2455	0.0142	0.0000	44.6010
Total	**0.0368**	**0.4159**	**0.2119**	**5.1000e-004**	**0.0836**	**0.0170**	**0.1005**	**0.0436**	**0.0156**	**0.0592**	**0.0000**	**44.2455**	**44.2455**	**0.0142**	**0.0000**	**44.6010**

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	1.1200e-003	8.7000e-004	9.8300e-003	3.0000e-005	2.8500e-003	2.0000e-005	2.8700e-003	7.6000e-004	2.0000e-005	7.8000e-004	0.0000	2.5712	2.5712	8.0000e-005	0.0000	2.5731
Total	**1.1200e-003**	**8.7000e-004**	**9.8300e-003**	**3.0000e-005**	**2.8500e-003**	**2.0000e-005**	**2.8700e-003**	**7.6000e-004**	**2.0000e-005**	**7.8000e-004**	**0.0000**	**2.5712**	**2.5712**	**8.0000e-005**	**0.0000**	**2.5731**

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					0.0326	0.0000	0.0326	0.0170	0.0000	0.0170	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0128	0.2459	0.2984	5.1000e-004		0.0109	0.0109		0.0109	0.0109	0.0000	44.2455	44.2455	0.0142	0.0000	44.6010

Total	**0.0128**	**0.2459**	**0.2984**	**5.1000e-004**	**0.0326**	**0.0109**	**0.0435**	**0.0170**	**0.0109**	**0.0279**	**0.0000**	**44.2455**	**44.2455**	**0.0142**	**0.0000**	**44.6010**

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	1.1200e-003	8.7000e-004	9.8300e-003	3.0000e-005	2.8500e-003	2.0000e-005	2.8700e-003	7.6000e-004	2.0000e-005	7.8000e-004	0.0000	2.5712	2.5712	8.0000e-005	0.0000	2.5731
Total	**1.1200e-003**	**8.7000e-004**	**9.8300e-003**	**3.0000e-005**	**2.8500e-003**	**2.0000e-005**	**2.8700e-003**	**7.6000e-004**	**2.0000e-005**	**7.8000e-004**	**0.0000**	**2.5712**	**2.5712**	**8.0000e-005**	**0.0000**	**2.5731**

3.8 Grading/Excavation ED-ICU - 2021

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					0.1466	0.0000	0.1466	0.0664	0.0000	0.0664	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0926	1.0505	0.6189	1.3700e-003		0.0427	0.0427		0.0393	0.0393	0.0000	120.4563	120.4563	0.0388	0.0000	121.4270
Total	**0.0926**	**1.0505**	**0.6189**	**1.3700e-003**	**0.1466**	**0.0427**	**0.1893**	**0.0664**	**0.0393**	**0.1057**	**0.0000**	**120.4563**	**120.4563**	**0.0388**	**0.0000**	**121.4270**

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	3.1100e-003	0.1022	0.0238	2.9000e-004	6.3400e-003	3.1000e-004	6.6500e-003	1.7400e-003	2.9000e-004	2.0300e-003	0.0000	28.1287	28.1287	1.9500e-003	0.0000	28.1775
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	2.2900e-003	1.7800e-003	0.0201	6.0000e-005	5.8300e-003	5.0000e-005	5.8800e-003	1.5500e-003	4.0000e-005	1.5900e-003	0.0000	5.2610	5.2610	1.5000e-004	0.0000	5.2649
Total	**5.4000e-003**	**0.1039**	**0.0439**	**3.5000e-004**	**0.0122**	**3.6000e-004**	**0.0125**	**3.2900e-003**	**3.3000e-004**	**3.6200e-003**	**0.0000**	**33.3898**	**33.3898**	**2.1000e-003**	**0.0000**	**33.4425**

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					0.0572	0.0000	0.0572	0.0259	0.0000	0.0259	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0343	0.6662	0.7876	1.3700e-003		0.0286	0.0286		0.0286	0.0286	0.0000	120.4562	120.4562	0.0388	0.0000	121.4269
Total	**0.0343**	**0.6662**	**0.7876**	**1.3700e-003**	**0.0572**	**0.0286**	**0.0857**	**0.0259**	**0.0286**	**0.0545**	**0.0000**	**120.4562**	**120.4562**	**0.0388**	**0.0000**	**121.4269**

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	3.1100e-003	0.1022	0.0238	2.9000e-004	6.3400e-003	3.1000e-004	6.6500e-003	1.7400e-003	2.9000e-004	2.0300e-003	0.0000	28.1287	28.1287	1.9500e-003	0.0000	28.1775
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	2.2900e-003	1.7800e-003	0.0201	6.0000e-005	5.8300e-003	5.0000e-005	5.8800e-003	1.5500e-003	4.0000e-005	1.5900e-003	0.0000	5.2610	5.2610	1.5000e-004	0.0000	5.2649
Total	**5.4000e-003**	**0.1039**	**0.0439**	**3.5000e-004**	**0.0122**	**3.6000e-004**	**0.0125**	**3.2900e-003**	**3.3000e-004**	**3.6200e-003**	**0.0000**	**33.3898**	**33.3898**	**2.1000e-003**	**0.0000**	**33.4425**

3.9 Building Construction ED-ICU - 2021

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	0.1384	1.1557	1.0438	2.1700e-003		0.0504	0.0504		0.0477	0.0477	0.0000	182.7763	182.7763	0.0512	0.0000	184.0550
Total	**0.1384**	**1.1557**	**1.0438**	**2.1700e-003**		**0.0504**	**0.0504**		**0.0477**	**0.0477**	**0.0000**	**182.7763**	**182.7763**	**0.0512**	**0.0000**	**184.0550**

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	2.2700e-003	0.0720	0.0195	1.9000e-004	4.6000e-003	1.5000e-004	4.7500e-003	1.3300e-003	1.4000e-004	1.4700e-003	0.0000	17.9943	17.9943	1.1000e-003	0.0000	18.0218
Worker	5.9700e-003	4.6500e-003	0.0525	1.5000e-004	0.0152	1.3000e-004	0.0153	4.0400e-003	1.2000e-004	4.1500e-003	0.0000	13.7163	13.7163	4.0000e-004	0.0000	13.7264

Total	**8.2400e-003**	**0.0767**	**0.0720**	**3.4000e-004**	**0.0198**	**2.8000e-004**	**0.0201**	**5.3700e-003**	**2.6000e-004**	**5.6200e-003**	**0.0000**	**31.7105**	**31.7105**	**1.5000e-003**	**0.0000**	**31.7482**

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	0.0630	1.1867	1.3144	2.1700e-003		0.0634	0.0634		0.0634	0.0634	0.0000	182.7761	182.7761	0.0512	0.0000	184.0548
Total	**0.0630**	**1.1867**	**1.3144**	**2.1700e-003**		**0.0634**	**0.0634**		**0.0634**	**0.0634**	**0.0000**	**182.7761**	**182.7761**	**0.0512**	**0.0000**	**184.0548**

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	2.2700e-003	0.0720	0.0195	1.9000e-004	4.6000e-003	1.5000e-004	4.7500e-003	1.3300e-003	1.4000e-004	1.4700e-003	0.0000	17.9943	17.9943	1.1000e-003	0.0000	18.0218
Worker	5.9700e-003	4.6500e-003	0.0525	1.5000e-004	0.0152	1.3000e-004	0.0153	4.0400e-003	1.2000e-004	4.1500e-003	0.0000	13.7163	13.7163	4.0000e-004	0.0000	13.7264
Total	**8.2400e-003**	**0.0767**	**0.0720**	**3.4000e-004**	**0.0198**	**2.8000e-004**	**0.0201**	**5.3700e-003**	**2.6000e-004**	**5.6200e-003**	**0.0000**	**31.7105**	**31.7105**	**1.5000e-003**	**0.0000**	**31.7482**

3.9 Building Construction ED-ICU - 2022

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	0.2446	1.9960	2.0141	4.2600e-003		0.0838	0.0838		0.0793	0.0793	0.0000	358.2845	358.2845	0.0994	0.0000	360.7700
Total	**0.2446**	**1.9960**	**2.0141**	**4.2600e-003**		**0.0838**	**0.0838**		**0.0793**	**0.0793**	**0.0000**	**358.2845**	**358.2845**	**0.0994**	**0.0000**	**360.7700**

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	4.1700e-003	0.1341	0.0362	3.6000e-004	9.0100e-003	2.5000e-004	9.2600e-003	2.6000e-003	2.4000e-004	2.8400e-003	0.0000	34.9394	34.9394	2.0900e-003	0.0000	34.9916
Worker	0.0110	8.2200e-003	0.0947	2.9000e-004	0.0298	2.4000e-004	0.0300	7.9100e-003	2.2000e-004	8.1300e-003	0.0000	25.9244	25.9244	7.1000e-004	0.0000	25.9422
Total	**0.0151**	**0.1423**	**0.1309**	**6.5000e-004**	**0.0388**	**4.9000e-004**	**0.0393**	**0.0105**	**4.6000e-004**	**0.0110**	**0.0000**	**60.8638**	**60.8638**	**2.8000e-003**	**0.0000**	**60.9338**

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	0.1233	2.3246	2.5748	4.2600e-003		0.1241	0.1241		0.1241	0.1241	0.0000	358.2840	358.2840	0.0994	0.0000	360.7696
Total	**0.1233**	**2.3246**	**2.5748**	**4.2600e-003**		**0.1241**	**0.1241**		**0.1241**	**0.1241**	**0.0000**	**358.2840**	**358.2840**	**0.0994**	**0.0000**	**360.7696**

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	4.1700e-003	0.1341	0.0362	3.6000e-004	9.0100e-003	2.5000e-004	9.2600e-003	2.6000e-003	2.4000e-004	2.8400e-003	0.0000	34.9394	34.9394	2.0900e-003	0.0000	34.9916
Worker	0.0110	8.2200e-003	0.0947	2.9000e-004	0.0298	2.4000e-004	0.0300	7.9100e-003	2.2000e-004	8.1300e-003	0.0000	25.9244	25.9244	7.1000e-004	0.0000	25.9422
Total	**0.0151**	**0.1423**	**0.1309**	**6.5000e-004**	**0.0388**	**4.9000e-004**	**0.0393**	**0.0105**	**4.6000e-004**	**0.0110**	**0.0000**	**60.8638**	**60.8638**	**2.8000e-003**	**0.0000**	**60.9338**

3.10 Architectural Coating ED-ICU - 2022

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	0.0273					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.1100e-003	0.0352	0.0453	7.0000e-005		2.0400e-003	2.0400e-003		2.0400e-003	2.0400e-003	0.0000	6.3831	6.3831	4.2000e-004	0.0000	6.3935
Total	**0.0324**	**0.0352**	**0.0453**	**7.0000e-005**		**2.0400e-003**	**2.0400e-003**		**2.0400e-003**	**2.0400e-003**	**0.0000**	**6.3831**	**6.3831**	**4.2000e-004**	**0.0000**	**6.3935**

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	4.0000e-004	3.0000e-004	3.4800e-003	1.0000e-005	1.1000e-003	1.0000e-005	1.1000e-003	2.9000e-004	1.0000e-005	3.0000e-004	0.0000	0.9542	0.9542	3.0000e-005	0.0000	0.9548
Total	**4.0000e-004**	**3.0000e-004**	**3.4800e-003**	**1.0000e-005**	**1.1000e-003**	**1.0000e-005**	**1.1000e-003**	**2.9000e-004**	**1.0000e-005**	**3.0000e-004**	**0.0000**	**0.9542**	**0.9542**	**3.0000e-005**	**0.0000**	**0.9548**

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	0.0273					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.4900e-003	0.0339	0.0458	7.0000e-005		2.3800e-003	2.3800e-003		2.3800e-003	2.3800e-003	0.0000	6.3831	6.3831	4.2000e-004	0.0000	6.3935
Total	**0.0288**	**0.0339**	**0.0458**	**7.0000e-005**		**2.3800e-003**	**2.3800e-003**		**2.3800e-003**	**2.3800e-003**	**0.0000**	**6.3831**	**6.3831**	**4.2000e-004**	**0.0000**	**6.3935**

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	4.0000e-004	3.0000e-004	3.4800e-003	1.0000e-005	1.1000e-003	1.0000e-005	1.1000e-003	2.9000e-004	1.0000e-005	3.0000e-004	0.0000	0.9542	0.9542	3.0000e-005	0.0000	0.9548
Total	**4.0000e-004**	**3.0000e-004**	**3.4800e-003**	**1.0000e-005**	**1.1000e-003**	**1.0000e-005**	**1.1000e-003**	**2.9000e-004**	**1.0000e-005**	**3.0000e-004**	**0.0000**	**0.9542**	**0.9542**	**3.0000e-005**	**0.0000**	**0.9548**

3.11 Paving MOB-PS - 2022

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	0.0143	0.1446	0.1896	3.0000e-004		7.3800e-003	7.3800e-003		6.7900e-003	6.7900e-003	0.0000	26.0358	26.0358	8.4200e-003	0.0000	26.2463
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0143**	**0.1446**	**0.1896**	**3.0000e-004**		**7.3800e-003**	**7.3800e-003**		**6.7900e-003**	**6.7900e-003**	**0.0000**	**26.0358**	**26.0358**	**8.4200e-003**	**0.0000**	**26.2463**

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	7.9000e-004	5.9000e-004	6.7900e-003	2.0000e-005	2.1400e-003	2.0000e-005	2.1500e-003	5.7000e-004	2.0000e-005	5.8000e-004	0.0000	1.8606	1.8606	5.0000e-005	0.0000	1.8619
Total	**7.9000e-004**	**5.9000e-004**	**6.7900e-003**	**2.0000e-005**	**2.1400e-003**	**2.0000e-005**	**2.1500e-003**	**5.7000e-004**	**2.0000e-005**	**5.8000e-004**	**0.0000**	**1.8606**	**1.8606**	**5.0000e-005**	**0.0000**	**1.8619**

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	7.2900e-003	0.1468	0.2248	3.0000e-004		7.9200e-003	7.9200e-003		7.9200e-003	7.9200e-003	0.0000	26.0358	26.0358	8.4200e-003	0.0000	26.2463
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**7.2900e-003**	**0.1468**	**0.2248**	**3.0000e-004**		**7.9200e-003**	**7.9200e-003**		**7.9200e-003**	**7.9200e-003**	**0.0000**	**26.0358**	**26.0358**	**8.4200e-003**	**0.0000**	**26.2463**

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	7.9000e-004	5.9000e-004	6.7900e-003	2.0000e-005	2.1400e-003	2.0000e-005	2.1500e-003	5.7000e-004	2.0000e-005	5.8000e-004	0.0000	1.8606	1.8606	5.0000e-005	0.0000	1.8619
Total	**7.9000e-004**	**5.9000e-004**	**6.7900e-003**	**2.0000e-005**	**2.1400e-003**	**2.0000e-005**	**2.1500e-003**	**5.7000e-004**	**2.0000e-005**	**5.8000e-004**	**0.0000**	**1.8606**	**1.8606**	**5.0000e-005**	**0.0000**	**1.8619**

3.12 Architectural Coating MOB-PS - 2022

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	0.0295					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.6600e-003	0.0183	0.0236	4.0000e-005		1.0600e-003	1.0600e-003		1.0600e-003	1.0600e-003	0.0000	3.3192	3.3192	2.2000e-004	0.0000	3.3246
Total	**0.0322**	**0.0183**	**0.0236**	**4.0000e-005**		**1.0600e-003**	**1.0600e-003**		**1.0600e-003**	**1.0600e-003**	**0.0000**	**3.3192**	**3.3192**	**2.2000e-004**	**0.0000**	**3.3246**

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	7.3000e-004	5.5000e-004	6.3400e-003	2.0000e-005	1.9900e-003	2.0000e-005	2.0100e-003	5.3000e-004	1.0000e-005	5.4000e-004	0.0000	1.7366	1.7366	5.0000e-005	0.0000	1.7378
Total	**7.3000e-004**	**5.5000e-004**	**6.3400e-003**	**2.0000e-005**	**1.9900e-003**	**2.0000e-005**	**2.0100e-003**	**5.3000e-004**	**1.0000e-005**	**5.4000e-004**	**0.0000**	**1.7366**	**1.7366**	**5.0000e-005**	**0.0000**	**1.7378**

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	0.0295					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.7000e-004	0.0176	0.0238	4.0000e-005		1.2400e-003	1.2400e-003		1.2400e-003	1.2400e-003	0.0000	3.3192	3.3192	2.2000e-004	0.0000	3.3246
Total	**0.0303**	**0.0176**	**0.0238**	**4.0000e-005**		**1.2400e-003**	**1.2400e-003**		**1.2400e-003**	**1.2400e-003**	**0.0000**	**3.3192**	**3.3192**	**2.2000e-004**	**0.0000**	**3.3246**

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	7.3000e-004	5.5000e-004	6.3400e-003	2.0000e-005	1.9900e-003	2.0000e-005	2.0100e-003	5.3000e-004	1.0000e-005	5.4000e-004	0.0000	1.7366	1.7366	5.0000e-005	0.0000	1.7378
Total	**7.3000e-004**	**5.5000e-004**	**6.3400e-003**	**2.0000e-005**	**1.9900e-003**	**2.0000e-005**	**2.0100e-003**	**5.3000e-004**	**1.0000e-005**	**5.4000e-004**	**0.0000**	**1.7366**	**1.7366**	**5.0000e-005**	**0.0000**	**1.7378**

3.13 Paving ED-ICU - 2022

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	0.0469	0.5132	0.4454	8.5000e-004		0.0224	0.0224		0.0207	0.0207	0.0000	74.1032	74.1032	0.0237	0.0000	74.6957

Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0469**	**0.5132**	**0.4454**	**8.5000e-004**		**0.0224**	**0.0224**		**0.0207**	**0.0207**	**0.0000**	**74.1032**	**74.1032**	**0.0237**	**0.0000**	**74.6957**

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	2.3600e-003	1.7700e-003	0.0204	6.0000e-005	6.4100e-003	5.0000e-005	6.4600e-003	1.7000e-003	5.0000e-005	1.7500e-003	0.0000	5.5818	5.5818	1.5000e-004	0.0000	5.5857
Total	**2.3600e-003**	**1.7700e-003**	**0.0204**	**6.0000e-005**	**6.4100e-003**	**5.0000e-005**	**6.4600e-003**	**1.7000e-003**	**5.0000e-005**	**1.7500e-003**	**0.0000**	**5.5818**	**5.5818**	**1.5000e-004**	**0.0000**	**5.5857**

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	0.0219	0.4210	0.5780	8.5000e-004		0.0215	0.0215		0.0215	0.0215	0.0000	74.1031	74.1031	0.0237	0.0000	74.6956
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0219**	**0.4210**	**0.5780**	**8.5000e-004**		**0.0215**	**0.0215**		**0.0215**	**0.0215**	**0.0000**	**74.1031**	**74.1031**	**0.0237**	**0.0000**	**74.6956**

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	2.3600e-003	1.7700e-003	0.0204	6.0000e-005	6.4100e-003	5.0000e-005	6.4600e-003	1.7000e-003	5.0000e-005	1.7500e-003	0.0000	5.5818	5.5818	1.5000e-004	0.0000	5.5857
Total	**2.3600e-003**	**1.7700e-003**	**0.0204**	**6.0000e-005**	**6.4100e-003**	**5.0000e-005**	**6.4600e-003**	**1.7000e-003**	**5.0000e-005**	**1.7500e-003**	**0.0000**	**5.5818**	**5.5818**	**1.5000e-004**	**0.0000**	**5.5857**

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	tons/yr										MT/yr					
Mitigated	0.4881	1.2595	6.3312	0.0201	2.0995	0.0192	2.1187	0.5610	0.0178	0.5788	0.0000	1,837.2257	1,837.2257	0.0925	0.0000	1,839.5387
Unmitigated	0.4881	1.2595	6.3312	0.0201	2.0995	0.0192	2.1187	0.5610	0.0178	0.5788	0.0000	1,837.2257	1,837.2257	0.0925	0.0000	1,839.5387

4.2 Trip Summary Information

	Average Daily Trip Rate	Unmitigated	Mitigated

Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Hospital	580.75	447.64	391.69	2,073,055	2,073,055
Medical Office Building	1,998.05	495.69	85.95	3,500,706	3,500,706
Unenclosed Parking with Elevator	0.00	0.00	0.00		
Total	2,578.80	943.33	477.64	5,573,762	5,573,762

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
Hospital	16.60	8.40	6.90	64.90	16.10	19.00	73	25	2
Medical Office Building	16.60	6.40	6.40	29.60	51.40	19.00	60	30	10
Unenclosed Parking with Elevator	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Hospital	0.770213	0.060017	0.040011	0.060017	0.020006	0.020006	0.010003	0.010003	0.001637	0.001633	0.004831	0.000583	0.001041
Medical Office Building	0.889880	0.029663	0.029663	0.019775	0.004944	0.004944	0.004944	0.004944	0.002364	0.002441	0.004860	0.000664	0.000915
Unenclosed Parking with Elevator	0.546501	0.044961	0.204016	0.120355	0.015740	0.006196	0.020131	0.030678	0.002515	0.002201	0.005142	0.000687	0.000876

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Percent of Electricity Use Generated with Renewable Energy

	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	328.1975	328.1975	0.0000	0.0000	328.1975
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	437.5967	437.5967	0.0000	0.0000	437.5967
NaturalGas Mitigated	0.0239	0.2170	0.1823	1.3000e-003		0.0165	0.0165		0.0165	0.0165	0.0000	236.2512	236.2512	4.5300e-003	4.3300e-003	237.6551
NaturalGas Unmitigated	0.0239	0.2170	0.1823	1.3000e-003		0.0165	0.0165		0.0165	0.0165	0.0000	236.2512	236.2512	4.5300e-003	4.3300e-003	237.6551

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					
Hospital	3.81436e+006	0.0206	0.1870	0.1571	1.1200e-003		0.0142	0.0142		0.0142	0.0142	0.0000	203.5490	203.5490	3.9000e-003	3.7300e-003	204.7586
Medical Office Building	612816	3.3000e-003	0.0300	0.0252	1.8000e-004		2.2800e-003	2.2800e-003		2.2800e-003	2.2800e-003	0.0000	32.7022	32.7022	6.3000e-004	6.0000e-004	32.8965
Unenclosed Parking with Elevator	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
Total		**0.0239**	**0.2170**	**0.1823**	**1.3000e-003**		**0.0165**	**0.0165**		**0.0165**	**0.0165**	**0.0000**	**236.2512**	**236.2512**	**4.5300e-003**	**4.3300e-003**	**237.6551**

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					
Hospital	3.81436e+006	0.0206	0.1870	0.1571	1.1200e-003		0.0142	0.0142		0.0142	0.0142	0.0000	203.5490	203.5490	3.9000e-003	3.7300e-003	204.7586
Medical Office Building	612816	3.3000e-003	0.0300	0.0252	1.8000e-004		2.2800e-003	2.2800e-003		2.2800e-003	2.2800e-003	0.0000	32.7022	32.7022	6.3000e-004	6.0000e-004	32.8965
Unenclosed Parking with Elevator	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

Total		**0.0239**	**0.2170**	**0.1823**	**1.3000e-003**		**0.0165**	**0.0165**		**0.0165**	**0.0165**	**0.0000**	**236.2512**	**236.2512**	**4.5300e-003**	**4.3300e-003**	**237.6551**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Hospital	1.3441e+006	243.2838	0.0000	0.0000	243.2838
Medical Office Building	764695	138.4110	0.0000	0.0000	138.4110
Unenclosed Parking with Elevator	308848	55.9020	0.0000	0.0000	55.9020
Total		**437.5967**	**0.0000**	**0.0000**	**437.5967**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Hospital	1.00807e+006	182.4628	0.0000	0.0000	182.4628
Medical Office Building	573521	103.8083	0.0000	0.0000	103.8083
Unenclosed Parking with Elevator	231636	41.9265	0.0000	0.0000	41.9265
Total		**328.1975**	**0.0000**	**0.0000**	**328.1975**

6.0 Area Detail

6.1 Mitigation Measures Area

	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	0.4421	6.0000e-005	6.5900e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0128	0.0128	3.0000e-005	0.0000	0.0136
Unmitigated	0.4421	6.0000e-005	6.5900e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0128	0.0128	3.0000e-005	0.0000	0.0136

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	5.6800e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.4359					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	6.1000e-004	6.0000e-005	6.5900e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0128	0.0128	3.0000e-005	0.0000	0.0136
Total	**0.4421**	**6.0000e-005**	**6.5900e-003**	**0.0000**		**2.0000e-005**	**2.0000e-005**		**2.0000e-005**	**2.0000e-005**	**0.0000**	**0.0128**	**0.0128**	**3.0000e-005**	**0.0000**	**0.0136**

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	5.6800e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.4359					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	6.1000e-004	6.0000e-005	6.5900e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0128	0.0128	3.0000e-005	0.0000	0.0136
Total	**0.4421**	**6.0000e-005**	**6.5900e-003**	**0.0000**		**2.0000e-005**	**2.0000e-005**		**2.0000e-005**	**2.0000e-005**	**0.0000**	**0.0128**	**0.0128**	**3.0000e-005**	**0.0000**	**0.0136**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	45.1775	0.4815	0.0114	60.6042
Unmitigated	45.1775	0.4815	0.0114	60.6042

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Hospital	7.3908 / 1.40777	22.5945	0.2408	5.6900e-003	30.3098
Medical Office Building	7.38704 / 1.40706	22.5830	0.2407	5.6800e-003	30.2944
Unenclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**45.1775**	**0.4815**	**0.0114**	**60.6042**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Hospital	7.3908 / 1.40777	22.5945	0.2408	5.6900e-003	30.3098
Medical Office Building	7.38704 / 1.40706	22.5830	0.2407	5.6800e-003	30.2944
Unenclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**45.1775**	**0.4815**	**0.0114**	**60.6042**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	129.0941	7.6292	0.0000	319.8253
Unmitigated	258.1883	15.2585	0.0000	639.6505

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Hospital	636.12	129.1266	7.6312	0.0000	319.9057
Medical Office Building	635.8	129.0617	7.6273	0.0000	319.7448
Unenclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Total		**258.1883**	**15.2585**	**0.0000**	**639.6505**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			

Hospital	318.06	64.5633	3.8156	0.0000	159.9529
Medical Office Building	317.9	64.5308	3.8137	0.0000	159.8724
Unenclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Total		**129.0941**	**7.6292**	**0.0000**	**319.8253**

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
Emergency Generator	1	1	12	800	0.73	CNG

Boilers

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

User Defined Equipment

Equipment Type	Number

10.1 Stationary Sources

Unmitigated/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
Equipment Type	tons/yr										MT/yr					
Emergency Generator - CNG (500 - 9999 HP)	0.0422	3.2500e-003	0.1100	1.0000e-005		2.3000e-004	2.3000e-004		2.3000e-004	2.3000e-004	0.0000	2.4477	2.4477	5.1200e-003	0.0000	2.5757

Total	0.0422	3.2500e-003	0.1100	1.0000e-005		2.3000e-004	2.3000e-004		2.3000e-004	2.3000e-004	0.0000	2.4477	2.4477	5.1200e-003	0.0000	2.5757

11.0 Vegetation

Appendix B

Tree Inventory Report

PSOMAS

Balancing the Natural and Built Environment

October 19, 2020

Tony Blakely
Corporate Director of Planning, Design, and Construction
Emanate Health
140 West College Street
Covina, California 91722

VIA EMAIL
tblakely@emanatehealth.org

Subject: Tree Inventory Report for the Queen of the Valley Hospital Medical Office Building; Parking Structure; and Emergency Department/Intensive Care Unit Project (Precise Plan No. 20-04), West Covina, California

Dear Mr. Blakely:

Psomas is pleased to provide this tree inventory report for the Queen of Valley Hospital Project site located at 1115 South Sunset Avenue in West Covina, California (Exhibit 1). The purpose of the tree inventory is to document all trees on the Project site and specifically identify all trees that are subject to regulation by the City of West Covina (City) to support the environmental assessment of the proposed Project.

PROJECT DESCRIPTION

The proposed Project involves the construction of a two-story medical office building (MOB) adjacent to the existing Queen of the Valley Hospital. The new medical office building would be to the northeast of the existing main building and surrounded by landscaping. The new four-level parking structure will contain 398 parking spaces and would be constructed northwest of the existing main building, adjacent to the new MOB and separated by a landscaped area. Surface parking spaces are also provided outside the structure adjacent to the entrance and along the north and west elevations. Landscaping and a walkway separate the parking structure from the medical office building.

Additionally, a new two-story emergency department and intensive care unit (ED/ICU) would be constructed to the southwest of the existing Education Annex and to the west of the main hospital building. A total of 235 on-site parking spaces would be associated with these buildings. Adjacent to the MOB entry/exit would be a patient drop-off area and eight ambulance parking spaces. There would be landscaping along the entrance and patient drop-off area and within the surface parking lot.

REGULATORY AUTHORITY

The tree inventory summarized herein documents trees that are defined as "significant trees" or "heritage trees" in Division 9 of the City's Municipal Code. These trees cannot be removed without first acquiring a tree permit from the City.

Significant trees are defined as any tree in the front yard of a parcel (or street-side yard of a corner lot) with a trunk diameter measuring at least 12 inches or trees located anywhere on a lot whose trunk measures at least 6 inches for the following species: any oak tree species

5 Hutton Centre Drive
Suite 300
Santa Ana, CA 92707

Tel 714.751.7373
Fax 714.545.8883
www.Psomas.com

(*Quercus* spp.) that is native to California, California sycamore (*Platanus racemosa*), or American sycamore (*Platanus occidentalis*). The trees listed in this report are those that meet the size and/or species requirements to be considered as significant trees though the City's Municipal Code does not specify if the definition of significant trees applies to commercial properties. The significant tree definition does not indicate how to calculate the trunk diameter of multi-trunk trees. Therefore, trees that have a cumulative trunk diameter of 12 inches are included in this inventory.

Heritage trees are any individual tree or group of trees that have been identified by resolution of the Planning Commission based on: (1) association with a historic place, building, natural feature, or event; (2) identification on any historic or cultural resources survey as a significant feature of a landmark, historic site, or historic district; (3) its value as being representative of a significant period of the City's development; or (4) designation for protection or conservation in a specific plan, conditional use permit, precise plan of design, tract or parcel map, or similar development approval.

All street trees adjacent to the Project site were also evaluated and are included in this inventory report.

METHODS

Psomas Certified Arborist Trevor Bristle (International Society of Arboriculture Certificate No. WE-10233A) visited the Project site on August 24 and 31, 2020 to document the type, quantity, and condition of trees on the Project site. Each tree was individually numbered, and the trunk, branches, and foliage were carefully examined. During the site visit, the following data were recorded: tree species, trunk diameter at breast height (dbh), and canopy diameter. The health and aesthetic quality of each tree was assessed on a scale of 1 (very poor) to 5 (excellent).

The health evaluation generally considered visual evidence of vigor, such as the amount of foliage; leaf color and size; presence of branch or twig dieback; severity of insect infestation; the presence of disease; heart rot; fire damage; mechanical damage; amount of new growth; appearance of bark; and rate of callous development over wounds. Structural integrity was also evaluated with respect to branch attachment, branch placement, root health, and stability. Tree aesthetics were evaluated with respect to overall form and symmetry, crown balance, branching pattern, and broken branches.

EXISTING CONDITIONS

The survey area for this report consists of landscaped areas associated with the various buildings on the property and adjacent surface parking lots. Many of the trees in the survey area are planted amidst the parking lots and line the outer boundary of the property. As stated above, this tree inventory identifies all trees that meet the definition of "significant trees", though the City's Municipal Code does not state if this definition also applies to commercial properties. In all, the site inventory identified 272 trees in the survey area consisting of: 1 African fern pine (*Afrocarpus falcatus*), 1 crimson bottlebrush (*Callistemon citrinus*), 1 Deodar cedar (*Cedrus deodara*), 2 silk floss trees (*Chorisia speciosa*), 17 camphor trees (*Cinnamomum camphora*), 16 carrotwoods (*Cupaniopsis anacardioides*), 6 South African coral trees (*Erythrina caffra*), 2 Nichol's willowleafed peppermint (*Eucalyptus nicholii*), 1 common fig (*Ficus carica*), 1 rubber tree (*Ficus elastica*), 1 Indian laurel fig (*Ficus microcarpa*), 2 rusty-leaf figs (*Ficus rubiginosa*), 67 Shamel ash trees (*Fraxinus uhdei*), 1 maidenhair tree (*Ginkgo biloba*), 2 Arizona cypress (*Hesperocyparis arizonica*), 15 jacarandas (*Jacaranda mimosifolia*), 1 goldenrain tree (*Koelreuteria paniculata*), 18 crape myrtles (*Lagerstroemia indica*), 4 glossy privets (*Ligustrum lucidum*), 35 sweetgums (*Liquidambar styraciflua*), 1 tulip tree (*Liriodendron tulipifera*), 12 southern magnolias (*Magnolia grandiflora*), 1 saucer magnolia (*Magnolia x soulangeana*), 10 mulberry trees (*Morus alba*), 1 olive (*Olea europaea*), 1 Canary Island date palm (*Phoenix canariensis*), 4 Canary Island pines (*Pinus canariensis*), 1 Chinese pistache (*Pistacia chinensis*), 1 Catalina cherry (*Prunus ilicifolia* ssp. *Lyonii*), 17

evergreen pears (*Pyrus kawakamii*), 4 holly oak (*Quercus ilex*), 1 black locust (*Robinia pseudoacacia*), 6 Brazilian pepper trees (*Schinus terebinthifolius*), 11 coast redwoods (*Sequoia sempervirens*), 1 California fan palm (*Washingtonia filifera*), and 6 Mexican fan palms (*Washingtonia robusta*).

Trees in the survey area are generally well maintained and in good health without significant health problems. A significant exception is tree number 38; this American sweetgum is dead and should be removed as soon as possible because its location next to a bus stop makes this tree a hazard.

The locations of the trees described above are provided on Exhibit 2. A complete summary of the collected tree data during the field evaluation is provided in Attachment A.

EXPECTED TREE IMPACTS

The three Project construction components are indicated on Exhibit 2 and include: the MOB, the new Parking Structure, and the ED/ICU. Expected tree impacts that would result from Project implementation are summarized in Table 1 and are categorized by the Project components. All trees listed in Table 1 meet the definition of significant trees, assuming the definition applies to both residential and commercial property. In all, a total of 70 significant trees are expected to be removed for Project construction, consisting of 23 tree removals for the MOB, 29 removals for the new Parking Structure, and 18 removals for the ED/ICU. None of the trees on the Project site are considered heritage trees.

TABLE 1
SUMMARY OF PROPOSED TREE REMOVALS

Tree Species		Quantity to be Removed	Range of Trunk DBH (inches)*
Scientific Name	**Common Name**		
Medical Office Building Area			
Cupaniopsis anacardioides	carrotwood	4	13.6 – 15.4
Ficus elastica	rubber tree	1	31.7
Fraxinus uhdei	Shamel ash	2	29.0 – 40.4
Liquidambar styraciflua	sweetgum	6	12.0 – 31.9
Liriodendron tulipifera	tulip tree	1	18.1
Magnolia grandiflora	southern magnolia	7	13.0 – 32.1
Pyrus kawakamii	evergreen pear	2	18.8 – 26.4
	Subtotal	***23***	
Parking Structure Area			
Cinnamomum camphora	camphor	6	12.5 – 21.2
Erythrina caffra	South African coral tree	4	23.0 – 41.4
Fraxinus uhdei	Shamel ash	15	12.1 – 19.5
Sequoia sempervirens	coast redwood	4	15.8 – 21.0
	Subtotal	***29***	
Emergency Department/Intensive Care Unit			
Afrocarpus falcatus	African fern pine	1	14.3
Cinnamomum camphora	camphor	2	15.5 – 19.2
Erythrina caffra	South African coral tree	1	31.9
Lagerstroemia indica	crape myrtle	5	8.7 – 12.6
Liquidambar styraciflua	sweetgum	6	12.0 – 18.6
Magnolia grandiflora	southern magnolia	2	12.0 – 15.5

TABLE 1
SUMMARY OF PROPOSED TREE REMOVALS

Tree Species		Quantity to be Removed	Range of Trunk DBH (inches)*
Scientific Name	**Common Name**		
Sequoia sempervirens	coast redwood	1	26.6
	Subtotal	***18***	
Outside Project Areas/No Impact			
Callistemon citrinus	crimson bottlebrush	1	12.4
Cedrus deodara	Deodar cedar	1	32.9
Chorisia speciosa	silk floss tree	2	17.9 – 27.0
Cinnamomum camphora	camphor	9	12.2 – 26.5
Cupaniopsis anacardioides	carrotwood	12	12.0 – 17.9
Erythrina caffra	South African coral tree	1	23.4
Eucalyptus nicholii	Nichol's willowleafed peppermint	2	22.3 – 24.6
Ficus carica	common fig	1	17.8
Ficus microcarpa	Indian laurel fig	1	21.5
Ficus rubiginosa	rusty-leaf fig	2	13.0 – 22.5
Fraxinus uhdei	Shamel ash	50	10.4 – 38.5
Ginkgo biloba	maidenhair tree	1	23.7
Hesperocyparis arizonica	Arizona cypress	2	14.0 – 15.6
Jacaranda mimosifolia	jacaranda	15	14.4 – 21.6
Koelreuteria paniculata	goldenrain tree	1	12.7
Lagerstroemia indica	crape myrtle	13	12.4 – 19.1
Ligustrum lucidum	glossy privet	4	14.4 – 32.1
Liquidambar styraciflua	sweetgum	23	12.0 – 26.3
Magnolia grandiflora	southern magnolia	3	12.3 – 18.1
Magnolia x soulangeana	saucer magnolia	1	14.8
Morus alba	mulberry	10	16.5 – 21.0
Olea europaea	olive	1	52.0
Phoenix canariensis	Canary Island date palm	1	47.0
Pinus canariensis	Canary Island pine	4	17.2 – 24.1
Pistacia chinensis	Chinese pistache	1	13.9
Prunus ilicifolia ssp. *Lyonii*	Catalina cherry	1	13.3
Pyrus kawakamii	evergreen pear	15	12.1 – 18.1
Quercus ilex	holly oak	4	12.8 – 18.0
Robinia pseudoacacia	black locust	1	21.9
Schinus terebinthifolius	Brazilian pepper	6	10.0 – 25.6
Sequoia sempervirens	coast redwood	6	12.8 – 24.1
Washingtonia filifera	California fan palm	1	14.5
Washingtonia robusta	Mexican fan palm	6	10.0 – 14.5
	Subtotal	***202***	
	Total	**272**	

DBH: diameter at breast height
*The DBH for trees that are multi-trunk trees are represented as the sum of the largest two trunks.

Please call David Hughes at (626) 351-2000 with any questions related to this report.

Sincerely,
PSOMAS

David T. Hughes
Senior Project Manager

Trevor Bristle
Certified Arborist
International Society of Arboriculture
Certificate No. WE-10233A

Attachments: Exhibits 1 and 2
A – Tree Data Summary

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Local Vicinity

Exhibit 1

Tree Inventory Report for the Queen of the Valley Hospital Medical Office Building and Parking Structure Project

2,000 1,000 0 2,000 Feet

PSOMAS

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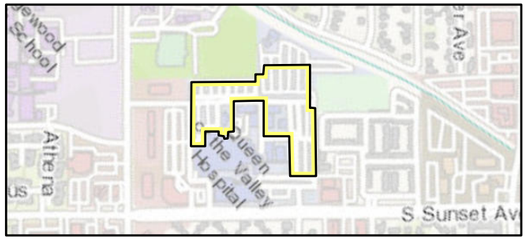

Property Boundary

Project Boundary

Tree Species

- African fern pine (*Afrocarpus falcatus*)
- Arizona cypress (*Hesperocyparis arizonica*)
- Brazilian peppertree (*Schinus terebinthifolius*)
- California fan palm (*Washingtonia filifera*)
- Canary Island date palm (*Phoenix canariensis*)
- Canary Island pine (*Pinus canariensis*)
- Catalina cherry (*Prunus ilicifolia ssp. Lyonii*)
- Chinese pistache (*Pistacia chinensis*)
- Deodar cedar (*Cedrus deodara*)
- Indian laurel fig (*Ficus microcarpa*)
- Mexican fan palm (*Washingtonia robusta*)
- Nichol's willowleafed peppermint (*Eucalyptus nicholii*)
- Shamel ash (*Fraxinus uhdei*)
- South African coral tree (*Erythrina caffra*)
- black locust (*Robinia pseudoacacia*)
- camphor tree (*Cinnamomum camphora*)
- carrotwood (*Cupaniopsis anacardioides*)
- coast redwood (*Sequoia sempervirens*)
- common fig (*Ficus carica*)
- crape myrtle (*Lagerstroemia indica*)
- crimson bottlebrush (*Callistemon citrinus*)
- evergreen pear (*Pyrus kawakamii*)
- glossy privet (*Ligustrum lucidum*)
- goldenrain tree (*Koelreuteria paniculata*)
- holly oak (*Quercus ilex*)
- jacaranda (*Jacaranda mimosifolia*)
- maidenhair tree (*Ginkgo biloba*)
- mulberry (*Morus alba*)
- olive (*Olea europaea*)
- rubber tree (*Ficus elastica*)
- rusty-leaf fig (*Ficus rubiginosa*)
- saucer magnolia (*Magnolia x soulangeana*)
- silk floss tree (*Chorisia speciosa*)
- snag
- southern magnolia (*Magnolia grandiflora*)
- sweetgum (*Liquidambar styraciflua*)
- tulip tree (*Liriodendron tulipifera*)

140 70 0 140 Feet

Aerial Source: LAR-IAC 2014

Tree Locations

Exhibit 2

Tree Inventory Report for the Queen of the Valley Hospital Medical Office Building and Parking Structure Project

PSOMAS

(Rev: 09/25/2020 RMB) R:\Projects\EMA\3EMA010100\Graphics\Tree_Report\ex_TreeLocations.pdf

D:\Projects\3EMA\010100\MXD\Tree_Report\Tree_Locations_11x17_20200917.mxd

ATTACHMENT A

TREE DATA SUMMARY

TREE DATA SUMMARY

Tree Tag #	Common Name	Species	# Main Trunks	D.B.H. (in)		Height (ft)	Canopy Diameter (ft)	Health Rating	Aesthetic Rating	Project Component			Notes
				All Trunks	Sum of Largest Two Trunks					MOB	Parking Structure	ED/ICU	
1	jacaranda	*Jacaranda mimosifolia*	1	16.2	16.2	25	20	4	4				
2	jacaranda	*Jacaranda mimosifolia*	1	20.4	20.4	25	25	4	4				
3	jacaranda	*Jacaranda mimosifolia*	1	18.0	18.0	30	20	4	4				
4	jacaranda	*Jacaranda mimosifolia*	1	14.4	14.4	25	20	4	4				
5	jacaranda	*Jacaranda mimosifolia*	1	16.8	16.8	25	20	4	4				
6	sweetgum	*Liquidambar styraciflua*	1	13.0	13.0	20	10	4	4				
7	sweetgum	*Liquidambar styraciflua*	1	14.4	14.4	20	12	4	4				
8	silk floss tree	*Chorisia speciosa*	1	17.9	17.9	25	25	4	4				
9	sweetgum	*Liquidambar styraciflua*	1	12.0	12.0	20	10	4	4				
10	Mexican fan palm	*Washingtonia robusta*	1	13.0	13.0	35	10	4	3				
11	Shamel ash	*Fraxinus uhdei*	1	14.4	14.4	25	25	4	4				
12	carrotwood	*Cupaniopsis anacardioides*	1	17.9	17.9	15	12	4	4				
13	carrotwood	*Cupaniopsis anacardioides*	1	12.0	12.0	15	12	4	4				
14	rusty-leaf fig	*Ficus rubiginosa*	1	13.0	13.0	25	25	4	4				
15	Canary Island pine	*Pinus canariensis*	1	17.2	17.2	40	15	4	4				
16	carrotwood	*Cupaniopsis anacardioides*	1	14.6	14.6	20	15	4	4				
17	carrotwood	*Cupaniopsis anacardioides*	1	12.0	12.0	20	15	4	4				
18	carrotwood	*Cupaniopsis anacardioides*	3	7.4, 4.1, 3.0	11.5	15	12	4	3				
19	carrotwood	*Cupaniopsis anacardioides*	1	15.0	15.0	20	15	4	4				
20	carrotwood	*Cupaniopsis anacardioides*	1	13.5	13.5	20	15	4	4				
21	carrotwood	*Cupaniopsis anacardioides*	1	13.3	13.3	15	15	4	4				
22	carrotwood	*Cupaniopsis anacardioides*	1	14.5	14.5	15	12	4	4				
23	rusty-leaf fig	*Ficus rubiginosa*	1	22.5	22.5	20	25	4	4				
24	carrotwood	*Cupaniopsis anacardioides*	1	12.3	12.3	20	20	4	4				
25	sweetgum	*Liquidambar styraciflua*	1	18.9	18.9	25	15	4	4				
26	sweetgum	*Liquidambar styraciflua*	1	20.1	20.1	25	20	4	4				
27	sweetgum	*Liquidambar styraciflua*	1	16.6	16.6	25	20	4	4				
28	sweetgum	*Liquidambar styraciflua*	1	16.1	16.1	25	15	2	1				
29	sweetgum	*Liquidambar styraciflua*	1	12.2	12.2	20	20	3	2				
30	sweetgum	*Liquidambar styraciflua*	1	14.5	14.5	25	20	4	3				
31	sweetgum	*Liquidambar styraciflua*	1	16.1	16.1	25	15	4	4				
32	sweetgum	*Liquidambar styraciflua*	1	14.4	14.4	25	20	3	2				
33	sweetgum	*Liquidambar styraciflua*	1	14.9	14.9	25	20	4	4				
34	sweetgum	*Liquidambar styraciflua*	1	9.0	9.0	15	10	1	1				Immediate removal; dead snag with risk to bus stop
35	sweetgum	*Liquidambar styraciflua*	1	16.3	16.3	30	25	4	3				
36	sweetgum	*Liquidambar styraciflua*	1	12.6	12.6	20	15	4	3				
37	sweetgum	*Liquidambar styraciflua*	1	18.6	18.6	30	25	4	3				
38	camphor tree	*Cinnamomum camphora*	1	13.5	13.5	30	25	4	4				
39	camphor tree	*Cinnamomum camphora*	1	12.2	12.2	25	20	4	4				
40	camphor tree	*Cinnamomum camphora*	1	12.8	12.8	25	25	4	4				
41	camphor tree	*Cinnamomum camphora*	1	14.3	14.3	30	25	4	4				
42	jacaranda	*Jacaranda mimosifolia*	1	17.2	17.2	25	20	4	4				

TREE DATA SUMMARY

Tree Tag #	Common Name	Species	# Main Trunks	D.B.H. (in)		Height (ft)	Canopy Diameter (ft)	Health Rating	Aesthetic Rating	Project Component			Notes
				All Trunks	Sum of Largest Two Trunks					MOB	Parking Structure	ED/ICU	
43	jacaranda	*Jacaranda mimosifolia*	1	16.6	16.6	25	20	4	4				
44	jacaranda	*Jacaranda mimosifolia*	1	19.1	19.1	25	20	4	4				
45	jacaranda	*Jacaranda mimosifolia*	1	18.9	18.9	25	20	4	4				
46	jacaranda	*Jacaranda mimosifolia*	1	18.2	18.2	25	20	4	4				
47	jacaranda	*Jacaranda mimosifolia*	1	17.7	17.7	25	20	4	4				
48	jacaranda	*Jacaranda mimosifolia*	1	19.6	19.6	25	20	4	4				
49	jacaranda	*Jacaranda mimosifolia*	1	17.1	17.1	25	25	4	4				
50	jacaranda	*Jacaranda mimosifolia*	1	15.8	15.8	25	20	4	4				
51	jacaranda	*Jacaranda mimosifolia*	1	21.6	21.6	30	25	4	4				
52	goldenrain tree	*Koelreuteria paniculata*	1	12.7	12.7	20	20	4	4				
53	evergreen pear	*Pyrus kawakamii*	1	17.2	17.2	12	10	4	4				
54	crape myrtle	*Lagerstroemia indica*	1	12.4	12.4	20	15	4	4				
55	crape myrtle	*Lagerstroemia indica*	2	10.0, 4.6	14.6	30	25	4	4				
56	crape myrtle	*Lagerstroemia indica*	2	7.9, 5.3	13.2	30	20	4	4				
57	evergreen pear	*Pyrus kawakamii*	1	14.2	14.2	12	10	4	4				
58	evergreen pear	*Pyrus kawakamii*	1	12.2	12.2	12	10	4	4				
59	evergreen pear	*Pyrus kawakamii*	1	18.1	18.1	12	15	4	4				
60	South African coral tree	*Erythrina caffra*	1	23.4	23.4	20	20	4	4				
61	maidenhair tree	*Ginkgo biloba*	2	12.6, 11.1	23.7	30	25	4	4				
62	evergreen pear	*Pyrus kawakamii*	1	14.7	14.7	12	12	4	4				
63	evergreen pear	*Pyrus kawakamii*	1	14.5	14.5	15	12	4	4				
64	evergreen pear	*Pyrus kawakamii*	1	14.3	14.3	12	12	4	4				
65	silk floss tree	*Chorisia speciosa*	1	27.0	27.0	30	30	4	4				
66	camphor tree	*Cinnamomum camphora*	1	13.1	13.1	30	25	4	4				
67	camphor tree	*Cinnamomum camphora*	1	12.6	12.6	30	25	4	4				
68	camphor tree	*Cinnamomum camphora*	1	15.4	15.4	30	25	4	4				
69	camphor tree	*Cinnamomum camphora*	1	17.6	17.6	45	40	4	4				
70	camphor tree	*Cinnamomum camphora*	1	26.5	26.5	35	30	4	4				
71	sweetgum	*Liquidambar styraciflua*	1	14.6	14.6	30	25	4	3				
72	olive	*Olea europaea*	3	28.4, 23.6, 9.5	52.0	30	40	4	4				
73	crimson bottlebrush	*Callistemon citrinus*	5	6.2, 6.2, 5.9, 5.8, 5.8, 5.0	12.4	20	15	4	4				
74	crape myrtle	*Lagerstroemia indica*	1	12.6	12.6	25	20	4	4				
75	crape myrtle	*Lagerstroemia indica*	5	7.4, 7.0, 6.5, 5.0, 4.0	14.4	25	15	4	4				
76	crape myrtle	*Lagerstroemia indica*	3	6.9, 5.5, 4.8	12.4	15	12	4	4				
77	crape myrtle	*Lagerstroemia indica*	1	12.7	12.7	15	20	4	4				
78	crape myrtle	*Lagerstroemia indica*	2	9.6, 9.5	19.1	30	25	4	4				
79	crape myrtle	*Lagerstroemia indica*	3	10.4, 7.6, 7.0	18.0	25	20	4	4				
80	crape myrtle	*Lagerstroemia indica*	3	5.4, 5.4, 5.0	10.8	15	10	3	3				
81	Chinese pistache	*Pistacia chinensis*	1	13.9	13.9	20	20	4	3				
82	Chinese pistache	*Pistacia chinensis*	1	12.1	12.1	20	15	4	4				

TREE DATA SUMMARY

Tree Tag #	Common Name	Species	# Main Trunks	D.B.H. (in)		Height (ft)	Canopy Diameter (ft)	Health Rating	Aesthetic Rating	Project Component			Notes
				All Trunks	Sum of Largest Two Trunks					MOB	Parking Structure	ED/ICU	
83	southern magnolia	*Magnolia grandiflora*	1	14.1	14.1	20	20	3	3	X			
84	southern magnolia	*Magnolia grandiflora*	1	15.2	15.2	25	20	4	4	X			
85	southern magnolia	*Magnolia grandiflora*	1	15.0	15.0	25	20	4	4	X			
86	evergreen pear	*Pyrus kawakamii*	1	14.5	14.5	15	15	4	4				
87	sweetgum	*Liquidambar styraciflua*	1	15.6	15.6	25	20	4	4				
88	sweetgum	*Liquidambar styraciflua*	1	19.7	19.7	25	20	4	4				
89	sweetgum	*Liquidambar styraciflua*	1	17.1	17.1	25	25	4	4				
90	sweetgum	*Liquidambar styraciflua*	1	20.2	20.2	25	20	4	4				
91	evergreen pear	*Pyrus kawakamii*	1	13.5	13.5	15	12	4	4				
92	evergreen pear	*Pyrus kawakamii*	1	13.1	13.1	15	12	4	4				
93	evergreen pear	*Pyrus kawakamii*	1	12.6	12.6	15	12	4	4				
94	evergreen pear	*Pyrus kawakamii*	1	12.1	12.1	15	12	4	4				
95	evergreen pear	*Pyrus kawakamii*	1	12.5	12.5	15	12	4	4				
96	evergreen pear	*Pyrus kawakamii*	1	13.6	13.6	15	12	4	4				
97	coast redwood	*Sequoia sempervirens*	1	12.8	12.8	20	12	4	4				
98	evergreen pear	*Pyrus kawakamii*	1	15.1	15.1	15	12	4	4				
99	carrotwood	*Cupaniopsis anacardioides*	1	14.1	14.1	25	20	4	4				
100	California fan palm	*Washingtonia filifera*	1	14.5	14.5	20	10	4	4				
101	saucer magnolia	*Magnolia x soulangeana*	1	14.8	14.8	15	15	4	4				
102	tulip tree	*Liriodendron tulipifera*	1	18.1	18.1	35	25	4	4	X			
103	sweetgum	*Liquidambar styraciflua*	1	12.6	12.6	30	20	4	4				
104	sweetgum	*Liquidambar styraciflua*	1	26.3	26.3	40	25	4	4				
105	crape myrtle	*Lagerstroemia indica*	5	3.5, 3.5, 3.2, 3.0, 3.0	7.0	20	20	4	4				
106	crape myrtle	*Lagerstroemia indica*	6	4.0, 3.5, 3.5, 3.0, 3.0, 2.5	7.5	20	20	4	4				
107	crape myrtle	*Lagerstroemia indica*	4	4.5, 4.0, 3.0, 2.5	8.5	15	15	4	4				
108	sweetgum	*Liquidambar styraciflua*	1	19.3	19.3	45	30	4	4	X			
109	mulberry	*Morus alba*	1	16.9	16.9	25	20	4	4				
110	mulberry	*Morus alba*	1	21.0	21.0	30	25	4	4				
111	mulberry	*Morus alba*	1	17.4	17.4	25	25	4	4				
112	mulberry	*Morus alba*	1	19.1	19.1	25	25	4	4				
113	southern magnolia	*Magnolia grandiflora*	1	14.2	14.2	20	20	3	3	X			
114	southern magnolia	*Magnolia grandiflora*	1	13.0	13.0	20	15	4	3	X			
115	evergreen pear	*Pyrus kawakamii*	1	26.4	26.4	30	30	4	4	X			
116	evergreen pear	*Pyrus kawakamii*	1	18.8	18.8	30	30	4	4	X			
117	southern magnolia	*Magnolia grandiflora*	1	32.1	32.1	40	35	4	4	X			
118	southern magnolia	*Magnolia grandiflora*	1	16.2	16.2	30	35	4	4	X			
119	carrotwood	*Cupaniopsis anacardioides*	1	14.3	14.3	25	20	4	4	X			
120	carrotwood	*Cupaniopsis anacardioides*	1	15.4	15.4	25	20	4	4	X			
121	carrotwood	*Cupaniopsis anacardioides*	1	13.6	13.6	20	20	4	4	X			
122	carrotwood	*Cupaniopsis anacardioides*	1	14.2	14.2	25	20	4	4	X			

TREE DATA SUMMARY

Tree Tag #	Common Name	Species	# Main Trunks	D.B.H. (in)		Height (ft)	Canopy Diameter (ft)	Health Rating	Aesthetic Rating	Project Component			Notes
				All Trunks	Sum of Largest Two Trunks					MOB	Parking Structure	ED/ICU	
123	sweetgum	*Liquidambar styraciflua*	1	31.9	31.9	35	25	4	4	X			
124	sweetgum	*Liquidambar styraciflua*	1	17.4	17.4	30	20	4	4	X			
125	sweetgum	*Liquidambar styraciflua*	1	16.2	16.2	30	20	4	4	X			
126	sweetgum	*Liquidambar styraciflua*	1	19.2	19.2	30	20	4	4	X			
127	sweetgum	*Liquidambar styraciflua*	1	12.0	12.0	20	20	4	4	X			
128	rubber tree	*Ficus elastica*	2	20.2, 11.5	31.7	20	15	4	4	X			
129	Shamel ash	*Fraxinus uhdei*	1	40.4	40.4	40	35	4	4	X			
130	Shamel ash	*Fraxinus uhdei*	1	29.0	29.0	35	30	4	4	X			
131	Shamel ash	*Fraxinus uhdei*	1	28.9	28.9	40	35	4	4				
132	Shamel ash	*Fraxinus uhdei*	1	28.7	28.7	35	35	4	4				
133	Deodar cedar	*Cedrus deodara*	1	32.9	32.9	35	45	4	4				
134	southern magnolia	*Magnolia grandiflora*	1	12.0	12.0	30	25	4	4			X	
135	southern magnolia	*Magnolia grandiflora*	1	15.5	15.5	30	30	4	4			X	
136	coast redwood	*Sequoia sempervirens*	3	13.6, 13.0, 5.8	26.6	35	25	4	4			X	
137	sweetgum	*Liquidambar styraciflua*	1	12.5	12.5	20	12	3	3			X	
138	South African coral tree	*Erythrina caffra*	3	16.1, 15.8, 15.1	31.9	35	35	4	4			X	
139	African fern pine	*Afrocarpus falcatus*	1	14.3	14.3	30	20	4	4			X	
140	sweetgum	*Liquidambar styraciflua*	1	18.6	18.6	35	25	4	4			X	
141	sweetgum	*Liquidambar styraciflua*	1	13.8	13.8	30	20	4	4			X	
142	sweetgum	*Liquidambar styraciflua*	1	13.7	13.7	30	20	4	4			X	
143	sweetgum	*Liquidambar styraciflua*	1	12.0	12.0	30	20	4	4			X	
144	sweetgum	*Liquidambar styraciflua*	1	13.8	13.8	30	25	4	4			X	
145	crape myrtle	*Lagerstroemia indica*	4	4.5, 4.2, 3.9, 3.5	8.7	20	25	4	4			X	
146	crape myrtle	*Lagerstroemia indica*	6	5.2, 5.0, 4.5, 4.4, 4.0, 3.0	10.2	25	25	4	4			X	
147	crape myrtle	*Lagerstroemia indica*	3	7.2, 5.4, 5.0	12.6	25	20	4	4			X	
148	crape myrtle	*Lagerstroemia indica*	5	6.3, 5.5, 5.0, 4.8, 4.2	11.8	25	20	4	4			X	
149	crape myrtle	*Lagerstroemia indica*	3	7.0, 4.5, 3.8	11.5	25	25	4	4			X	
150	camphor tree	*Cinnamomum camphora*	1	19.2	19.2	40	40	4	4			X	
151	camphor tree	*Cinnamomum camphora*	1	15.5	15.5	25	30	4	4			X	
152	carrotwood	*Cupaniopsis anacardioides*	1	14.5	14.5	25	25	4	4				
153	Brazilian peppertree	*Schinus terebinthifolius*	4	13.8, 12.5, 10.8, 9.5	26.3	30	35	4	3				
154	Shamel ash	*Fraxinus uhdei*	1	19.9	19.9	40	35	4	4				
155	glossy privet	*Ligustrum lucidum*	6	6.5, 6.0, 4.2, 4.0, 3.5, 3.0	12.5	20	15	4	3				
156	glossy privet	*Ligustrum lucidum*	2	18.6, 13.5	32.1	25	20	3	3				
157	glossy privet	*Ligustrum lucidum*	1	19.5	19.5	25	25	4	3				
158	Shamel ash	*Fraxinus uhdei*	1	31.4	31.4	45	35	4	4				
159	Shamel ash	*Fraxinus uhdei*	1	27.5	27.5	40	25	4	4				
160	Shamel ash	*Fraxinus uhdei*	1	13.0	13.0	25	20	4	4				
161	coast redwood	*Sequoia sempervirens*	1	21.0	21.0	40	25	4	3		X		

TREE DATA SUMMARY

Tree Tag #	Common Name	Species	# Main Trunks	D.B.H. (in)		Height (ft)	Canopy Diameter (ft)	Health Rating	Aesthetic Rating	Project Component			Notes
				All Trunks	Sum of Largest Two Trunks					MOB	Parking Structure	ED/ICU	
162	coast redwood	*Sequoia sempervirens*	1	15.8	15.8	40	25	4	3		X		
163	coast redwood	*Sequoia sempervirens*	1	16.3	16.3	40	25	4	3		X		
164	coast redwood	*Sequoia sempervirens*	1	17.4	17.4	40	20	4	3		X		
165	coast redwood	*Sequoia sempervirens*	1	16.8	16.8	40	20	4	3				
166	coast redwood	*Sequoia sempervirens*	1	18.3	18.3	40	20	4	3				
167	mulberry	*Morus alba*	4	10.6, 10.0, 8.3, 5.0	20.6	25	40	4	4				
168	coast redwood	*Sequoia sempervirens*	1	18.9	18.9	40	15	3	3				
169	coast redwood	*Sequoia sempervirens*	1	17.5	17.5	40	20	4	3				
170	coast redwood	*Sequoia sempervirens*	1	24.1	24.1	40	20	4	3				
171	Brazilian peppertree	*Schinus terebinthifolius*	1	25.6	25.6	25	25	4	3				
172	glossy privet	*Ligustrum lucidum*	1	14.4	14.4	30	35	4	3				
173	holly oak	*Quercus ilex*	1	12.8	12.8	30	12	4	4				
174	Arizona cypress	*Hesperocyparis arizonica*	1	14.0	14.0	20	25	4	4				
175	holly oak	*Quercus ilex*	1	13.1	13.1	30	25	4	4				
176	holly oak	*Quercus ilex*	3	8.7, 8.5, 7.0	17.2	35	25	4	4				
177	holly oak	*Quercus ilex*	2	9.6, 8.4	18.0	35	25	4	3				
178	Canary Island pine	*Pinus canariensis*	1	21.7	21.7	60	30	4	4				
179	Canary Island pine	*Pinus canariensis*	1	24.1	24.1	60	30	4	4				
180	Canary Island pine	*Pinus canariensis*	1	24.6	24.6	60	30	4	4				
181	southern magnolia	*Magnolia grandiflora*	1	12.9	12.9	30	25	4	4				
182	southern magnolia	*Magnolia grandiflora*	1	12.3	12.3	30	25	4	4				
183	southern magnolia	*Magnolia grandiflora*	1	18.1	18.1	35	30	4	4				
184	Arizona cypress	*Hesperocyparis arizonica*	2	8.1, 7.5	15.6	20	20	4	4				
185	Shamel ash	*Fraxinus uhdei*	1	38.5	38.5	45	40	4	4				
186	Indian laurel fig	*Ficus microcarpa*	5	11.7, 9.8, 8.5, 3.0, 3.0	21.5	30	30	4	3				
187	Shamel ash	*Fraxinus uhdei*	2	15.7, 13.1	28.8	40	35	4	4				
188	Shamel ash	*Fraxinus uhdei*	1	13.1	13.1	20	12	4	4				
189	Shamel ash	*Fraxinus uhdei*	1	14.2	14.2	20	20	4	4				
190	Shamel ash	*Fraxinus uhdei*	1	16.1	16.1	20	25	4	4				
191	Shamel ash	*Fraxinus uhdei*	1	14.4	14.4	25	20	4	4				
192	Shamel ash	*Fraxinus uhdei*	1	13.7	13.7	25	25	4	4				
193	Shamel ash	*Fraxinus uhdei*	1	14.5	14.5	25	25	4	4				
194	Shamel ash	*Fraxinus uhdei*	1	14.1	14.1	30	25	4	4				
195	mulberry	*Morus alba*	1	19.9	19.9	15	15	4	2				
196	mulberry	*Morus alba*	1	18.7	18.7	25	25	3	3				
197	mulberry	*Morus alba*	1	16.5	16.5	25	20	4	4				
198	mulberry	*Morus alba*	2	9.8, 9.0	18.8	25	25	4	4				
199	Shamel ash	*Fraxinus uhdei*	1	15.1	15.1	40	40	4	4				
200	mulberry	*Morus alba*	4	9.5, 9.4, 9.0, 7.0	18.9	25	30	3	4				
201	Catalina cherry	*Prunus ilicifolia* ssp. *Lyonii*	4	8.3, 5.0, 3.8, 3.6	13.3	30	20	3	2				bacterical canker
202	Shamel ash	*Fraxinus uhdei*	3	20.0, 14.1, 9.5	34.1	45	30	4	4				

TREE DATA SUMMARY

Tree Tag #	Common Name	Species	# Main Trunks	D.B.H. (in)		Height (ft)	Canopy Diameter (ft)	Health Rating	Aesthetic Rating	Project Component			Notes
				All Trunks	Sum of Largest Two Trunks					MOB	Parking Structure	ED/ICU	
203	Shamel ash	*Fraxinus uhdei*	1	36.1	36.1	45	50	3	3				
204	Shamel ash	*Fraxinus uhdei*	1	18.3	18.3	35	25	3	3				
205	Mexican fan palm	*Washingtonia robusta*	1	14.5	14.5	25	10	2	2				burned
206	common fig	*Ficus carica*	3	9.1, 8.7, 6.0	17.8	25	20	4	3				
207	Shamel ash	*Fraxinus uhdei*	2	7.2, 6.2	13.4	30	20	3	3				
208	Shamel ash	*Fraxinus uhdei*	1	17.3	17.3	25	30	3	3				
209	Shamel ash	*Fraxinus uhdei*	1	12.4	12.4	25	20	4	3				
210	Shamel ash	*Fraxinus uhdei*	2	7.1, 6.9	14.0	25	15	4	4				
211	Shamel ash	*Fraxinus uhdei*	4	7.2, 6.1, 5.2, 4.0	13.3	25	15	4	3				
212	Shamel ash	*Fraxinus uhdei*	2	7.7, 6.1	13.8	30	20	3	3				
213	Shamel ash	*Fraxinus uhdei*	1	10.4	10.4	25	25	4	4				
214	Mexican fan palm	*Washingtonia robusta*	1	10.0	10.0	30	10	4	4				
215	Shamel ash	*Fraxinus uhdei*	1	29.5	29.5	40	35	4	4				
216	black locust	*Robinia pseudoacacia*	1	21.9	21.9	30	35	3	2				insulation, bee hive
217	Brazilian peppertree	*Schinus terebinthifolius*	5	8.8, 8.5, 7.5, 5.0, 3.0	17.3	25	30	4	3				
218	Shamel ash	*Fraxinus uhdei*	1	12.5	12.5	35	25	4	4				
219	Brazilian peppertree	*Schinus terebinthifolius*	4	8.0, 6.5, 2.0, 2.0	14.5	25	25	4	3				
220	Brazilian peppertree	*Schinus terebinthifolius*	10	9.5, 9.0, 6.5, 6.0, 6.0, 5.0, 5.0, 3.0, 3.0, 3.0	18.5	25	35	4	3				
221	Brazilian peppertree	*Schinus terebinthifolius*	6	10.0, 10.0, 9.5, 9.0, 8.0, 7.0	20.0	30	40	4	3				
222	Shamel ash	*Fraxinus uhdei*	1	14.4	14.4	40	25	4	3				
223	Shamel ash	*Fraxinus uhdei*	2	18.2, 9.2	27.4	45	35	4	4				
224	Shamel ash	*Fraxinus uhdei*	8	6.6, 5.0, 4.5, 3.5, 3.0, 3.0, 2.8, 2.8	11.6	30	25	3	3				
225	Shamel ash	*Fraxinus uhdei*	1	15.7	15.7	45	35	4	4				
226	Shamel ash	*Fraxinus uhdei*	1	15.5	15.5	45	35	4	4				
227	Shamel ash	*Fraxinus uhdei*	5	13.1, 13.0, 10.9, 10.0, 9.0	26.1	45	40	4	3				
228	Shamel ash	*Fraxinus uhdei*	1	13.0	13.0	40	25	4	4				
229	Shamel ash	*Fraxinus uhdei*	1	12.0	12.0	40	20	3	3				
230	Shamel ash	*Fraxinus uhdei*	1	15.9	15.9	45	35	3	3				
231	Shamel ash	*Fraxinus uhdei*	1	19.5	19.5	40	30	3	3				
232	Shamel ash	*Fraxinus uhdei*	1	15.5	15.5	45	30	3	2				
233	Shamel ash	*Fraxinus uhdei*	3	9.0, 9.0, 5.0	18.0	40	30	3	3				
234	Shamel ash	*Fraxinus uhdei*	5	13.5, 13.0, 9.5, 6.0, 6.0	26.5	50	45	4	4				
235	Shamel ash	*Fraxinus uhdei*	5	5.0, 4.0, 4.0, 4.0, 3.0	9.0	25	20	3	3				
236	Shamel ash	*Fraxinus uhdei*	5	7.0, 6.5, 6.0, 6.0, 4.0	13.5	30	25	3	3				

TREE DATA SUMMARY

Tree Tag #	Common Name	Species	# Main Trunks	D.B.H. (in)		Height (ft)	Canopy Diameter (ft)	Health Rating	Aesthetic Rating	Project Component			Notes
				All Trunks	Sum of Largest Two Trunks					MOB	Parking Structure	ED/ICU	
237	Shamel ash	*Fraxinus uhdei*	1	20.6	20.6	45	35	4	4				
238	Mexican fan palm	*Washingtonia robusta*	1	12.0	12.0	25	5	4	3				
239	Shamel ash	*Fraxinus uhdei*	1	32.5	32.5	45	50	4	4				
240	Mexican fan palm	*Washingtonia robusta*	1	14.1	14.1	45	10	4	3				
241	Nichol's willowleafed peppermint	*Eucalyptus nicholii*	1	24.6	24.6	40	35	4	3				
242	Nichol's willowleafed peppermint	*Eucalyptus nicholii*	1	22.3	22.3	40	30	3	3				
243	Canary Island date palm	*Phoenix canariensis*	2	30.0, 17.0	47.0	30	25	4	4				
244	Shamel ash	*Fraxinus uhdei*	1	25.1	25.1	30	25	4	3				
245	Shamel ash	*Fraxinus uhdei*	1	26.5	26.5	25	20	3	2				
246	Shamel ash	*Fraxinus uhdei*	1	25.8	25.8	30	30	4	3				
247	Shamel ash	*Fraxinus uhdei*	1	14.1	14.1	30	25	4	4		X		
248	Shamel ash	*Fraxinus uhdei*	1	13.4	13.4	25	20	4	4		X		
249	Shamel ash	*Fraxinus uhdei*	1	12.5	12.5	25	20	4	4		X		
250	Shamel ash	*Fraxinus uhdei*	1	12.5	12.5	25	20	4	4				
251	Shamel ash	*Fraxinus uhdei*	1	12.1	12.1	25	20	4	4		X		
252	Shamel ash	*Fraxinus uhdei*	1	19.5	19.5	30	25	4	4		X		
253	Shamel ash	*Fraxinus uhdei*	1	14.0	14.0	25	20	4	4		X		
254	Shamel ash	*Fraxinus uhdei*	1	12.1	12.1	25	20	4	4		X		
255	Shamel ash	*Fraxinus uhdei*	1	13.8	13.8	25	25	4	4		X		
256	Shamel ash	*Fraxinus uhdei*	1	13.4	13.4	25	20	4	4		X		
257	Shamel ash	*Fraxinus uhdei*	1	15.2	15.2	30	25	4	4		X		
258	Shamel ash	*Fraxinus uhdei*	1	13.0	13.0	25	20	4	4		X		
259	Shamel ash	*Fraxinus uhdei*	1	13.4	13.4	25	25	4	4		X		
260	Shamel ash	*Fraxinus uhdei*	1	12.1	12.1	25	20	4	4		X		
261	camphor tree	*Cinnamomum camphora*	1	14.4	14.4	30	25	4	4		X		
262	camphor tree	*Cinnamomum camphora*	1	14.1	14.1	30	25	4	4		X		
263	camphor tree	*Cinnamomum camphora*	1	12.5	12.5	30	25	4	4		X		
264	South African coral tree	*Erythrina caffra*	7	17.0, 15.0, 14.5, 14.0, 13.0, 11.0, 11.0	32.0	30	25	4	4		X		
265	South African coral tree	*Erythrina caffra*	6	15.8, 14.5, 13.0, 11.5, 11.5, 11.0	30.3	30	30	4	4		X		
266	South African coral tree	*Erythrina caffra*	3	20.7, 14.4, 13.7	35.1	30	30	4	4		X		
267	South African coral tree	*Erythrina caffra*	3	21.0, 20.4, 10.6	41.4	30	30	4	4		X		
268	Shamel ash	*Fraxinus uhdei*	1	13.6	13.6	25	20	4	4		X		
269	camphor tree	*Cinnamomum camphora*	1	14.9	14.9	30	35	4	4		X		
270	Shamel ash	*Fraxinus uhdei*	1	13.8	13.8	30	25	4	4		X		
271	camphor tree	*Cinnamomum camphora*	1	21.2	21.2	30	35	4	4		X		
272	camphor tree	*Cinnamomum camphora*	1	13.8	13.8	25	25	4	4		X		

Appendix C

Energy Data

Energy Use Summary

Construction Phase (gallons/construction perioc	Gasoline	Diesel
Construction Vehicles	11,391	32,956
Worker Trips	22,241	89
Vendor Trips	5,785	82
Haul Trucks	2	1,760
Total	**39,420**	**34,886**

Operations Phase (gallons/year)		Gasoline	Diesel	Natural Gas (kBTU/yr)	Electricity (kWh/yr)
Hospital		193,420	20,174	3,814,360	1,008,070
	0	0	0	612,816	573,521
	0	0	0	0	231,636
	0	0	0	0	0
	0	0	0	0	0
	0	0	0	0	0
All Land Uses		193,420	20,174	4,427,176	1,813,227

Operations Onroad Energy Use

Year 2022

Vehicle Types	MPG by Fuel Type			Population by Fuel Type			
	GAS	DSL	ELEC	GAS	DSL	ELEC	Total
LDA	30.8	48.7		6,542,832	58,938	127,533	6,601,770
LDT1	26.5	22.6		736,906	387	5,339	737,293
LDT2	24.7	35.7		2,246,303	14,235	22,590	2,260,537
LHDT1	10.5	21.6		175,903	119,381		295,284
LHDT2	9.2	19.5		30,010	47,336		77,346
MCY	36.4			295,960			295,960
MDV	20.0	27.4		1,579,640	33,349	11,658	1,612,989
MH	5.2	10.6		35,098	12,759		47,857
MHDT	5.1	10.7		25,445	123,310		148,755
HHDT	4.2	6.7		78	108,362		108,440
OBUS	5.0	8.5		5,959	4,274		10,234
SBUS	9.1	7.6		2,631	6,631		9,262
UBUS	4.9	6.0		952	14	17	966

Trips/Day Land Use	Trips/day Weekday	Trips/day Saturday	Trips/day Sunday	Total Weekly	VMT/day Weekday	VMT/day Saturday	VMT/day Sunday	Trip Length
Hospital	2,579.00	943.00	478.00	14316	19,310	7,060	3,579	7.49
Total	**2,579**	**943**	**478**					

Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH	Total
Hospital	0.770213	0.060017	0.040011	0.060017	0.020006	0.020006	0.010003	0.010003	0.001637	0.001633	0.004831	0.000583	0.001041	100.0%
														0.0%
														0.0%
														0.0%
														0.0%
														0.0%

Vehicle Trips

Weekday Trips		LDA	LDT1	LDT2	MDV	LHDT1	LHDT2	MHDT	HHDT	Obus	Ubus	MCY	Sbus	MH	Total	Daily VMT
Hospital		1986	155	103	155	52	52	26	26	4	4	12	2	3	2,579	19,309.66
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-
Total		**1986**	**155**	**103**	**155**	**52**	**52**	**26**	**26**	**4**	**4**	**12**	**2**	**3**	**2,579**	

Saturday Trips		LDA	LDT1	LDT2	MDV	LHDT1	LHDT2	MHDT	HHDT	Obus	Ubus	MCY	Sbus	MH	Total	Daily VMT
Hospital		726	57	38	57	19	19	9	9	2	2	5	1	1	943	7,060.49
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-
Total		**726**	**57**	**38**	**57**	**19**	**19**	**9**	**9**	**2**	**2**	**5**	**1**	**1**	**943**	

Sunday Trips		LDA	LDT1	LDT2	MDV	LHDT1	LHDT2	MHDT	HHDT	Obus	Ubus	MCY	Sbus	MH	Total	Daily VMT
Hospital		368	29	19	29	10	10	5	5	1	1	2	0	0	478	3,578.91
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-
Total		**368**	**29**	**19**	**29**	**10**	**10**	**5**	**5**	**1**	**1**	**2**	**0**	**0**	**478**	

Gallons of Fuel

Gasoline		LDA	LDT1	LDT2	MDV	LHDT1	LHDT2	MHDT	HHD	Obus	Ubus	MCY	Sbus	MH	Total	
Hospital		137,942	12,632	8,986	16,376	6,308	4,719	1,878	10	1,053	1,849	740	101	826	193,420	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		137,942	**12,632**	**8,986**	**16,376**	**6,308**	**4,719**	**1,878**	**10**	**1,053**	**1,849**	**740**	**101**	**826**	**193,420**	**Total Gallons**

Diesel		LDA	LDT1	LDT2	MDV	OBUS	LHDT2	MHDT	HHD	Obus	Ubus	MCY	Sbus	MH	Total	
Hospital		787	8	39	253	2,091	3,503	4,309	8,259	450	22	0	306	146	20,174	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		787	**8**	**39**	**253**	**2,091**	**3,503**	**4,309**	**8,259**	**450**	**22**	**0**	**306**	**146**	**20,174**	**Total Gallons**

213,594 **Total Gallons**

26 **Average MP**

Utilities

	NaturalGas Use	Electricity Use
Land Use	kBTU/yr	kWh/yr
Hospital	3,814,360	1,008,070
Medical Office Building	612,816	573,521
Unenclosed Parking with Elevator	-	231,636
Total	**4,427,176**	**1,813,227**

Offroad Construction Equipment Energy Use

PhaseName	OffRoadEquipmentType	OffRoadEquipmentUnitAmount	UsageHours	HorsePower	Load Factor	Horsepower Category	Num Days	Year	Fuel Consumption Rate (gal/hour)	Fuel Type	Total Fuel Consumption (gal/construction period)
Demolition	Concrete/Industrial Saws	0	8	81	0.73	100	36	2021	4.7	Gasoline	0
Demolition	Excavators	0	8	158	0.38	175	36	2021	2.9	Diesel	0
Demolition	Rubber Tired Dozers	0	8	247	0.4	300	36	2021	4.5	Diesel	0
Demolition	Tractors/Loaders/Backhoes	1	8	97	0.37	100	36	2021	1.6	Diesel	169
Site Preparation MOB-PS	Rubber Tired Dozers	0	8	247	0.4	300	7	2021	4.5	Diesel	0
Site Preparation MOB-PS	Tractors/Loaders/Backhoes	1	8	97	0.37	100	7	2021	1.6	Diesel	33
Grading-Excavation MOB-PS	Excavators	1	8	158	0.38	175	26	2021	2.9	Diesel	228
Grading-Excavation MOB-PS	Graders	1	8	187	0.41	175	26	2021	3.1	Diesel	268
Grading-Excavation MOB-PS	Rubber Tired Dozers	0	8	247	0.4	300	26	2021	4.5	Diesel	0
Grading-Excavation MOB-PS	Tractors/Loaders/Backhoes	0	8	97	0.37	100	26	2021	1.6	Diesel	0
Demolition ED-ICU	Concrete/Industrial Saws	0	8	81	0.73	100	21	2021	4.7	Gasoline	0
Demolition ED-ICU	Excavators	1	8	158	0.38	175	21	2021	2.9	Diesel	184
Demolition ED-ICU	Rubber Tired Dozers	1	8	247	0.4	300	21	2021	4.5	Diesel	300
Demolition ED-ICU	Rubber Tired Loaders	1	8	203	0.36	300	21	2021	3.9	Diesel	233
Demolition ED-ICU	Skid Steer Loaders	1	8	65	0.37	50	21	2021	0.9	Diesel	58
Demolition ED-ICU	Tractors/Loaders/Backhoes	1	8	97	0.37	100	21	2021	1.6	Diesel	99
Building Construction MOB-PS	Cranes	2	7	231	0.29	300	340	2021	3.3	Diesel	4,540
Building Construction MOB-PS	Forklifts	1	8	89	0.2	100	340	2021	2.0	Diesel	1,089
Building Construction MOB-PS	Generator Sets	0	8	84	0.74	100	340	2021	5.2	Gasoline	0
Building Construction MOB-PS	Pumps	1	8	84	0.74	100	340	2021	1.3	Diesel	2,699
Building Construction MOB-PS	Tractors/Loaders/Backhoes	1	7	97	0.37	100	340	2021	1.6	Diesel	1,399
Building Construction MOB-PS	Welders	0	8	46	0.45	50	340	2021	2.4	Gasoline	0
Site Preparation ED-ICU	Excavators	1	8	158	0.38	175	26	2021	2.9	Diesel	228
Site Preparation ED-ICU	Graders	2	8	187	0.41	175	26	2021	3.1	Diesel	537
Site Preparation ED-ICU	Plate Compactors	1	8	8	0.43	25	26	2021	0.3	Gasoline	28
Site Preparation ED-ICU	Rubber Tired Dozers	1	8	247	0.4	300	26	2021	4.5	Diesel	372
Site Preparation ED-ICU	Rubber Tired Loaders	1	8	203	0.36	300	26	2021	3.9	Diesel	289
Site Preparation ED-ICU	Skid Steer Loaders	1	8	65	0.37	50	26	2021	0.9	Diesel	71
Site Preparation ED-ICU	Tractors/Loaders/Backhoes	1	8	97	0.37	100	26	2021	1.6	Diesel	122
Grading/Excavation ED-ICU	Excavators	1	8	158	0.38	175	38	2021	2.9	Diesel	333
Grading/Excavation ED-ICU	Graders	2	8	187	0.41	175	38	2021	3.1	Diesel	785
Grading/Excavation ED-ICU	Plate Compactors	1	8	8	0.43	25	38	2021	0.3	Gasoline	41
Grading/Excavation ED-ICU	Rubber Tired Dozers	1	8	247	0.4	300	38	2021	4.5	Diesel	543
Grading/Excavation ED-ICU	Rubber Tired Loaders	1	8	203	0.36	300	38	2021	3.9	Diesel	422
Grading/Excavation ED-ICU	Scrapers	2	8	367	0.48	300	38	2021	5.6	Diesel	1,621
Grading/Excavation ED-ICU	Skid Steer Loaders	1	8	65	0.37	50	38	2021	0.9	Diesel	104
Grading/Excavation ED-ICU	Tractors/Loaders/Backhoes	2	8	97	0.37	100	38	2021	1.6	Diesel	357
Building Construction ED-ICU	Aerial Lifts	2	8	63	0.31	75	432	2021	1.2	Diesel	2,468
Building Construction ED-ICU	Bore/Drill Rigs	1	8	221	0.5	100	432	2021	2.2	Diesel	3,733
Building Construction ED-ICU	Cranes	1	7	231	0.29	300	432	2021	3.3	Diesel	2,884
Building Construction ED-ICU	Forklifts	1	8	89	0.2	100	432	2021	2.0	Diesel	1,384
Building Construction ED-ICU	Generator Sets	0	8	84	0.74	100	432	2021	5.2	Gasoline	0
Building Construction ED-ICU	Tractors/Loaders/Backhoes	1	7	97	0.37	100	432	2021	1.6	Diesel	1,778
Building Construction ED-ICU	Welders	3	8	46	0.45	50	432	2021	2.4	Gasoline	11,239
Architectural Coating ED-ICU	Air Compressors	1	6	78	0.48	100	50	2021	1.3	Diesel	191
Paving MOB-PS	Pavers	2	8	130	0.42	100	26	2021	1.7	Diesel	303
Paving MOB-PS	Paving Equipment	2	8	132	0.36	100	26	2021	1.6	Diesel	246
Paving MOB-PS	Rollers	2	8	80	0.38	100	26	2021	1.7	Diesel	268
Architectural Coating MOB-PS	Air Compressors	1	6	78	0.48	100	26	2021	1.3	Diesel	99
Paving ED-ICU	Graders	1	8	187	0.41	175	78	2021	3.1	Diesel	805
Paving ED-ICU	Pavers	2	8	130	0.42	100	78	2021	1.7	Diesel	909
Paving ED-ICU	Paving Equipment	0	8	132	0.36	100	78	2021	1.6	Diesel	0
Paving ED-ICU	Plate Compactors	1	8	8	0.43	25	78	2021	0.3	Gasoline	84
Paving ED-ICU	Rollers	2	8	80	0.38	100	78	2021	1.7	Diesel	803
									Total	**Gasoline**	**11,391**
									Total	**Diesel**	**32,956**

Onroad Construction Energy Use

Year 2021

Vehicle Types	MPG by Fuel Type			Population by Fuel Type			
	GAS	DSL	ELEC	GAS	DSL	ELEC	Total
LDA	30.0	47.5		6,444,755	55,086	107,407	6,499,841
LDT1	25.8	22.3		715,053	416	3,766	715,469
LDT2	23.8	34.7		2,207,489	12,809	17,083	2,220,298
LHDT1	10.4	21.2		176,982	113,082		290,064
LHDT2	9.1	19.2		29,883	44,616		74,500
MCY	36.4			286,161			286,161
MDV	19.4	26.6		1,569,538	30,444	7,447	1,599,981
MH	5.1	10.5		35,587	12,386		47,973
MHDT	5.0	10.4		25,313	122,609		147,922
HHDT	4.0	6.6		82	106,417		106,499
OBUS	5.0	8.2		5,971	4,250		10,222
SBUS	9.1	7.5		2,479	6,589		9,067
UBUS	4.8	6.0		944	14	17	958

Input							Gasoline Consumption			Diesel Consumption		
Phase Name	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker	Vendor	Haul	Worker	Vendor	Haul
Demolition	3	0	159	14.7	6.9	8						
Site Preparation MOB-PS	3	0	0	14.7	6.9	8						
Grading-Excavation MOB-PS	5	0	125	14.7	6.9	8						
Demolition ED-ICU	13	0	423	14.7	6.9	8						
Building Construction MOB-F	70	36	0	14.7	6.9	8						
Site Preparation ED-ICU	20	0	0	14.7	6.9	8						
Grading/Excavation ED-ICU	28	0	738	14.7	6.9	8						
Building Construction ED-ICU	19	10	0	14.7	6.9	8						
Architectural Coating ED-ICU	4	0	0	14.7	6.9	8						
Paving MOB-PS	15	0	0	14.7	6.9	8						
Architectural Coating MOB-F	14	0	0	14.7	6.9	8						
Paving ED-ICU	15	0	0	14.7	6.9	8						
Adjusted												
Demolition	108	0	159	14.7	6.9	8	66	0	0	0	0	194
Site Preparation MOB-PS	21	0	0	14.7	6.9	8	13	0	0	0	0	0
Grading-Excavation MOB-PS	130	0	125	14.7	6.9	8	80	0	0	0	0	152
Demolition ED-ICU	273	0	423	14.7	6.9	8	168	0	1	1	0	515
Building Construction MOB-F	23800	12240	0	14.7	6.9	8	14,603	4,276	0	58	60	0
Site Preparation ED-ICU	520	0	0	14.7	6.9	8	319	0	0	1	0	0
Grading/Excavation ED-ICU	1064	0	738	14.7	6.9	8	653	0	1	3	0	899
Building Construction ED-ICU	8208	4320	0	14.7	6.9	8	5,036	1,509	0	20	21	0
Architectural Coating ED-ICU	200	0	0	14.7	6.9	8	123	0	0	0	0	0
Paving MOB-PS	390	0	0	14.7	6.9	8	239	0	0	1	0	0
Architectural Coating MOB-F	364	0	0	14.7	6.9	8	223	0	0	1	0	0
Paving ED-ICU	1170	0	0	14.7	6.9	8	718	0	0	3	0	0
Total							**22,241**	**5,785**	**2**	**89**	**82**	**1,760**

Appendix D

Phase I Environmental Site Assessment

Provided Separately

Appendix E

Noise Calculations

Construction Generated Noise

Building Type	Office, Hotel, Hospital, School, Public Works		**Distance (ft)**
Construction Noise at 50 Feet (dBA Leq)			50
Construction Phase	**All Applicable Equipment in Use**[1]	**Minimum Required Equipment in Use**[1]	
Ground Clearing/Demolition	84	84	
Excavation	89	79	
Foundation Construction	78	78	
Building Construction	87	75	
Finishing and Site Cleanup	89	75	

Receptors to the Northwest – Orangewood Park			
Maximum Construction Noise (dBA Leq)			90
Construction Phase	**All Applicable Equipment in Use**[1]	**Minimum Required Equipment in Use**[1]	
Ground Clearing/Demolition	79	79	
Excavation (Site Preparation)	84	74	
Foundation Construction	73	73	
Building Construction	82	70	
Paving	84	70	
Average Construction Noise (dBA Leq)			275
Construction Phase	**All Applicable Equipment in Use**[1]	**Minimum Required Equipment in Use**[1]	
Ground Clearing/Demolition	69	69	
Excavation (Site Preparation)	74	64	
Foundation Construction	63	63	
Building Construction	72	60	
Paving	74	60	

Residents to the Northeast – Multifamily Residential (Torrey Pines)			
Maximum Construction Noise (dBA Leq)			200
Construction Phase	**All Applicable Equipment in Use**[1]	**Minimum Required Equipment in Use**[1]	
Ground Clearing/Demolition	72	72	
Excavation (Site Preparation)	77	67	
Foundation Construction	66	66	
Building Construction	75	63	
Paving	77	63	
Average Construction Noise (dBA Leq)			300
Construction Phase	**All Applicable Equipment in Use**[1]	**Minimum Required Equipment in Use**[1]	
Ground Clearing/Demolition	68	68	
Excavation (Site Preparation)	73	63	
Foundation Construction	62	62	
Building Construction	71	59	
Paving	73	59	

Receptors to the Southeast – Single Family Residential Uses			
Maximum Construction Noise (dBA Leq)			650
Construction Phase	**All Applicable Equipment in Use**[1]	**Minimum Required Equipment in Use**[1]	
Ground Clearing/Demolition	62	62	
Excavation (Site Preparation)	67	57	
Foundation Construction	56	56	
Building Construction	65	53	
Paving	67	53	
Average Construction Noise (dBA Leq)			800
Construction Phase	**All Applicable Equipment in Use**[1]	**Minimum Required Equipment in Use**[1]	
Ground Clearing/Demolition	60	60	
Excavation (Site Preparation)	65	55	
Foundation Construction	54	54	
Building Construction	63	51	
Paving	65	51	

Receptors to the Southwest – Edgewood High School			
Maximum Construction Noise (dBA Leq)			1,000
Construction Phase	**All Applicable Equipment in Use**[1]	**Minimum Required Equipment in Use**[1]	
Ground Clearing/Demolition	58	58	
Excavation (Site Preparation)	63	53	
Foundation Construction	52	52	
Building Construction	61	49	
Paving	63	49	
Average Construction Noise (dBA Leq)			1,150
Construction Phase	**All Applicable Equipment in Use**[1]	**Minimum Required Equipment in Use**[1]	
Ground Clearing/Demolition	57	57	
Excavation (Site Preparation)	62	52	
Foundation Construction	51	51	
Building Construction	60	48	
Paving	62	48	

Source: Bolt, Beranek and Newman, "Noise from Construction Equipment and Operations, Building Equipment, and Home Appliances," prepared for the USEPA, December 31, 1971. Based on analysis for Office Building, Hotel, Hospital, School, and Public Works.

Construction Generated Vibration

Receptors to the Northwest – Orangewood Park		Closest Distance (feet):	415
Equipment	**Approximate RMS a Velocity at 25 ft, inch/second**	**Approximate RMS Velocity Level, inch/second**	
Vibratory roller	0.21	0.003	
Caisson Drill	0.089	0.001	
Large bulldozer	0.089	0.001	
Small bulldozer	0.003	0.000	
Jackhammer	0.035	0.001	
Loaded trucks	0.076	0.001	
	Criteria	0.250	
Residents to the Northeast – Multifamily Residential (Torrey		Closest Distance (feet):	200
Equipment	**Approximate RMS a Velocity at 25 ft, inch/second**	**Approximate RMS Velocity Level, inch/second**	
Vibratory roller	0.21	0.009	
Large bulldozer	0.089	0.004	
Small bulldozer	0.003	0.000	
Jackhammer	0.035	0.002	
Loaded trucks	0.076	0.003	
	Criteria	0.250	
Receptors to the Southeast – Single Family Residential Uses		Closest Distance (feet):	650
Equipment	**Approximate RMS a Velocity at 25 ft, inch/second**	**Approximate RMS Velocity Level, inch/second**	
Vibratory roller	0.21	0.002	
Large bulldozer	0.089	0.001	
Small bulldozer	0.003	0.000	
Jackhammer	0.035	0.000	
Loaded trucks	0.076	0.001	
	Criteria	0.250	
Receptors to the Southwest – Edgewood High School		Closest Distance (feet):	1,000
Equipment	**Approximate RMS a Velocity at 25 ft, inch/second**	**Approximate RMS Velocity Level, inch/second**	
Vibratory roller	0.21	0.001	
Large bulldozer	0.089	0.000	
Small bulldozer	0.003	0.000	
Jackhammer	0.035	0.000	
Loaded trucks	0.076	0.000	
	Criteria	0.250	

Based on distance to nearest structure

[1.] Determined based on use of jackhammers or pneumatic hammers that may be used for pavement demolition at a distance of 25 feet

Notes: RMS velocity calculated from vibration level (VdB) using the reference of one microinch/second.

Source: Based on methodology from the United States Department of Transportation Federal Transit Administration, *Transit Noise and Vibration Impact Assessment* (2006).

Queen of the Valley Medical Office Building

Roadway Segment		Speed	24-hour Traffic Volume: Existing	Future Without Project	Future With Project	Distance to CNEL from Roadway Centerline: Existing 50.0 Feet	60 CNEL	65 CNEL	70 CNEL	Future No Project 50.0 Feet	60 CNEL	65 CNEL	70 CNEL	Future With Project 50.0 Feet	60 CNEL	65 CNEL	70 CNEL	Change From Existing	Change due to Project	Noise Level (CNEL or Ldn) at Distance from Roadway Centerline: Existing 50 feet	50 feet	50 feet	Future No Proj 50 feet	50 feet	50 feet	Noise Level (CNEL or Ldn) at Distance from Roadway Centerline: Future Plus Proj 50 feet	50 feet	50 feet	Change From Existing	Change due to Project
Merced Avenue	Orange Ave to N. Hospital Dr.	40	14,300	14,700	15,100	71.9	310	144	67	72.0	316	147	68	72.1	322	149	69	0.2	0.1	71.9	71.9	71.9	72.0	72.0	72.0	72.1	72.1	72.1	+0.2	+0.1
Merced Avenue	N. Hospital Dr. to Sunset Ave	40	14,100	14,500	14,700	71.8	307	143	66	72.0	313	145	67	72.0	316	147	68	0.2	0.1	71.8	71.8	71.8	72.0	72.0	72.0	72.0	72.0	72.0	+0.2	+0.1
Sunset Avenue	Merced Ave to E. Hospital Dr.	40	26,000	26,700	27,200	74.5	462	215	100	74.6	471	218	101	74.7	476	221	103	0.2	0.1	74.5	74.5	74.5	74.6	74.6	74.6	74.7	74.7	74.7	+0.2	+0.1
Sunset Avenue	E. Hospital Dr. to Vine Ave	40	25,700	26,400	26,900	74.4	459	213	99	74.6	467	217	101	74.6	473	220	102	0.2	0.1	74.4	74.4	74.4	74.6	74.6	74.6	74.6	74.6	74.6	+0.2	+0.1

Assumptions:

Simplified to 2 lanes 6.1 meters= 20.0 feet from centerline

future 6.1 meters= 20.0 feet from centerline

Noise path decay parameter for hard site

Fleet Mix

92%	Autos
3%	Medium Trucks
5%	Heavy Trucks

Time of Day:

70%	Day
15%	Evening
15%	Night

Calculations using methods of Federal Highway Administration *Highway Traffic Noise Prediction Model*, December, 1978. Baseline California vehicle noise levels from Caltrans, TAN 95-03, 1995

Source of standard assumptions:

24-hour distribution of traffic volumes:
70% day (7-7), 15% evening (7-10), 15% night (10-7)
Analysis of L.A. County 24-hour traffic counts for selected arterial streets conducted by Pat Mann for Inglewood Noise Element, 1974
Truck Mix

ARB standard fleet mix for air quality analysis
Heavy trucks for noise model includes heavy diesel tractor-trailers only
Medium trucks for noise model includes buses and bobtail trucks
Autos includes cars, vans, pickups and light trucks

	Site parameter:	0.0	(0=hard, 1=soft)
HALFSEP	1/2 lane separation	6.1	
HALFSEPFUT	1/2 lane separation (future)	6.1	

Lane separation: consider moving lanes only

2 ___ ___
+ +

4 ___ ___ ___ ___
+ <--------> +

6 ___ ___ ___ ___ ___ ___
+ <----------> +

8 + ___ ___ ___ ___ ___ ___ ___ ___
+ <----------> +

California base noise levels:

Autos	5.2+38.8 Log10 (speed, mi/hr) = -2.8 + 38.8 Log10 (speed, km/hr)	
Light trucks:	35.3 + 25.6 Log10 (speed, mi/hr) = 30 + 25.6 Log10 (speed, km/hr)	
Heavy trucks:	25-31 mi/hr:	51.9 + 19.2 Log10 (speed, mi/hr) = 47.9 + 19.2 Log10 (speed, km/hr)
	35-65 mi/hr:	50.4 + 19.2 Log10 (speed, mi/hr) = 46.4 + 19.2 Log10 (speed, km/hr)
	31-35 mi/hr:	straight line interpolation between above two curves

Appendix F

Traffic Impact Analysis

DRAFT Traffic Impact Study Medical Office Building, Parking Structure, Emergency Department/ Intensive Care Unit

Addendum to the Certified Final Program Environmental Impact Report Queen of the Valley Hospital Phases 1A and 1B

Emanate Health™

December 2020

Balancing the Natural and Built Environment

PSOMAS

TRAFFIC IMPACT STUDY
MEDICAL OFFICE BUILDING, PARKING STRUCTURE, EMERGENCY DEPARTMENT/INTENSIVE CARE UNIT
ADDENDUM TO THE CERTIFIED FINAL PROGRAM ENVIRONMENTAL IMPACT REPORT
QUEEN OF THE VALLEY
PHASES 1A AND 1B
WEST COVINA, CA

Prepared For

Emanate Health™

Prepared By

PSOMAS

Psomas Project No. 3EMA010100

December 2020

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1. INTRODUCTION

The Queen of the Valley Hospital was founded in 1962 in the City of West Covina as shown in Figure 1. Existing services provided at the hospital include a Primary Stroke Center, a Family Birth and Newborn Center, a Level IIIB Newborn Intensive Care Unit (ICU), da Vinci Robotic Surgery, and Inpatient and Outpatient Rehabilitation services for adults and children. The hospital currently has approximately 355,000 square feet of various single- and multi-level structures, with surface parking provided throughout the site. A medical office building on site is approximately 89,000 square feet. The hospital is surrounded by various land uses, including primarily single- and multi-family residential uses, park and recreation uses, and other medical office uses.

To meet the increasing care needs of the community, a multi-phase improvement project is underway at the Hospital, including a major addition and renovations. The larger improvement project was evaluated in the *Traffic Impact Study for Queen of the Valley Hospital Specific Plan*[1] *(2019 TIS)* as part of the Environmental Impact Report (EIR). The EIR was accepted in 2019. This report provides a more detailed analysis of traffic operations for the Phases 1A and 1B, which include the addition of emergency room and ICU space as well as a new medical office building. In the original study, Phases 1A and 1B were scheduled to be completed in 2022, which is the assumption for this report.

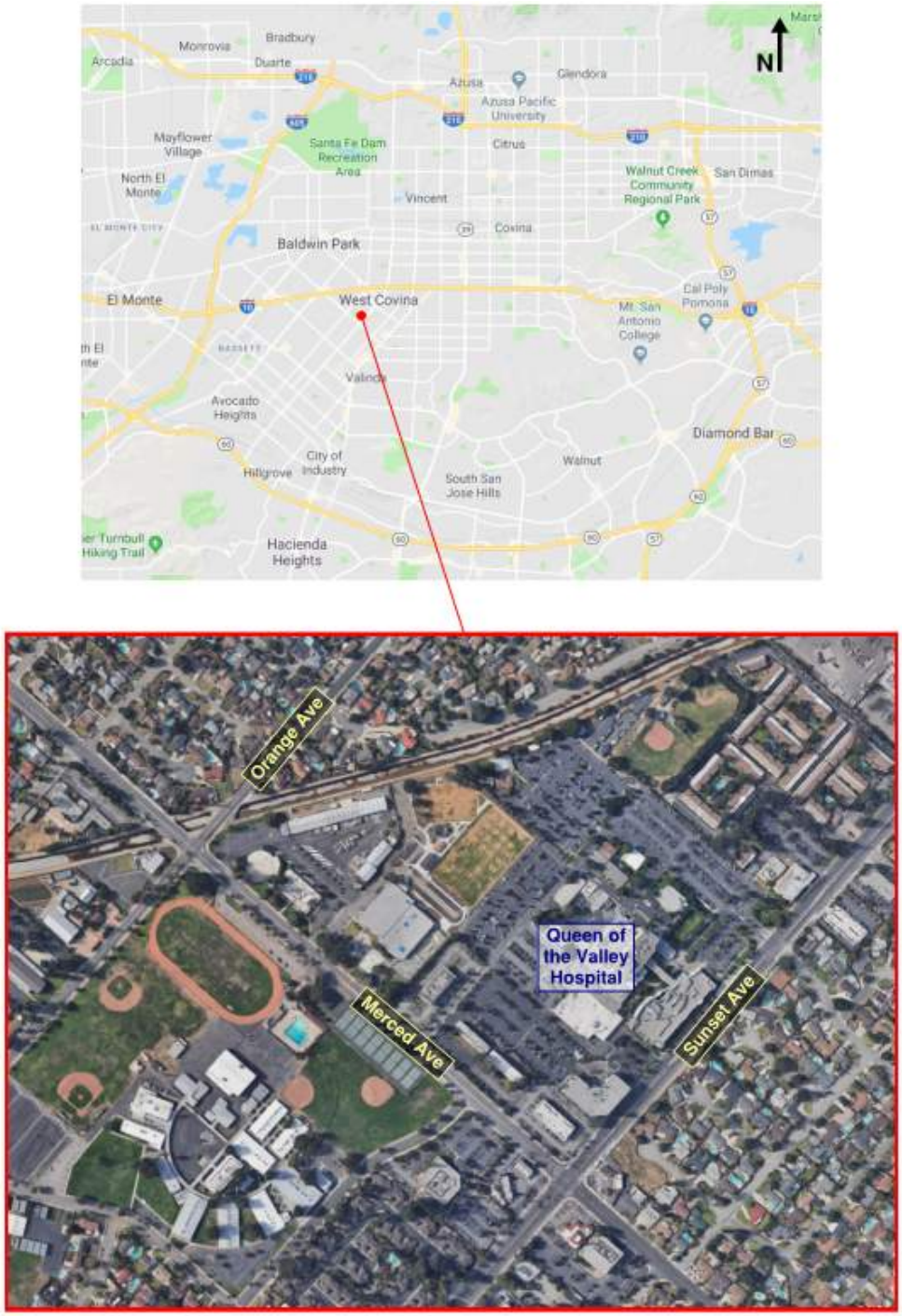
In this study, the original Phases 1A and 1B will be referred to as the Project. In the original traffic study, the Project included the following:

- Demolish 20,000 sq. ft. of existing hospital space
- Construct new emergency room expansion (33,000 sq. ft.) and new ICU (33,000 sq. ft.)
- Construct new medical office (90,000 sq. ft.)

Given the more detailed design underway, the Project now includes the following:

- Demolish 9,408 sq. ft. of existing hospital space
- Construct new emergency department/ICU (58,901 sq. ft.)
- Construct new medical office (58,868 sq. ft.)

Figure 1. Site Location



Note that the project includes other internal renovations and construction of parking structures, but those aspects of the project are not expected to alter the trip generation and are therefore not listed in the project description nor are they further discussed in this report.

Because the Project is smaller than what was originally evaluated in the *2019 TIS*, it is considered to be consistent with the 2019 EIR and no further operational analysis is required. However, this study will evaluate the project driveways to ensure that sufficient turn lane storage is available and will provide recommendations for which previously identified mitigation measures are still applicable for the reduced Project size.

For this study, traffic impact analyses were conducted for conditions with the project at the completion of Phases 1A and 1B, assumed to be in 2022. The study area and traffic impact analysis methodology used in this study are described in the following sections.

1.1. STUDY AREA

The study area includes the four site access points, shown in Figure 2 and listed below:

1. Merced Avenue/North Driveway (unsignalized)
2. Medical Office Driveway/Sunset Avenue (unsignalized)
3. East Driveway/Sunset Avenue (unsignalized)
4. Vine Avenue/Sunset Avenue (signalized)

The signalized intersection of Vine Avenue and Sunset Avenue was previously evaluated in the *2019 TIS*, but queuing analysis was not completed. All four intersections are existing. In addition, to evaluate the need for the previously determined mitigation measures, the four existing intersections of Cameron Avenue/Sunset Avenue (signalized), Merced Avenue/Dalewood Street/Garvey Avenue (unsignalized), Merced Avenue/California Avenue (signalized), and Cameron Avenue/Orange Avenue (signalized). Those four intersections were identified in the *2019 TIS* as requiring mitigation at the completion of Phases 1A and 1B.

1.2. ANALYSIS METHODOLOGY

Level of Service (LOS) is the typical measure used to characterize the quality of traffic operations at an intersection or roadway segment. LOS A represents relatively free operating conditions, whereas LOS F has unstable flow and congestion with volumes at or near the capacity of the facility. Excessive delays and queues can occur when the LOS is not acceptable.

Figure 2. Study Intersections

To assess the potential need to incorporate the mitigation measures previously identified for the completion of Phase 1, conditions for 2022 with and without the Project were evaluated for the four signalized intersections listed in the previous section. To evaluate the queues and potential need for additional turn lane storage, conditions for 2022 with the Project were evaluated.

Signalized intersections were evaluated using the Intersection Capacity Utilization (ICU) methodology to maintain consistency with the *2019 TIS*. For the unsignalized intersections, operational analyses were based on the HCM methodology per the *Los Angeles County Public Works Transportation Impact Analysis Guidelines*[2]. Per direction from the City of West Covina, VMT analyses are not required because the Project is consistent with the previously-approved 2019 EIR. The methodologies and significance thresholds are discussed further in the following sections.

1.2.1. Intersection Capacity Utilization (ICU)

The ICU methodology is used to determine the operating LOS of signalized intersections. This methodology requires the calculation of the intersection volume/capacity (V/C) ratio, which is the summation of critical lane group flow ratios with a yellow clearance adjustment. The LOS estimated by the ICU methodology is directly related to the intersection V/C ratio.

The impact related to the project is considered significant if the increase in the volume to capacity (V/C) ratio with the project equals or exceeds the values shown in Table 1.

Table 1. Significant Impact Thresholds – ICU Methodology

Intersection Conditions Pre-Project		Project V/C Increase
LOS	V/C	
C	0.71 to 0.80	0.04 or more
D	0.81 to 0.90	0.02 or more
E/F	0.91 or more	0.01 or more

1.2.2. Highway Capacity Manual

Per the LA County guidelines, this study applied the *HCM* methodology to evaluate unsignalized intersections using the software *Synchro*. The significant impact for the unsignalized intersection of Merced Avenue/Dalewood Street/Garvey Avenue was based on the LADOT guidelines[3], which evaluate unsignalized intersections using the HCM methodology to determine the need for the installation of a traffic signal or other traffic control devices. Based on the estimated delay, if the resultant LOS is E or F in the "Future with Project" scenario, it is recommended that a traffic signal warrant analysis be conducted.

Note that the LOS was not evaluated at the study intersections; instead, the analysis focuses on the queuing at the intersections, particularly the queues on Merced Avenue and Sunset Avenue for vehicles turning into the site.

2. EXISTING STUDY AREA CONDITIONS

2.1. PROJECT ACCESS

There are four existing site access locations, all of which are expected to remain as the campus develops. Those four study intersections are discussed below:

1. **Merced Avenue/North Driveway** – This unsignalized intersection operates with two-way stop control on the driveway. There is no northwest-bound right turn lane on Merced Avenue, but the existing two-way left turn lane provides storage for vehicles turning left into the site. The driveway has one inbound and one outbound lane and allows both left and right turns onto Merced Avenue.
2. **Medical Office Driveway/Sunset Avenue** – This unsignalized intersection operates with two-way stop control on the driveway. The driveway only allows right turns into and out of the site, but there is no exclusive right turn lane on Sunset Avenue. The driveway has one inbound and one outbound lane.
3. **East Driveway/Sunset Avenue** – This unsignalized intersection operates with two-way stop control on the driveway. There is no right turn lane on Sunset Avenue into the site, but there is an existing left turn lane with approximately 95 feet of storage. The driveway has one inbound and one outbound lane, and left turns are not permitted from the driveway onto Sunset Avenue.
4. **Vine Avenue/Sunset Avenue** – This signalized intersection includes left turn lanes on Sunset Avenue and operates with permissive left turns only. Both existing left turn lanes on Sunset Avenue have approximately 140 feet of storage. There are no right turn lanes on Sunset Avenue. On Vine Avenue, both approaches include a shared through-left turn lane and an exclusive right turn lane. For the Project site, Vine Avenue has two inbound lanes.

2.2. TRAFFIC VOLUMES

Due to the ongoing Covid-19 pandemic, traffic volumes at the study intersections could not be collected. Therefore, the 2018 volumes collected for the *2019 TIS* were used for the signalized intersections.

Driveway volumes were estimated based on the 2018 volumes and the estimated trip generation calculated using Institute of Transportation Engineers (ITE) *Trip Generation Manual*[4] for the site as it was in 2018. Table 2 shows the estimated site trip generation in 2018 for reference. An additional medical/dental office unrelated to the hospital also has access from the Vine Avenue/Sunset Avenue intersection; the estimated trip generation for that building is shown in Table 3.

Table 2. Estimated Existing (2018) Queen of the Valley Trip Generation

Existing						
ITE LU 610 (10th Edition) - Hospital						
1,000 SF			**355.380**			
Period	**Trips/Unit**	**Trips**	**% In**	**% Out**	**Trips In**	**Trips Out**
AM Peak	0.89	316	68%	32%	215	101
PM Peak	0.97	345	32%	68%	110	234
Daily	10.72	3,810	50%	50%	1,905	1,905

Existing						
ITE LU 720 (10th Edition) - Medical-Dental Office Building						
1,000 SF			**88.786**			
Period	**Trips/Unit**	**Trips**	**% In**	**% Out**	**Trips In**	**Trips Out**
AM Peak	2.78	247	78%	22%	193	54
PM Peak	3.46	307	28%	72%	86	221
Daily	34.80	3,090	50%	50%	1,545	1,545

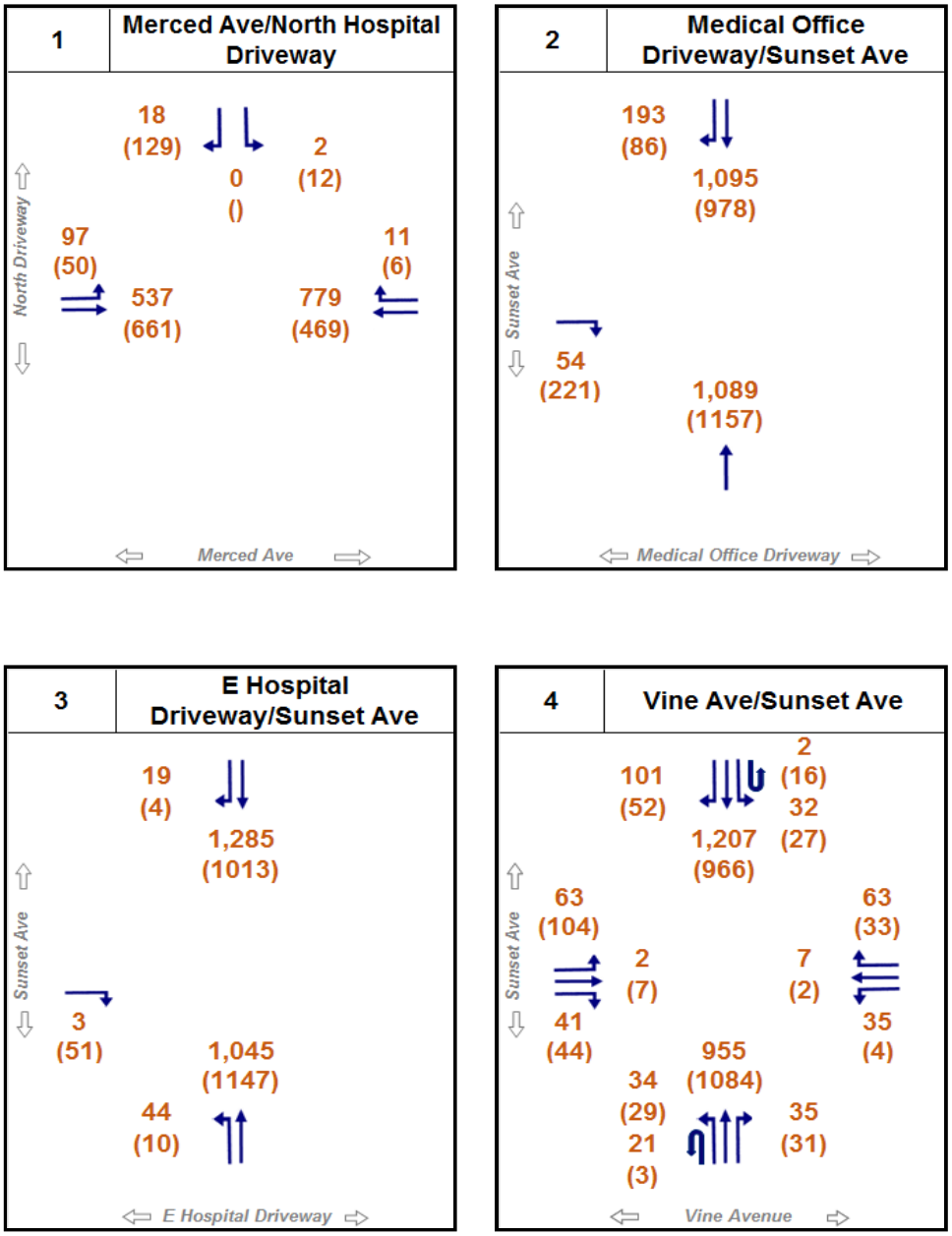
Table 3. Estimated Existing (2018) Medical/Dental Office Trip Generation

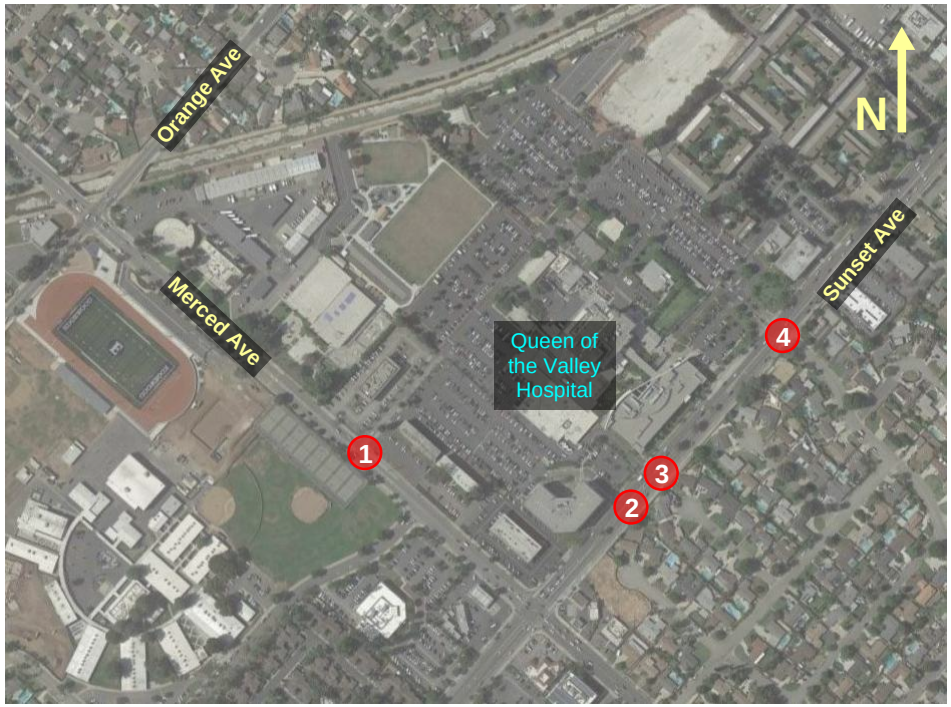
Unrelated Existing Medical/Dental Office						
ITE LU 720 (10th Edition) - Medical-Dental Office Building						
1,000 SF			**45**			
Period	**Trips/Unit**	**Trips**	**% In**	**% Out**	**Trips In**	**Trips Out**
AM Peak	2.78	125	78%	22%	98	28
PM Peak	3.46	156	28%	72%	44	112
Daily	34.80	1,566	50%	50%	783	783

Based on the layout of the facility, it was assumed that 100% of the Queen of the Valley medical office building traffic uses the Medical Office Building driveway located along Sunset Avenue between Merced Avenue and Vine Avenue (study intersection #2).

The Queen of the Valley hospital traffic was assumed to be split between the North Driveway, the East Driveway, and the Vine Avenue/Sunset Avenue intersection. Because volumes were collected at the latter intersection, no adjustments were required; it is also assumed that 100% of the unrelated medical/dental office traffic volumes use the same intersection.

For the remaining hospital traffic, it was assumed that 70% enters the site using the North Driveway and 30% enters the site via the East Driveway. Exiting traffic is slightly different due to the turning movement restrictions and location of on-site parking, with 75% using the North Driveway and 25% using the East Driveway. The collected and estimated 2018 traffic volumes are shown in Figure 3.





LEGEND

xx	AM Peak Hour Traffic Volume (veh/hr)
(xx)	PM Peak Hour Traffic Volume (veh/hr)

Queen of the Valley Hospital Phase 1A and 1B Traffic Impact Study	*Figure 3.* *Existing (2018) Traffic Volumes*	PSOMAS December 2020

3. PROJECT DESCRIPTION

To meet the growing critical care needs of the community, the Queen of the Valley Hospital Campus will be expanded and renovated. The eventual improvements will be built in several phases, including demolition of existing buildings, construction of new buildings, renovation of existing facilities, construction of new parking (both surface and structure), and additional signage/monumentation.

For the purposes of this study, the renovation of existing facilities, construction of new parking, and signage are not significant. This study only includes evaluation of conditions at the completion of Phase 1, which will include the following improvements:

1. Demolition of 9,408 SF of existing hospital uses
2. Addition of 58,901 SF of emergency department/ICU (hospital) uses
3. Construction of new 58,868 SF medical office building (MOB)

As previously mentioned, both the hospital expansion and the new MOB are smaller than what was previously studied. The demolished area is also smaller, but the net new hospital space is still smaller than it was in the 2019 EIR. The existing project access locations are not expected to change with the Project.

4. PROJECTED TRAFFIC VOLUMES

4.1. CUMULATIVE GROWTH AND TRAFFIC VOLUMES

The cumulative traffic volumes are the anticipated traffic volumes in a future year without the project traffic. The anticipated annual growth for the *2019 TIS* was 1.4% per year and was maintained for this study. Figure 4 shows the anticipated traffic volumes for 2022 without the Project.

4.2. PROJECT TRAFFIC VOLUMES

4.2.1. Project Trip Generation

The anticipated traffic generation for the Project was estimated using the ITE *Trip Generation Manual* for morning and afternoon weekday peak hour trips. The resulting project trip generation is shown in Table 4. For comparison, note that the Project as evaluated in the *2019 TIS* was expected to generate 3,625 new daily trips including 291 new AM peak hour trips and 356 new PM peak hour trips.

Table 4. Project Trip Generation

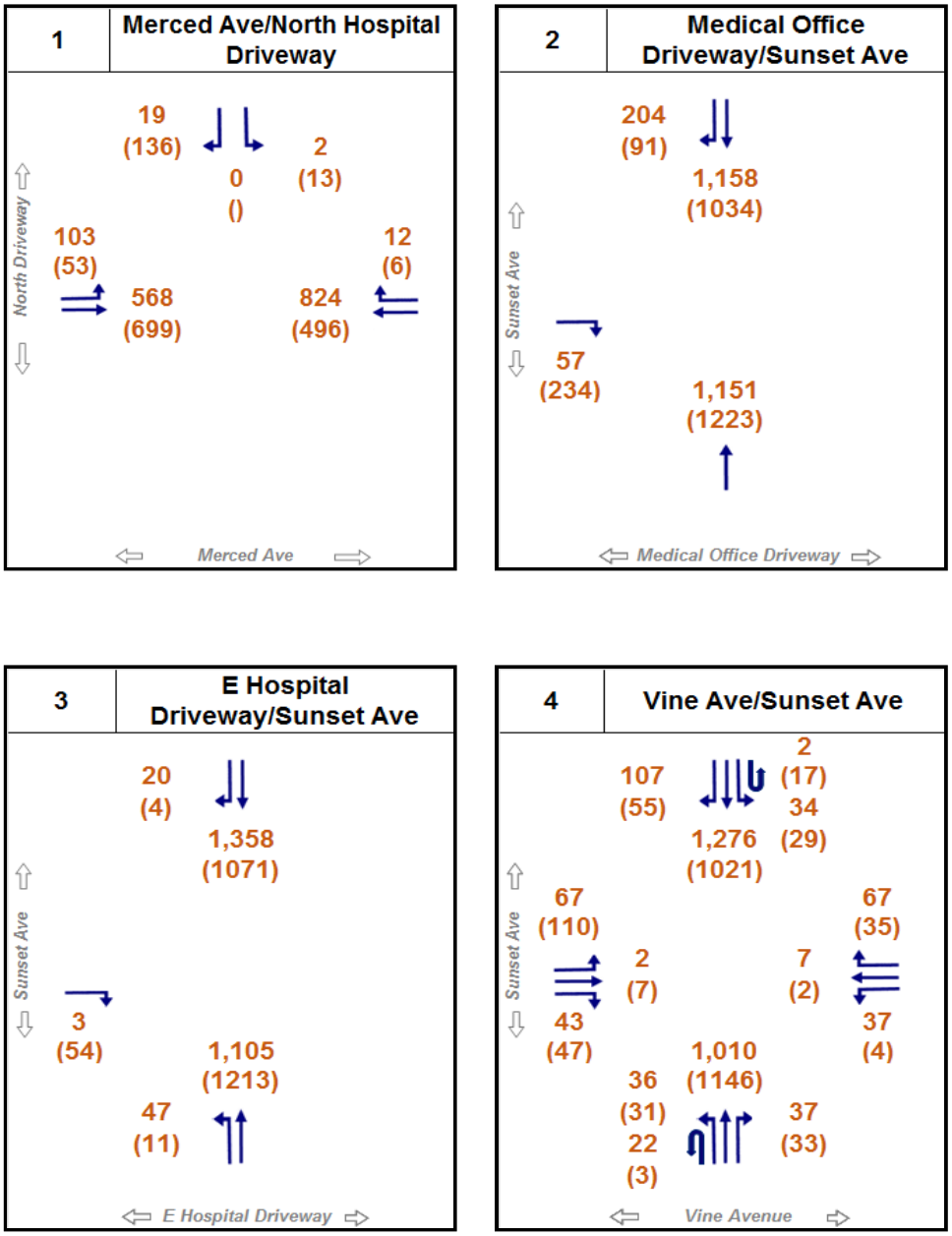
Development Type	Units	Number of Units	Daily	AM		PM	
				In	Out	In	Out
Immediate Improvements							
Hospital Area to be Demolished	1,000 SF	9.408	-101	-6	-3	-3	-6
Phase 1A (2022)							
New Medical Office Building	1,000 SF	58.868	2,049	128	36	57	147
Phase 1B (2022)							
Addition of Emergency Department/ICU	1,000 SF	58.901	631	36	17	18	39
Total New Trips at the end of Phase 1			***2,579***	***158***	***50***	***72***	***179***

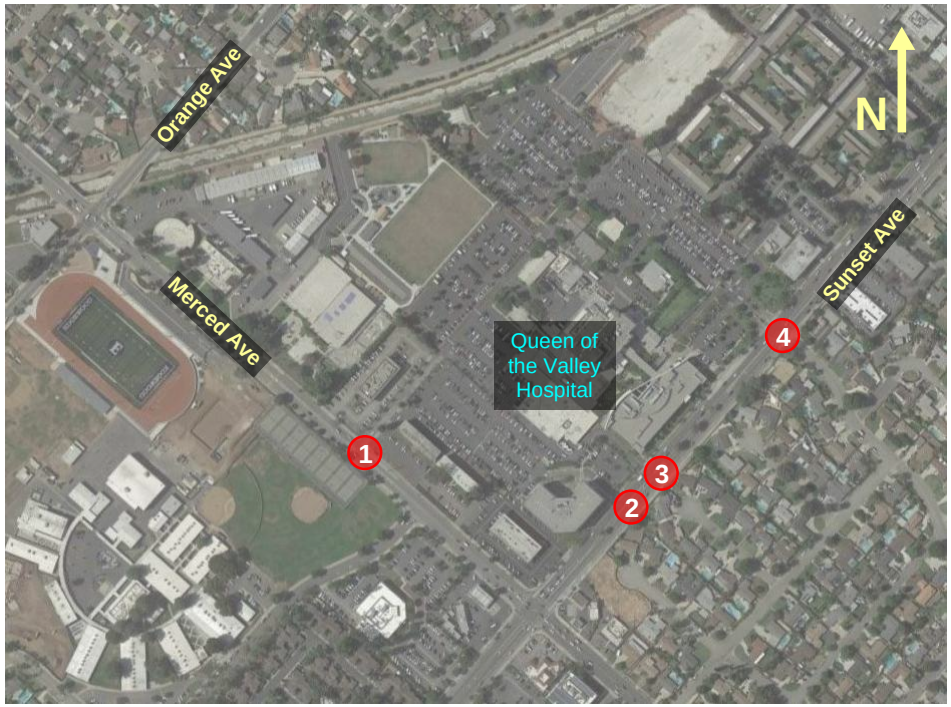
4.2.2. Project Trip Distribution

The project trip distribution is shown in Figure 5. The distribution matches what was shown in the *2019* TIS to maintain consistency.

4.2.3. Project Traffic Volumes

Using the Project trip generation and trip distribution, the Project traffic volumes were calculated and are shown in Figure 6.



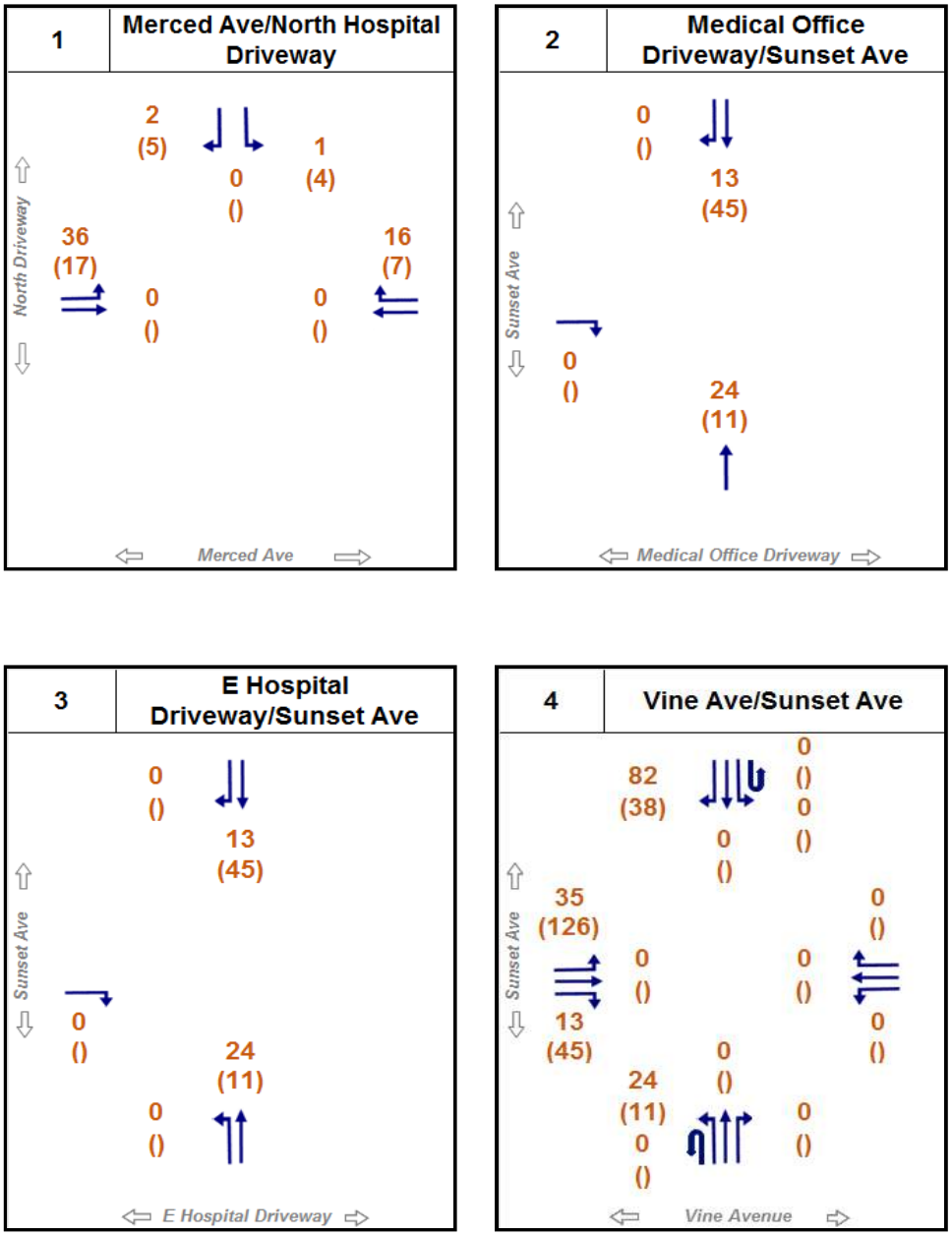


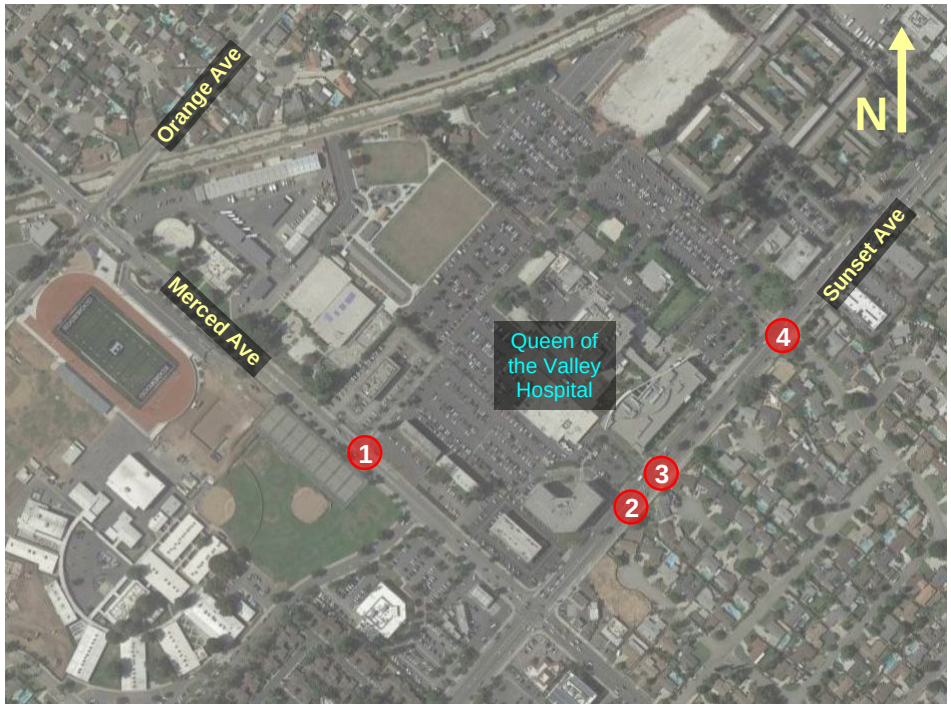
LEGEND

xx	AM Peak Hour Traffic Volume (veh/hr)
(xx)	PM Peak Hour Traffic Volume (veh/hr)

Queen of the Valley Hospital Phase 1A and 1B Traffic Impact Study	*Figure 4.* *2022 Cumulative Traffic Volumes*	PSOMAS December 2020

Queen of the Valley Hospital Phase 1A and 1B Traffic Impact Study	*Figure 5.* *Project Trip Distribution*	PSOMAS December 2020





LEGEND

xx	AM Peak Hour Traffic Volume (veh/hr)
(xx)	PM Peak Hour Traffic Volume (veh/hr)

Figure 6.
Project Traffic Volumes

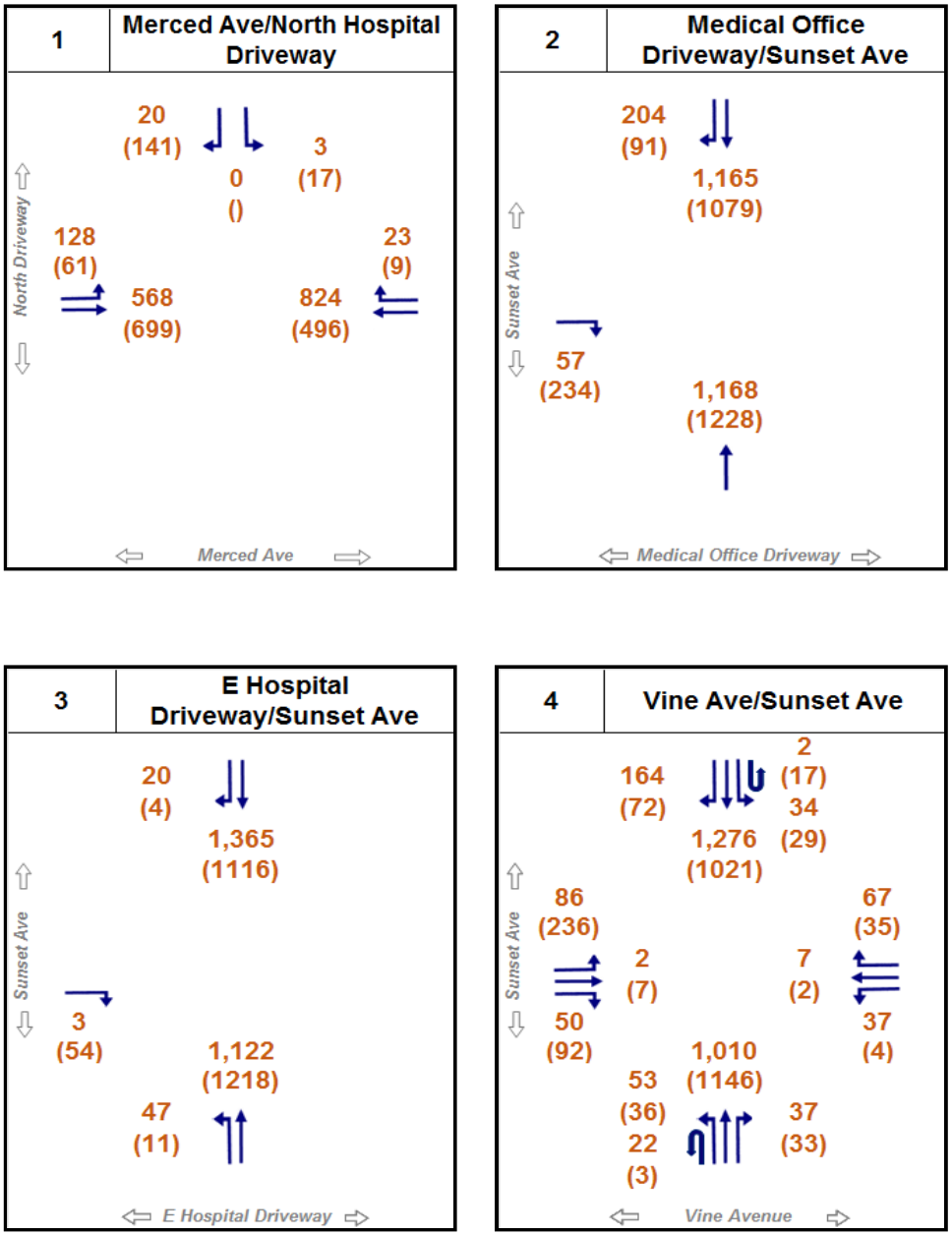
4.3. EXISTING + CUMULATIVE + PROJECT TRAFFIC VOLUMES

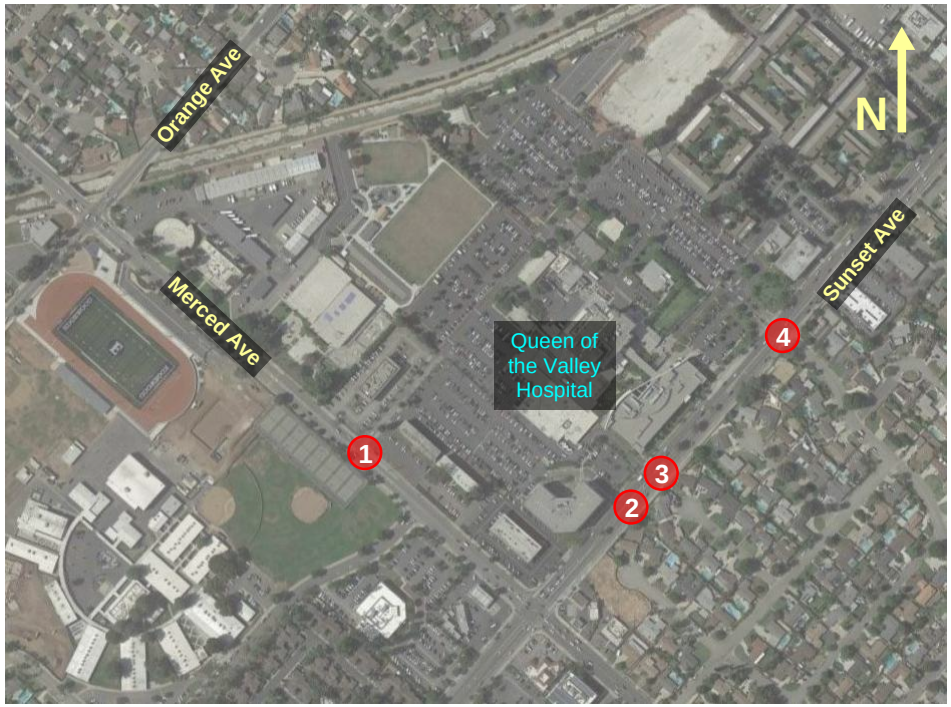
To estimate traffic volumes in a future year, traffic generated by cumulative growth and by the project must be considered. Future volumes with the project would generally be calculated by adding the cumulative growth and project traffic volumes. However, adjustments had to be made to account for the growth rate assumptions in the West Covina General Plan. The 1.4% annual growth rate in the General Plan included approximately 290,000 square feet (SF) of new "commercial" land uses would be in place by 2035 on the Queen of the Valley site. Details concerning the adjustments can be found in the *2019 TIS*, and Table 5 shows the adjusted Project trips.

Table 5. Adjusted Project Trips

Development Type	Daily	AM		PM	
		In	Out	In	Out
Phase 1 (2022)					
New Project Trips	2,579	158	50	72	179
Estimated General Plan Trips on Project Site	-1,068	-49	-23	-40	-64
Adjusted New Site Trips at the end of Phase 1	***1,512***	***109***	***27***	***32***	***115***

Figure 7 shows the existing + cumulative + Project traffic volumes in 2022.





LEGEND

xx	AM Peak Hour Traffic Volume (veh/hr)
(xx)	PM Peak Hour Traffic Volume (veh/hr)

Queen of the Valley Hospital Phase 1A and 1B Traffic Impact Study	*Figure 7.* *Existing + Cumulative + Project Traffic Volumes (2022)*	PSOMAS December 2020

5. SIGNIFICANT IMPACT ANALYSIS

Recall that the signalized intersections were evaluated using the ICU methodology and the unsignalized intersections were evaluated using the HCM methodology. The ICU spreadsheets and HCM reports for 2022 are included in Appendix A. Table 6 shows the resulting LOS for each of the four intersections which were previously expected to require mitigation in 2022 with the Project.

Table 6. Existing + Cumulative + Project Significant Impacts

Intersection	Existing Plus Interim Year 2022						Existing Plus Interim Year 2022 Plus Project Phases 1A and 1B						Increase in Delay (E or F only)		Increase in V/C		Significant Impact?	
	AM Peak Hour			PM Peak Hour			AM Peak Hour			PM Peak Hour								
	Delay	V/C	LOS	Delay	V/C	LOS	Delay	V/C	LOS	Delay	V/C	LOS	AM	PM	AM	PM	AM	PM
Cameron Ave/ Sunset Ave		0.840	D		0.767	C		0.860	D		0.794	C			0.02	0.03	YES	NO
Merced Ave/ Dalewood St/Garvey Ave	51.9		F	30.2		D	55.3		F	31.9		D	3.4	N/A			YES	NO
Merced Ave/ California Ave		1.012	F		1.007	F		1.024	F		1.019	F			0.01	0.01	YES	YES
Cameron Ave/ Orange Ave		0.889	D		0.889	D		0.900	E		0.893	D			0.01	0.00	NO	NO

As seen in the table, three of the intersections are still expected to have significant impacts with the smaller Project discussed in this report. The intersection of Cameron Avenue and Orange Avenue will no longer require mitigation at the completion of Phase 1 of the overall Queen of the Valley improvement plan.

The following list includes the recommended improvements for each of the intersections, taken directly from the *2019 TIS.*

- Cameron Ave/Sunset Ave
  - Convert the outside lane on Sunset Avenue to a shared thru-right turn lane in both directions. This will require additional striping on the downstream side of the intersection in both directions and will require that parking be prohibited on Sunset Avenue in the improvement area.
- Merced Ave/Dalewood St/Garvey Ave
  - Restripe the eastbound approach to include one thru lane and one exclusive right turn lane.

    - Convert intersection to a two-way stop control, with free eastbound and westbound approaches.
- Merced Ave/California Ave
    - Restripe both approaches on Merced Avenue to include one exclusive left turn lane, one thru lane, and one shared thru-right turn lane.

6. SITE DRIVEWAY ANALYSIS

6.1. QUEUING

As previously discussed, this study includes an evaluation of anticipated queuing at the project access locations to ensure that project traffic does not interfere with other traffic in the area. The anticipated 95th percentile queues were taken from *Synchro.* The 95th percentile queues are only exceeded 5% of the time and are typically used to determine turn lane storage needs. The queues for the turn lanes are shown in Table 7 along with the existing turn lane storage. The *Synchro* reports are included in Appendix B.

Table 7. 95th Percentile Queues with Project (feet)

Scenario		2022 + Project		Storage
Peak Hour		AM	PM	
Merced Ave and North Driveway	SE LT (Merced Ave)	13	5	**N/A***
	SW LT-RT (Driveway)	3	25	**140****
Medical Office Driveway and Sunset Ave	SW RT (Driveway)	15	95	**110****
East Driveway and Sunset Ave	NE LT (Sunset Ave)	10	0	**95**
	SW RT (Driveway)	0	13	**160****
Vine Ave and Sunset Ave	NE LT (Sunset Ave)	65	27	**140**
	SW LT (Sunset Ave)	27	38	**140**
	SE LT (Vine Ave)	44	115	**125****
	SE RT (Vine Ave)	23	31	**125****

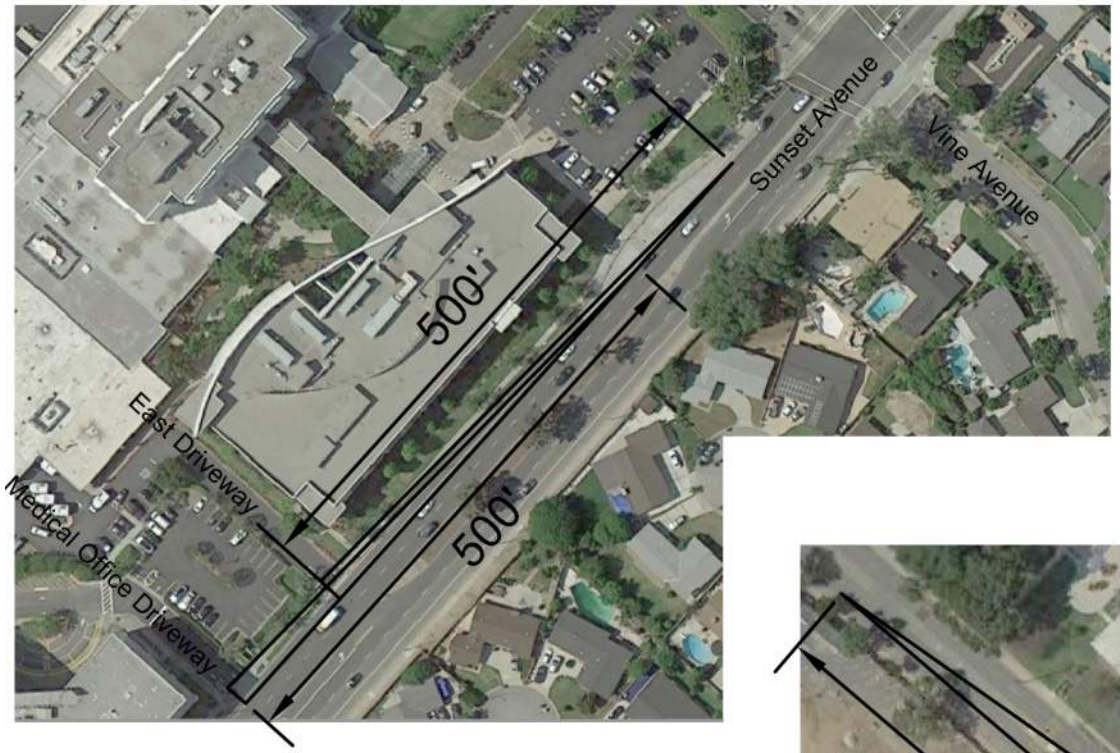
*Two-Way Left Turn Lane
**Distance is to nearest driveway or turn in driveway throat

As seen in the table, all of the queues are expected to be adequately served by the existing turn lane storages. Therefore, no improvements are required.

6.2. SIGHT DISTANCE

Per the scoping agreement, the sight distance for both driveways was evaluated using the requirements in the California *Highway Design Manual*[5]. For private road (site driveway) intersections, corner sight distance applies (Table 405.1A). Sight distance requirements are shown in Figure 405.7 of the manual. The corner sight distance is longer than the stopping sight distance (Table 201.1 of the manual) for both Merced Avenue and Sunset Avenue, which both have a posted speed of 40 mph. Figure 8 shows the sight visibility triangles for all three driveways.

As seen in the figure, on-street parking should continue to be prohibited along the frontage of the Project site on Sunset Avenue from the Medical Office Driveway to Vine Avenue. The same is true for the northeast side of Merced Avenue as shown in Figure 8. The Project would not change the existing geometric design within the area. Additionally, for all three driveways, the sight distance triangles are free of objects except for an existing bus shelter; therefore, visibility would not be impeded with project implementation. Therefore, the proposed Project would not create a new significant impact pertaining to site geometry that was not previously analyzed, and no mitigation measures are required.



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Queen of the Valley Hospital Phase 1A and 1B Traffic Impact Study	*Figure 8.* *Sight Visibility Triangles*	PSOMAS December 2020

7. CONSTRUCTION TRAFFIC

Although specific construction traffic volumes are not known at this time, it is expected that the construction traffic volumes will be lower than the volumes at completion of the Project. Therefore, no traffic impacts are expected from the construction traffic.

Care should be taken to ensure that construction traffic does not travel through residential areas. The project has direct access to two arterial roadways in Merced Avenue and Sunset Avenue, including signalized access at Vine Avenue and Sunset Avenue, so it is not expected that construction traffic will impact residential areas. While on-site, construction vehicles should be parked to ensure that access is available to all areas of the hospital campus without any major detours. Emergency vehicle access should also be provided at all times throughout the site.

8. FAIR SHARE CONTRIBUTION

It is anticipated that the project will contribute its fair share towards the cost of the mitigation measures listed in Section 5. The project fair share was calculated for each of the intersections requiring mitigation based on the Caltrans methodology for equitable mitigation measures, which indicates that the fair share percentage is equal to the percentage of total new trips which are generated by the project.

Table 8 shows the project fair share contribution; for instances where an intersection has impacts in both peak hours, the fair share is assumed to be an average of the two peak hour calculations. If the significant impact is only in one peak hour, the fair share contribution for the intersection is equal to the percentage calculated for the affected peak hour. The table also includes the fair share percentage that was calculated for the three intersections in the *2019 TIS* for reference. As seen in the table, because the Project size has decreased and will therefore generate less traffic than originally expected, the fair share responsibility for the Project has also decreased.

Table 8. Project Fair Share Contribution

Intersection	AM Peak Hour	PM Peak Hour	Fair Share	Fair Share in 2019 TIS
Cameron Ave/Sunset Ave	27%	33%	**30%**	41%
Merced Ave/Dalewood St/Garvey Ave	32%	N/A	**32%**	43%
Merced Ave/California Ave	17%	18%	**18%**	25%

9. SUMMARY

This traffic study provided an evaluation of Phases 1A and 1B (Project) of the Queen of the Valley Hospital Specific Plan improvements, which were previously evaluated in the *2019 TIS.* The Project evaluated in this report is smaller in size than what was originally evaluated; therefore, the original study intersections were re-evaluated to determine where mitigation would still be required with this portion of the overall improvement plan. In addition, the site access driveways were evaluated to ensure proper turn lane storage and sight distance (unsignalized intersections only).

The Project, defined in this report as Phases 1A and 1B from the *2019 TIS*, is expected to generate 2,579 new daily trips, including 208 trips in the AM peak hour and 252 new trips in the PM peak hour. At the completion of the Project in 2022, three of the four intersections which were previously identified as needing mitigation will still require mitigation. Those intersections (and the mitigation measures) include:

- Cameron Ave/Sunset Ave
  - Convert the outside lane on Sunset Avenue to a shared thru-right turn lane in both directions. This will require additional striping on the downstream side of the intersection in both directions and will require that parking be prohibited on Sunset Avenue in the improvement area.
- Merced Ave/Dalewood St/Garvey Ave
  - Restripe the eastbound approach to include one thru lane and one exclusive right turn lane.
  - Convert intersection to a two-way stop control, with free eastbound and westbound approaches.
- Merced Ave/California Ave
  - Restripe both approaches on Merced Avenue to include one exclusive left turn lane, one thru lane, and one shared thru-right turn lane.

The evaluation also found that the existing turn lanes at the project access points are expected to serve the 95th percentile queues with the Project, so no improvements are needed. Lastly, the sight visibility triangles for the three unsignalized project access driveways are generally free of obstructions with the exception of an existing bus shelter on Merced Avenue. However, intersection geometry will not be changed with the project, and therefore, visibility would not be impeded with project implementation.

10. REFERENCES

[1] *Traffic Impact Study for Queen of the Valley Hospital Specific Plan, Environmental Impact Report.* Psomas, June 2019.

[2] *Transportation Impact Analysis Guidelines.* Los Angeles County Public Works, July 2020.

[3] *Transportation Impact Study Guidelines*. City of Los Angeles Department of Transportation (LADOT), 2016

[4] *Trip Generation, 10th Edition*. Institute of Transportation Engineers (ITE). Washington, D.C., 2017.

[5] *Highway Design Manual.* California Department of Transportation, 2020.

Appendix A – ICU Spreadsheets and Synchro Reports

SE-NW Street: Cameron Ave
NE-SW Street: Sunset Ave
Scenario: AM Peak
Lane Capacity: 1600
Dual Lefts Capacity (per lane): 1440

Movement	2022 No Project				2022 + Project				PHF
	Total Volume	No. of Lanes	Equivalent Lanes	Movement V/C	Total Volume	No. of Lanes	Equivalent Lanes	Movement V/C	
Southeast-bound Left	73	1	1.00	0.05	73	1	1.00	0.05	0.865
Comb. L-T		0				0			
Southeast-bound Thru	404	1	1.46	0.17	404	1	1.38	0.18	
Comb. T-R		1				1			
Southeast-bound Right	149	0	0.54	0.17	183	0	0.62	0.18	
Comb. L-T-R		0				0			
Northwest-bound Left	237	1	1.00	0.15	243	1	1.00	0.15	0.934
Comb. L-T		0				0			
Northwest-bound Thru	765	1	1.89	0.25	765	1	1.89	0.25	
Comb. T-R		1				1			
Northwest-bound Right	44	0	0.11	0.25	44	0	0.11	0.25	
Comb. L-T-R		0				0			
Northeast-bound Left	198	1	1.00	0.12	198	1	1.00	0.12	0.818
Comb. L-T		0				0			
Northeast-bound Thru	831	2	2.00	0.26	849	2	2.00	0.27	
Comb. T-R		0				0			
Northeast-bound Right	133	1	1.00	0.08	135	1	1.00	0.08	
Comb. L-T-R		0				0			
Southwest-bound Left	37	1	1.00	0.02	37	1	1.00	0.02	0.845
Comb. L-T		0				0			
Southwest-bound Thru	946	2	2.00	0.30	963	2	2.00	0.30	
Comb. T-R		0				0			
Southwest-bound Right	96	1	1.00	0.06	96	1	1.00	0.06	
Comb. L-T-R		0				0			

Critical Volumes	E-W:	0.32	E-W:	0.34
	N-S:	0.42	N-S:	0.42
	Total:	0.74	Total:	0.76
Lost Time		0.10		0.10
V/C		0.840		0.860
Level of Service		D		D

Intersection	
Intersection Delay, s/veh	55.3
Intersection LOS	F

Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Vol, veh/h	511	2	48	381	4	95
Future Vol, veh/h	511	2	48	381	4	95
Peak Hour Factor	0.90	0.90	0.83	0.83	0.87	0.87
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	568	2	58	459	5	109
Number of Lanes	1	1	1	0	0	1

Approach	NW	NE	SW
Opposing Approach		SW	NE
Opposing Lanes	0	1	1
Conflicting Approach Left	NE		NW
Conflicting Lanes Left	1	0	2
Conflicting Approach Right	SW	NW	
Conflicting Lanes Right	1	2	0
HCM Control Delay	89.8	26.9	12
HCM LOS	F	D	B

Lane	NELn1	NWLn1	NWLn2	SWLn1
Vol Left, %	0%	100%	0%	4%
Vol Thru, %	11%	0%	0%	96%
Vol Right, %	89%	0%	100%	0%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	429	511	2	99
LT Vol	0	511	0	4
Through Vol	48	0	0	95
RT Vol	381	0	2	0
Lane Flow Rate	517	568	2	114
Geometry Grp	2	7	7	2
Degree of Util (X)	0.788	1.086	0.003	0.214
Departure Headway (Hd)	5.789	6.888	5.669	7.103
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	631	528	634	509
Service Time	3.789	4.594	3.375	5.103
HCM Lane V/C Ratio	0.819	1.076	0.003	0.224
HCM Control Delay	26.9	90.1	8.4	12
HCM Lane LOS	D	F	A	B
HCM 95th-tile Q	7.6	17.7	0	0.8

Intersection	
Intersection Delay, s/veh	31.9
Intersection LOS	D

Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Vol, veh/h	247	8	234	417	6	52
Future Vol, veh/h	247	8	234	417	6	52
Peak Hour Factor	0.84	0.84	0.93	0.93	0.81	0.81
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	294	10	252	448	7	64
Number of Lanes	1	1	1	0	0	1

Approach	NW	NE	SW
Opposing Approach		SW	NE
Opposing Lanes	0	1	1
Conflicting Approach Left	NE		NW
Conflicting Lanes Left	1	0	2
Conflicting Approach Right	SW	NW	
Conflicting Lanes Right	1	2	0
HCM Control Delay	18.3	40.1	9.9
HCM LOS	C	E	A

Lane	NELn1	NWLn1	NWLn2	SWLn1
Vol Left, %	0%	100%	0%	10%
Vol Thru, %	36%	0%	0%	90%
Vol Right, %	64%	0%	100%	0%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	651	247	8	58
LT Vol	0	247	0	6
Through Vol	234	0	0	52
RT Vol	417	0	8	0
Lane Flow Rate	700	294	10	72
Geometry Grp	2	7	7	2
Degree of Util (X)	0.933	0.57	0.015	0.12
Departure Headway (Hd)	4.8	6.984	5.765	6.032
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	763	518	619	591
Service Time	2.8	4.733	3.513	4.099
HCM Lane V/C Ratio	0.917	0.568	0.016	0.122
HCM Control Delay	40.1	18.6	8.6	9.9
HCM Lane LOS	E	C	A	A
HCM 95th-tile Q	13.4	3.5	0	0.4

SE-NW Street: Cameron Ave
NE-SW Street: Sunset Ave
Scenario: PM Peak
Lane Capacity: 1600
Dual Lefts Capacity (per lane): 1440

Movement	2022 No Project				2022 + Project				PHF
	Total Volume	No. of Lanes	Equivalent Lanes	Movement V/C	Total Volume	No. of Lanes	Equivalent Lanes	Movement V/C	
Southeast-bound Left	150	1	1.00	0.09	150	1	1.00	0.09	0.853
Comb. L-T		0				0			
Southeast-bound Thru	626	1	1.56	0.25	626	1	1.54	0.25	
Comb. T-R		1				1			
Southeast-bound Right	177	0	0.44	0.25	187	0	0.46	0.25	
Comb. L-T-R		0				0			
Northwest-bound Left	104	1	1.00	0.07	106	1	1.00	0.07	0.941
Comb. L-T		0				0			
Northwest-bound Thru	450	1	1.78	0.16	450	1	1.78	0.16	
Comb. T-R		1				1			
Northwest-bound Right	55	0	0.22	0.16	55	0	0.22	0.16	
Comb. L-T-R		0				0			
Northeast-bound Left	172	1	1.00	0.11	172	1	1.00	0.11	0.909
Comb. L-T		0				0			
Northeast-bound Thru	982	2	2.00	0.31	1059	2	2.00	0.33	
Comb. T-R		0				0			
Northeast-bound Right	141	1	1.00	0.09	147	1	1.00	0.09	
Comb. L-T-R		0				0			
Southwest-bound Left	69	1	1.00	0.04	69	1	1.00	0.04	0.879
Comb. L-T		0				0			
Southwest-bound Thru	778	2	2.00	0.24	783	2	2.00	0.24	
Comb. T-R		0				0			
Southwest-bound Right	53	1	1.00	0.03	53	1	1.00	0.03	
Comb. L-T-R		0				0			

Critical Volumes	E-W:	0.32	E-W:	0.32
	N-S:	0.35	N-S:	0.37
	Total:	0.67	Total:	0.69
Lost Time		0.10		0.10
V/C		0.767		0.794
Level of Service		C		C

SE-NW Street: Merced Ave
NE-SW Street: California Ave
Scenario: AM Peak
Lane Capacity: 1600
Dual Lefts Capacity (per lane): 1440

Movement	2022 No Project				2022 + Project				PHF
	Total Volume	No. of Lanes	Equivalent Lanes	Movement V/C	Total Volume	No. of Lanes	Equivalent Lanes	Movement V/C	
Southeast-bound Left	70	0	0.14	0.32	70	0	0.14	0.32	0.816
Comb. L-T		1				1			
Southeast-bound Thru	435	1	1.86	0.15	440	1	1.86	0.15	
Comb. T-R		0				0			
Southeast-bound Right	44	1	1.00	0.03	44	1	1.00	0.03	
Comb. L-T-R		0				0			
Northwest-bound Left	78	0	0.10	0.48	78	0	0.10	0.49	0.827
Comb. L-T		1				1			
Northwest-bound Thru	690	1	1.90	0.23	707	1	1.90	0.23	
Comb. T-R		0				0			
Northwest-bound Right	39	1	1.00	0.02	39	1	1.00	0.02	
Comb. L-T-R		0				0			
Northeast-bound Left	29	0	0.13	0.14	29	0	0.13	0.14	0.697
Comb. L-T		1				1			
Northeast-bound Thru	188	0	0.87	0.14	188	0	0.87	0.14	
Comb. T-R		0				0			
Northeast-bound Right	63	1	1.00	0.04	63	1	1.00	0.04	
Comb. L-T-R		0				0			
Southwest-bound Left	44	0	0.18	0.15	44	0	0.18	0.15	0.700
Comb. L-T		1				1			
Southwest-bound Thru	196	0	0.82	0.15	196	0	0.82	0.15	
Comb. T-R		0				0			
Southwest-bound Right	71	1	1.00	0.04	71	1	1.00	0.04	
Comb. L-T-R		0				0			

Critical Volumes	E-W:	0.63	E-W:	0.64
	N-S:	0.29	N-S:	0.29
	Total:	0.91	Total:	0.92
Lost Time		0.10		0.10
V/C		1.012		1.024
Level of Service		F		F

SE-NW Street: Merced Ave
NE-SW Street: California Ave
Scenario: PM Peak
Lane Capacity: 1600
Dual Lefts Capacity (per lane): 1440

Movement	2022 No Project				2022 + Project				PHF
	Total Volume	No. of Lanes	Equivalent Lanes	Movement V/C	Total Volume	No. of Lanes	Equivalent Lanes	Movement V/C	
Southeast-bound Left	80	0	0.11	0.44	80	0	0.11	0.45	0.895
Comb. L-T		1				1			
Southeast-bound Thru	627	1	1.89	0.21	644	1	1.89	0.21	
Comb. T-R		0				0			
Southeast-bound Right	31	1	1.00	0.02	31	1	1.00	0.02	
Comb. L-T-R		0				0			
Northwest-bound Left	45	0	0.10	0.27	45	0	0.10	0.27	0.926
Comb. L-T		1				1			
Northwest-bound Thru	385	1	1.90	0.13	390	1	1.90	0.13	
Comb. T-R		0				0			
Northwest-bound Right	48	1	1.00	0.03	48	1	1.00	0.03	
Comb. L-T-R		0				0			
Northeast-bound Left	29	0	0.11	0.17	29	0	0.11	0.17	0.942
Comb. L-T		1				1			
Northeast-bound Thru	246	0	0.89	0.17	246	0	0.89	0.17	
Comb. T-R		0				0			
Northeast-bound Right	52	1	1.00	0.03	52	1	1.00	0.03	
Comb. L-T-R		0				0			
Southwest-bound Left	39	0	0.15	0.17	39	0	0.15	0.17	0.790
Comb. L-T		1				1			
Southwest-bound Thru	227	0	0.85	0.17	227	0	0.85	0.17	
Comb. T-R		0				0			
Southwest-bound Right	48	1	1.00	0.03	48	1	1.00	0.03	
Comb. L-T-R		0				0			

Critical Volumes	E-W:	0.57	E-W:	0.58
	N-S:	0.34	N-S:	0.34
	Total:	0.91	Total:	0.92
Lost Time		0.10		0.10
V/C		1.007		1.019
Level of Service		F		F

SE-NW Street: Cameron Ave
NE-SW Street: Orange Ave
Scenario: AM Peak
Lane Capacity: 1600
Dual Lefts Capacity (per lane): 1440

Movement	2022 No Project				2022 + Project				PHF
	Total Volume	No. of Lanes	Equivalent Lanes	Movement V/C	Total Volume	No. of Lanes	Equivalent Lanes	Movement V/C	
Southeast-bound Left	8	1	1.00	0.01	8	1	1.00	0.01	0.842
Comb. L-T		0				0			
Southeast-bound Thru	433	1	1.15	0.24	435	1	1.15	0.24	
Comb. T-R		1				1			
Southeast-bound Right	320	0	0.85	0.24	320	0	0.85	0.24	
Comb. L-T-R		0				0			
Northwest-bound Left	328	1	1.00	0.21	328	1	1.00	0.21	0.839
Comb. L-T		0				0			
Northwest-bound Thru	670	1	1.97	0.21	670	1	1.97	0.21	
Comb. T-R		1				1			
Northwest-bound Right	10	0	0.03	0.21	10	0	0.03	0.21	
Comb. L-T-R		0				0			
Northeast-bound Left	357	0	0.96	0.23	357	0	0.96	0.23	0.854
Comb. L-T		1				1			
Northeast-bound Thru	15	0	0.04	0.23	15	0	0.04	0.23	
Comb. T-R		0				0			
Northeast-bound Right	343	1	1.00	0.21	343	1	1.00	0.21	
Comb. L-T-R		0				0			
Southwest-bound Left	106	0	0.57	0.12	123	0	0.61	0.13	0.830
Comb. L-T		1				1			
Southwest-bound Thru	80	0	0.43	0.12	80	0	0.39	0.13	
Comb. T-R		0				0			
Southwest-bound Right	56	1	1.00	0.04	56	1	1.00	0.04	
Comb. L-T-R		0				0			

Critical Volumes	E-W:	0.44	E-W:	0.44
	N-S:	0.35	N-S:	0.36
	Total:	0.79	Total:	0.80
Lost Time		0.10		0.10
V/C		0.889		0.900
Level of Service		D		E

SE-NW Street: Cameron Ave
NE-SW Street: Orange Ave
Scenario: PM Peak
Lane Capacity: 1600
Dual Lefts Capacity (per lane): 1440

Movement	2022 No Project				2022 + Project				PHF
	Total Volume	No. of Lanes	Equivalent Lanes	Movement V/C	Total Volume	No. of Lanes	Equivalent Lanes	Movement V/C	
Southeast-bound Left	7	1	1.00	0.00	7	1	1.00	0.00	0.937
Comb. L-T		0				0			
Southeast-bound Thru	495	1	1.38	0.22	495	1	1.38	0.22	
Comb. T-R		1				1			
Southeast-bound Right	223	0	0.62	0.22	223	0	0.62	0.22	
Comb. L-T-R		0				0			
Northwest-bound Left	351	1	1.00	0.22	351	1	1.00	0.22	0.952
Comb. L-T		0				0			
Northwest-bound Thru	551	1	1.99	0.17	551	1	1.99	0.17	
Comb. T-R		1				1			
Northwest-bound Right	4	0	0.01	0.17	4	0	0.01	0.17	
Comb. L-T-R		0				0			
Northeast-bound Left	329	0	0.96	0.22	329	0	0.96	0.22	0.924
Comb. L-T		1				1			
Northeast-bound Thru	15	0	0.04	0.22	15	0	0.04	0.22	
Comb. T-R		0				0			
Northeast-bound Right	426	1	1.00	0.27	426	1	1.00	0.27	
Comb. L-T-R		0				0			
Southwest-bound Left	75	0	0.59	0.08	80	0	0.61	0.08	0.838
Comb. L-T		1				1			
Southwest-bound Thru	52	0	0.41	0.08	52	0	0.39	0.08	
Comb. T-R		0				0			
Southwest-bound Right	64	1	1.00	0.04	64	1	1.00	0.04	
Comb. L-T-R		0				0			

Critical Volumes	E-W:	0.44	E-W:	0.44
	N-S:	0.35	N-S:	0.35
	Total:	0.79	Total:	0.79
Lost Time		0.10		0.10
V/C		0.889		0.893
Level of Service		D		D

Appendix B – Synchro Reports for Site Access Points

Intersection	
Int Delay, s/veh	0.9

Movement	SEL	SET	NWT	NWR	SWL	SWR
Lane Configurations						
Traffic Vol, veh/h	103	568	824	12	2	19
Future Vol, veh/h	103	568	824	12	2	19
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	50	-	-	-	0	-
Veh in Median Storage,#	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	112	617	896	13	2	21

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	909	0	-	0	1436	455
Stage 1	-	-	-	-	903	-
Stage 2	-	-	-	-	533	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	745	-	-	-	124	552
Stage 1	-	-	-	-	356	-
Stage 2	-	-	-	-	553	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	745	-	-	-	105	552
Mov Cap-2 Maneuver	-	-	-	-	210	-
Stage 1	-	-	-	-	303	-
Stage 2	-	-	-	-	553	-

Approach	SE	NW	SW
HCM Control Delay, s	1.6	0	12.9
HCM LOS			B

Minor Lane/Major Mvmt	NWT	NWR	SEL	SET	SWLn1
Capacity (veh/h)	-	-	745	-	478
HCM Lane V/C Ratio	-	-	0.15	-	0.048
HCM Control Delay (s)	-	-	10.7	-	12.9
HCM Lane LOS	-	-	B	-	B
HCM 95th %tile Q(veh)	-	-	0.5	-	0.1

Intersection	
Int Delay, s/veh	0.4

Movement	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Vol, veh/h	0	57	0	1151	1158	204
Future Vol, veh/h	0	57	0	1151	1158	204
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	62	0	1251	1259	222

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	741	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-	-
Pot Cap-1 Maneuver	0	359	0	-	-	-
Stage 1	0	-	0	-	-	-
Stage 2	0	-	0	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	359	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	SE	NE	SW
HCM Control Delay, s	17.1	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NET	SELn1	SWT	SWR
Capacity (veh/h)	-	359	-	-
HCM Lane V/C Ratio	-	0.173	-	-
HCM Control Delay (s)	-	17.1	-	-
HCM Lane LOS	-	C	-	-
HCM 95th %tile Q(veh)	-	0.6	-	-

Intersection	
Int Delay, s/veh	0.3

Movement	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Vol, veh/h	0	3	47	1105	1358	20
Future Vol, veh/h	0	3	47	1105	1358	20
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	95	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	3	51	1201	1476	22

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	749	1498	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	4.14	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	0	354	444	-	-	-
Stage 1	0	-	-	-	-	-
Stage 2	0	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	354	444	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	SE	NE	SW
HCM Control Delay, s	15.3	0.6	0
HCM LOS	C		

Minor Lane/Major Mvmt	NEL	NET	SELn1	SWT	SWR
Capacity (veh/h)	444	-	354	-	-
HCM Lane V/C Ratio	0.115	-	0.009	-	-
HCM Control Delay (s)	14.2	-	15.3	-	-
HCM Lane LOS	B	-	C	-	-
HCM 95th %tile Q(veh)	0.4	-	0	-	-

Lane Group	SET	SER	NWT	NWR	NEL	NET	SWL	SWT
Lane Group Flow (vph)	75	47	48	73	63	1138	39	1503
v/c Ratio	0.15	0.08	0.09	0.12	0.50	0.65	0.26	0.86
Control Delay	14.9	8.6	14.1	6.2	27.4	12.9	13.8	19.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	14.9	8.6	14.1	6.2	27.4	12.9	13.8	19.2
Queue Length 50th (ft)	19	5	12	3	14	143	7	222
Queue Length 95th (ft)	44	23	31	26	#65	200	27	#317
Internal Link Dist (ft)	124		127			544		445
Turn Bay Length (ft)					140		140	
Base Capacity (vph)	484	569	518	591	132	1832	157	1824
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.15	0.08	0.09	0.12	0.48	0.62	0.25	0.82

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Intersection	
Int Delay, s/veh	1.7

Movement	SEL	SET	NWT	NWR	SWL	SWR
Lane Configurations						
Traffic Vol, veh/h	53	699	496	6	16	139
Future Vol, veh/h	53	699	496	6	16	139
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	50	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	58	760	539	7	17	151

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	546	0	-	0	1039	273
Stage 1	-	-	-	-	543	-
Stage 2	-	-	-	-	496	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	1019	-	-	-	226	725
Stage 1	-	-	-	-	546	-
Stage 2	-	-	-	-	577	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1019	-	-	-	213	725
Mov Cap-2 Maneuver	-	-	-	-	333	-
Stage 1	-	-	-	-	515	-
Stage 2	-	-	-	-	577	-

Approach	SE	NW	SW
HCM Control Delay, s	0.6	0	12.5
HCM LOS			B

Minor Lane/Major Mvmt	NWT	NWR	SEL	SET	SWLn1
Capacity (veh/h)	-	-	1019	-	646
HCM Lane V/C Ratio	-	-	0.057	-	0.261
HCM Control Delay (s)	-	-	8.7	-	12.5
HCM Lane LOS	-	-	A	-	B
HCM 95th %tile Q(veh)	-	-	0.2	-	1

Intersection	
Int Delay, s/veh	2.3

Movement	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Vol, veh/h	0	234	0	1223	1063	91
Future Vol, veh/h	0	234	0	1223	1063	91
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	254	0	1329	1155	99

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	627	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-	-
Pot Cap-1 Maneuver	0	426	0	-	-	-
Stage 1	0	-	0	-	-	-
Stage 2	0	-	0	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	426	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	SE	NE	SW
HCM Control Delay, s	25.2	0	0
HCM LOS	D		

Minor Lane/Major Mvmt	NET	SELn1	SWT	SWR
Capacity (veh/h)	-	426	-	-
HCM Lane V/C Ratio	-	0.597	-	-
HCM Control Delay (s)	-	25.2	-	-
HCM Lane LOS	-	D	-	-
HCM 95th %tile Q(veh)	-	3.8	-	-

Intersection	
Int Delay, s/veh	0.4

Movement	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Vol, veh/h	0	54	11	1213	1100	4
Future Vol, veh/h	0	54	11	1213	1100	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	95	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	59	12	1318	1196	4

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	600	1200	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	4.14	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	0	444	577	-	-	-
Stage 1	0	-	-	-	-	-
Stage 2	0	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	444	577	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	SE	NE	SW
HCM Control Delay, s	14.3	0.1	0
HCM LOS	B		

Minor Lane/Major Mvmt	NEL	NET	SELn1	SWT	SWR
Capacity (veh/h)	577	-	444	-	-
HCM Lane V/C Ratio	0.021	-	0.132	-	-
HCM Control Delay (s)	11.4	-	14.3	-	-
HCM Lane LOS	B	-	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.5	-	-

Lane Group	SET	SER	NWT	NWR	NEL	NET	SWL	SWT
Lane Group Flow (vph)	216	83	6	38	37	1282	50	1170
v/c Ratio	0.44	0.14	0.01	0.06	0.28	0.76	0.38	0.70
Control Delay	18.3	7.1	13.2	5.7	15.3	15.5	19.2	13.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	18.3	7.1	13.2	5.7	15.3	15.5	19.2	13.9
Queue Length 50th (ft)	58	6	1	0	7	172	10	148
Queue Length 95th (ft)	115	31	8	16	27	240	38	208
Internal Link Dist (ft)	124		127			544		445
Turn Bay Length (ft)					140		140	
Base Capacity (vph)	494	612	598	599	149	1910	149	1905
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.44	0.14	0.01	0.06	0.25	0.67	0.34	0.61

Intersection Summary

PSOMAS

Balancing the Natural and Built Environment

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