Initial Study/Mitigated Negative Declaration

Mt. San Antonio College **Technology and Health Building**

Prepared for Mt. San Antonio College 1100 North Grand Avenue Walnut, California 91789

Prepared by

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SECTION 1.0 INTRODUCTION

1.1 PURPOSE OF THE INITIAL STUDY

The purpose of this Initial Study (IS) is to (1) describe the Mt. San Antonio College Technology and Health Building project (hereinafter referred to as the "proposed project"), which is located on the campus of Mt. San Antonio College (Mt. SAC) in Walnut, Los Angeles County, California; and (2) provide an evaluation of potential environmental effects associated with the proposed project's construction and use. This IS has been prepared pursuant to the California Environmental Quality Act (CEQA), as amended (*California Public Resources Code* §21000 et seq.) and in accordance with the State CEQA Guidelines (*California Code of Regulations* §15000 et seq.).

Pursuant to Section 15367 of the State CEQA Guidelines, Mt. San Antonio Community College District (District) is the lead agency for the project. The lead agency is the public agency that has the principal responsibility for carrying out or approving a project that may have a significant effect on the environment. The District, as the lead agency, has the authority for project approval and certification of the accompanying environmental documentation.

1.2 SUMMARY OF FINDINGS

This IS is based on the Environmental Checklist Form (Form) included in Appendix G of the 2020 State CEQA Guidelines. The Form is found in Section 3.1 of this IS. It contains a series of questions about the proposed project for each of the listed environmental topics. The Form is used to evaluate whether or not any potentially significant environmental effects are associated with implementation of the proposed project based on the adopted Mt. SAC 2016 CEQA Thresholds of Significance. The explanation for each answer is included in Section 3.1.

The Form is used to review the potential environmental effects of the proposed project for each of the following areas:

- Aesthetics
- Agriculture and Forestry Resources
- Air Quality
- Biological Resources
- Cultural Resources
- Energy
- Geology and Soils
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning

- Mineral Resources
- Noise
- Population and Housing
- Public Services
- Recreation
- Transportation
- Tribal Cultural Resources
- Utilities and Service Systems
- Wildfire
- Mandatory Findings of Significance

The proposed project incorporates mitigation measures (MMs) from the 2018 Educational and Facilities Master Plan Environmental Impact Report (2018 EFMP EIR), which are assumed in the analysis presented this IS and restated in Section 5.0 of this document. These MMs are applicable campus wide and applicable MMs have been identified in the analysis presented in the IS. As identified through the analysis presented in this IS, the proposed project would have no impacts

or less than significant impacts related to aesthetics; agriculture and forestry resources; air quality; biological resources; cultural resources; energy geology and soils; greenhouse gas emissions; hazards and hazardous materials; hydrology and water quality; land use; mineral resources; noise population and housing; public services; recreation; transportation; tribal cultural resources; utilities/service systems; and wildfire.

According to the State CEQA Guidelines, a Mitigated Negative Declaration (MND) is appropriate if the proposed project will not have a significant impact on the environment after incorporation of mitigation measures in the project. Based on the available project information and the environmental analysis presented in this document, there is no substantial evidence that, after incorporation of mitigation measures, the proposed project would have a significant impact on the environment.

1.3 PUBLIC REVIEW

This IS and proposed MND have been circulated by the State Office of Planning and Research (State Clearinghouse) for review by State agencies and to any responsible agencies, trustee agencies, and interested parties, as required by CEQA. A Notice of Intent to adopt the proposed MND for review and comment has been posted in locations both on the project site and offsite in a publicly accessible area. The environmental documentation is also available for review on Mt. SAC's website:

www.mtsac.edu/construction/reports-and-publications/environmental-impact-reports.html

A 30-day public review period has been established for the IS and the proposed MND. The review period has been established in accordance with Section 15073 of the State CEQA Guidelines. The IS and proposed MND's 30-day review period will extend from **March 12**, **2021 to April 12**, **2021**. Comments regarding the IS and proposed MND must be received no later than 5:00 PM on **April 12**, **2021**.

Comments on the IS and the analysis contained herein may be mailed or emailed to the following address:

Gary Gidcumb, Project Manager
Facilities Planning & Management
Mt. San Antonio College
1100 N. Grand Avenue
Walnut, California 91789
mailto:facilitiesplanning@mtsac.edu

Please designate a contact person in your agency and send responses to the address above.

If you have any questions about the environmental review for the proposed Technology and Health Building, please contact Gary Gidcumb at 909.762.6071.

Following receipt and evaluation of comments from agencies, organizations, and/or individuals, the District will determine whether any substantial new environmental issues have been raised. If so, further documentation may be required. If not, the District may adopt the MND.

1.4 INITIAL STUDY ORGANIZATION

This document has been organized into the following sections:

- **Section 1 Introduction.** This section provides an introduction and overview describing the conclusions of the IS.
- **Section 2 Project Description.** This section provides an overview of the proposed project location; a description of existing on-site and surrounding land uses; and key project characteristics and includes a list of anticipated discretionary actions.
- **Section 3 Environmental Checklist Form.** The completed Environmental Checklist Form provides an overview of the potential impacts that may or may not result from project implementation.
- **Section 4 Environmental Evaluation.** This section contains an analysis of environmental impacts identified in the environmental checklist.
- **Section 5 Summary of Mitigation Measures.** This section identifies MMs from the 2018 EFMP EIR. These MMs are applicable campus wide and applicable MMs have been identified in the analysis presented in the IS.
- **Section 6 Report Preparers.** This section identifies those individuals responsible for preparing the IS/MND.
- **Section 7 References.** The References section identifies resources used to prepare this document.

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SECTION 2.0 PROJECT DESCRIPTION

2.1 PROJECT LOCATION AND SETTING

The project site is located north of Temple Avenue and west of Bonita Drive in the City of Walnut, Los Angeles County, California. Local access to the project site is provided from Temple Avenue; Interstate (I) 10, and State Routes (SR) 57 and 60. Exhibit 1, Vicinity Map, depicts the regional location and local vicinity of the project site.

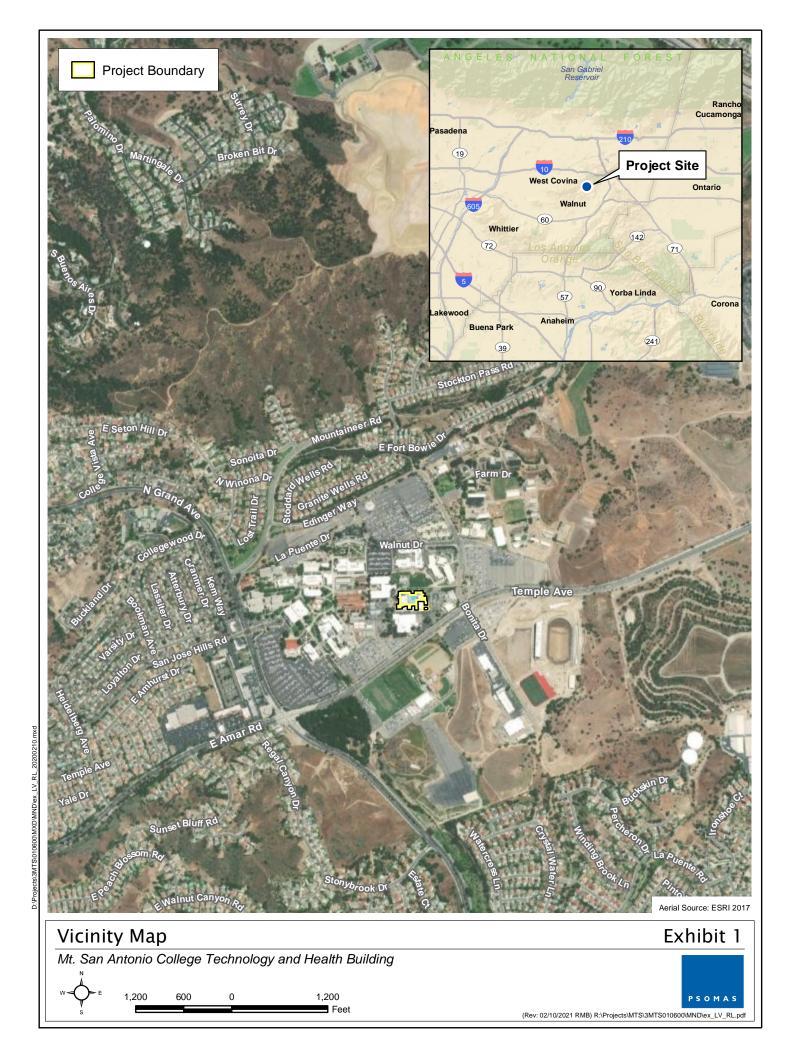
The project site is located on the Mt. San Antonio College (Mt. SAC) campus, which forms the City of Walnut's eastern boundary. The campus is located approximately 25 miles east of the City of Los Angeles, in the Pomona-Walnut Valley, and is adjacent to California State Polytechnic University, Pomona (Cal Poly Pomona). Mt. SAC serves students from within the Mt. SAC District service area as well as students from throughout the San Gabriel Valley in areas as far east as Fontana and as far west as Monterey Park.

As shown in the aerial photograph provided in Exhibit 2, Aerial Photograph, the project site is currently developed with Buildings 27A, 27B, 27C, and Swimming Pool (27P). The project site is surrounded by campus uses, including the Library Learning Resources and Humanities/Social Sciences buildings and in close proximity to existing parking and the proposed Transit Center. According to the recently adopted City of Walnut General Plan, the site is currently designated in the City's General Plan Land Use Plan as Schools and Public Institutional (City of Walnut 2018b). According to the September 2012 City of Walnut Zoning Map, the project site is zoned as Mt. SAC Community College with the Civic Center Overlay and an underlying zoning of Residential Planned Development (RPD) – 61,700 – 0.6 DU (City of Walnut 2012). However, the City of Walnut has adopted a Zoning Code Amendment (ZCA) – ZCA No. 2018-01 and Zone Change (ZC) 2018-02. ZCA 2018-01 and ZC 2018-02 that establishes the Schools and Public Institutional Zoning District to be consistent with the recently adopted Walnut General Plan. The Land Use Element of the Walnut General Plan has created a new land use designation that identifies public uses, such as schools, civic center complex, and other government and utility property and uses as being included in the new Zone.

The project site is located in an area characterized by hilly terrain. The elevation at the project site varies from approximately 735 to 760 feet above mean sea level, with general surface gradients sloping from north to south. The majority of the project site exists as a relatively flat surface, with slopes along the southern and northern boundaries. The project site is located within an alluvial basin surrounded by hillsides consisting of sedimentary bedrock of the Monterey (Puente) Formation and is primarily underlain by alluvial sediments (Converse 2018).

Vegetation located in the project site is limited to ornamental species and several mature trees within landscaped areas. No natural open space is located in the project site or in the vicinity. No drainage features, wetlands, or sensitive plant communities have been identified in the project site. No federally and/or State listed as Endangered or Threatened plant or wildlife species reported in the vicinity have the potential to occur in the project site because the area does not support suitable habitat.

Runoff from the project site generally sheet flows from north to the south and is collected by a series of catch basins and storm drains that outlet to the gutter on Temple Avenue, which then gravity flows to a public, City-owned storm drain in Temple Avenue. Groundwater was encountered to a maximum depth of approximately 36 feet below ground surface (bgs) (Converse 2018).





In the vicinity of the project site, Temple Avenue is a four-lane facility (two in each direction) with a raised median. Currently, a median break and a dedicated left-turn lane in both the eastbound-and westbound directions are located at the existing driveway to the project site. It is noted that the left-turn lane in the eastbound direction currently serves as a U-turn only. Segments of on-street parallel parking are provided along both sides of Temple Avenue in the vicinity of the project site.

2.2 PROJECT DESCRIPTION

The project proposes to build a new four-story Technology and Health building at Mt. SAC. The Technology and Health Division is currently housed within six different facilities throughout campus, some of which are permanent structures and temporary portables. Existing facilities are struggling to keep up with technological demands of instructional programs and do not provide enough space to accommodate student enrollment demand. The proposed project will increase instructional space capacity, consolidate the Technology and Health Division into a single facility, and support industry standards for technology in career technical education and health related occupations.

The proposed Technology and Health building will encompass 253,866 gross square feet (gsf) and consist of 152,668 assignable square feet (asf). Functional space within the building will include 6,512 asf of classroom, 107,090 asf of laboratory, 14,514 asf of office, 12,878 asf of library, and 11,674 asf of other support space as detailed in Exhibit 3, Conceptual Site Plan. The following Departments and services will be housed in the new Technology and Health building: Technical Education Resource Center (TERC), Health Careers Resource Center, Career Advancement, Aeronautics, Air Conditioning and Welding, Air Maintenance Technology, Architecture Industrial Design Engineering and Manufacturing Technologies, Electronics and Computer Technology, Mental Health, Nursing, Public Safety Programs, Radiologic Technology, and Respiratory Therapy. The First, Second, Third, and Fourth Floor Diagrams are provided in Exhibits 4a through 4d.

The proposed building will be located on a site at the center of campus instructional core and adjacent to the new Library Learning Resources building. Buildings 27A, 27B, 27C, and Swimming Pool (27P) will be demolished to provide a construction site for the new building. Following occupancy of the new Technology and Health building, Technology Center A (28A) and B (28B), and Health Careers Center A (67A) will be inactivated. The TERC modular (18C) will also be inactivated and relocated offsite. In addition, spaces from within the Design Technology building (13) and Health Careers Center B (67B) will be vacated and inactivated.

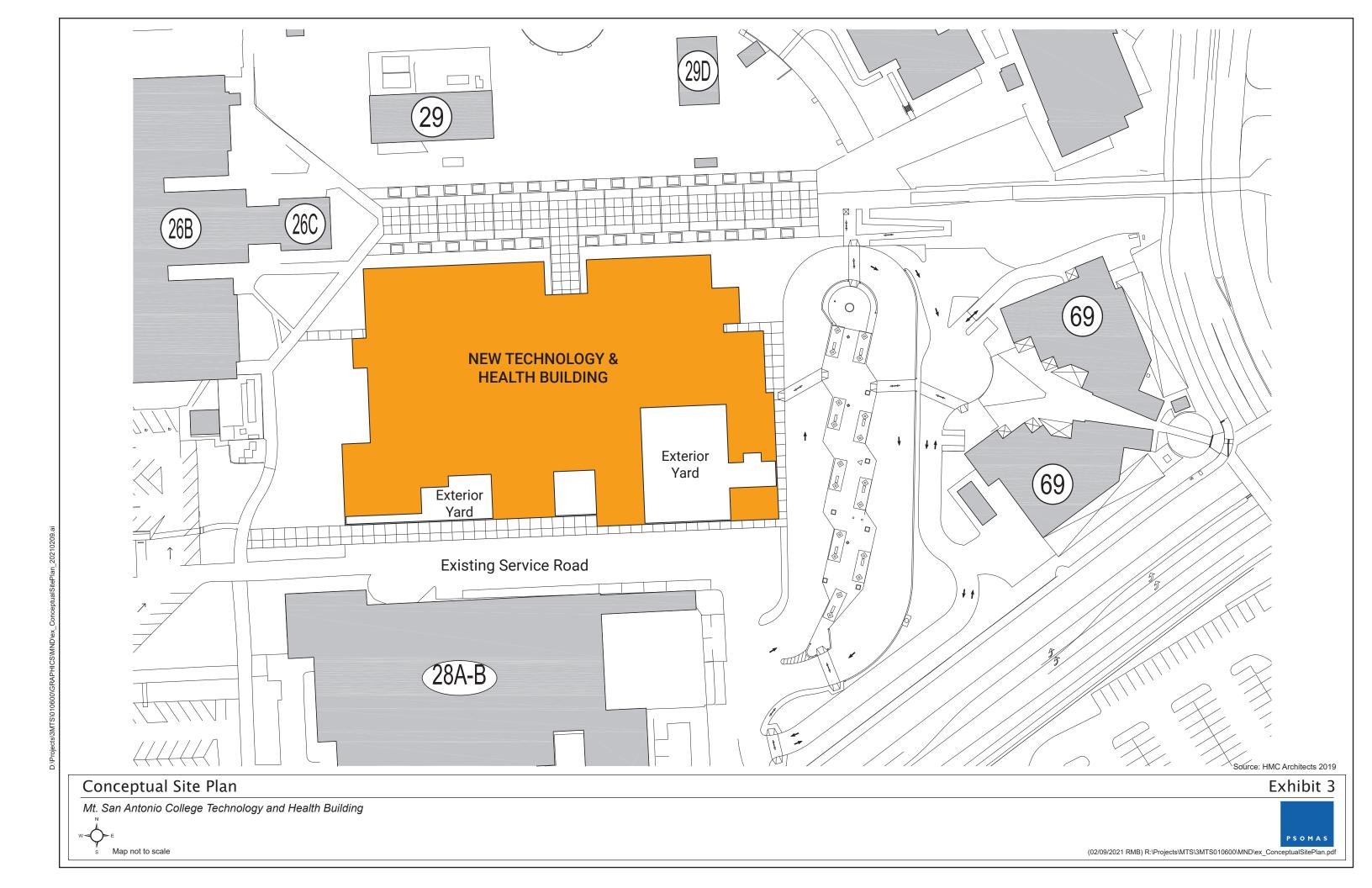
Construction details are discussed in further detail below, in Section 2.2.5, Construction Activities.

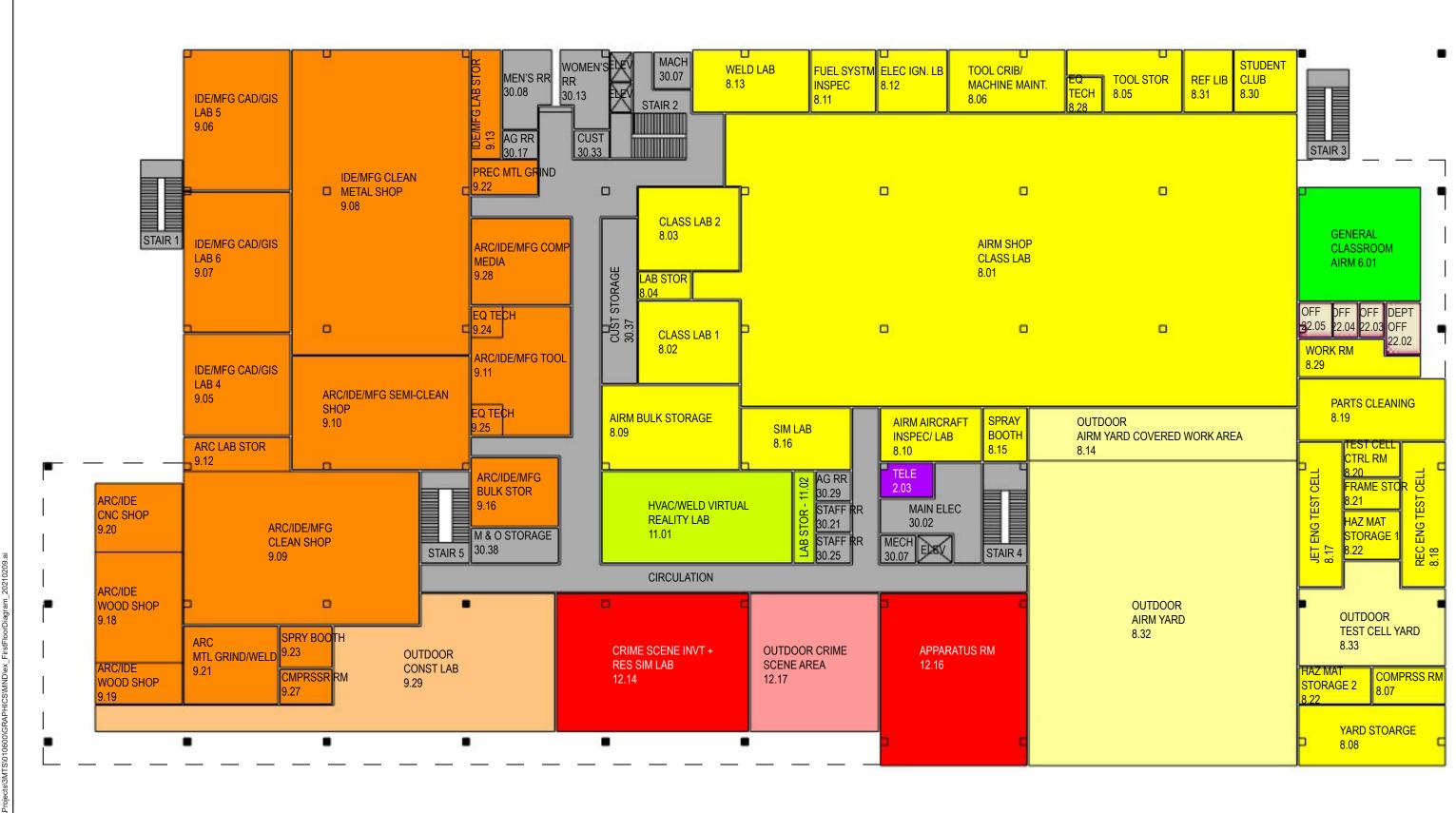
Circulation and Parking

Vehicular Circulation

The proposed Technology and Health building is located immediately south of Miracle Mile, the pedestrian path which runs through the center of campus. Currently, those wishing to access buildings in the project area are directed to park in Lot F or Lot G.

Lot F is connected to the center of campus near the project via a pedestrian bridge over Bonita Drive. Once parking structure S is completed, it is assumed those wishing to access the new building can also easily do so from that area. Vehicle access to the three parking areas discussed will not change from existing conditions; Lot F and Structure S can both be accessed from Bonita Drive or Temple Avenue, and Lot G can be accessed from either Bonita Drive or other areas of



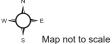


Source: HMC Architects 2019

Exhibit 4a

First Floor Diagram

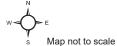
Mt. San Antonio College Technology and Health Building



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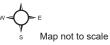
Mt. San Antonio College Technology and Health Building



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Mt. San Antonio College Technology and Health Building



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Map not to scale

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campus to the west. It is not expected that there will be any direct public vehicle access to the building. However, service vehicles and emergency vehicles will have direct access to the building after completion.

Construction vehicles are expected to access the site via Temple Avenue. The ongoing transit center construction will include a new traffic signal at the transit center access driveway on Temple Avenue which construction vehicles can use for easy access to the site. A secondary access path will be through Lot D, approaching the site from the west. Construction is not expected to affect access for other areas of campus.

Non-Vehicular Circulation

While the project site is generally accessible from I-10, located north of the project site, and SR-57, located east of the project site, bus service is provided by Foothill Transit. Currently, five separate bus lines operate in the vicinity of the project site at four separate bus stops: Lines 190, 194, 289, 480, and 486. Although the campus is not directly served by regional public transportation options, the nearest Metrolink station is located approximately 4 miles from campus in the City of Industry. This station is served by the Riverside Line, which connects Los Angeles Union Station to downtown Riverside. Additionally, Foothill Transit is looking at possible connections to provide bus service connections between Mt. SAC and Los Angeles County Metropolitan Transportation Authority's (Metro's) Foothill Gold Line, which currently connects Los Angeles Union Station to Azusa and is planned to extend through Glendora, San Dimas, La Verne, Pomona, Claremont, and Montclair (Metro 2021a, Metro 2021b). The planned La Verne station to the north and the Pomona station to the east will be located approximately 7 miles from campus.

Parking

Parking will be available at the new Parking Structure S, as well as existing Parking Lots D, F, and G.

Landscape, Hardscape, and Lighting

Consistent with the 2018 EFMP EIR, landscaping, hardscaping, and lighting associated with the project would be consistent with Mt. SAC's Landscape Guidelines, as well as construction standards and design guidelines. The landscape guidelines are intended to provide strategies for landscape project design, implementation, and maintenance that contribute to a unified, accessible, and sustainable campus landscape. Specifically, the project proposes to remove approximately 20 trees (no street trees would be removed) and approximately 40 trees would be planted as part of the project.

Utility Infrastructure

Municipal and private utility services necessary to serve the proposed project are currently available within or adjacent to the project site. On-site utility infrastructure necessary to serve the proposed project, including water, sanitary sewer, drainage, and stormwater runoff treatment would be installed with the proposed development and would connect to the existing utilities. The final sizing and design of on-site facilities would occur during final project design. Following is a description of existing and proposed utility infrastructure.

Water and Sanitary Sewer

Water (domestic and fire) and sewer service for the Mt. SAC campus is provided by the Walnut Valley Water District. The project site would be served by existing campus-owned water and sewer lines in the areas surrounding the project site. Proposed water and sewer lines would be installed on the project site and would connect to existing campus water and sewer lines located northeast of the site. Due to the nominal amount of anticipated water usage and required sewer capacity, the existing infrastructure has sufficient capacity to accommodate the proposed uses, and no upgrades to the existing infrastructure would be needed.

Storm Drains and Water Quality Features

The City of Walnut Public Works Department maintains the public storm drain system serving the campus and project site, which is located in Temple Avenue. City-owned storm drains were designed to contain the on-site flows in a developed condition such as a surface parking lot. The storm drain system for the proposed project has been designed to accommodate anticipated on-site water flows and follows the Los Angeles County Low Impact Development (LID) Standards Manual, including stormwater best management practices (BMPs), consistent with Mt. SAC's Campuswide Stormwater Analysis (Psomas 2016), to reduce stormwater pollution.

Stormwater runoff from the project site would continue to be intercepted by a series of catch basins and enter the existing storm drain system. The existing storm drains have sufficient capacity to accommodate stormwater runoff from the project site, and no upgrades to the existing infrastructure off site would be needed.

Dry Utilities

The project site is within the service areas of the following utility purveyors: Southern California Edison (SCE) and Southern California Gas Company (natural gas). The project would connect to existing lines that currently serve the project site.

2.2.1 CONSTRUCTION ACTIVITIES

It is estimated that construction of the proposed project would begin in 2023 with project completion in 2026. Demolition of the existing Buildings 27A, 27B, 27C, and Swimming Pool (27P) is anticipated to occur over a 12- to 16-week period. It is estimated that approximately 4,626 tons of demolition materials that would be hauled off-site and recycled. Demolition activities would generate approximately 127 heavy truck round trips during the demolition period for export of the demolition material. The proposed project would occur in one phase. The project would require a total of 18,000 cubic yards of over-excavation of soil, and all soil work would be balanced on site.

Construction staging and parking would occur on site and construction access would be available from Temple Avenue.

2.3 DISCRETIONARY AND NONDISCRETIONARY ACTIONS

Table 1, Anticipated Discretionary Actions/Approvals, lists the approvals and permits required from the Mt. San Antonio Community College District (District), as the lead agency, the City of Walnut, and other agencies to implement the proposed project.

TABLE 1 ANTICIPATED DISCRETIONARY ACTIONS/APPROVALS

Lead Agency	Action
	Adoption of the Final Tiered IS/MND
	 Adoption of the Mitigation Monitoring and Reporting Program
Mt. San Antonio College Community	Approval of the design
College District	Approval of the project budget
	Approval of financing
Responsible Agencies	Action
California Division of the State Architect (DSA)	 Title 24 structural, access compliance, fire/life safety, and energy reviews
State of California Fire Marshal	Fire/life safety

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SECTION 3.0 ENVIRONMENTAL CHECKLIST FORM

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

	ne environmental factors checked below would gnificant Impact" as indicated by the checklis		olving at least one impact that is a "Potentially
	Aesthetics Biological Resources Geology/Soils Hydrology/Water Quality Noise Recreation Utilities/Service Systems	☐ Agriculture & Forestry Resource ☐ Cultural Resources ☐ Greenhouse Gas Emissions ☐ Land Use/Planning ☐ Population/Housing ☐ Transportation ☐ Wildfire	es
DE	ΓERMINATION:		
On 1	the basis of this initial evaluation:		
	I find that the proposed project COU DECLARATION will be prepared.	JLD NOT have a significant effect	on the environment, and a NEGATIVE
₫		ase because revisions in the proje	effect on the environment, there will ct have been made by or agreed to by ON will be prepared.
	I find that the proposed project MA' ENVIRONMENTAL IMPACT REI	•	vironment, and an
	mitigated" impact on the environme document pursuant to applicable leg	nt, but at least one effect 1) has bee al standards, and 2) has been addre- attached sheets. An ENVIRONMEN	pact" or "potentially significant unless n adequately analyzed in an earlier ssed by mitigation measures based on NTAL IMPACT REPORT is required,
	I find that although the proposed propotentially significant effects (a) has DECLARATION pursuant to applic earlier EIR or NEGATIVE DECLA upon the proposed project, nothing to	we been analyzed adequately in an exable standards, and (b) have been a RATION, including revisions or missions.	arlier EIR or NEGATIVE voided or mitigated pursuant to that
	OK G. Nellesen	3/10/202	1
	Signature /	Date	
	Gary Nellesen		
	Executive Director, Facilities Planni Management	ing & 909.274.	5179
	Printed Name/Title	Phone No.	_

EVALUATION OF ENVIRONMENTAL IMPACTS:

- 1) All answers must take account of the whole action involved, including offsite as well as onsite, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
- 2) A list of "Supporting Information Sources" must be attached and other sources used or individuals contacted should be cited in the Narrative Summary for each section.
- 3) Response Column Heading Definitions:
 - a) **Potentially Significant Impact** is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.
 - b) **Less Than Significant Impact With Mitigation** applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact". The mitigation measures must be described, along with a brief explanation of how they reduce the effect to a less than significant level.
 - c) Less Than Significant Impact applies where the project creates no significant impacts, only Less Than Significant impacts.
 - d) **No Impact** applies where a project does not create an impact in that category. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one proposed (e.g., the project falls outside of a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
- 4) Earlier analyses may be used where, pursuant to a tiering, program EIR, Master EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration (Section 15062(c)(3)(D)). In this case, a brief discussion should identify the following:
 - a) Earlier Analysis Used. Identify and state where they are available for review.
 - b) Impacts Adequately Addressed. Identify which effects from the checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
 - c) Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated", describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

Incorporate into the checklist any references to information sources for potential impacts (e.g., the General Plan, zoning ordinance). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.

The explanation of each issue should identify:

- a) the significance criteria or threshold, if any, used to evaluate each question; and
- b) the mitigation measure identified, if any, to reduce the impact to less than significant.

Environmental Issues	Potentially Significant Impact	Less Than Significant Impact with Mitigation	Less Than Significant Impact	No Impact
I. AESTHETICS Except as provided in Public Resources Code Section 21099, would the project:				
a) Have a substantial adverse effect on a scenic vista?			\square	
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?			Ø	
II. AGRICULTURE & FOREST RESOURCES In determining wheth environmental effects, lead agencies may refer to the California Agricultural prepared by the California Department of Conservation as an optional material farmland. In determining whether impacts to forest resources, including the agencies may refer to information compiled by the California Department inventory of forest land, including the Forest and Range Assessment Proforest carbon measurement methodology provided in Forest Protocols and the project:	al Land Evaluat nodel to use in imberland, are of Forestry an ject and the Fo	ion and Site As assessing imp significant env d Fire Protectionest Legacy A	sessment Mod pacts on agricu ironmental effe on regarding th assessment pro	lel (1997) Iture and ects, lead ne state's oject; and
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				Ø
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?				$\overline{\mathbf{V}}$
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?				
d) Result in the loss of forest land or conversion of forest land to non-forest use?				$\overline{\mathbf{A}}$
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?				Ø
III. AIR QUALITY Where available, the significance criteria establish pollution control district may be relied upon to make the following determine			llity manageme	ent or air
a) Conflict with or obstruct implementation of the applicable air quality plan?				$\overline{\mathbf{A}}$
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?				

Environmental Issues	Potentially Significant Impact	Less Than Significant Impact with Mitigation	Less Than Significant Impact	No Impact
c) Expose sensitive receptors to substantial pollutant concentrations?				
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?				Ø
IV. 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?			Ø	
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?			Ø	
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?				
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?				\square
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?				\square
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?				\square
V. CULTURAL RESOURCES Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in §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?				
VI. 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?			abla	

Environmental Issues	Potentially Significant Impact	Less Than Significant Impact with Mitigation	Less Than Significant Impact	No Impact
VII. 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.				Ø
ii) Strong seismic ground shaking?				
iii) Seismic-related ground failure, including liquefaction?				
iv) Landslides?				
b) Result in substantial soil erosion or the loss of topsoil?				
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?				
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?				
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of waste water?				Ø
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?				
VIII. 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?			☑	
IX. 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?			Ø	
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				Ø
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?			Ø	

Environmental Issues	Potentially Significant Impact	Less Than Significant Impact with Mitigation	Less Than Significant Impact	No Impact
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 of public use airport, would the project result in a safety hazard for people residing or working in the project area?				Z
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?			abla	
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?				Ø
X. HYDROLOGY AND WATER QUALITY Would the project:				
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?				
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?			Ø	
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;			$\overline{\square}$	
ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;			abla	
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?			$\overline{\square}$	
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?				\square
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?				
XI. LAND USE AND PLANNING Would the project:				
a) Physically divide an established community?				
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?			Ø	
XII. MINERAL RESOURCES Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				Ø
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?				Ø

Environmental Issues	Potentially Significant Impact	Less Than Significant Impact with Mitigation	Less Than Significant Impact	No Impact
XIII. 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?				Ø
XIV. POPULATION AND HOUSING Would the project:				
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?			7	
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?				\square
XVI. PUBLIC SERVICES Would the project result in substantial adver new or physically altered governmental facilities, need for new or physical which could cause significant environmental impacts, in order to maintain performance objectives for any of the public services:	lly altered gove	ernmental facili	ities, the const	ruction of
Fire protection?			Ø	
Police protection?				
Schools?			\square	
Parks?				
Other public facilities?			Ø	
XVI. RECREATION				
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?			V	
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?				
XVII. TRANSPORTATION Would the project:				
a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?			V	
b) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?				

Environmental Issues	Potentially Significant Impact	Less Than Significant Impact with Mitigation	Less Than Significant Impact	No Impact
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?			$\overline{\mathbf{A}}$	
XVIII. TRIBAL CULTURAL RESOURCES Would the project cause a su cultural resource, defined in Public Resources Code section 21074 as e geographically defined in terms of the size and scope of the landscape, sa Native American tribe, and that is:	ither a site, fe	ature, place, ci	ultural landsca	pe 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), or				
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 Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.			Ø	
XIX. UTILITIES AND SERVICE SYSTEMS Would the project:			-	
a) Would the proposed project require or result in the relocation or construction of new or expanded water, wastewater treatment facilities or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction of which could cause significant environmental effects?			Ø	
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?			\square	
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?			Ø	
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?			\square	
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?				

Environmental Issues	Potentially Significant Impact	Less Than Significant Impact with Mitigation	Less Than Significant Impact	No Impact
XX. 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?				Ø
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?				Ø
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?				Ø
XXI. MANDATORY FINDINGS OF SIGNIFICANCE				
a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?			Ø	
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?			Ø	
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?				

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SECTION 4.0 ENVIRONMENTAL EVALUATION

I. AESTHETICS

The analysis of Aesthetics is tiered from the 2018 EFMP EIR as addressed in Section 4.1, Aesthetics, of that document. Relevant elements of the proposed project related to aesthetics/visual change include the construction of a new four-story Technology and Health building that would encompass 253,866 gsf and consist of 152,668 asf. The project would also include a service drive; stationary equipment (e.g., HVAC); landscape and hardscape elements similar to the surrounding areas. The building would include new sources of light, similar to the existing buildings in the immediate area. The project proposes to remove approximately 20 trees (no street trees would be removed) and approximately 40 trees would be planted as part of the project. The proposed building would be located on a site at the center of campus instructional core and adjacent to the new Library Learning Resources building. Buildings 27A, 27B, 27C, and Swimming Pool (27P) would be demolished to provide a construction site for the new building. Following occupancy of the new Technology and Health building, Technology Center A (28A) and B (28B), and Health Careers Center A (67A) would then be inactivated. The TERC modular (18C) would also be inactivated and relocated offsite. In addition, spaces from within the Design Technology building (13) and Health Careers Center B (67B) would be vacated and inactivated.

The following MM was identified in the 2019 Mitigation Monitoring Program prepared for the certified 2018 EFMP EIR and is incorporated as part of the proposed project and assumed in the analysis presented in this section.

Prior to the issuance of grading permits, the Project Applicant shall provide evidence to the City that the contractor specifications require any temporary nighttime lighting installed during construction for security or any other purpose 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 Department during inspections of the construction site.

Thresholds of Significance

Mt. SAC 2016 CEQA Thresholds of Significance

To the extent the following thresholds of significance are applicable to the project, they shall be applied to determine the project's environmental impact.

Environmental Topic in the CEQA Checklist	Impact	Mt. San Antonio Community College District Threshold of Significance	Agencies and Regulations	CEQA Procedures
Aesthetics	New substantial light or glare impacts that adversely affect day or nighttime views; Light and glare impacts in sensitive biological resource areas or off-site residential areas.	Compliance with IES's Sports and Recreational Area Lighting (IES RP-6-15) standards for site-specific athletics facilities (excluding the Stadium, Flex and Practice Fields); New permanent lighting standards in Parking Lot M and Lot W immediately adjacent to sensitive biological habitat areas (i.e., Wildlife Sanctuary/Open Space Zone) shall not exceed 0.2 foot-candles at five (5) feet outside of the parking lot boundary.	California Department of Fish and Wildlife (CDFW)	If needed, case-by-case light and glare or massing studies, elevations or perspectives for potential aesthetic impacts; Special lighting plans for select major projects; Limit direct significant flare and prolonged exposure offsite.

Project Impact Analysis

Question A: Would the project have a substantial adverse effect on a scenic vista?

Discussion

The analysis of Impact 4.1-1 in Section 4.1, Aesthetics, of the 2018 EFMP EIR concluded that development under the 2018 EFMP would result in a less than significant impact to scenic vistas.

As mentioned in Section 4.1.1, Regulatory Setting, of the 2018 EFMP EIR, the recently adopted 2018 *City of Walnut General Plan* (WGP) does not designate any scenic highways, routes, or vistas; however, the City does designate gateways, corridors, landmarks, and nodes as shown in Figure LCD-11 of the WGP Land Use and Community Design Element (City of Walnut 2018b).

The improvements occurring toward the center of the campus, including the proposed project, would not be visible from the Major Gateway due to the curvature of the roadway and intervening topography and vegetation. As detailed in Section 4.10, Land Use and Planning, of the 2018 EFMP EIR, as part of the consistency zoning process (i.e., to make the zoning code consistent with the recently adopted General Plan), the City of Walnut is proposing the creation of a Schools and Public Institutional (SPI) zone, including development standards, permitted, conditionally permitted, and prohibited uses, and other regulations for the SPI zone. Proposed development would not exceed applicable height restrictions as set forth by these development standards, would be surrounded by existing development, and would not further obstruct any distant views of the hillsides from the Major Gateway. As stated previously, the proposed project would not be visible from the Major Gateway. Additionally, the proposed project would not be viewed from or affect a Historical/Cultural Landmark. Therefore, impacts related to scenic vistas would be less than significant which is consistent with the findings of the 2018 EFMP EIR.

Additional Project-Level Mitigation Measures

None required.

Level of Significance

The proposed project would not impact scenic vistas. The proposed project impacts were adequately addressed in the 2018 EFMP EIR.

Question B: Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

Discussion

As discussed on page 4.1-11 of the 2018 EFMP EIR, the campus is not located within or near a State scenic highway. The nearest Officially Designated and Eligible State Scenic Highways are approximately 20 miles north and over 2.5 miles south of the Mt. SAC campus, respectively (Caltrans 2011). Views of the proposed project site from the portion of SR-57, which is an Eligible State Scenic Highway, are completely obstructed by intervening topography. Therefore, implementation of proposed project would not damage scenic resources within a State scenic highway consistent with the findings of the 2018 EFMP EIR.

Additional Project-Level Mitigation Measures

None required.

Level of Significance

The proposed project would not substantially damage scenic resources within a scenic highway. The proposed project impacts were adequately addressed in the 2018 EFMP EIR.

Question C: Would the project 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?

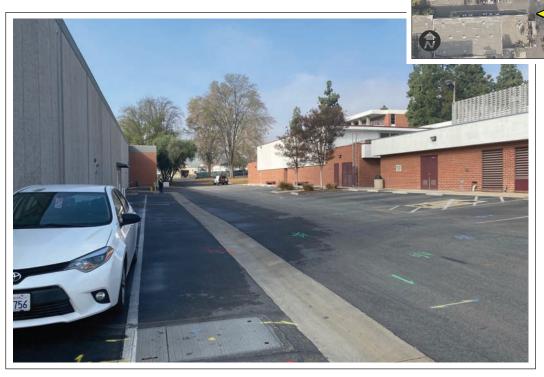
Discussion

The analysis of Impact 4.1-3 in the 2018 EFMP EIR concluded that development under the 2018 EFMP would result in a less than significant impact to the visual character or quality of the campus and the immediately surrounding area.

As stated previously, the proposed Technology and Health building would be located on a site at the center of campus instructional core and adjacent to the new Library Learning Resources building. Buildings 27A, 27B, 27C, and Swimming Pool (27P) would be demolished to provide a construction site for the new building. Following occupancy of the new Technology and Health building, Technology Center A (28A) and B (28B), and Health Careers Center A (67A) would then be inactivated. The TERC modular (18C) would also be inactivated and relocated offsite. In addition, spaces from within the Design Technology building (13) and Health Careers Center B (67B) would be vacated and inactivated. The existing visual character of the project site and immediate surrounding areas is depicted in the site photographs provided on Exhibits 5a through 5c and are described below.



View 1 - View of the Physical Education Center (27C) building from the southeast corner of the site looking northwest



View 2 - View of Pool Building (27B) from the existing service drive looking west

Site Photographs

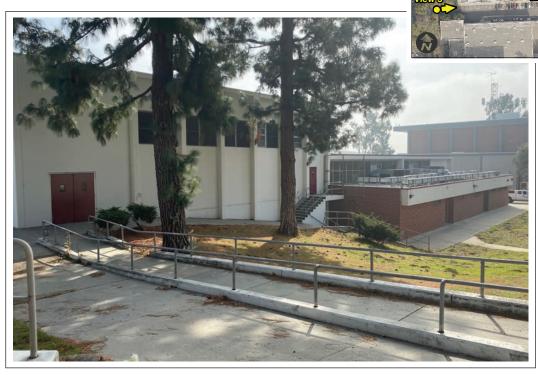
Exhibit 5a

Mt. San Antonio College Technology and Health Building





View 3 - View of the Exercise Science/Wellness (27A) building from the existing pedestrian corridor looking east



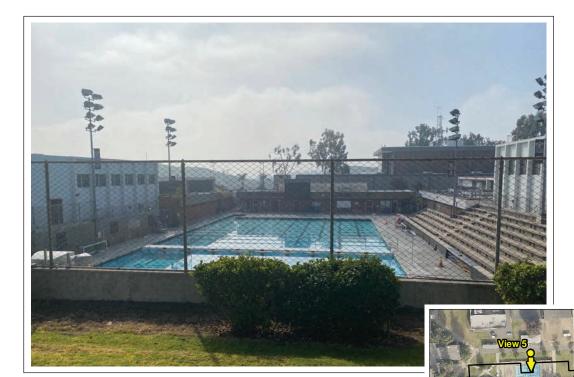
View 4 - View of the Exercise Science/Wellness (27A) building from the northwest corner of the site looking south

Site Photographs

Exhibit 5b

Mt. San Antonio College Technology and Health Building





View 5 - View of the Pool and Pool Building (27B) from the northern boundary of the site looking south.



View 6 - View of the Physical Education Center (27C) from the northeast corner of the site facing southwest.

Site Photographs

Exhibit 5c

Mt. San Antonio College Technology and Health Building



- View 1 on Exhibit 5a, Site Photographs, shows the view of the Physical Education Center (27C) building from the southeast corner of the site looking northwest. As shown in the photograph, this view is from Parking Lot D-3, which currently consists of a surface parking lot, landscaped medians, and overhead pole-mounted security lighting. The existing service drive can be seen on the left-hand side of the photograph, where a van is parked along the building. Distant viewsheds are obstructed by existing buildings and landscaping.
- View 2 on Exhibit 5a, Site Photographs, shows the view of Pool Building (27B) from
 the existing service drive looking west. The service drive is the dominant view with the
 Exercise Science/Wellness (27A) building visible in the background. The Technology
 Center (28A/B) can also be seen (with a car parked along the building) on the lefthand side of the photograph. Mature trees are visible throughout and along the
 perimeter of the project site.
- View 3 on Exhibit 5b, Site Photographs, illustrates the view of the Exercise Science/Wellness (27A) building from the existing pedestrian corridor looking east. A large grassy area with mature trees is the main focal point of the photograph. Polemounted security lighting can also be seen along the pedestrian corridor. The existing service drive and Technology Center (28A/B) building can be seen on the right-hand side of the photograph. Due to the change in topography and intervening development, background views are obstructed.
- View 4 on Exhibit 5b, Site Photographs, shows the view of the Exercise Science/Wellness (27A) building from the northwest corner of the site looking south. A pedestrian corridor which leads to the Planetarium (26C) building is the main focal point of the photograph. The existing Exercise Science/Wellness (27A) building is surrounded by mature trees and vegetation. The Technology Center (28A/B) building is visible in the background of the photograph.
- **View 5** on Exhibit 5c, Site Photographs, shows the view of the Pool and Pool Building (27B) from the northern boundary of the site looking south. The Pool is currently surrounded by a chain link fence and is bound by ornamental vegetation. Bleachers and overhead pole-mounted lighting is visible within the Pool area. The Physical Education Center (27C) and Exercise Science/Wellness (27A) buildings can also be seen in this photograph. Distant mountain views are visible in the background.
- View 6 on Exhibit 5c, Site Photographs, shows the view of the Physical Education Center (27C) from the northeast corner of the site facing southwest. Mature trees and vegetation are prominent in this viewshed. Pedestrian corridors surround the existing lawn area. Overhead pole-mounted lighting associated with the Pool is visible in the middle-ground of the photograph. The Exercise Science/Wellness (27A) building is also visible in this photograph. Due to the change in topography and intervening development, background views are obstructed.

Implementation of the proposed project would represent a change to the existing visual character of the project site through demolition of the existing Buildings 27A, 27B, 27C, and Swimming Pool (27P) and construction of a new of a new four-story Technology and Health building that would encompass 253,866 gsf. During demolition and construction, construction equipment and activities would be visible from the immediately surrounding uses. This visual change would be temporary in nature and typical of construction sites in an urban environment; therefore, temporary impacts during construction would be less than significant consistent with the findings of the 2018 EFMP EIR.

To address visual changes associated with implementation of the proposed project and to address the relationship between the proposed project and the existing land uses surrounding the project site, elevations are provided on Exhibits 6a and 6b, and Aerial Views: Northeast, Northwest, Southwest, and Southeast are provided on Exhibits 7a through 7d.

The proposed project would alter the existing visual character of the project area and views from surrounding vantage points; however, all new construction projects on campus, including the proposed project, exterior building materials, colors and signage would be reviewed by the Campus Master Plan Coordinating Team (CMPCT). The review process through CMPCT is conducted on a project-by-project basis. Additionally, the proposed project is assumed within the 2018 EFMP and has been designed consistent with the landscape guidelines included in the 2018 EFMP. Consistency review by the CMPCT and incorporation of the landscape guidelines included in the 2018 EFMP would ensure that the introduction of the proposed project, associated site improvements, and landscaping would be visually compatible with the existing campus buildings in the surrounding area. Therefore, the visual appearance of the proposed uses would be generally similar in nature to the existing uses adjacent to the project and would not be considered a degradation of the existing visual character or quality of the project site or its surroundings. The proposed project would result in a less than significant impact related to change in visual character or quality of the project sites and surrounding areas consistent with the findings of the 2018 EFMP EIR.

Additional Project-Level Mitigation Measures

None required.

Level of Significance

The proposed project would not substantially degrade the existing visual character or quality of the site and its surroundings. The proposed project impacts were adequately addressed in the 2018 EFMP EIR.

Question D: Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

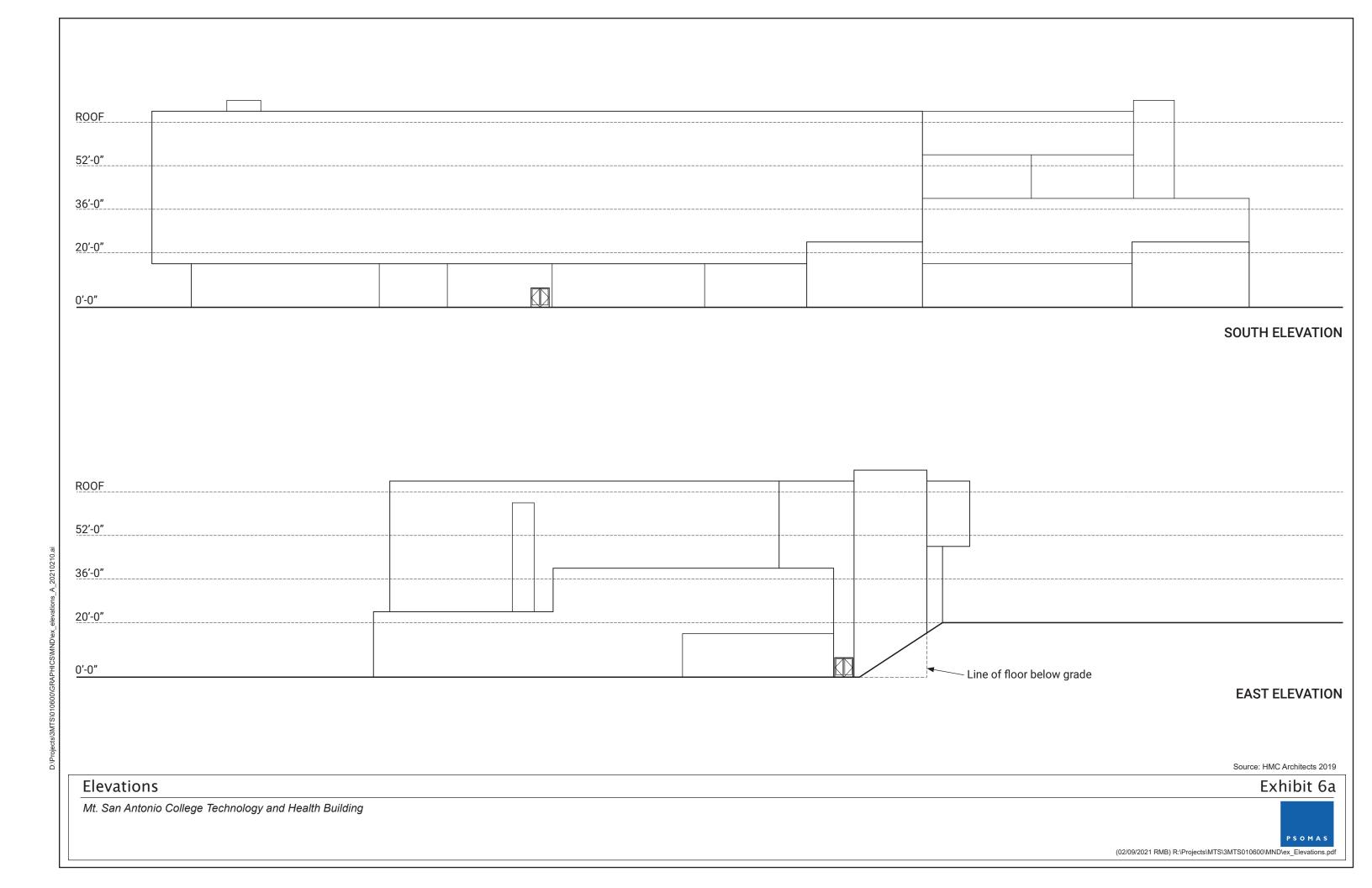
Discussion

The analysis of Impact 4.1-4 in the 2018 EFMP EIR concluded that implementation of MM AES-1 would ensure that light and glare impacts on adjacent land uses resulting from development under the 2018 EFMP would be reduced or avoided, resulting in a less than significant impact.

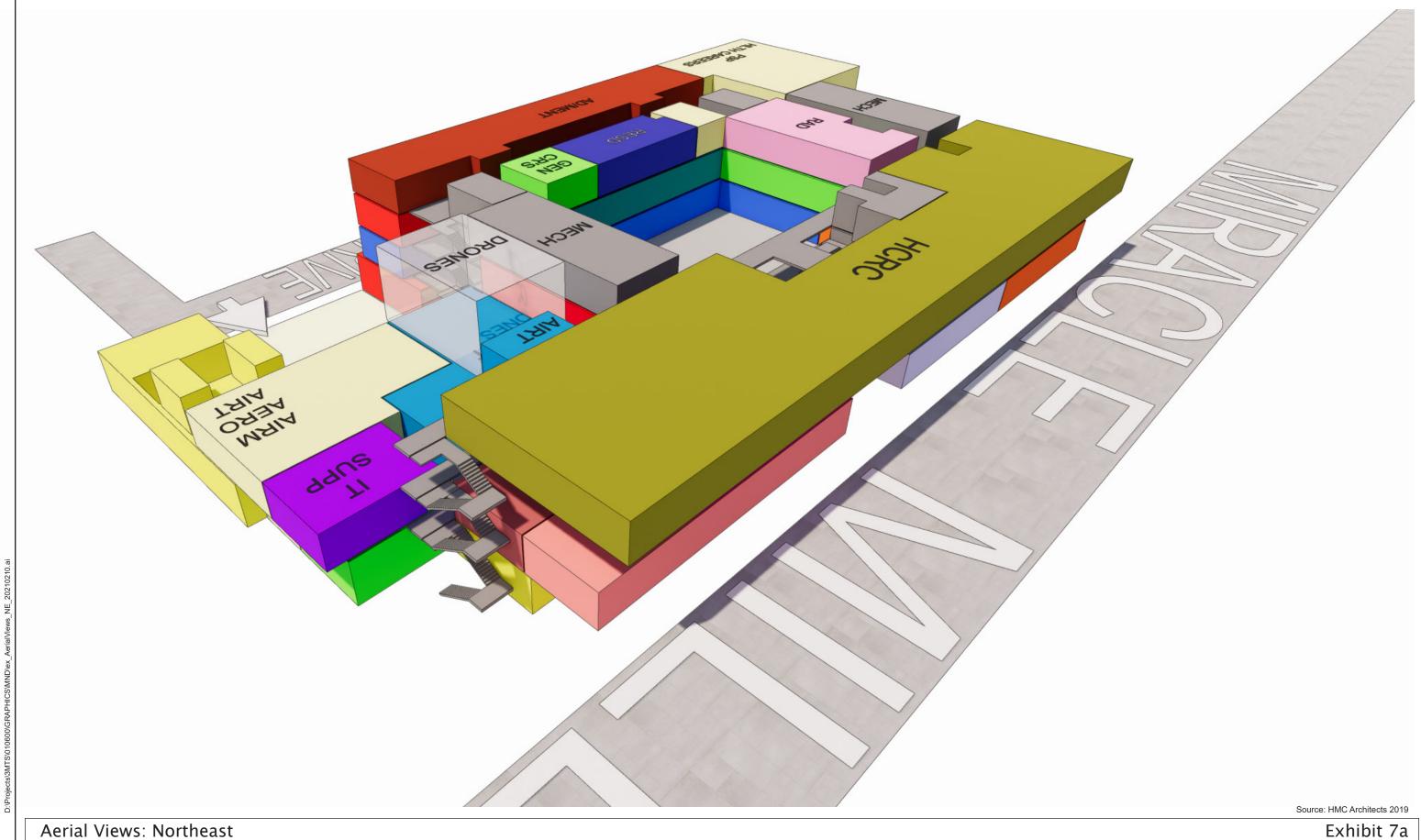
Light

Short-Term (Construction-Related) Impacts

Construction activities associated with development of the proposed project would not occur after 7:00 PM Mondays through Saturdays. No construction activities are permitted on Sundays and federal holidays except for emergencies. Temporary lighting installed in construction areas to provide security for construction equipment and construction materials may cause a significant impact in the form of a nuisance to Timberline residents to the north and south of the campus. MM AES-1 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-1, potential lighting impacts during construction



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Aerial Views: Northeast

Mt. San Antonio College Technology and Health Building



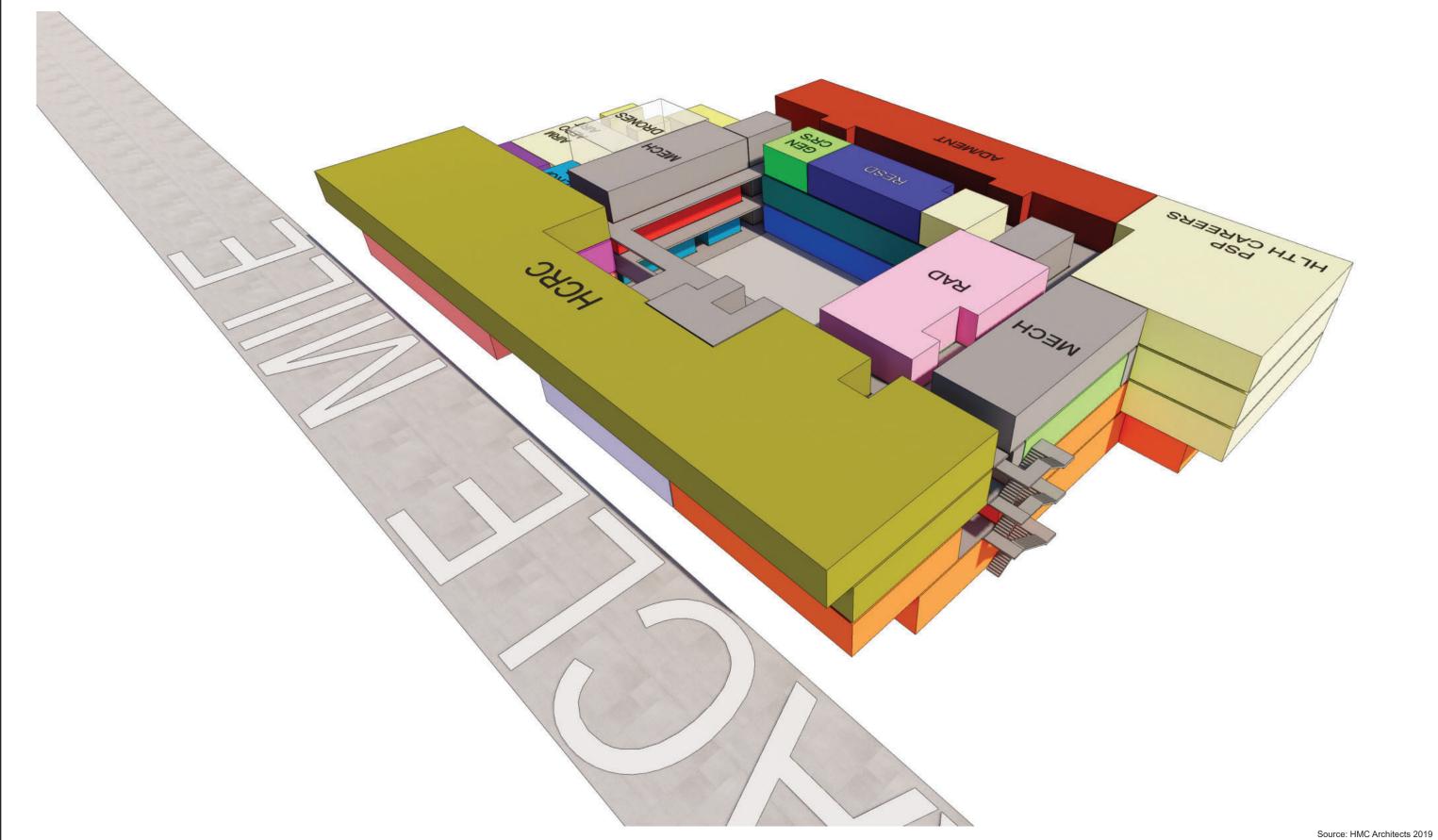
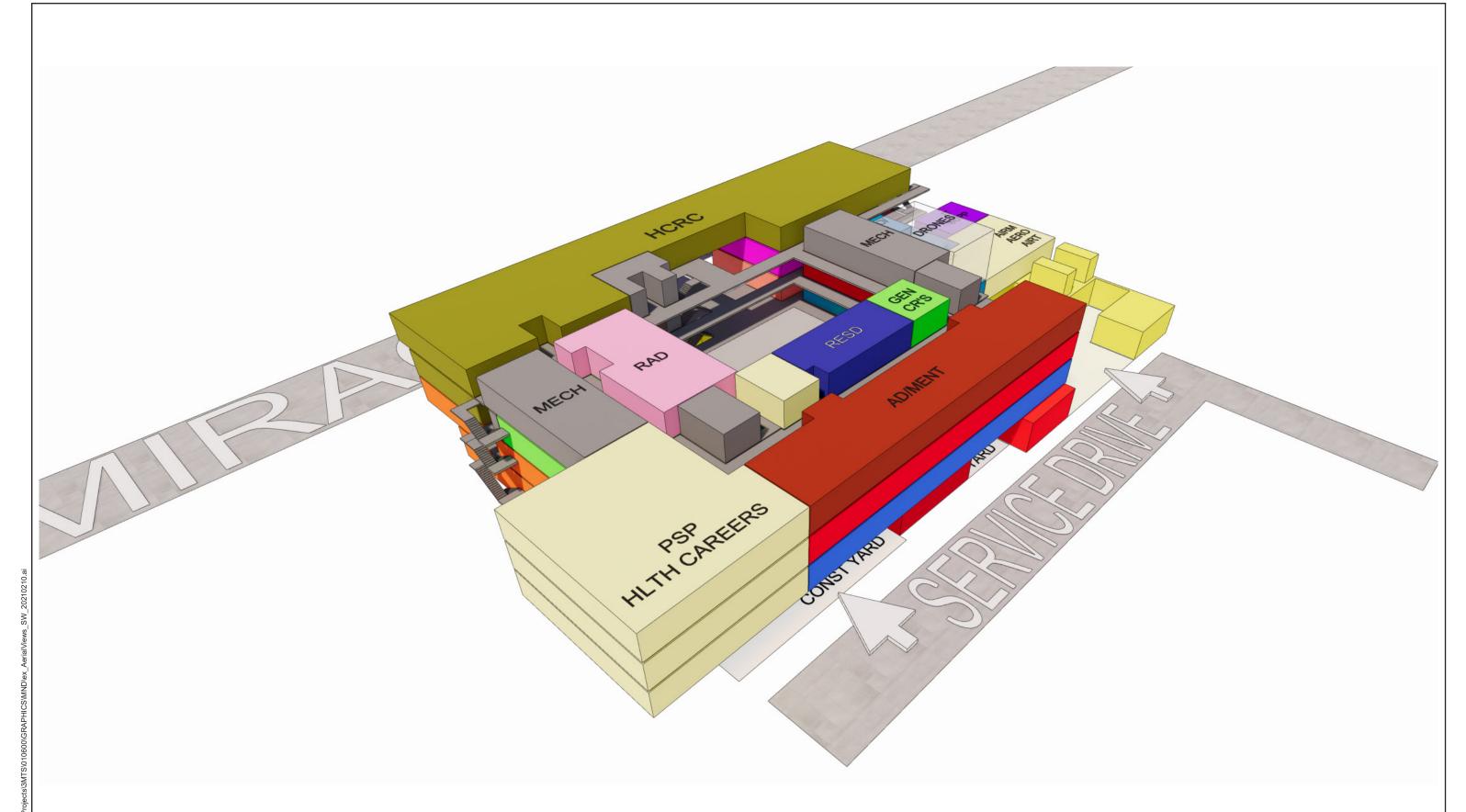


Exhibit 7b

Aerial Views: Northwest

Mt. San Antonio College Technology and Health Building





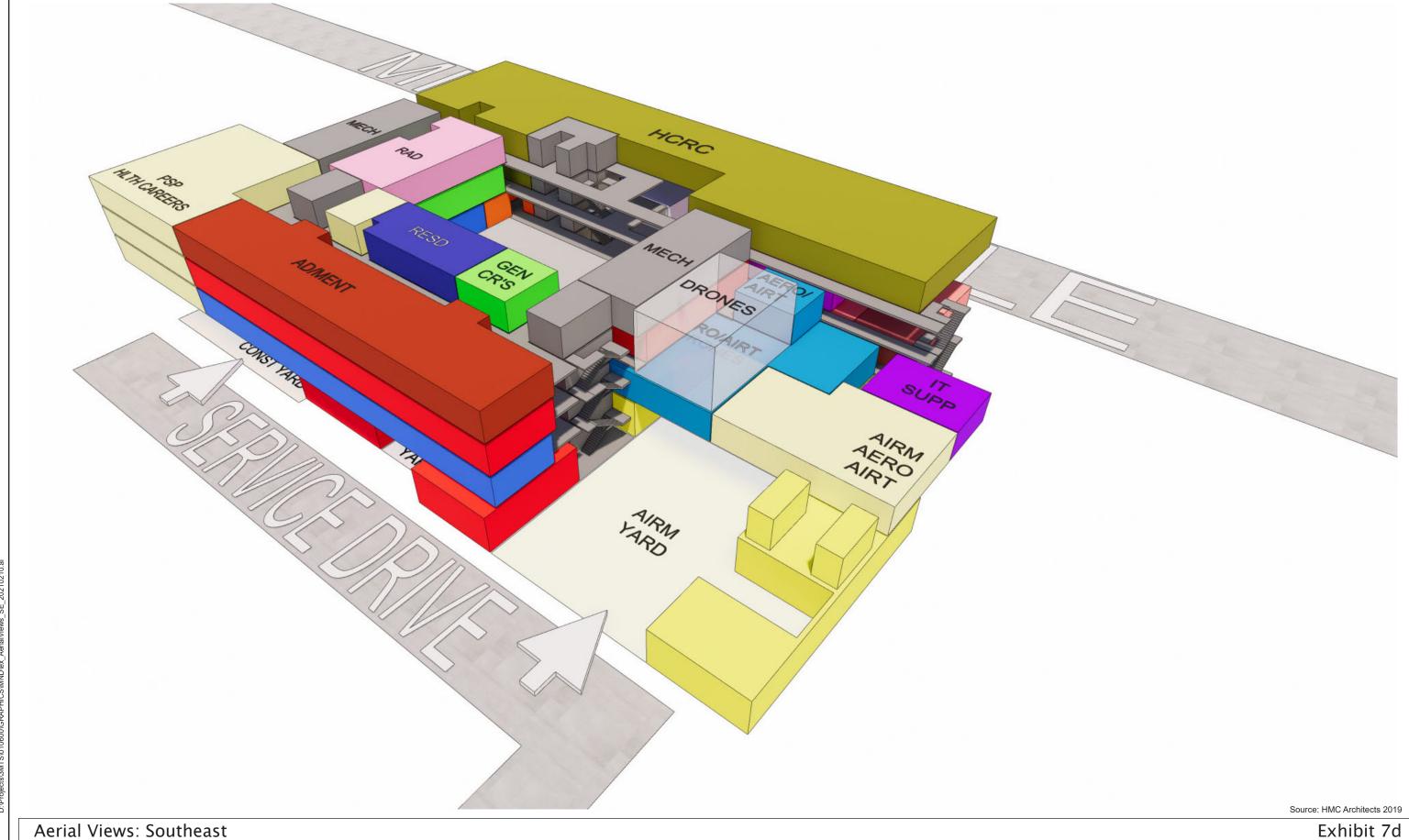
Source: HMC Architects 2019

Aerial Views: Southwest

Mt. San Antonio College Technology and Health Building



Exhibit 7c



Aerial Views: Southeast

Mt. San Antonio College Technology and Health Building



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would be reduced to a less than significant level, consistent with the findings of the 2018 EFMP EIR.

Long-Term (Operational) Impacts

Consistent with the Landscape Guidelines included in the Appendix to the 2018 EFMP, exterior site lighting would be provided as necessary to promote safety, security, sustainability, and a unified campus character through the design, installation, and maintenance of outdoor lighting. Lighting would be associated with new and reconfigured parking areas, roadways, pedestrian walkways, bikeways and bicycle storage facilities, buildings, and landscape features.

Lighting would be designed and installed so that all direct rays are confined to the site and adjacent properties are protected from glare. In general, lighting would be consistent with existing conditions on campus and would not create a new source of substantial light that would adversely affect nighttime views in the area. This impact would be less than significant consistent with the findings of the 2018 EFMP EIR.

Glare

Short-Term (Construction-Related) Impacts

Temporary lighting would likely be used within the construction areas (notably the construction staging areas) to provide security for construction equipment and construction materials. MM AES-1 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 nearby residential properties. These measures would also serve to reduce potential glare impacts to a less than significant level consistent with the findings of the 2018 EFMP EIR.

Long-Term (Operational) Impacts

Glare can occur during daytime and nighttime hours. Daylight glare is typically caused by light reflections from building materials such as reflective glass and polished surfaces, pavement, and vehicles. To address these potential issues under the 2018 EFMP, Mt. SAC developed design guidelines and building standards to provide direction regarding the physical design of building elements, including exterior building materials. These guidelines and standards require that building materials and finishes reduce glare and minimize reflectivity wherever possible; and, with installation of planned landscaping around the buildings, exterior building materials would not result in potentially significant glare impacts within the campus or surrounding areas, consistent with existing conditions. The potential for glare from buildings is less than significant, consistent with the findings of the 2018 EFMP EIR.

The proposed project would involve the installation of new lighting as necessary to provide sufficient lighting for proposed activities, security, and safety. The project site is currently subject to nighttime lighting from existing on-site and surrounding uses, including lighting standards associated with Parking Lot D-3, pedestrian lighting along adjacent walkways including the Miracle Mile to the north, security lighting for adjacent buildings, and street lights along Temple Avenue. All proposed lighting would be designed and installed so that all direct rays are confined to the site and adjacent properties are protected from glare. Additionally, vehicular circulation would follow existing patterns. Therefore, the potential increase in glare from campus safety and security lighting and vehicle headlights that would occur with implementation of the proposed project would not represent a new source of substantial glare; this impact would be less than significant which is consistent with the findings of the 2018 EFMP EIR.

Additional Project-Level Mitigation Measures

None required.

Level of Significance

There would be a less than significant impact associated with the creation of a new source of substantial light or glare affecting day or nighttime views in the area with the incorporation of the MM AES-1 noted above. The proposed project impacts were adequately addressed in the 2018 EFMP EIR.

II. AGRICULTURE AND FOREST LAND RESOURCES

Section 15128 of the State CEQA Guidelines states that "an EIR shall contain a statement briefly indicating the reasons that various possible significant effects of a project were determined not to be significant and were therefore not discussed in detail in the EIR". Through review of the 2018 EFMP site, Mt. SAC determined that detailed discussions for agricultural resources (designated farmland) and forestry resources were not required because the proposed project would result in effects found not to be significant due to the lack of resources on the 2018 EFMP site.

There were no applicable MMs adopted as part of the 2018 EFMP EIR related to agricultural resources.

Project Impact Analysis

- Question A: Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?
- Question B: Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract?
- Question C: Would the project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined in Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?
- Question D: Would the project result in the loss of forest land or conversion of forest land to non-forest use?
- Question E: Would the project involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?

Discussion

Based on current farmland mapping (2016) published by the California Department of Conservation, the Mt. SAC campus is unmapped in the Farmland Mapping and Monitoring Program. However, the college has divided the campus into different zones, including an approximate 110-acre Agricultural Zone (also referred to as The Farm) in the northeast portion of the campus; this zone reflects the agricultural-related educational focus for this area and is not reflective of its use as for agricultural production purposes. The project site is not located within

the 110-acre Agricultural Zone, nor is it used for agricultural use. According to the City of Walnut General Plan and West Valley Specific Plan Draft EIR, there are no zoning provisions related to agricultural or forestry resources, nor does the project site contain any agricultural, forest land, or timberland (City of Walnut 2018a). The project site is not considered to be farmland of significance or land in agricultural use and is not subject to any California Land Conservation Act (Williamson Act) contracts.

No forest land or timberland occurs on the campus. The project site is not defined as forest land according to Section 12220(g) of the *California Public Resources Code*, which defines forest land as "land that can support 10 percent native tree cover of any species, including hardwoods, under natural conditions, and that allows for management of one or more forest resources, including timber, aesthetics, fish and wildlife, biodiversity, water quality, recreation, and other public benefits", nor is it zoned for Timberland Production as defined by Section 51104(g) of the *California Government Code*.

Since the project site is in an urban area, project-related changes would not result in conversion of farm or forest land to non-agricultural or non-forest uses. No impacts related to agricultural and forest land resources would occur, and no mitigation is required.

Additional Project-Level Mitigation Measures

None required.

Level of Significance

There would be no impacts to Farmland, forest land, timberland, or Williamson Act Contracts.

III. AIR QUALITY

The analysis of air quality is tiered from the 2018 EFMP EIR and was addressed in Section 4.2, Air Quality, of that document. Relevant elements of the proposed project related to air quality include demolition of the existing Buildings 27A, 27B, 27C, and Swimming Pool (27P), and other hardscape and landscape areas; use of diesel-powered off-road construction equipment and on-road trucks used for material deliveries/debris hauling; construction of an approximately 253,866 gsf Technology and Health building with associated hardscape, landscape, and on-site improvements.

The following MM was identified in the 2019 Mitigation Monitoring Program prepared for the certified 2018 EFMP EIR and is incorporated as part of the proposed project and assumed in the analysis presented in this section.

MM AQ-1

All off-road diesel-powered construction equipment greater than 50 horsepower (hp) shall meet Tier 4 final off-road emissions standards. In addition, all construction equipment shall be outfitted with Best Available Control Technology (BACT) devices certified by the California Air Resources Board (CARB). Any emissions-control device used by the contractor shall achieve emissions reductions that are no less than what could be achieved by a Level 3 diesel emissions control strategy for a similarly sized engine as defined by CARB regulations.

Thresholds of Significance

South Coast Air Quality Management District Air Quality Significance Thresholds

The South Coast Air Quality Management District's (SCAQMD) Air Quality Analysis Handbook (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. Mt. SAC uses the current SCAQMD thresholds to determine whether a proposed project would have a significant impact. These SCAQMD thresholds are identified in Table 2, South Coast Air Quality Management District Air Quality Significance Thresholds.

TABLE 2 SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT AIR QUALITY SIGNIFICANCE THRESHOLDS

	Mass Daily Thresholds (lbs/day) ^a				
Pollutant	Construction ^b	Operation			
VOC	75	55			
NOx	100 55				
CO	550	550			
PM10	150	150			
PM2.5	55	55			
SOx	150	150			
Lead	3	3			
	Toxic Air Contaminants				
TACs (carcinogenic and noncarcinogenic)	Maximum Incremental Ca Cancer Burden > 0.5 excess canc Chronic & Acute Hazard Ind	er cases (in areas ≥ 1 in 1 million)			
Odor	Project creates an odor nuisance pursuant to SCAQMD Rule 402				
GHG	GHG 10,000 MT/yr CO ₂ eq for industrial facilities				
	Ambient Air Quality for Criteria Pollu	ıtants ^c			
NO_2	SCAQMD is in attainment; project is significant if it causes or contributes to an exceedance of the following attainment standards: 1-hour average ≥ 0.18 ppm Annual average ≥ 0.03 ppm (state) and 0.0534 ppm (federal)				
PM10	24-hour average ≥ 10.4 μg/m³ (construction) 24-hour average ≥ 2.5 μg/m³ (operation) Annual average ≥ 1.0 μg/m³				
PM2.5	24-hour average ≥ 10. 24-hour average ≥ 2				
СО	SCAQMD is in attainment; project is significant if it causes or contributes to an exceedance of the following attainment standards: 1-hour average ≥ 20.0 ppm (State) 8-hour average ≥ 9.0 ppm (State/federal)				
Sulfate	24-hour averaç	ge ≥ 1.0 µg/m³			
Lead 30-day average Rolling 3-month average	1.5 μg/m³ (State) 0.15 μg/m³ (federal)				

lbs/day: pounds per day; VOC: volatile organic compound; NOx: nitrogen oxides; CO: carbon monoxide; PM10: respirable particulate matter with a diameter of 10 microns or less; PM2.5: fine particulate matter with a diameter of 2.5 microns or less; SOx: sulfur oxides; TAC: toxic air contaminant; SCAQMD: South Coast Air Quality Management District; GHG: greenhouse gas; MT/yr CO₂eq: metric tons per year of carbon dioxide equivalent; NO₂: nitrogen dioxide; ppm: parts per million; μg/m³: micrograms per cubic meter.

- ^a Source: SCAQMD CEQA Handbook (SCAQMD 1993).
- ^b Construction thresholds apply to both the South Coast Air Basin and Coachella Valley (Salton Sea and Mojave Desert Air Basins).
- ^c Ambient air quality thresholds for criteria pollutants based on SCAQMD Rule 1303, Table A-2 unless otherwise stated. Source: South Coast AQMD 2019.

Mt. SAC 2016 CEQA Thresholds of Significance

To the extent the following thresholds of significance are applicable to the project, they shall be applied to determine the project's environmental impact.

Environmental Topic in the CEQA Checklist	Impact	Mt. San Antonio Community College District Threshold of Significance	Agencies and Regulations	CEQA Procedures
Air Quality	Localized and regional air quality	An air quality impact for multiple projects in a FMP occurs if SCAQMD daily construction and daily operational thresholds, due to the net trip increase from baseline to buildout (based on fall student enrollment headcount increases), are exceeded; Site-specific project thresholds for single projects are stated below. A significant construction or operational air quality impact occurs if the SCAQMD construction and operation thresholds (See Table 1 of Report 15-116A) are exceeded. LST analysis is required for construction emissions for all site-specific projects of 56,000 asf (80,000 gsf); when a new building is located less than 417 feet (130 meters) from a sensitive receptor offsite (See Table 3 of Report 15-116A). See Report 15-116A for evaluating Scenario 1A in support of the air quality thresholds; watering twice per day, painting with 80 g/l or less to lower VOCs for the site-specific Scenario 1A. The stated thresholds apply to project air quality impacts only (existing + project baseline); not to air quality cumulative impacts (existing + project + cumulative).	CARB; California Environmental Protection Agency (CalEPA); SCAQMD; SCAQMD Localized Significance Thresholds (LST) standards.	All CalEEMod analyses shall include watering the project site at least twice per day during grading (MM-3h). If project air quality impacts are not significant, each site-specific project remains subject to the applicable air quality Mitigation Measures included in the latest approved FMP MMP. Renovation projects are usually excluded from further CalEEMod analyses because the construction activities do not result in significant net emissions.

Project Impact Analysis

Question A: Would the project conflict with or obstruct implementation of the applicable air quality plan?

Discussion

The project site is located in the Los Angeles County portion of the South Coast Air Basin (SoCAB) and, for air quality regulation and permitting, is under the jurisdiction of the SCAQMD.

Air quality data for the project site is represented by the Pomona Monitoring Station located at 924 North Garey Avenue, Pomona, located approximately 5 miles east of the project site, and the Azusa Monitoring Station, located at 803 North Loren Avenue, Azusa, located approximately 7 miles northwest of the project site. Pollutants measured at the Pomona Monitoring Station include ozone (O₃) and nitrogen dioxide (NO₂). Data for fine particulate matter with a diameter of less than or equal to 2.5 microns (PM2.5) and respirable matter with a diameter of less than or equal to 10 microns (PM10), and carbon monoxide (CO) was not provided for this monitoring station from the CARB website (CARB 2021a). Therefore, data for PM2.5 and PM10 was taken from the Azusa Monitoring Station. The monitoring data is presented in Table 3, Air Quality Levels Measured at the Pomona and Azusa Monitoring Stations. Table 3 also presents federal and State air quality standards with the frequency that may be exceeded.

TABLE 3 AIR QUALITY LEVELS MEASURED AT THE POMONA AND AZUSA MONITORING STATIONS

Pollutant	California Standard	National Standard	Year	Maximum Level ^a	Days State Standard Exceeded	Days National Standard Exceeded
		Pomon	a Monitoring Sta	ation Data		
•			2017	0.147	18	NA
O₃ (1-hour)	0.09 ppm	None	2018	0.112	7	NA
(1-Hour)			2019	0.096	1	NA
_			2017	0.114	35	35
O₃ (8-hour)	0.070 ppm	0.070 ppm	2018	0.092	10	10
(o-nour)	(o-nour)		2019	0.083	12	12
			2017	0.147	18	NA
NO ₂ (1-Hour)	0.18 ppm	0.100 ppm	2018	0.112	7	NA
(1-Hour)	(1-11001)		2019	0.096	1	NA
00			2017	2	0	0
CO (1-hour)	20 ppm	20 ppm	2018	2.1	0	0
(1 Hour)			2019	1.7	0	0
00			2017	1.6	0	0
CO (8-hour)	9 ppm	9 ppm	2018	1.8	0	0
(o nodi)			2019	1.3	0	0
		Azusa	Monitoring Stat	ion Data		
DM40			2017	83	6	0
PM10 (24-hour)	50 μg/m ³	150 μg/m³	2018	78	10	0
(= 1 11001)			2019	82	4	0
PM2.5			2017	24.9	NA	0
PM2.5 (24-Hour)	None	35 μg/m ³	2018	30.2	NA	0
(=)			2019	28.3	NA	0

^{-:} Data Not Reported or insufficient data available to determine the value; O₃: ozone; ppm: parts per million; ; NO₂: nitrogen dioxide; PM10: respirable particulate matter with a diameter of 10 microns or less; μg/m³: micrograms per cubic meter; PM2.5: fine particulate matter with a diameter of 2.5 microns or less.

Source: CARB 2021a.

The U.S. Environmental Protection Agency (USEPA) defines seven "criteria" air pollutants: O₃, CO, NO₂, sulfur dioxide (SO₂), PM10, PM2.5, and lead. These pollutants are called criteria pollutants because the USEPA has established National Ambient Air Quality Standards (NAAQS) for the concentrations of these pollutants. 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 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 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 4, Attainment Status of Criteria Pollutants in the South

California maximum levels were used.

Coast Air Basin. As identified in Table 4, Los Angeles County is a nonattainment area for O₃, lead, PM10, and PM2.5.

TABLE 4 ATTAINMENT STATUS OF CRITERIA POLLUTANTS IN THE SOUTH COAST AIR BASIN

Pollutant	State	Federal
O ₃ (1-hour)	Nonattainment	No standard
O ₃ (8-hour)	Nonattailinent	Extreme Nonattainment
PM10	Nonattainment	Attainment/Maintenance
PM2.5	Nonattainment	Serious Nonattainment
CO	Attainment	Attainment/Maintenance
NO ₂	Attainment	Attainment/Maintenance
SO ₂	Attainment	Attainment
Lead	Attainment	Attainment/Nonattainment*
All others	Attainment/Unclassified	No standards

 O_3 : ozone; PM10: respirable particulate matter 10 microns or less in diameter; PM2.5: fine particulate matter 2.5 microns or less in diameter; CO: carbon monoxide; NO₂: nitrogen dioxide; SO₂: sulfur dioxide

Source: CARB 2021b.

O₃ is a secondary pollutant 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 O₃, CO, NO₂, SO₂, PM10, PM2.5, and lead are shown in Table 5, California and Federal Ambient Air Quality Standards.

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

TABLE 5 CALIFORNIA AND FEDERAL AMBIENT AIR QUALITY STANDARDS

		California	Federa	l Standards	
Pollutant	Averaging Time	Standards	Primary ^a	Secondary ^b	
	1-Hour	0.09 ppm (180 µg/m ³)	_	_	
O ₃	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	
FIVITO	AAM	20 μg/m³	_	Same as Primary	
PM2.5	24-Hour	_	35 μg/m³	Same as Primary	
PIVIZ.5	AAM	12 μg/m³	12.0 μg/m ³	15.0 μg/m ³	
	1-Hour	20 ppm (23 mg/m ³)	35 ppm (40 mg/m ³)		
со	8-Hour	9.0 ppm (10 mg/m ³)	9 ppm (10 mg/m ³)	_	
00	8-Hour (Lake Tahoe)	6 ppm (7 mg/m ³)	_		
NO ₂	AAM	0.030 ppm (57 μg/m ³)	0.053 ppm (100 μg/m ³)	Same as Primary	
INO2	1-Hour	0.18 ppm (339 µg/m ³)	0.100 ppm (188 μg/m ³)		
	24-Hour	0.04 ppm (105 µg/m ³)	_		
SO ₂	3 Hour	_		0.5 ppm (1,300 μg/m³)	
	1 Hour	0.25 ppm (655 µg/m ³)	0.075 ppm (196 μg/m ³)	_	
	30-day Avg.	1.5 μg/m ³	_	_	
Lead	Calendar Quarter	_	1.5 μg/m³	Como ao Drimary	
	Rolling 3-month Avg.	_	0.15 μg/m ³	Same as Primary	
Visibility Reducing Particles	8-Hour	Extinction coefficient of 0.23 per km – visibility ≥ 10 miles (0.07 per km – ≥30 miles for Lake Tahoe)	S 0 0 No Pederal 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; μ g/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

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.

Sensitive receptors include, but are not limited to, children, the elderly, persons with preexisting respiratory or cardiovascular illness, and athletes and others who engage in frequent exercise. The project site is located on the Mt. SAC campus. In accordance with the Mt. SAC 2016 CEQA Thresholds of Significance, sensitive receptors are limited to off campus areas. However, for the purposes of this project, the nearest receptors are considered to be persons located in on-campus buildings including the Physical Education Center (Building 27C), Pool Building (Building 27B), the Pool, the Exercise Science/Wellness Center (Building 27A), the Technology Center

^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

(Building 28A/B), the Health Careers Center (Building 67A), and the Welding and Heating/Air Conditioning Buildings (Building 69), none of which would be considered sensitive receptors. The nearest off-campus sensitive land uses are residential uses located approximately 1,400 feet to the northwest of the project site.

Air Quality Management Plan Consistency

On March 3, 2017, the SCAQMD adopted the 2016 Air Quality Management Plan (AQMP), which incorporates the latest scientific and technical information and planning assumptions, including the 2016–2040 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), updated emission inventory methodologies for various source categories, and Southern California Association of Government's (SCAG's) latest growth forecasts. The main purpose of an AQMP is to bring an area into compliance with the requirements of federal and State air quality standards. For a project to be consistent with the AQMP, the pollutants emitted from the project should not (1) exceed the SCAQMD CEQA air quality significance thresholds or (2) conflict with or exceed the assumptions in the AQMP.

As shown in the response to Question B, below, pollutant emissions from the proposed project would be less than the SCAQMD thresholds and would not result in a significant impact. The project provides additional building capacity for academic instruction consistent with the goals of the 2018 EFMP.

With respect to the second criterion for consistency with the AQMP, the 2016–2040 RTP/SCS was adopted on April 7, 2016, and includes the most updated available local demographic data for Los Angeles County, which includes the Mt. SAC Geographic Boundaries and Service Area and has been used for SCAG's 2016 Regional Growth Forecast projections included in the 2016–2040 RTP/SCS. Since the 2016–2040 RTP/SCS contains updated projections through the 2040 horizon year encompassing the Mt. SAC Geographic Boundaries and Service Area, both the 2018 EFMP population profile data (based on the SCAG 2012 RTP Regional Growth Forecast) and SCAG's 2016 Regional Growth Forecast projections are included. Because the 2018 EFMP is consistent with the goals of the AQMP, no conflict with the 2016 AQMP would occur with the proposed project.

Because the project would not exceed the SCAQMD CEQA air quality significance thresholds, and is consistent with the goals and assumptions of the AQMP, no conflict with the 2016 AQMP would occur with the proposed project consistent with the findings of the 2018 EFMP EIR.

Additional Project-Level Mitigation Measures

None required.

Level of Significance

The proposed project would not conflict with the 2016 AQMP. The proposed project impacts were adequately addressed in the 2018 EFMP EIR.

Question B: Would the project 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?

Discussion

A project may have a significant impact if project-related emissions exceed federal, State, or regional standards or thresholds or if project-related emissions substantially contribute to an existing or projected air quality violation. The SCAQMD has developed construction and operational thresholds to determine whether projects would potentially result in contributing toward a violation of ambient air quality standards.

A project with daily emission rates below the SCAQMD's established air quality significance thresholds (shown in Table 5) would have a less than significant effect on regional air quality. As discussed in the Air Quality and GHG Analysis provided in Appendix A, project emissions were estimated using the California Emissions Estimator Model (CalEEMod) version 2016.3.2 based on construction activities provided by Mt. SAC.

Construction Emissions

Air pollutant emissions would occur from construction equipment exhaust; fugitive dust from demolition and site grading; exhaust from trucks hauling demolition debris and materials and from vehicles trips by construction workers; and VOCs from painting and asphalt paving operations. Project construction rules such as SCAQMD Rule 403, Fugitive Dust which requires watering of active grading areas as well as MM AQ-1, Tier 4 off-road engines, have been incorporated into the proposed project and are included in the emissions calculations. Additional input details are included in Appendix A.

Regional Emissions Thresholds – Maximum Daily Regional Emissions

Table 6, Estimated Maximum Daily Regional 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 6, project construction mass daily emissions would be less than the SCAQMD's thresholds for all criteria air pollutants assuming implementation of SCAQMD Rule 403 and MM AQ-1, as discussed previously. As such, emissions from construction activities would not violate any air quality standard or substantially contribute to an existing or projected air quality violation. Although no significant impacts would result, MM AQ-1 is included as part of the 2018 EFMPEIR .

TABLE 6
ESTIMATED MAXIMUM DAILY REGIONAL CONSTRUCTION EMISSIONS

	Emissions (lbs/day)					
Year	VOC	NOx	co	SOx	PM10	PM2.5
2023	<1	2	15	<1	3	1
2024	1	7	17	<1	12	4
2025	1	7	17	<1	2	<1
2026	40	7	17	<1	2	<1
Maximum	40	7	17	<1	12	4
SCAQMD Thresholds (Table 5)	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: Psomas 2021.

In accordance with the Mt. SAC CEQA Thresholds of Significance, the project does not require preparation of analysis pursuant to the SCAQMD localized significance threshold (LST) methodology due to the distance of the project site from the nearest offsite sensitive receptor. However, for informational purposes, Table 7 provides a LST analysis consistent with SCAQMD's LST methodology. Consistent with the LST methodology guidelines, when quantifying mass emissions for localized analysis, only emissions that occur onsite are considered. For the CO and NO₂ LST exposure analysis, receptors who could be exposed for one hour or more are considered. For the PM10 and PM2.5 LST exposure analysis, receptors who could be exposed for 24 hours are considered. The nearest receptors that could be exposed for 1 hour are students, faculty, and staff members at the General Instruction Space (Building 28A/B) as well as the Humanities/Social Sciences Buildings (Buildings 26A-D). The nearest receptors who could be exposed for 24 hours (e.g., residences) are located approximately 1.400 feet to the northwest of the project site. However, to provide a conservative analysis of potential localized air pollutant exposure, the nearest on-campus uses were analyzed with the shortest distance specified within the LST guidance (SCAQMD 2008) of 25 meters is used for all pollutants. Table 7 shows the highest maximum localized daily construction emissions for NO_x, CO, PM10, and PM2.5 for onsite construction activities. These project related construction emissions would not exceed the localized significance thresholds developed by the SCAQMD to determine whether localized air quality impacts would occur at receptor locations proximate to the project site. Locations located further from these analyzed locations would result in less exposure to air pollutants. As such, no significant localized air quality impacts would occur from construction related air pollutant emissions attributable to the project consistent with the findings of the 2018 EFMP EIR.

TABLE 7
MAXIMUM LOCALIZED DAILY CONSTRUCTION EMISSIONS (LBS/DAY)

Year	NOx	СО	PM10	PM2.5
Maximum Daily Emissions	1	15	2	1
SCAQMD LST ^a	103	612	4	3
Exceeds Thresholds	No	No	No	No

lbs/day: pounds per day; NO_x: nitrogen oxides; CO: carbon monoxide; SCAQMD: South Coast Air Quality Management District; PM10: respirable particulate matter 10 microns or less in diameter; PM2.5: fine particulate matter 2.5 microns or less in diameter; LST: Localized Significance Threshold.

Operational Emissions

Operational emissions comprise area, energy, and mobile source emissions. Area and energy source emissions are based on CalEEMod assumptions for the specific land uses and size. Estimated peak daily operational emissions are shown in Table 8, Peak Daily Operational Emissions.

^a Thresholds for Source Receptor Area 10, Pomona/Walnut Valley for a 1-acre site, 25-meter receptor distance. Sources: SCAQMD 2006.

TABLE 8 PEAK DAILY OPERATIONAL EMISSIONS

	Emissions (lbs/day)					
Source	VOC	NOx	СО	SOx	PM10	PM2.5
Area sources	6	<1	<1	<1	<1	<1
Energy sources	0	2	2	<1	<1	<1
Mobile sources	4	4	52	<1	20	5
Total Operational Emissions*	10	6	53	<1	20	6
SCAQMD Significance Thresholds (Table 5)	55	55	550	150	150	55
Significant Impact?	No	No	No	No	No	No

lbs/day: pounds per day; VOC: volatile organic compounds; 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

Note: CalEEMod model data sheets are included Appendix A.

Source: Psomas 2021.

As shown in Table 8, the project's operational emissions would be less than the SCAQMD CEQA significance thresholds for all criteria pollutants. Therefore, the project's operational impact on regional emissions would be less than significant; and no mitigation is required consistent with the findings of the 2018 EFMP EIR.

Additional Project-Level Mitigation Measures

The proposed project would not result in any regional or localized air quality impacts and no additional project-specific mitigation measures are necessary. **Level of Significance**

The proposed project would not 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 with incorporation of MM AQ-1. The proposed project impacts were adequately addressed in the 2018 EFMP EIR.

Question C: Would the project expose sensitive receptors to substantial pollutant concentrations?

Discussion

A significant impact may occur when a project would generate pollutant concentrations to a degree that would significantly affect sensitive receptors, which include populations more susceptible to the effects of air pollution than the population at large. Exposure of sensitive receptors is addressed for the following situations: CO hotspots, criteria pollutants and toxic air contaminants (TACs), specifically diesel particulate matter [DPM]) from on-site construction, and exposure to off-site TAC emissions.

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

^{*} Some totals may not add due to rounding.

impacts are less than significant when measured near congested intersections, impacts would also be less than significant at more distant sensitive-receptors and other locations. An initial screening procedure is provided in the *Transportation Project-Level Carbon Monoxide Protocol* (CO Protocol), developed in 1997 for the California Department of Transportation to determine whether a project poses the potential to generate a CO hotspot. The key criterion is whether the project would worsen traffic congestion at signalized intersections operating at level of service (LOS) E or F. If a project poses a potential for a CO hotspot, a quantitative screening is required.

The 2018 EFMP was evaluated for the potential for CO hotspots and was found to not result in the generation of CO hotspots at intersections local to the campus and consequently result in less than significant impacts. Because the proposed Technology and Health Building comprises a small portion of the traffic analyzed in the 2018 EFMP, traffic generated by the proposed Technology and Health Building would likewise not generate CO hotspots and result in less than significant impacts consistent with the findings of the 2018 EFMP EIR.

Criteria Pollutants

Exposure of persons to NOx, CO, PM10, and PM2.5 emissions is discussed in response to Question B, above. There would be no significant impacts consistent with the findings of the 2018 EFMP EIR.

Toxic Air Contaminant Emissions

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 are higher if a fixed exposure occurs over a longer time period. According to the Office of Environmental Health Hazard Assessment, health risk assessments—which determine the exposure of sensitive receptors to TAC emissions—should be based on a 30-year exposure period; however, such assessments should be limited to the period/duration of activities associated with the project.

Relatively few pieces of off-road, heavy-duty diesel equipment would be operated; and the total construction period would be relatively short when compared to a 30-year exposure period. In addition, the nearest off-site residential development is located approximately 1,400 feet away. This large distance would allow for the relative low amounts of DPM generated by the project to disperse such that health risk exposure impact resulting from the project would be less than significant, and no mitigation is required consistent with the findings of the 2018 EFMP EIR.

The project's operations phase vehicle trips from students, staff and faculty were also evaluated in the Draft EIR for the 2018 EFMP for the potential for the emissions of toxic air contaminants. The DEIR found that the campus and vehicle trips do not involve emission sources that generate substantial levels of toxic air contaminants. Therefore, the impact would be less than significant, and no mitigation is required consistent with the findings of the 2018 EFMP EIR.

Additional Project-Level Mitigation Measures

None.

Level of Significance

The proposed project would not expose sensitive receptors to substantial pollutant concentrations. The proposed project impacts were adequately addressed in the 2018 EFMP EIR.

Question D: Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

Discussion

According to the SCAQMD's *CEQA Air Quality Handbook*, land uses associated with odor complaints typically include agricultural uses, wastewater treatment plants, food processing plants, chemical plants, composting, refineries, landfills, dairies, and fiberglass molding. The project does not include any uses identified by the SCAQMD as being associated with odors and, therefore, would not produce objectionable odors. As such, the project would have no significant impact in regard to objectionable odors and no mitigation is required consistent with the findings of the 2018 EFMP EIR.

Additional Project-Level Mitigation Measures

None.

Level of Significance

The proposed project would not result in emissions (such as those leading to odors) adversely affecting a substantial number of people. The proposed project impacts were adequately addressed in the 2018 EFMP EIR.

IV. BIOLOGICAL RESOURCES

The analysis of biological resources is tiered from the 2018 EFMP EIR and was addressed in Section 4.3, Biological Resources, of that document. Relevant elements of the proposed project related to biological resources include removal and/or retention of trees, ornamental landscape, and vegetation located within the project site. New trees are also proposed as part of the project.

The following MMs were identified in the 2019 Mitigation Monitoring Program prepared for the certified 2018 EFMP EIR and are incorporated as part of the proposed project and assumed in the analysis presented in this section.

MM BIO-1

Focused special status plant surveys will be conducted in habitat suitable for special status plant species in the survey area within two years prior to any ground disturbance at that location. Focused surveys shall be conducted by qualified Biologists and shall be conducted per the most current CNPS protocol and during the appropriate blooming period for each potentially occurring special status plant species. If special status plant species are not found within the proposed Project impact area, no further mitigation would be required. If special status plant species are detected within impact areas, an Avoidance and Mitigation Plan will be developed and implemented by Mt. SAC prior to project implementation. The Avoidance and Mitigation Plan would include on-site translocation of any bulbs of special status plant species within the impact area.

MM BIO-2

During grading and construction activities, should any southern California black walnut tree be impacted, including trimming greater than one-quarter of a tree's canopy, significant digging or trenching within the tree's dripline, or tree removal, the impacts shall be mitigated according to the Mt. SAC California Black Walnut Management Plan (Psomas 2019). At a minimum, the loss of any southern California black walnut trees resulting from the project shall be replaced in the designated on-site conservation area at a ratio of 1:1 for each tree with a trunk greater than 6 inches in diameter at breast height and at a higher replacement ratio for smaller trees.

MM BIO-3

No project-related activities shall result in the failure of a nest protected under the conditions set forth in the California Fish and Game Code. The nature of the project may require that work would be initiated during the breeding season for nesting birds (March 15–September 15) and nesting raptors (February 1–June 30). To avoid direct impacts on active nests, a pre-construction survey shall be conducted by a qualified Biologist for nesting birds and/or raptors within three days prior to clearing of any vegetation or any work near existing structures (i.e., within 50 feet for nesting birds and within 500 feet for nesting raptors). If the Biologist does not find any active nests within or immediately adjacent to the impact area, the vegetation clearing/construction work shall be allowed to proceed.

If the Biologist finds an active nest within or immediately adjacent to the construction area and determines that the nest may be impacted or breeding activities substantially disrupted, the Biologist shall delineate an appropriate buffer zone (at a minimum of 25 feet) around the nest depending on the sensitivity of the species and the nature of the construction activity. Any nest found during survey efforts shall be mapped on the construction plans. The active nest shall be protected until nesting activity has ended. To protect any nest site, the following restrictions to construction activities shall be required until nests are no longer active, as determined by a qualified Biologist: (1) clearing limits shall be

established within a buffer around any occupied nest (the buffer shall be 25–100 feet for nesting birds and 300–500 feet for nesting raptors), unless otherwise determined by a qualified Biologist; and (2) access and surveying shall be restricted within the buffer of any occupied nest, unless otherwise determined by a qualified Biologist. Encroachment into the buffer area around a known nest shall only be allowed if the Biologist determines that the proposed activity would not disturb the nest occupants. Construction can proceed when the qualified Biologist has determined that fledglings have left the nest or the nest has failed.

Thresholds of Significance

Mt. SAC 2016 CEQA Thresholds of Significance

To the extent the following thresholds of significance are applicable to the project, they shall be applied to determine the project's environmental impact.

Environmental Topic in the CEQA Checklist	Impact	Mt. San Antonio Community College District Threshold of Significance	Agencies and Regulations	CEQA Procedures
Biological Resources	Rare and endangered species	Non-compliance with a Conservation Plan in the latest FMP for a site- specific project is a significant impact;	U.S. Army Corps of Engineers (USACE) U.S. Fish and Wildlife Service	Approved permits from responsible agencies; Case studies if needed; Unless there are unusual
		Non-compliance with responsible agencies' biological resources regulations, permits or environmental standards for the latest FMP or for a site-specific project is a significant impact; (See Section 1: Aesthetics for light and glare thresholds for biological resources areas)	(USFWS) State Water Resources Control Board (SWRCB) California Department of Fish and Wildlife (CDFW)	circumstances, no additional mitigation for biological resources beyond that included in the latest approved FMP MMP.

Project Impact Analysis

Question A: Would the project 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?

Discussion

The analysis of Impact 4.3-1 in the 2018 EFMP EIR concluded that, with implementation of MMs BIO-1 through BIO-3, development under the 2018 EFMP would result in less than significant impacts on candidate, sensitive, and special-status plant and wildlife species.

The project site is located within a developed area and consists of the existing Buildings 27A, 27B, 27C, and Swimming Pool (27P). Biological resources found on the project site include

ornamental vegetation, including shrubs and mature trees. As discussed previously in Section 2.0, Project Description, the project proposes to remove approximately 20 trees (no street trees would be removed) and approximately 40 trees would be planted as part of the project. Due to the presence of trees on the project site, the site has the potential to be used by nesting birds and a limited potential to be used by nesting raptors protected by the Migratory Bird Treaty Act (MBTA). The MBTA makes it illegal to take, possess, buy, sell, purchase, or barter any migratory bird listed in the *Code of Federal Regulations* (Title 50, Part 10), including feathers, nests, eggs, or other avian products. This includes the active nests of all bird species, including common species. Impacts on an active bird/raptor nest would be considered potentially significant. Implementation of MM BIO-3 is identified to ensure compliance with the MBTA. With implementation of MMs BIO-1 through BIO-3, the proposed project would result in less than significant impacts on candidate, sensitive, and special-status plant and wildlife species consistent with the findings of the 2018 EFMP EIR.

Additional Project-Level Mitigation Measures

None required.

Level of Significance

The proposed project would not 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 (CDFW) or the U.S. Fish and Wildlife Service (USFWS). Impacts would be less significant with incorporation of the MMs BIO-1 through BIO-3 noted above. The proposed project impacts were adequately addressed in the 2018 EFMP EIR.

Question B: Would the project 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?

Discussion

The analysis of Impact 4.3-2 in the 2018 EFMP EIR concluded that, with implementation of MMs BIO-1 through BIO-3, development under the 2018 EFMP would result in less than significant impacts to riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the CDFW or USFWS.

The project site is composed entirely of developed and landscaped areas. No riparian habitat and no sensitive communities identified in local or regional plans or policies by the CDFW or by the USFWS are located on the project site. Additionally, the project site does not support any federally protected wetlands as defined by Section 404 of the Clean Water Act; therefore, the proposed project would not impact any marsh, vernal pool, or coastal habitats. With implementation of MMs BIO-1 through BIO-3, the proposed project would result in less than significant impacts on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the CDFW or USFWS consistent with the findings of the 2018 EFMP EIR.

Additional Project-Level Mitigation Measures

None required.

Level of Significance

The proposed project would not have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the CDFW or USFWS. Impacts would be less significant with the incorporation of the MMs BIO-1 through BIO-3 noted above. The proposed project impacts were adequately addressed in the 2018 EFMP EIR.

Question C: Would the project have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

Discussion

The analysis of Impact 4.3-3 in the 2018 EFMP EIR concluded that development under the 2018 EFMP would result in less than significant impacts to federally protected wetlands (including, but not limited to, marsh, vernal pool, and coastal) as defined by Section 404 of the Clean Water Act through direct removal, filling, hydrological interruption, or other means.

The project site is composed entirely of developed and landscaped areas. No riparian habitat and no sensitive communities identified in local or regional plans or policies by the CDFW or by the UUSFWS are located on the project site. Additionally, the project site does not support any federally protected wetlands as defined by Section 404 of the Clean Water Act; therefore, the proposed project would not impact any marsh, vernal pool, or coastal habitats. No impact would occur, and no mitigation would be required.

Level of Significance

The proposed project would not have a substantial effect on federally protected wetlands (including, but not limited to, marsh, vernal pool, and coastal) as defined by Section 404 of the Clean Water Act through direct removal, filling, hydrological interruption, or other means. The proposed project impacts were adequately addressed in the 2018 EFMP EIR.

Question D: Would the project 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?

Discussion

The analysis of Impact 4.3-4 in the 2018 EFMP EIR concluded that development under the 2018 EFMP would result in less than significant impacts to 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.

The project site exists as a developed area, is surrounded by existing buildings and roads, and lacks connectivity to natural open space areas. Therefore, the project site does not function as a wildlife movement corridor or a wildlife nursery site. No impact would occur, and no mitigation is required consistent with the findings of the 2018 EFMP EIR.

Additional Project-Level Mitigation Measures

None required.

Level of Significance

The proposed project would not 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. The proposed project impacts were adequately addressed in the 2018 EFMP EIR.

Question E: Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

Discussion

The analysis of Impact 4.3-5 in the 2018 EFMP EIR concluded that, with implementation of MM BIO-2, development under the 2018 EFMP would result in less than significant impacts to local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.

Although ornamental trees and vegetation would be removed with implementation of the proposed project, the project is not subject to any additional applicable policies or ordinances related to the protection of biological resources on the project site, including the Mt. San Antonio College California Black Walnut Management Plan (Psomas 2019). Therefore, no impacts would occur consistent with the findings of the 2018 EFMP EIR.

Additional Project-Level Mitigation Measures

None required.

Level of Significance

The proposed project would have less than significant impacts related to conflict with EMFP policies protecting biological resources with incorporation of the MM BIO-2 noted above. The proposed project impacts were adequately addressed in the 2018 EFMP EIR.

Question F: Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan?

Discussion

The analysis of Impact 4.3-6 in the 2018 EFMP EIR concluded that development under the 2018 EFMP would result in less than significant impacts to an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan.

The project site is not located within a USFWS or CDFW designated habitat conservation plan or natural community conservation plan. It should be noted that the campus is organized into multiple zones, including three which support biological resources and habitats: (1) the Land Use Management and Athletics Zone, (2) the Wildlife Sanctuary/Open Space Zone, and (3) the Agricultural/Sustainable Development Zone. The project site is not located in these designated

areas on campus and would not conflict with these campus plans. The proposed project would not conflict with any adopted habitat or conservation plans. No impact would occur consistent with the findings of the 2018 EFMP EIR.

Additional Project-Level Mitigation Measures

None required.

Level of Significance

The proposed project would have no impact related to conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan. The proposed project impacts were adequately addressed in the 2018 EFMP EIR.

V. CULTURAL RESOURCES

The analysis of cultural resources is tiered from the 2018 EFMP EIR and was addressed in Section 4.4, Cultural Resources, of that document. Additionally, information in this section is synthesized from cultural resource research conducted in support of the Mt. SAC 2015 Facilities Master Plan Update and Physical Education Projects Subsequent Program and Project Final Environmental Impact Report (2015 SEIR). The results of these research methods were used to assess the potential impacts for the proposed project.

The following MM was identified in the 2019 Mitigation Monitoring Program prepared for the certified 2018 EFMP EIR and is incorporated as part of the proposed project and assumed in the analysis presented in this section.

- **MM CULT-3** Prior to initiation of grading activities, the following requirements shall be incorporated on the cover sheet of the Grading Plan under the general heading "Conditions of Approval":
 - a. A qualified archaeologist that meets the Secretary of the Interior's Standards and Guidelines for Professional Qualifications in Archaeology (Archaeologist) shall be present at the pre-grade meeting to consult with the Contractor and other consultants prior to the start of earth-moving activities.
 - b. During construction grading and site preparation activities, the Contractor shall monitor all construction activities. In the event that cultural resources (i.e., prehistoric sites, historic sites, and/or isolated artifacts) are discovered, work shall be halted immediately within 50 feet of the discovery and the Contractor shall inform the Mt. SAC Project Manager. The Archaeologist shall analyze the significance of the discovery and recommend further appropriate measures to reduce further impacts on archaeological resources. Such measures may include avoidance, preservation in place, excavation, documentation, curation, data recovery, or other appropriate measures. Facilities Planning & Management shall monitor compliance.

Thresholds of Significance

Mt. SAC 2016 CEQA Thresholds of Significance

To the extent the following thresholds of significance are applicable to the project, they shall be applied to determine the project's environmental impact.

Environmental Topic in the CEQA Checklist	Impact	Mt. San Antonio Community College District Threshold of Significance	Agencies and Regulations	CEQA Procedures
Cultural Resources	Historic, archaeological and paleontological resources	Non-compliance with California law and/or an approved final cultural resources study's mitigation measures is a significant impact for a FMP or a site-specific project.	Office of Historic Places (OHP) Native American Heritage Commission (NAHC) California Assembly Bill No. 52 California Senate Bill No. 18	Case studies Unless there are special circumstances, no additional mitigation for cultural resources beyond that included in a case study or the latest approved FMP MMP.

Existing Conditions

<u>Archaeological Resources</u>

According to the SCCIC literature review and records search conducted for the 2018 EFMP EIR, 15 cultural resource studies have been undertaken within a half mile of the campus; none of these reports included the campus. The records search did not identify any archaeological resources, including prehistoric archaeological resources on the campus. Furthermore, the search failed to identify archaeological sites within a half mile of the campus.

Historical Resources

A historic resource evaluation of the campus was conducted by Timothy Gregory, The Building Biographer, in June 2002 (Gregory 2003) in support of the EIR for the 2002 Mt. SAC Master Plan. This report concluded that many of the buildings at Mt. SAC are utilitarian in nature and are of a vernacular or non-descript design. Newer buildings were determined to be aesthetically pleasing with attention to architectural style. Older buildings dating back to the earliest days of the college and to earlier institutional uses were determined to have varying degrees of historical and/or architectural interest. Of the 57 buildings addressed, 21 buildings were at least 45 years old; of these, 15 were identified to be demolished as part of the implementation of the 2002 Master Plan. None of the buildings on campus were determined eligible for listing in the National Register of Historic Places.

With respect to the 21 buildings 45 years or older: (1) seven buildings were considered sufficiently significant to merit a provisional 5S3 National Register evaluation code (not eligible for separate listing or designation under an existing local ordinance, but eligible for special consideration in local planning), but were not eligible for listing in the California Register of Historic Places (CRHR); (1) one building had no particular architectural or historic interest and was given a 6Z rating (ineligible for listing of any kind); and (3) 13 buildings were given a 5S1 National Register

evaluation code (not eligible for the National Register but eligible for listing or designation under a local ordinance). The 5S1 buildings were determined to be potentially eligible for listing on the California Register.

In 2012, ASM Affiliates analyzed five additional buildings to be demolished as part of the 2012 Mt. SAC Facilities Master Plan (FMP) for eligibility for listing in the CRHR and as a historical resource under CEQA. Four of these buildings were recommended as contributors to a potential historic district, the Mt. SAC Historic District, discussed below.

As part of the 2015 SEIR, ASM Affiliates evaluated whether the 2015 Facilities Master Plan Update (2015 FMPU) and Physical Education Projects would impact any historic resources within the campus. As part of this effort, ASM Affiliates surveyed 22 potentially new contributing resources to the Mt. SAC Historic District. Twenty of those were recommended as eligible contributing resources (3CD) to Mt. SAC Historic District. Ten buildings previously identified as eligible contributing resources were found to have been demolished; one additional resource was found to have lost integrity and was recommended as a non-contributing resource. The Mt. SAC Historic District was determined to retain approximately 75 percent of its eligible contributing resources and continued to be eligible for the CRHR. ASM Affiliates also identified two individually eligible properties.

Mt. SAC Historic District

The Mt. SAC Historic District is recommended as eligible for the CRHR under Criterion 1 at the local level, under the theme of education, for its association with the development of the City of Walnut, California, and its surrounding communities. The college serves numerous communities and thousands of residents and is today the largest community college in California in terms of the number of students served. Mt. SAC was one of the first junior colleges in California and the San Gabriel Valley to be established as independent from a high school campus. The period of significance for the district is 1946–1972, reflecting the date the present site of the college became its permanent residence, its early years of development and growth, and ending with the construction of the last major campus facility (the Marie T. Mills Aquatic Facility) to be built until the 1990s, before the growth of the college plateaued (only two buildings being constructed between 1972 and 1990). The college was built to accommodate the increased need for an independent community college (one not located on a high school campus) in the area after World War II.

Project Impact Analysis

Question A: Would the project cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?

Discussion

The project intends to demolish Buildings 27A, 27B, 27C, and Swimming Pool (27P) to provide a construction site for the new building. Following occupancy of the new Technology and Health building, Technology Center A (28A) and B (28B), Health Careers Center A (67A) would then inactivated. The TERC modular (18C) would also be inactivated and relocated offsite. In addition, spaces from within the Design Technology building (13) and Health Careers Center B (67B) would be vacated and inactivated. These buildings were evaluated for significance by ASM Affiliates, Inc. (ASM) in 2018.

Buildings 27A, B, C, and the Pool (27P), also referred to as the Athletic Facilities, were documented in 2012 as potential contributors to a historic district. These buildings are considered

as a significant historic resource in accordance with guidelines from the California State Historic Preservation Office. The demolition of the buildings poses the potential to cause an adverse direct impact because the project results in the complete loss of contributing resources to a historic district. As such, the project would result in a substantial adverse change in the significance of a historical resource pursuant to CEQA Section 21084.1 and a significant direct impact pursuant to CEQA Section 15064.5. These impacts were assessed as unavoidable in the 2015 SEIR and do not represent a new significant impact for this project.

The Technology Center, including Buildings 28A and 28B, and the Health Careers Center consisting of Building 67A would not be demolished; these buildings would be rendered inactive. In addition to these buildings, spaces from within the Design Technology building (13) and Health Careers Center B (67B) would be vacated and inactivated. The current Technology Center is considered a potential contributor to a historic district and is also considered individually eligible for listing under Criterion 3. The Health Careers Center was excluded from ASM's 2018 historic survey, but it is not considered a contributor to the historic district. The Design Technology building is a newer addition and is therefore not considered a contributor to the historic district. The project would not negatively impact these buildings because the project does not intend to demolish them.

The TERC modular (18C) would also be inactivated and relocated offsite. The TERC modular building is not considered a contributing building to the historic district, nor has it been determined that it is eligible for individually listing. Furthermore, the project does not intend to demolish the building, but rather relocate it to a new location. As such, the project would not impact the TERC modular building.

Additional Project-Level Mitigation Measures

None required.

Level of Significance

The project would have less than significant impact related to the potential to cause a substantial adverse change to a significant historical resource as defined in Section 15064.5 of the State CEQA Guidelines. The project's impacts were adequately addressed in the 2015 SEIR and 2018 EFMP EIR.

Question B: Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?

Discussion

The records search did not identify any archaeological resources (e.g. village sites, shell or trash middens) on the campus. Furthermore, the search failed to identify archaeological resources within a half mile of the campus. As such, there are no known archaeological resources within the proposed project site or within ½ mile of the project site.

It is likely that Native Americans (Tongva) traversed through the project site in prehistoric times. However, the project site and surrounding area has been developed through significant landscaping and hardscaping. Nevertheless, there is always the potential for intact archaeological resources buried beneath the surface. Therefore, there is always the possibility intact archaeological resources may be damaged by earthmoving activities during project construction, which would represent a significant impact. To avoid impacts to archaeological resources, MM CUL-1 requires that a qualified Archaeologist (a crossed trained Archaeologist/Paleontologist

is acceptable) be retained for on-call services in the event of the discovery of cultural resources during trenching activities. Any discovered resources would be evaluated for significance by the monitor and a mitigation plan would be developed. Impacts on archaeological resources would be less than significant with implementation of MM CULT-3 consistent with the findings of the 2018 EFMP EIR.

Additional Project-Level Mitigation Measures

None required.

Level of Significance

The project would have less than significant impact related to a substantial adverse changed in the significance of an archaeological resource pursuant to Section 15064.5 of the State CEQA Guidelines with the incorporation of MM CULT-3 noted above. The proposed project impacts were adequately addressed in the 2018 EFMP EIR.

Question C: Would the project disturb any human remains, including those interred outside of formal cemeteries?

Discussion

There are no known human remains within the project site. In the unlikely event of an unanticipated encounter with human remains, all work is required to halt in the immediate vicinity of the discovery and the County Coroner must be notified (*California Public Resources Code* §5097.98). The Coroner is required to determine whether the remains are of forensic interest. If the Coroner, with the aid of an Archaeologist, determines that the remains are prehistoric, s/he is required to contact the Native American Heritage Commission (NAHC). The NAHC is responsible for designating the most likely descendant (MLD), who is responsible for the ultimate disposition of the remains, as required by Section 7050.5 of the *California Health and Safety Code*. The MLD is required to make his/her recommendation within 48 hours of being granted access to the site. The MLD's recommendation is required to be followed if feasible, and may include scientific removal and non-destructive analysis of the human remains and any items associated with Native American burials (*California Health and Safety Code* §7050.5). If the landowner rejects the MLD's recommendations, the landowner is required to rebury the remains with appropriate dignity on the property in a location that will not be subject to further subsurface disturbance (*California Public Resources Code* §5097.98).

There would be a less than significant impact, and no mitigation is required.

Additional Project-Level Mitigation Measures

None required.

Level of Significance

The proposed project would have a less than significant potential to disturb any human remains, including those interred outside of formal cemeteries. The proposed project impacts were adequately addressed in the 2018 EFMP EIR.

VI. ENERGY

The analysis of energy is tiered from the 2018 EFMP EIR and was addressed in Section 4.5, Energy, of that document. Relevant elements of the proposed project related to energy include demolition of the existing Buildings 27A, 27B, 27C, and Swimming Pool (27P), and other hardscape and landscape areas; use of diesel-powered off-road construction equipment and on-road trucks used for material deliveries/debris hauling; construction of an approximately 253,866 gsf Technology and Health building with associated hardscape, landscape, and on-site improvements.

The following MM was identified in the 2019 Mitigation Monitoring Program prepared for the certified 2018 EFMP EIR and is incorporated as part of the proposed project and assumed in the analysis presented in this section.

MM AQ-1

All off-road diesel-powered construction equipment greater than 50 horsepower (hp) shall meet Tier 4 final off-road emissions standards. In addition, all construction equipment shall be outfitted with Best Available Control Technology (BACT) devices certified by the California Air Resources Board (CARB). Any emissions-control device used by the contractor shall achieve emissions reductions that are no less than what could be achieved by a Level 3 diesel emissions control strategy for a similarly sized engine as defined by CARB regulations.

Thresholds of Significance

Mt. SAC 2016 CEQA Thresholds of Significance

To the extent the following thresholds of significance are applicable to the 2018 EFMP, they shall be applied to determine the proposed Project's environmental impact.

Environmental Topic in the CEQA Checklist	Impact	Mt. San Antonio Community College District Threshold of Significance	Agencies and Regulations	CEQA Procedures
CEQA Checklist Item V (a - c);	Wasteful, inefficient, or unnecessary consumption of energy; Renewable energy or energy efficiency measures	Non-compliance with an Energy Conservation Plan for site-specific projects is a significant impact;	CEC	
CEC: California Ene	rgy Commission		•	

Project Impact Analysis

Question A: Would the project result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

Discussion

Construction

Construction energy use could be considered wasteful, inefficient, or unnecessary if construction equipment is not well maintained such that its energy efficiency is substantially lower than newer equipment; if equipment idles even when not in use; if construction trips utilize longer routes than

necessary; or if excess electricity and water¹ are used during construction activities. Pursuant to the *California Code of Regulations* (specifically, Title 13, Section 2485), all diesel-fueled commercial motor vehicles must not idle for more than five consecutive minutes at any location. Mandatory compliance should reduce fuel use by construction vehicles. Based on MM AQ-1, construction equipment would utilize equipment that complies with Tier 4 final engine standards. Tier 4 final engines are the newest, lowest emitting off-road engines. Fuel efficiency for these engines would not be considered inefficient. Fuel energy consumed during construction would also be temporary in nature, and 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 region or state. Short-term energy usage for construction of the proposed project and other 2018 EFMP projects would result in long-term energy savings from renovated and newly constructed buildings that are compliant with the current Title 24 California Building Code and goals/strategies adopted by Mt. SAC.

The construction of the proposed project would require the use of construction equipment for grading and building activities; all off-road construction equipment is assumed to use diesel fuel. Transportation energy use depends on the type and number of trips, vehicle miles traveled, fuel efficiency of vehicles, and travel mode. During construction, transportation energy would be used for the transport and use of construction equipment, from delivery vehicles and haul trucks, and from construction employee vehicles that would use gasoline and/or diesel fuel. The use of these energy resources fluctuates according to the phase of construction and would be temporary. Table 9 quantifies anticipated energy use during construction activities.

TABLE 9
CONSTRUCTION-RELATED ENERGY USE

Source	Gasoline Fuel (gallons)	Diesel Fuel (gallons)
Off-road Construction Equipment	39,845	15,413
Worker commute	42,949	202
Vendors	9,061	151
On-road haul	9	7,578
Totals	91,864	23,346

Construction related to the proposed project would result in less than significant impacts to energy with implementation of AQ-1, consistent with the findings of the 2018 EFMP EIR.

Operations

The operations phase of the proposed project would result in energy consumption related to electricity, natural gas, water, solid waste, and transportation. In addition, as detailed previously, potential energy impacts of proposed project are evaluated with particular emphasis on avoiding or reducing inefficient, wasteful, and unnecessary consumption of energy. 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.

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Indirect energy use for the extraction, treatment, and conveyance of water.

Long-term energy use would be considered inefficient if alternative energy sources are not used when they are feasible/available and if the new buildings are not compliant with building code requirements for energy efficiency. The regulations, plans, and policies adopted for the purpose of maximizing energy efficiency that are directly applicable to the proposed project include (1) California's Title 24 Energy Efficiency Standards for Residential and Nonresidential Buildings, (2) the CALGreen Code, and (3) Title 31 of the County Code (the Los Angeles County Green Building Standards Code). The proposed project would be developed in compliance with these regulations, plans, and policies.

The California Energy Commission states that the 2019 energy efficiency standards are projected to result in a 30 percent improvement in energy efficiency over the 2016 standards. Based on the CalEEMod included as Appendix B, the electricity usage from the 2018 EFMP would be approximately 2 million kilowatt hours per year. Natural gas consumption for the 2018 EFMP would be approximately 6.9 million kilo-British Thermal Units per year (kBTU/year). CalEEMod has not been updated to the 2019 energy efficiency standards. Actual energy consumption is anticipated to be less. Because the proposed project would be constructed to meet forecasted educational demands as well as comply with the latest energy efficiency standards, energy use associated with the proposed project would not be considered inefficient, wasteful, or unnecessary.

Transportation energy use would be associated with daily trips associated with the proposed project, (including internal trips to points within the proposed project site) and local trips (including vehicular trips to local area destinations). Based on data obtained from CalEEMod (refer to Appendix B), the proposed project would generate approximately 7.2 million annual vehicle miles traveled (VMT). The gasoline and diesel consumption rates were calculated using estimated miles per gallon factors based on Los Angeles County data from CARB's Emissions Factors model that provides average vehicle emissions rates for California. It is estimated that the proposed project-generated traffic would use 2,989 gallons of diesel fuel and 39,845 gallons of gasoline per year. The proposed project would continue to provide higher education options and would meet the forecasted educational needs of the region. Transportation fuels consumption would steadily decline with increases to the Corporate Average Fuel Efficiency Standards as well as the phase-out of older, more fuel consumptive vehicles.

In addition, Mt. SAC's significance threshold is based on whether proposed Projects would comply with the 2018 Climate Action Plan.

Relative to Criterion 1—decreasing overall per capita energy consumption—development of the 2018 EFMP projects is required to comply with the latest Title 24 Building Code Requirements. These Building Code Requirements are reviewed triennially and are progressively more stringent relative to energy consumption. Some of the buildings that will be replaced or renovated were constructed in the 1950s and 1960s. Replacement of these older, energy-inefficient buildings with new buildings will result in substantial increases in energy efficiency. This is evident in recent energy use intensity shown in Table 10, from Mt. SAC's 2018 Climate Action Plan (CAP). The reduction in energy use intensity typically consisted of upgrades to higher efficiency equipment and improved building automation, lighting controls, and sequences of operations.

TABLE 10 ANNUAL ENERGY USE 2014-2016 PURCHASED ELECTRICITY AND NATURAL GAS

Year	Annual Energy Use Intensity (kBTU/s	
2014	189	
2015	181	
2016	171	
kBTU/sf: kilo-British Thermal Units per square foot		
Source: Mt. SAC 2018.		

The development of the new project building would result in further reductions in per capita energy consumption. The 2019 Building Standards are expected to reduce energy consumption for nonresidential buildings by 30 percent, and Mt. SAC's 2018 CAP seeks to go beyond this reduction by 15 percent for new construction projects and 10 percent for renovation projects. As such, the 2018 EFMP will be consistent with Criterion 1 and result in a decrease in the overall per capita energy consumption.

In regards to Criterion 2—decreasing reliance on fossil fuels such as coal, natural gas, and oil and Criterion 3—increasing reliance on renewable energy sources—development of the proposed project and other 2018 EFMP projects is guided by 2018 CAP strategies, which include transportation emission reduction strategies (increase access to alternative modes of transportation, such as construction of the Transit Center, accommodations for electric vehicles. incentives for carpools, educational materials, and bicycle and pedestrian facilities). Increases in energy efficiency for buildings and water and solid waste conservation efforts would result in reductions in energy consumption. Additionally, Mt. SAC is exploring options to add 4 to 6.5 megawatts of electrical generating capacity via alternative energy strategies (rooftop photovoltaics (PVs) on new buildings and parking structures and ground-mounted PV on surface parking lots, as well as energy storage and management systems). Implementation of these measures to reduce energy consumption for transportation, building energy usage, water consumption, and solid waste generation would directly reduce reliance on fossil fuel usage, which is used to generate electricity and meet heating needs. This reduction in fossil fuel reliance is consistent with Criterion 2. The development of alternative energy sources (rooftop PVs) would satisfy both Criteria 2 and 3.

In summary, the proposed project would expand on the region's need for higher education by providing local educational options as well as improve energy efficiency for new campus buildings. It would not result in an inefficient, wasteful, or unnecessary consumption of energy. The development of the proposed project would result in less than significant impacts to energy, and no mitigation measures are required consistent with the findings of the 2018 EFMP EIR.

Additional Project-Level Mitigation Measures

None required.

Level of Significance

The proposed project would have less than significant impacts related to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation. The proposed project impacts were adequately addressed in the 2018 EFMP EIR.

Question B: Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

Discussion

As discussed above, strategies and measures have been implemented at the State level with the California's Title 24 Energy Efficiency Standards for Residential and Nonresidential Buildings and the CALGreen Code and at the local level with the City of Walnut's adoption of the CALGreen Code and Title 24 Energy Efficiency Standards, Title 31 of the County Code (the Los Angeles County Green Building Standards Code).

The project would be developed in compliance with (and exceed) Title 24 Energy Efficiency Standards and the CALGreen Code, and Mt. SAC would incorporate other green building strategies in new development, as described in the 2018 CAP including energy consumption reduction targets and water use reduction. The proposed project that would be developed would be more energy efficient than the existing buildings, including the buildings to be demolished. The 2018 EFMP would not impede the policies described in CARB's Scoping Plan Update, or others, that will help achieve established goals.

Consistency with the Mt. SAC 2018 Climate Action Plan

The 2018 CAP includes four distinct areas that identify broad strategies for achieving a more sustainable campus: Sustainable Building Strategies, Mobile Source Emissions Reduction Strategies, Solid Waste Reduction Strategies, and Water Conservation Strategies. Mt. SAC would implement the 2018 CAP to the fullest extent possible, consistent with budgetary constraints, and regulatory and programmatic requirements.

Sustainable Building Strategies

The proposed project employs the Integrated Systems Approach concept in all future building design projects of the 2018 EFMP in order to achieve a sustainable product. The sustainable building strategies identified in the 2018 CAP are reviewed and implemented as part of the Integrated Systems Approach, to the extent feasible. The following sustainable strategies/practices related to energy would be implemented for the project:

- Design new construction to United States Green Building Council's Leadership in Energy and Environmental Design (LEED)² Silver standards, at a minimum;
- Reduce energy consumption from the 2014 baseline by 20 percent by the end of 2025, 50 percent by 2035, and 100 percent by 2050;
- Design and construct all new major capital projects (10,000 square feet and above) such that they will outperform Title 24 Standards by at least 15 percent, and all major renovation projects will outperform Title 24 by at least 10 percent;
- Reduce water use per student from the 2014 baseline by 50 percent by 2030;
- Achieve Net-Zero Waste by 2050;
- Include 10 percent recycled content in building materials, where feasible;
- Include 10 percent regional content in building materials, where feasible;

² Leadership in Energy and Environmental Design (LEED®) is a green building rating system that contains prerequisites and credits in five areas: (1) environmentally sensitive site planning, (2) water conservation, (3) energy efficiency, (4) conservation of materials and resources, and (5) indoor air quality.

- Install 30 to 40 percent more efficient water-saving sinks;
- Install water-efficient plumbing fixtures (e.g., water closets and urinals). To ensure ease of maintenance, the gallons per flush of these fixtures should not be lower than 1.6;
- Specify No-VOC (emit no volatile organic compounds) interior finishes;
- Ensure the design of tight building envelope assemblies which limit air infiltration through additional layers of exterior insulation, high performance low-emissivity dual pane glass, and cool roof coatings;
- Specify light-colored paving materials to prevent heat island effect; and
- Continue commissioning, enhanced commissioning, and retro-commissioning of buildings.

Mobile Source Emissions Reduction Strategies

The project is part of the 2018 EFMP which would support the reduction of mobile source emissions through implementation of transportation and transit-related projects.

As part of the 2018 EFMP, a Transit Center is under construction on campus, which would improve bus access to and from campus, and provide a centralized drop-off and pick-up location that is central to the campus and has easy pedestrian access. Students, faculty, and staff members would have access to mass transit once the Transit Center is constructed which would result in reduced emissions associated with transportation to and from the campus.

The 2018 EFMP recommends improvements to pedestrian walkways, sidewalks, the Miracle Mile promenade, and pedestrian bridges/tunnel that would facilitate access to campus buildings and facilities from the proposed Transit Center. Bike racks and bike lanes would be improved/provided on site to facilitate bicycle use.

As detailed in Mt. SAC's 2018 CAP, Mt. SAC will produce educational materials highlighting the benefits of alternative transportation fuel costs and information related to alternative modes of transportation. These materials will be available via the college sustainability page. The proposed project, which is consistent with the 2018 EFMP, would support the goals of the 2018 CAP.

Solid Waste Reduction Strategies

Mt. SAC would continue to implement the programs that are currently in place to reduce the amount of waste sent to public landfills through strategies focused on reducing, recycling, and reusing. Mt. SAC currently participates in waste diversion programs implemented by the California Department of Resources, Recycling, and Recovery—also known as CalRecycle—and, related to the 2018 EFMP, is in the process of developing an expanded waste management and recycling program for the campus. Operationally, Mt. SAC 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), which sets specific diversion requirements for waste haulers. Further, the Mt. SAC 2018 CAP includes solid waste reduction strategies to achieve a Net Zero Waste goal by year 2050.

AB 341 is the current CalRecycle requirement for large state agencies, including all schools and community colleges, and requires a 75% diversion rate by 2020.

AB 1826 requires that Mt. SAC incorporate organic food waste diversion specifically targeting: food scraps (pre- and post-consumed), food-soiled paper, produce (lettuce, banana peels, orange peels), coffee grounds, leftover prepared foods, and post-consumer leftovers. Recently, Mt. SAC

has implemented organic waste collection points for the kitchen staff workers at the Mountie Café (Building 8) and the Culinary Arts Kitchen and Bakery (Building 78).

Mt. SAC's 2018 CAP planning process recommended that the college set waste diversion goals and strategies. Its recommendations include the following:

- Continue to support and fund student-run recycling programs which encourage recycling
 of plastics, aluminum, and paper, such as Mt. SAC's EAGLE Club which currently runs a
 recycling signage campaign;
- Use compostable wares at food facilities, as opposed to Styrofoam® and plastics;
- Contract with a hauling agency willing to achieve a 95-percent landfill diversion rate (most hauling agencies achieve a 50-percent diversion rate; however, more are becoming wellinformed about sustainable practices that keep waste out of landfills);
- Sort waste on site to improve landfill diversion rates (by sorting on site, haulers will be able to transfer recyclables to appropriate centers more efficiently);
- Compost the food waste that is generated on site for use on site and build a well-designed composting site in the Farm Precinct;
- Require the hauling agency to provide records by weight, type, and destination;
- Include a recycling/reuse/waste management center in the recommended new Reuse Depot facility (described in Chapter 10: Facilities Recommendations of the 2018 EFMP), and design this facility to accommodate recycling and reuse events for the college and community; and
- Increase the requirement for construction projects from 95-percent to 100-percent landfill waste diversion.

Additionally, as identified previously under Sustainable Building Strategies, the following sustainable strategies/practices would also be implemented during the planning period for the 2018 EFMP:

- Achieve Net-Zero Waste by 2050;
- Include 10 percent recycled content in building materials, where feasible; and
- Include 10 percent regional content in building materials, where feasible.

Water Conservation Strategies

Mt. SAC's water use includes on-campus domestic uses, landscape irrigation, athletic field irrigation, pasture and rangeland irrigation, and wildlife sanctuary uses. Mt. SAC would continue to employ the following campus programs to optimize water conservation: Technology-based Conservation, Effective Landscaping Design Standards, and Ongoing Maintenance Programs. Consistent with the 2018 EFMP, the proposed project would implement the following sustainable strategies/practices:

- Reduce stormwater, sewer discharge, and water pollution;
- Employ sustainable landscaping practices; and
- Improve irrigation systems.

Consistent with the 2018 EFMP, the following sustainable strategies/practices would also be implemented:

- Specify stormwater saving strategies, where feasible;
- Continue use of native and drought-tolerant landscaping;
- Install 30 to 40 percent more efficient water-saving sinks;
- Install water-efficient plumbing fixtures (e.g., water closets and urinals) (o ensure ease of maintenance, the gallons per flush of these fixtures should not be lower than 1.6); and
- Reduce water use per student from the 2014 baseline by 50 percent by 2030.

The project would be developed consistent with the energy and resource conservation measures identified by the State, City, and Mt. SAC. In summary, the proposed project would not conflict with or obstruct a State or local plan for renewable energy or energy efficiency. The impact would be less than significant; no mitigation is required consistent with the findings of the 2018 EFMP EIR.

Additional Project-Level Mitigation Measures

None required.

Level of Significance

The proposed project would have less than significant impacts related to conflicting with or obstructing a state or local plan for renewable energy or energy efficiency. The proposed project impacts were adequately addressed in the 2018 EFMP EIR.

VII. GEOLOGY AND SOILS

The analysis of geology and soils is tiered from the 2018 EFMP EIR and was addressed in Section 4.6, Geology and Soils, of that document. Relevant elements of the proposed project related to geology and soils include earth-moving activities to accommodate the required removal and preparation of the underlying soils for the building pad and associated building construction.

Information in this section is primarily based on general information related to geology and soils as stated in the 2018 EFMP EIR and consultation with Converse Consultants, who is currently preparing a site-specific geotechnical study in compliance with MM GEO-1, below.

The following MMs were identified in the 2019 Mitigation Monitoring Program prepared for the certified 2018 EFMP EIR and are incorporated as part of the proposed project and assumed in the analysis presented in this section. It should be noted that inclusion of recommendations from final geotechnical reports is a standard condition applied to all projects on campus (not just project included in the 2018 EFMP).

MM GEO-1

Prior to the approval of project plans by the Division of the State Architect (DSA), a site-specific geotechnical study 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 DSA as part of the project certification process, which includes review and approval of the site-specific geotechnical studies by the California Geological Survey (CGS).

- MM GEO-2 In accordance with the Memorandum of Agreement (MOA) between the Mt. San Antonio Community College District and the City of Walnut, grading and drainage plans for all future Mt. SAC exempt education facilities shall be subject to administrative review and approval by the City of Walnut's Building Official.
- **MM GEO-3** Prior to initiation of grading activities, the following requirements shall be incorporated on the cover sheet of the Grading Plan under the general heading "Conditions of Approval":
 - a. A qualified Paleontologist and Paleontological Monitor shall be present at the pre-grade meeting to consult with the grading contractor and other consultants prior to the start of earth-moving activities. At the meeting, the Paleontologist shall establish procedures for paleontological resources surveillance based on the location and depths of paleontologically sensitive sediments, and shall establish, in cooperation the Mt. SAC Project Manager, procedures for temporarily halting or redirecting work to permit the sampling, identification, and evaluation of the fossils as appropriate.
 - b. A qualified Paleontological Monitor shall be present at the site when grading and excavation in paleontologically sensitive sediments (Puente Formation and Quaternary older alluvial fan deposits). Paleontological monitoring is not required in areas where excavation occurs within fill soils.
 - c. The Monitor shall have the authority to temporarily direct, divert, or halt grading to allow recovery of paleontological resources. In areas rich in micro-vertebrates, collection of large bulk samples of matrix for later water screening to recover small bones and teeth shall be part of the paleontological salvage program.
 - d. Fossils recovered from this project shall be cleaned, stabilized, identified, and documented. A report on the paleontological resources recovered from the parcels shall be prepared by the Paleontologist and submitted to Mt. SAC Facilities Planning & Management.
 - e. Fossils with their contextual data must be deposited at a recognized museum or institution.

Thresholds of Significance

Mt. SAC 2016 CEQA Thresholds of Significance

To the extent the following thresholds of significance are applicable to the project, they shall be applied to determine the project's environmental impact.

Environmental Topic in the CEQA Checklist	Impact	Mt. San Antonio Community College District Threshold of Significance	Agencies and Regulations	CEQA Procedures
Open Space, Managed Resources, and Working Landscapes	Open spaces containing natural resources and working landscapes; Conversion of oak woodlands; Groundwater recharge; Soil erosion or the loss of topsoil; Special management due to hazards including unstable soil areas, liquefaction zones, areas subject to landslides and expansive soil areas.	Construction of a new building on campus located in a California Seismic Hazard Zone is a significant impact; Exposure of buildings or persons to liquefaction or subsidence safety hazards identified in an approved site-specific or FMP geology/soils report is a significant impact; Safety risks for buildings or persons due to expansive soil identified in an approved site-specific or FMP geology/soils report is a significant impact.	CGS DSA	Case studies; State law and civil engineers' recommendations; Unless there are unusual circumstances, no additional mitigation for geology/soils beyond that included in the latest approved FMP MMP; Obtain assessment and recommendations from civil engineers if damage from ground-borne vibration may occur during construction.

Project Impact Analysis

Question A: Would the project 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.

The analysis of Impact 4.6-1(i) in the 2018 EMFP EIR determined that there would be less than significant impacts related to fault rupture.

Discussion

Mt. SAC, as with Southern California as a whole, may experience strong ground shaking from a major earthquake on active regional faults in the Southern California area. No known active or potentially active faults traverse the campus, and the campus is not included in an Alquist-Priolo Earthquake Fault Zone (Psomas 2019). Since no known active or potentially active faults traverse the campus, no impact from risk of loss, injury, or death involving fault rupture of a known earthquake fault would be associated with implementation of the proposed project consistent with the findings of the 2018 EFMP EIR.

Additional Project-Level Mitigation Measures

None required.

Level of Significance

The proposed project would have less than significant impacts related to rupture of a known earthquake fault. The proposed project impacts were adequately addressed in the 2018 EFMP EIR.

(ii) Strong seismic ground shaking?

Discussion

The analysis of Impact 4.6-1(ii) in the 2018 EFMP EIR determined that, with implementation of MMs GEO-1 and GEO-2, there would be less than significant impacts related to strong seismic ground shaking.

According to the 2018 City of Walnut General Plan, Public Safety Element, moderate to severe ground shaking may be expected within the City, including at Mt. SAC, due to the proximity of the San Jose fault (located along the northern edge of the City and approximately 0.5 mile north of the campus) and the Chino and Central Avenue faults located approximately 4.3 miles to the east and southeast, as well as three major fault zones: the San Andreas, Newport-Inglewood, and Sierra Madre. The San Jose fault is the closest known active surface fault to the campus located along the southern flank of the San Jose Hills and is capable of producing a 6.5 magnitude earthquake. While other active faults in the area are located further from the site, they may have a greater potential to produce earthquakes of higher magnitudes (Psomas 2019, City of Walnut 2018b). The possibility of ground acceleration or shaking on any part of the campus is similar to that for all of Southern California. However, this geotechnical issue is common in Southern California and would be addressed through adherence to typical design and construction practices (such as design in accordance with the California Building Code and Uniform Building Code and City of Walnut grading requirements). All structural design and construction would be completed in accordance with the recommendations of the site-specific geotechnical study currently being prepared for the site (MM GEO-1), including final design of shoring, foundations, earthwork, grading, corrosion, subterranean walls, subdrains, water proofing, protection barriers, slab-on-grade, and paving, a well as protection of existing structures, improvements and utility lines to remain in place. Final seismic design parameters for foundation and building designs would be based on the current 2019 California Building Code (CBC) and ASCE7-16 with Supplement 1 calculated using the ATC Hazard, Seismic Design by Location website. Final site grading, foundation and building designs would be based on the anticipated Maximum Considered Earthquake (MCE) site-specific response spectrum(Converse 2021).

The DSA would review building plans and certify completed school buildings for compliance with Title 24, the Field Act, and the recommendations of the site-specific geotechnical studies. Thus, impacts would be less than significant after implementation of MM GEO-1 consistent with the findings of the 2018 EFMP EIR.

Additional Project-Level Mitigation Measures

None required.

Level of Significance

The proposed project would have less than significant impacts related to strong seismic ground shaking with incorporation of MM GEO-1 noted above. The proposed project impacts were adequately addressed in the 2018 EFMP EIR.

(iii) Seismic-related ground failure, including liquefaction?

Discussion

The analysis of Impact 4.6-1(iii) in the 2018 EFMP EIR determined that, with implementation of MM GEO-1, there would be less than significant impacts related to seismic-related ground failure, including liquefaction.

According to the recently adopted 2018 City of Walnut General Plan, Public Safety Element, and as shown on Exhibit 4.6-1, Seismic Hazard Zone Map, of the 2018 EFMP EIR, a majority of the campus is designated as a Liquefaction Hazard Zone; however, the designation does not mean that all areas within the Zone will experience liquefaction. This geotechnical issue is common in Southern California and can be mitigated by typical design and construction practices (such as design in accordance with the California Building Code and Uniform Building Code and City of Walnut grading requirements). Typical remedial measures to address liquefaction include, but are not limited to: removal of loose, disturbed, or unsuitable soils and debris, removal of undocumented fills, over-excavation and re-compaction of the upper 5 to 10 feet of native alluvial soils below the bottoms of proposed foundations to provide a uniform layer of engineered compacted fill for foundation support, over-excavation and re-compaction of soils beyond the edges of the building foundations for lateral support, placement of geosynthetic reinforcements layers in the compacted subgrade soils to improve soils strengths and reduce seismic settlements, removal of liquefiable soils, if possible; in-situ densification of liquefiable soils using rammed aggregate piers, deep soil mixing, vibro-compaction, vibro-replacement, deep dynamic compaction, and compaction grouting; using mat foundations; and using deep foundations (e.g., piles or caissons extending to non-liquefiable soil or bedrock) (Converse 2021). All of the typical remedial measures noted here would occur within the development footprint of the project as analyzed throughout this document.

Design and construction following the recommendations identified and compliance with applicable local and State regulations would ensure the potential for significant geologic and geotechnical hazards related to seismically induced liquefaction is less than significant consistent with the findings of the 2018 EFMP EIR. Pursuant to MM GEO-1, all site-specific remedial measures will also be identified in the geotechnical investigation currently being prepared for the project and would be included in the site preparation and building design specifications.

Additional Project-Level Mitigation Measures

None required.

Level of Significance

The proposed project would have less than significant impacts related to seismic-related ground failure, including liquefaction with incorporation of MM GEO-1 noted above. The proposed project impacts were adequately addressed in the 2018 EFMP EIR.

(iv) Landslides?

Discussion

The analysis of Impact 4.6-1(iv) in the 2018 EFMP EIR determined that, with implementation of MMs GEO-1 through GEO-2, there would be less than significant impacts related to landslides.

Landslides are downward movements of a mass of earth, soils, or rock or a combination of these under the influence of gravity and/or saturation. Landslide materials are commonly porous and very weathered in the upper portions and along the margins of the slide. Slope failures can occur during or after periods of intense rainfall or in response to strong seismic ground shaking. Areas of high topographic relief, such as steep canyon walls, are most likely to be impacted by slope failure. According to the recently adopted 2018 *City of Walnut General Plan*, Public Safety Element, the majority of Mt. SAC is not within a designated seismically induced landslide area including the project site (City of Walnut 2018b). According to geotechnical consultant Converse Consultant, the project site is located on a gently sloping alluvial fan surface. The topography at the project site and in the immediate vicinity of the site is gently sloping to the south, with no significant slopes or embankments. The area around the project site has been previously developed with existing structures and improvements on the Mt. San Antonio College campus. Under these circumstances, the potential for landslides at the subject site is considered negligible. Impacts relate to landslides would be less than significant and no remedial measures are required (Converse 2021).

Despite this finding, MM GEO-1 would be implemented which requires all recommendations from forthcoming site-specific geotechnical studies to be included in the site preparation and building design specifications. Therefore, design and construction following the recommendations contained in the project-specific geotechnical studies and compliance with applicable local and State regulations would ensure the potential for landslide hazards is less than significant consistent with the findings of the 2018 EFMP EIR. In addition, proposed project would be required to comply with current California Building Code and Uniform Building Code and City of Walnut grading requirements (MM GEO-2), consistent with the findings of the 2018 EFMP EIR.

Additional Project-Level Mitigation Measures

None required.

Level of Significance

The proposed project would have less than significant impacts related to landslides with incorporation of MMs GEO-1 and GEO-2 noted above. The proposed project impacts were adequately addressed in the 2018 EFMP EIR.

Question B: Would the project result in substantial soil erosion or the loss of topsoil?

Discussion

The analysis of Impact 4.6-2 in the 2018 EFMP EIR concluded that there would be less than significant impacts related to soil erosion and loss of topsoil with implementation of MM HYD-1 compliance with the National Pollutant Discharge Elimination System (NPDES) Construction General Permit.

As detailed in Section 4.6, Geology and Soils, of the 2018 EFMP EIR ground disturbance during grading and construction could lead to erosion and topsoil loss during wind or rain events,

resulting in a potentially significant impact. Development projects that disturb one acre or more of land are required to comply with the NPDES Construction General Permit. In compliance with the NPDES permit, erosion potential during construction activities would be managed with Best Management Practices (BMPs) implemented at each construction site as part of a Stormwater Pollution Prevention Plan (SWPPP) during construction activities to minimize erosion impacts. As part of the SWPPP, erosion and sediment control BMPs would be required pursuant to the NPDES General Construction Permit as well as permanent stormwater management features that would collectively meet the requirements set forth in the Low Impact Development (LID) Manual and include permanent BMPs that would reduce loose soils, sediment, and other pollutants from stormwater runoff. The project would also have to comply with the grading requirements of the City of Walnut, which would reduce erosion during construction and operation.

Compliance with the NPDES Construction General Permit, and City of Walnut grading requirements (MM GEO-2) would reduce erosion and sedimentation impacts during construction and long-term operations. Stormwater quality impacts resulting from erosion during construction and long-term operations would be less than significant after mitigation consistent with the findings of the 2018 EFMP EIR.

Additional Project-Level Mitigation Measures

None required.

Level of Significance

The proposed project would have a less than significant impact related to soil erosion and the loss of topsoil with incorporation of MM GEO-2 noted above. The proposed project impacts were adequately addressed in the 2018 EFMP EIR.

Question C: Would the project 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?

Discussion

The analysis of Impacts 4.6-3 in the 2018 EFMP EIR determined that, with implementation of MMs GEO-1 and GEO-2, there would be less than significant impacts related to unstable geologic materials.

Liquefaction and Landslides

The potential for liquefaction and landslides is addressed in Thresholds 6.1(iii) and 6.1(iv) of the 2018 EFMP EIR. According to the 2018 City of Walnut General Plan, Public Safety Element, the majority of Mt. SAC is not within a designated seismically induced landslide area (City of Walnut 2018b), including the project site. The project site is located within a fully developed area of the campus and would not be subject to landslides. The 2018 City of Walnut General Plan, Public Safety Element, also addressed liquefaction potential as shown on Exhibit 4.6-1, Seismic Hazard Zone Map. According to the general plan, a majority of the campus is designated as a Liquefaction Hazard Zone; however, the designation does not mean that all areas within the Zone will experience liquefaction. This geotechnical issue is common in Southern California and can be reduced through adherence to typical design and construction practices (such as design in accordance with the California Building Code [CBC]). MM GEO-1 requires all recommendations from forthcoming site-specific geotechnical studies to be included in the site preparation and

building design specifications. Based on consultation with geotechnical consultant Converse Consultants, these recommendations include:

- Removal of loose, disturbed, or unsuitable soils and debris,
- Removal of undocumented fills.
- Over-excavation and re-compaction of the upper 5 to 10 feet of native alluvial soils below the bottom of proposed foundations to provide a uniform layer of engineered compacted fill for foundation support,
- Over-excavation and re-compaction of soils beyond the edges of the building foundations for lateral support,
- Placement of geosynthetic reinforcement layers in the compacted fill subgrade soils below foundations to improve soil strengths and reduce seismic settlements,
- Ground improvement of potentially liquefiable soils, if possible, including in-situ
 densification of liquefiable soils using rammed aggregate piers, deep soil mixing, vibrocompaction, vibro-replacement, deep dynamic compaction and compaction grouting;
 using mat foundations; using deep foundations (e.g. piles or caissons extending to nonliquefiable soil or bedrock) (Converse 2021).

Design and construction following the recommendations contained in the project-specific geotechnical studies (noted above) and compliance with applicable local and State regulations would ensure the potential for significant geologic and geotechnical hazards related to seismically induced liquefaction is less than significant, consistent with the findings of the 2018 EFMP EIR.

Lateral Spreading

Lateral spreading involves the lateral movement of earth materials due to ground shaking. Evidence of this phenomenon is visible through near-vertical cracks with predominantly horizontal movement of the soil mass. The topography at the project site and in the immediate vicinity of the site is gently sloping to the south, with no significant slopes or embankments. The area around the project site has been developed with existing structures and improvements on the Mt. San Antonio College campus (Converse 2021). As no significant slopes or embankments are within the project area, the potential for lateral spreading is considered negligible and no impacts would occur consistent with the findings of the 2018 EFMP EIR. No remedial measures are needed.

Subsidence and Collapse

Subsidence is a lowering or settlement of the ground surface through collapse of subsurface void space. This condition can occur in areas where soil or groundwater has moved out of an area and has created a void space unable to sustain the materials above it or in areas where subsurface materials are dissolved, leaving little or no support for surface soils or features. The project-specific geotechnical study reports prepared for implementation of the 2018 EFMP identify that the potential for subsidence and collapse should be factored into the determinations of construction equipment types and grading techniques. This geotechnical issue can be reduced through adherence to typical design and construction practices (such as design in accordance with the CBC). MM GEO-1 requires all recommendations from forthcoming site-specific geotechnical studies to be included in the site preparation and building design specifications. Based on consultation with geotechnical consultant Converse Consultants, these recommendations include:

Removal of loose, disturbed or unsuitable soils and debris,

- Removal of undocumented fills,
- Over-excavation and re-compaction of the upper 5 to 10 feet of native alluvial soils below the bottom of proposed foundations to provide a uniform layer of engineered compacted fill for foundation support,
- Over-excavation and re-compaction of soils beyond the edges of the building foundations for lateral support,
- Placement of geosynthetic reinforcement layers in the compacted fill subgrade soils to improve soil strengths and reduce seismic settlements.
- Ground improvement of potentially liquefiable soils using rammed aggregate piers, deep soils mixing, vibro-compaction, vibro-replacement, deep dynamic compaction and compaction grouting; using mat foundations; using deep foundations (e.g. piles or caissons extending to non-liquefiable soil or bedrock).
- Monitor local groundwater basin within the vicinity of the Mt. San Antonio College campus
 for evidence of groundwater pumping activity and evidence of overdraft groundwater
 pumping extractions within the watershed. Review of Los Angeles County well records
 indicated that most of the previous water wells in the local area have been reported to
 have been closed and capped (Converse 2021).

Design and construction following the recommendations contained in the project-specific geotechnical studies and compliance with applicable local and State regulations would ensure the potential for significant geologic and geotechnical hazards related to subsidence and collapse is less than significant consistent with the findings of the 2018 EFMP EIR. Therefore, impacts are considered to be potentially significant; and implementation of MM GEO-1 requiring site-specific geotechnical studies to determine appropriate site and building design considerations for earthwork, site grading, seismic design, foundation and pavement design, site drainage, and construction recommendations would reduce potential impacts related to subsidence and collapse to less than significant levels consistent with the findings of the 2018 EFMP EIR.

Additional Project-Level Mitigation Measures

None required.

Level of Significance

The proposed project would have less than significant impacts associated with unstable soils with incorporation of MM GEO-1 noted above. The proposed project impacts were adequately addressed in the 2018 EFMP EIR.

Question D: Would the project 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?

Discussion

The analysis of Impact 4.6-4 in the 2018 EFMP EIR determined that, with implementation of MM GEO-1 and MM GEO-2, there would be less than significant impacts related to expansive soils.

Expansive soils are materials that, when subject to a constant load, are prone to expand when exposed to water. As discussed in the 2018 EFMP EIR, the potential for encountering expansive soils varies from very low to moderate throughout the campus. According to Converse Consultants, the project site is located on native alluvial soils which are expected to produce an

expansion index ranging from very low to low. Further, as part of their on-going geotechnical work at the project site, Converse Consultants performed one expansion index test resulting in a expansion index of very low. Although additional laboratory testing for expansion index testing would be performed during grading as the soil will be mixed during over-excavation, stockpiling and recompaction, the potential for encountering expansive soils varies from very low to low for the project site and a less than significant impact would occur. The proposed project would be subject to compliance with current CBC, as reviewed and certified by the DSA consistent with the findings of the 2018 EFMP EIR.

Additional Project-Level Mitigation Measures

None required.

Level of Significance

The proposed project would have less than significant impacts associated with expansive soils. The proposed project impacts were adequately addressed in the 2018 EFMP EIR.

Question E: Would the project 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?

Discussion

Mt. SAC has a 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, consistent with the findings of the 2018 EFMP EIR.

Additional Project-Level Mitigation Measures

None required.

Level of Significance

The proposed project would have no impact related to 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. The proposed project impacts were adequately addressed in the 2018 EFMP EIR.

Question F: Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Discussion

The Mt. SAC campus is located within the San Jose Hills, a northeast-trending structural upwarp in the northeast portion of the Los Angeles Basin. It is bounded to the north by the San Gabriel Valley and to the south by the Puente Hills (Sylvester and Gans 2016). The campus is underlain by four members of the Miocene Puente Formation in the hills primarily in the northeast and southern portion of the campus, and Quaternary alluvial deposits in the remainder of the campus.

Due to the unpredictable nature of the fossil record in given depositional environments, the significance of a specific fossil type is variable. Vertebrate fossils, especially those with

stratigraphic or ecological context, are considered scientifically significant. Invertebrate and plant fossils may be considered significant, dependent on the stratigraphic, ecological, temporal, or evolutionary indicators they provide.

Sensitivity of paleontological resources is highly correlated with the geology in which they are found. The Society of Vertebrate Paleontology has categorized the paleontological potential of rock types as having either high, low, undetermined, or no potential. The rock types can be further broken down into geologic formations with varying sensitivity. A geologic formation is defined as a rock unit that is lithologically distinct, geographically widespread, and able to be easily distinguished from formations above and below. A formation can be a single rock type, or it can contain a suite of closely related rock types that are commonly found in a specific depositional environment. Rock types are distinguished from geologic formations in that rock types are based solely on lithologic characteristics, while formations include age and geographic range

A paleontological resources records search and literature review was conducted by Dr. Sam McLeod at the Los Angeles County Natural History Museum (LACM), Vertebrate Paleontology Department of the LACM on April 5, 2018, to determine if any vertebrate fossil records within the LACM collections database had been recovered at the Mt. SAC campus or in the general vicinity. The results indicate that no vertebrate fossil localities are directly within the boundaries of the campus; however, five fossil-bearing localities are recorded within approximately 5.0 miles from the campus. An additional search of the Paleobiology Database (paleobiodb.org) resulted in one additional fossil locality, known as the Featherstone Quarry, approximately 2 miles northwest of the campus. Fossils from this quarry include two separate holotype (single physical example of an organism) genera (Jordan 1925).

Surface sediments at and surrounding the project area consist of Pleistocene and Holocene alluvial deposits, with Miocene Puente Formation in the hills. A search of the database of Late Pleistocene vertebrate localities for California (Jefferson 1991), which includes institutional records and published references, indicates that no previously recorded fossil localities have been recorded within 1.0 mile of the campus.

As identified under the results of the LACM records search, surficial deposits composed of Pleistocene and Holocene alluvial deposits within the Miocene Puente Formation are found in the hills within the campus. No fossil localities were found during the LACM and PaleoBiology records search that lie within the Project site or the Mt. SAC college campus, although many have been documented nearby from similar-aged sediments within the same geologic formations. For example, terrestrial vertebrate fossil localities include bison (*Bison* sp.), horse (*Equus* sp.), and camel (*Camelops* sp.) have been identified within the Pleistocene and Holocene alluvial deposits. Fossil localities dating to the Miocene Puente Formation consist of marine vertebrate fossil localities and include three separate species of herring (*Ganolytes* sp., *Etringus* sp., and *Lembicus meikleiohn* sp.), pipefish (*Sygnathus emeritus*), deep sea smelt (*Bathylagidae*), jackfish (*Carangidaes* sp.), mackerel (*Tunita* sp.), and unidentified fish species. Therefore, Mt. SAC is moderately sensitive for paleontological resources.

No unique geologic feature is known to exist, and no fossils have been documented on the campus. However, excavation activities associated with development of projects implementing the proposed Project could encounter deposits of the Pleistocene and Holocene alluvial deposits and the Miocene Puente Formation. Excavation in these sediments could potentially impact sensitive paleontological resources in areas where surficial deposits from the Puente Formation are present or when excavations exceed 10 feet in depth in areas with Pleistocene and Holocene sediments. This is a potentially significant impact. Implementation of MM GEO-3 for 2018 EFMP projects that have the potential to encounter deposits of the Pleistocene and Holocene alluvial deposits and the Miocene Puente Formation would reduce potential impacts to paleontological

resources to less than significant. MM GEO-3 requires attendance by a qualified paleontologist at the pre-grade conference, requires paleontological monitoring in paleontologically sensitive sediments, and identifies measures to take if paleontological resources are discovered.

Additional Project-Level Mitigation Measures

None required.

Level of Significance

The proposed project would have a less than significant impact related to the potential to directly or indirectly destroy a unique paleontological resource or site or unique geologic feature, with incorporation of the MM GEO-3 noted above. The proposed project impacts were adequately addressed in the 2018 EFMP EIR.

VIII. GREENHOUSE GAS EMISSIONS

The analysis of GHG emissions is tiered from the 2018 EFMP EIR and was addressed in Section 4.7, Greenhouse Gas Emissions, of that document. Relevant elements of the proposed project related to GHG emissions include (1) include demolition of the existing Buildings 27A, 27B, 27C, and Swimming Pool (27P), and other hardscape and landscape areas; (2) construction of the new approximately 253,866 gsf Technology and Health building, and associated on-site improvements, utility connections, hardscaping and landscaping; (3) construction equipment and workers' vehicles during the construction phase of the project; and (4) the increase in energy use for the Technology and Health building. The proposed project would serve the projected Mt. SAC campus population with the addition of approximately 90 net new staff positions. The new building associated with implementation of the proposed project would be designed to achieve a LEED Silver rating. Hours of operation will be similar to existing academic facilities on campus.

The following MM was identified in the 2019 Mitigation Monitoring Program prepared for the certified 2018 EFMP EIR and is incorporated as part of the proposed project and assumed in the analysis presented in this section.

MM GHG-1 All major capital projects (10,000 square feet and above) shall be designed to outperform Title 24, Part 6, Energy Efficiency Standards, by a minimum of 15%.

Thresholds of Significance

Mt. SAC 2016 CEQA Thresholds of Significance

To the extent the following thresholds of significance are applicable to the project, they shall be applied to determine the project's environmental impact.

Environmental Topic in the CEQA Checklist	Impact	Mt. San Antonio Community College District Threshold of Significance	Agencies and Regulations	CEQA Procedures
Greenhouse Gas Emissions	Carbon dioxide equivalent (CO ² EQ) annual operational emissions and annualized construction emissions	Written evidence supporting the District's GHG emissions thresholds is identified in Footnote 4. Site-specific projects of less than 3.0 acres with	CARB	Same criteria as stated for air quality in Section 2: Air Quality If GHG projects are not significant, each project remains subject to the applicable GHG MM in

Environmental Topic in the CEQA Checklist	Impact	Mt. San Antonio Community College District Threshold of Significance	Agencies and Regulations	CEQA Procedures
		import or export of 10,000 cy and buildings of 56,000 asf (80,000 gsf) do not exceed the GHG standard of 3,000 metric tonne per year (MT/Year) CO ² EQ for annual operational and 30-year amortized construction GHG emissions. See Table 5 of Report 15-116A See Report 15-116A for information regarding the GHG thresholds ⁴ ; all assumptions for Scenario 1A for air quality (i.e., watering twice per day, and painting with 80 g/l or less) are required in a GHG analysis. The stated GHG thresholds apply to GHG impacts only (existing + project balance); not to GHG cumulative impacts (existing + project + cumulative) or global GHG emission impacts.		the latest approved FMP MMP (i.e., as conditions of approval) to reduce GHG regional emissions.

Greenhouse Gas Emissions Background Information

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 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 appears to be closely 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 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 updated every five years as required. 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* (CARB 2014). 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 SCS into its RTPs that will achieve GHG emission reduction targets though 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 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 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 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; and
- 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, which detail how utilities would meet their customers' resource needs, reduce GHG emissions, and integrate clean energy resources (CEC 2015).

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 2020). SB 100 also creates new standards for the Renewable Portfolio Standard 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).

Mt. SAC has is also committed to the reduction of greenhouse gas emissions and is developing the Climate Action Plan & Sustainability. Mt. SAC prepared the 2018 Climate Action Plan (2018 CAP) to provide guidance for the campus towards becoming a more sustainable institution. The 2018 CAP articulates the goals, objectivities and strategies for having net-zero carbon emissions. The following areas of sustainability and established goals are listed in the 2018 CAP:

Greenhouse Gas Reduction: Reduce energy consumption from the 2014 baseline by 20% by the end of 2025, 50% by 2035 and 100% by 2050.

Green Building Standard: All new, major capital projects (10,000 square feet and above) will outperform Title 24 Standards by at least 15%, and all major renovation projects will outperform Title 24 by at least 10%.

Water Use Reduction: Reduce water use per student by 50% from 2014 levels by 2030.

Waste Diversion and Management: Net Zero Waste by 2050.

Institutionalization: Hire a full-time Sustainability Director by the end of 2018. Secure release time for a Sustainability Coordinator starting Fall 2019. Establish a Sustainability Center by 2020.

Curriculum Integration: Build sustainability into the educational experience of 50% of students by 2025, and 100% of students by 2035.

Professional Development: Establish professional development in sustainability for all new faculty and adjunct instructors by 2020. Integrate sustainability into campus Professional Development Plan by 2020. Offer online Sustainability Certificate for faculty.

Research and Community Outreach: Publicize campus sustainability efforts to surrounding community annually, starting in 2019.

Project Impact Analysis

Question A: Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Discussion

Based on the proposed construction activities described previously, the principal source of construction GHG emissions would be 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. The estimated construction GHG emissions for the project would be 1,596 MTCO₂e, as shown in Table 11, Estimated Greenhouse Gas Emissions from Construction.

TABLE 11 ESTIMATED GREENHOUSE GAS EMISSIONS FROM CONSTRUCTION

Source	Emissions (MTCO₂e)
2023	302
2024	493
2025	486
2026	315
Total	1,596

MTCO2e: metric tons of carbon dioxide equivalent

Notes:

- Totals may not add due to rounding variances.
- Detailed calculations in Appendix A.

Source: Psomas 2021.

Operational GHG emissions would come primarily vehicle trips and energy consumption related to the project. Estimated project operational GHG emissions are shown in Table 12, Estimated Annual Greenhouse Gas Emissions from Project Operation.

TABLE 12
ESTIMATED ANNUAL GREENHOUSE GAS
EMISSIONS FROM PROJECT OPERATION

Source	Emissions (MTCO ₂ e/yr)
Area	<1
Energy	733
Mobile	2,143
Waste	36
Water	5
Total Operational Emissions	2,917

MTCO₂e/yr: metric tons of carbon dioxide equivalent per year

Notes:

- Totals may not add due to rounding variances.
- Detailed calculations in Appendix A.

Source: Psomas 2021.

Because impacts from construction activities occur over a relatively short period of time, they contribute a relatively small portion of the GHG emissions for the overall lifetime of the project. 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 13, Estimated Total Project Annual Greenhouse Gas Emissions.

TABLE 13 ESTIMATED TOTAL PROJECT ANNUAL GREENHOUSE GAS EMISSIONS

Source	Emissions (MTCO₂e/yr²)
Construction Amortized	53ª
Operations (Table 14)	2,917
Total ^b	2,970
SCAQMD Threshold	3,000
Exceeds Threshold?	No

 $MTCO_2e/yr$: metric tons of carbon dioxide equivalent per year; SCAQMD: South Coast Air Quality Management District

- ^a Total derived by dividing construction emissions (see Table 12) by 30.
- ^b Total annual emissions is the sum of amortized construction emissions and operational emissions.

Source: Psomas 2021.

As noted above, Mt. SAC has established a GHG threshold related to project-level emissions from land use projects. The threshold for combined amortized construction and operational emissions is 3,000 metric tons of carbon dioxide equivalent per year (MTCO₂e/yr). The GHG emissions for the project would be 2,970 MTCO₂e/yr, as shown in Table 13, which is below the threshold of 3,000 MTCO₂e/yr. This GHG emissions estimate is conservative in that it does not take into account the vehicle trips or energy consumption that currently occur at the project site. If these existing emissions were taken into account, the net GHG emissions associated with the project would be substantially reduced and would be substantially below the threshold. The project would not generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment. The impact would be less than significant, and no mitigation is required.

Additional Project-Level Mitigation Measures

None required.

Level of Significance

The proposed project would have a less than significant impact related to GHG emissions with incorporation of the MM GHG-1 noted above. The proposed project impacts were adequately addressed in the 2018 EFMP EIR.

Question B: Would the project conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Discussion

Mt. SAC developed the 2018 Climate Action Plan to minimize GHG emissions associated with the campus. As shown in Table 13, Estimated Total Project Annual Greenhouse Gas Emissions, the project's GHG emissions would be below the threshold of significance established by Mt. SAC. The State policy and standards adopted for the purpose of reducing GHG emissions that are applicable to the proposed project are Executive Order S-3-05, Assembly Bill (AB) 32, the California Global Warming Solutions Act of 2006, and Senate Bill (SB) 32, which are further discussed in Appendix A. 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.

As described in detail under Section VI - Energy, new buildings would be developed in compliance with (and would exceed) Title 24 Energy Efficiency Standards and the CALGreen Code, and Mt. SAC would incorporate other green building strategies in new development. Therefore, the new buildings recommended to be developed in the proposed project would be more energy efficient than the existing buildings, including the buildings to be demolished. Impacts from off-site transportation and on-site energy usage would be affected by broader policies related to increases in electric vehicle and mass transit usage as well as decreases in electricity demand and the amount of carbon associated with electricity generation. The proposed project would not impede the policies described in CARB's Scoping Plan Update, or others, that will help achieve established goals.

The 2018 CAP includes four distinct areas that identify broad strategies for achieving a more sustainable campus: Sustainable Building Strategies, Mobile Source Emissions Reduction Strategies, Solid Waste Reduction Strategies, and Water Conservation Strategies. Mt. SAC would implement the 2018 CAP to the fullest extent possible, consistent with budgetary constraints and regulatory and programmatic requirements. The project is part of the development plan evaluated under the DEIR of the 2018 EFMP. The 2018 EFMP was found to be consistent with State, local and campus plans related to the minimization of GHG emissions. Since the project is a component of the 2018 EFMP, the project would likewise be consistent with the GHG emission reduction plans, measures, and regulations related to GHG emissions. Therefore, the proposed project does not conflict with these plans and regulations but would assist in achieving the statewide goal through use of alternative fuels and providing alternatives to higher GHG emissions associated with single-occupant vehicles. The impact would be less than significant, and no mitigation is required.

Additional Project-Level Mitigation Measures

None required.

Level of Significance

The proposed project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions. The proposed project impacts were adequately addressed in the 2018 EFMP EIR.

IX. HAZARDS AND HAZARDOUS MATERIALS

The analysis of hazards and hazardous materials is tiered from the 2018 EFMP EIR and was addressed in Section 4.8, Hazards and Hazardous Materials and Wildfire, of that document. Relevant elements of the proposed project related to hazards and hazardous materials include removal of existing landscape and hardscape areas, above-ground electrical equipment, demolition of the existing Buildings 27A, 27B, 27C, and Swimming Pool (27P), and the construction of the proposed Technology and Health Building, and associated on-site improvements. Landscape maintenance chemicals and cleaning products would continue to be used, consistent with existing campus operations. The design of the proposed project ensures that emergency access to and around the project site is maintained.

Section 4.8 of the 2018 EFMP EIR provides a detailed description of the hazardous materials and wastes handled and/or generated at Mt. SAC and the policies, programs, and practices implemented to manage these materials in compliance with local, State, and federal regulations, as applicable. At the local level, the Health Hazardous Materials Division of the Los Angeles County Fire Department (LACoFD), has the primary responsibility for hazardous waste enforcement. As identified in Section 3.16.010 of the City of Walnut Municipal Code, the City has adopted the 2017 Los Angeles Fire Code which is based on both the adopted sections of the 2016 California Fire Code and the unadopted sections of the California Fire Code found in the 2015 International Fire Code. Additionally, Mt. SAC has its own Campus Emergency Response and Evacuation Plan.

There were no applicable MMs adopted as part of the 2018 EFMP EIR related to hazards and hazardous materials.

Thresholds of Significance

Mt. SAC 2016 CEQA Thresholds of Significance

To the extent the following thresholds of significance are applicable to the project, they shall be applied to determine the project's environmental impact.

Environmental Topic in the CEQA Checklist	Impact	Mt. San Antonio Community College District Threshold of Significance	Agencies and Regulations	CEQA Procedures
Hazards/Hazardous Materials	Public exposure to hazardous materials	Non-compliance with an approved Phase 1 or Phase 2 ESA Report's recommendations is a significant impact.	Division Of Occupational Safety & Health (Cal/OSHA) CalEPA DSA LACoFD	Case studies Unless there are unusual circumstances, no additional mitigation for hazards beyond that included in the latest approved FMP MMP.

Project Impact Analysis

Question A: Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous

materials?

Question B: Would the project 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?

Discussion

The analysis of Impacts 4.8-1 and 4.8-2 in the 2018 EFMP EIR concluded that development under the 2018 LRDP would have a less than significant impact during construction and long-term operations related to public exposure to hazards from (1) the routine transport, use, or disposal of hazardous materials and (2) a reasonably foreseeable upset and accident condition involving the release of hazardous materials.

As defined in the 2018 EFMP EIR, for purposes of this analysis, hazardous materials include inorganic and organic chemicals and products (chemical reagents and reactions) containing such substances as defined by California laws and regulations, radioactive materials, and biohazardous materials.

Construction Activities

Construction associated with the proposed project would involve demolition of existing buildings and construction of the new Technology and Health building and associated site improvements. Buildings constructed before the 1980s have the potential to contain asbestos-containing materials (ACMs) and/or lead-based paint in the building materials. Therefore, there is a potential for asbestos and lead release during demolition. Polychlorinated biphenyls (PCBs) also have the potential to be encountered during demolition as a result of their potential use associated with existing buildings and electrical equipment on campus.

All demolition activities would comply with applicable regulations related to ACMs, lead, and PCBs, including CalOSHA requirements, SCAQMD Rule 1403, Title 8 of the CCR (Section 1529) which regulates asbestos exposure, and CCR Section 1532.1 which provides exposure limits, exposure monitoring, respiratory protection, and good working practices by workers exposed to lead. Therefore, compliance with applicable regulations and requirements would ensure that construction-related impacts would be less than significant consistent with the findings of the 2018 EFMP EIR.

During the construction phase, there is a limited risk of accidental release of hazardous materials such as gasoline, oil, or other fluids in the operation and maintenance of construction equipment. These materials are common to typical construction activities and are used routinely and do not pose a significant risk of upset or hazard to the public or environment.

Operation

Implementation of the proposed project would result in the development of uses including classroom and laboratory space that would use, store, or require the transportation and disposal of hazardous materials as described above. While the amount and type of hazardous materials may vary over time with changes in pedagogy, curriculum, and laboratory activities and additions to hazardous materials lists, and the specific facilities to be accommodated in the proposed

building have not been determined (e.g., number and type of laboratories, fume hoods, etc.), the general range and type of hazardous materials used currently on campus and in the future with the recommended uses is not expected to substantially change. Hazardous materials would continue be stored in laboratories in designated secured areas designed to prevent accidental release to the environment. Hazardous materials for research and academic use would be stored in laboratories in small, individual containers. In the unlikely event of an accidental release, these small storage volumes would present potential consequences to the individual laboratory in which they are stored. Mt. SAC would continue to use materials, some of which are considered hazardous, in laboratory curriculum and activities, building and grounds maintenance, and vehicle maintenance.

In addition, routine operations would continue, including regular building and landscape maintenance that use some hazardous materials such as standard cleaning products and pesticides or herbicides. The amount of hazardous materials that are handled at any one time is relatively small, reducing the potential consequences of an accident during handling.

With respect to transport of hazardous materials, under current conditions, Mt. SAC currently transports hazardous materials to and from campus on an as-needed basis, or as otherwise required by existing campus procedures. With implementation of the proposed project, hazardous materials and wastes would continue to be transported to and from the campus to support instructional and other on-campus activities.

As with existing conditions, the transport of hazardous materials and wastes can result in accidental spills, leaks, and toxic releases; however, it is heavily regulated and requires licensed vendors to bring hazardous materials to and from the campus. The established procedures for transport of hazardous materials and hazardous wastes to and from the campus would continue to be followed including the completion of manifests, which are maintained by Risk Management for all hazardous waste that is transported in connection with campus activities. The campus would continue to comply with all applicable federal, State, and local laws and regulations and existing campus programs related to the use, handling, transport, and storage of hazardous materials on campus. Compliance with applicable federal, State, and local laws and campus procedures would ensure that impacts associated with upset or accident conditions remain less than significant consistent with the findings of the 2018 EFMP EIR.

Additional Project-Level Mitigation Measures

None required.

Level of Significance

The proposed project would have a less than significant impact related to the potential to create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials or through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. The proposed project impacts were adequately addressed in the 2018 EFMP EIR.

Question C: Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

Discussion

The analysis of Impact 4.8-3 in the 2018 EFMP EIR concluded that development under the 2018 EFMP would have a less than significant impact related to hazardous emissions or handling hazardous materials within a 0.25 mile of a school.

The Mt. SAC Child Development Center (Buildings 70 through 72) on campus provides childcare to children of college students, staff members, and the community at large year-round. Off campus, two schools exist within 0.25 mile of Mt. SAC. Collegewood Elementary School, a public school at 20725 Collegewood Drive, is located approximately 0.20 mile to the northwest of campus, while the International School of Montessori at 20781 Amar Road is located less than 0.10 mile to the west of the campus.

As previously described, the proposed project would accommodate classroom, laboratory, office, library, and other support space. It is not anticipated that any operations in the proposed building would require the use or storage of any hazardous materials that are not currently used in some capacity on campus or result in a significant increase in quantities of hazardous materials. As described above, laboratory-related hazardous materials would be stored in laboratories in designated secured areas designed to prevent accidental release to the environment. The on-campus Child Development Center is currently in operation and would continue as a childcare center. While the proposed project would include the use of laboratories and technical education spaces that would use hazardous materials, these uses would likely not involve the use of hazardous materials that are not already used on the campus. Therefore, the proposed project would likely generate and use hazardous materials; however, these materials are already in use on campus and would continue to be handled in compliance with federal, State, and local regulations as well as continued compliance with established campus procedures related to the use, storage, disposal, and transport of hazardous materials and wastes. This would ensure that potential impacts associated with hazardous materials within 0.25 mile of a school would be less than significant, consistent with the findings of the 2018 EFMP EIR.

Additional Project-Level Mitigation Measures

None required.

Level of Significance

The proposed project would have no impact related to handling hazardous materials within ¼-mile of a school. The proposed project impacts were adequately addressed in the 2018 EFMP EIR.

Question D: Would the project 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?

Discussion

The analysis of Impact 4.8-4 in the 2018 EFMP EIR concluded that development under the 2018 EFMP would have a less than significant impact related to construction on a site included on the Cortese List, which is compiled pursuant to Section 65962.5 of the *California Government Code*.

Research on the Department of Toxic Substances Control (DTSC) EnviroStor database, which identifies those sites/addresses on the hazardous waste and substances site list (Cortese list), indicated that the Mt. SAC campus is not located on a site which is included on a list of hazardous materials pursuant to Section 65962.5 (DTSC 2018). A search of the EnviroStor database for listings in the City of Walnut or at Mt. SAC yielded no results.

The EDR Radius Map™ Report with GeoCheck®: Mt. San Antonio College Parking & Circulation MP, 1100 North Grand Avenue, Walnut, California 91789 (Inquiry Number 5085390.2s) (EDR Report) was prepared by Environmental Data Resources (EDR 2017). The EDR Report was prepared for the Mt. SAC 2017 Parking and Circulation Master Plan (2017 PCMP) project; however, it remains relevant to the proposed project because it covers the entire campus. The EDR Report incorporates data from a search of government databases to determine the presence or absence of significant hazardous materials or conditions on or near the campus. A search of the EDR report indicates that no sites located on the campus are included on the hazardous materials sites compiled pursuant to Government Code Section 65962.5. Therefore, the proposed project would not create a significant hazard to the public or the environment. Compliance with federal, State, and local regulations regarding hazardous material and hazardous waste management would ensure that the proposed project would not result in a significant hazard to the public or the environment. No significant impact would occur, and no mitigation is required, consistent with the findings of the 2018 EFMP EIR.

Additional Project-Level Mitigation Measures

None required.

Level of Significance

The proposed project would not be located on a site that is included on a list of hazardous materials sites compiled pursuant to *California Government Code* Section 65962.5 and would have less than significant impacts. The proposed project impacts were adequately addressed in the 2018 EFMP EIR.

Question 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?

Discussion

As detailed in Section 4.8, Hazards and Hazardous Materials and Wildfire, of the 2018 EFMP EIR, the Mt. SAC campus is not located within 2 miles of a public airport or public use airport. The nearest airport is Brackett Field, which is located approximately 4.5 miles northeast of the campus. This airport serves general aviation (GA) aircraft. According to the Brackett Field Airport Land Use Compatibility Plan (LACALUC 2015), the campus is not located in the Airport Influence Area of the airport. Therefore, the proposed project would not result in any impacts from safety hazards associated with airports or airstrips consistent with the findings of the 2018 EFMP EIR.

Additional Project-Level Mitigation Measures

None required.

Level of Significance

The proposed project would have no impacts related to public use airports or private airstrips. The proposed project impacts were adequately addressed in the 2018 EFMP EIR.

Question F: Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

Discussion

The analysis of Impact 4.8-6 in the 2018 EFMP EIR concluded that development under the 2018 EFMP would have a less than significant impact related to impairing the implementation of or physically interfering with an adopted emergency response plan or emergency evacuation plan.

Mt. SAC has a Campus Emergency Response and Evacuation Plan (Mt. SAC 2021a) that identifies procedures for emergencies, including campus emergency notification procedures, building evacuation procedures, and evacuation assembly areas. Approximately 20 assembly areas are identified on the Emergency Assembly Map included in the Campus Emergency Response and Evacuation Plan (Mt. SAC 2021a). While development of the 2018 EFMP would impact assembly areas, it is likely that only a small number of assembly areas would be affected at any one time since implementation of the project components would not occur at the same time. The Department of Campus Safety would ensure that alternate assembly areas would be identified to replace the impacted assembly area and/or ensure that existing assembly areas can meet the needs of the campus.

As indicated in the Emergency Response and Evacuation Plan, Mt. San Antonio College Police and Campus Safety Officers, the Los Angeles County Sheriff's Department, or the Los Angeles County Fire Department are the first responders to critical incidents on campus. These agencies work together to manage emergencies on campus. With implementation of the 2018 EFMP, an updated Campus Emergency Response and Evacuation Plan will be prepared and would incorporate the anticipated new status of Mt. SAC's Police and Campus Safety Department as a police force to enable it to participate more fully in the evacuation of the campus than in the past. Specifically, the Department would be authorized to implement traffic control measures on public roads to more quickly evacuate the campus. These and other measures would be included in the campus emergency response plan and be coordinated with the emergency response agencies of local governments.

Additionally, the City of Walnut provides emergency preparedness guidance for the City's response to emergency situations such as natural disasters, brush hazards, and emergency flood planning (Walnut 2018a). The City does not have an adopted emergency response plan or emergency evacuation plan.

Construction of the proposed project would not interfere with the implementation of the Mt. SAC Campus Emergency Response and Evacuation Plan or the City's Emergency Management Plan or the Campus Emergency Quick Plan. During project construction or operation and consistent with the existing conditions, should an emergency occur on campus that would necessitate evacuation, the existing street system would provide access off campus. Impacts would be less than significant consistent with the findings of the 2018 EFMP EIR.

Additional Project-Level Mitigation Measures

None required.

Level of Significance

The proposed project would have a less than significant impact related to implementation of or physical interference with an adopted emergency response plan or emergency evacuation plan. The proposed project impacts were adequately addressed in the EMFP EIR.

Question G: Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

Discussion

The analysis of Impact 4.8-7 in the 2018 EFMP EIR concluded that development under the 2018 EFMP would have a less than significant impact related to wildfires. The Mt. SAC campus is not within a designated VHFHSZ as defined by CalFire.

As discussed in Section 4.3, Biological Resources, of the 2018 EFMP EIR, the Mt. SAC campus contains ornamental vegetation throughout as well as natural habitat areas that support ecological and educational objectives of the campus. The campus is surrounded by developed land to the north, south, and west and open space and undeveloped areas to the east. These open space areas are limited in acreage and abut development or agricultural areas and livestock areas associated with Cal Poly Pomona, thus reducing the potential for wildland fires. In the event of fire emergency, Mt. SAC has an established Campus Emergency Response and Evacuation Plan that identifies procedures and actions for emergencies, including wildfires. All recommended structures associated with the 2018 EFMP would be constructed to meet current building and fire codes, and the buildings would be sprinklered accordingly. Implementation of the proposed project would not expose people or structures to a significant risk of loss, injury, or death involving wildland fires. Additionally, because thresholds 8.8 through 8.11 of the 2018 EFMP EIR 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. Specifically, implementation of the proposed project would not impair an adopted emergency response plan or evacuation plan; expose project occupants to pollutant concentrations from wildfire; require installation or maintenance of infrastructure that may exacerbate fire risk; and would not expose people or structures to significant risks as a result of runoff, post-fire slope instability, or drainage changes. No impacts would occur consistent with the findings of the 2018 EFMP EIR.

Additional Project-Level Mitigation Measures

None required.

Level of Significance

The proposed project would have no impact related to wildland fires. The proposed project was adequately addressed in the 2018 EFMP EIR.

X. HYDROLOGY AND WATER QUALITY

The analysis of hydrology and water quality is primarily tiered from the 2018 EFMP EIR and is addressed in Section 4.9 of the document. As detailed in the following discussions, relevant elements of the proposed project related to hydrology and water quality include the use of treatment-based LID BMPs. The analysis of hydrology and water quality is applicable to the proposed project which would involve the similar types of uses, and a similar amount of pervious and impervious surface.

The following MMs were identified in the 2019 Mitigation Monitoring Program prepared for the certified 2018 EFMP EIR and are incorporated as part of the proposed project and assumed in the analysis presented in this section.

MM HYD-1

Prior to the issuance of grading permits, Mt. SAC shall ensure preparation of a site-specific hydrologic evaluation for each proposed development project based on the project-specific grading plan and site design of each individual project. This evaluation shall include, but not be limited to: (1) an assessment of runoff quality, volume, and flow rate from the proposed Project site; (2) identification of project-specific BMPs (structural and non-structural) to reduce the runoff rate and volume to appropriate levels; and (3) identification of the need for new or upgraded storm drain infrastructure (on and off campus) to serve the project. Project design shall include measures to upgrade and expand campus storm drain capacity where necessary, as identified through the project-specific hydrologic evaluation. Design of future projects shall include measures to reduce runoff, including, but not limited to, the provision of permeable landscaped areas adjacent to structures to absorb runoff and the use of pervious or semi-pervious paving materials. All recommendations from forthcoming site-specific hydrologic evaluations shall be included in the site preparation and building design specifications.

Thresholds of Significance

Mt. SAC 2016 CEQA Thresholds of Significance

To the extent the following thresholds of significance are applicable to the project, they shall be applied to determine the project's environmental impact.

Environmental Topic in the CEQA Checklist	Impact	Mt. San Antonio Community College District Threshold of Significance	Agencies and Regulations	CEQA Procedures
Hydrology/Water Quality	Adequate facilities	Non-compliance with an applicable SWPPP	Los Angeles Department of Water and	Case studies Unless there are unusual
	Water quality Erosion or exceed the capacity of the Master Stormwater Drainage Plan	Non-compliance with an applicable Water Quality Management Plans (WQMP)	Power's (DPW's) Hydrology Manual NPDES – SWPPP – WQMP regulations	circumstances, no additional mitigation for hydrology and water quality beyond that included in the latest approved FMP MMP.

Project Impact Analysis

Question A: Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?

Discussion

The analysis of Impacts 4.9-1 in the 2018 EFMP EIR concluded that, with implementation of MM HYD-1, there would be a less than significant impact related to violation of existing water quality standards or waste discharge requirements (WDRs) and degradation of water quality.

Construction-Related Water Quality

Construction associated with the proposed project would primarily involve demolition of existing structures and construction of the new Technology and Health building. The potential impacts of construction activities, construction materials, and non-stormwater runoff on water quality during the construction phase would primarily be due to sediment (total suspended solids and turbidity) and certain non-sediment-related pollutants. 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 removal of vegetation from the site, grading of the site, and trenching for infrastructure improvements. Environmental factors that affect erosion include topographic, soil, and rainfall characteristics. Non-sediment--related pollutants that are also of concern during construction relate to construction materials and non-stormwater flows and include construction materials (e.g., paint and stucco); chemicals, liquid products, and petroleum products used in building construction or the maintenance of heavy equipment; and concrete-related pollutants.

The SWRCB's NPDES General Permit for Stormwater Discharges Associated with Construction Activity is referred to as the "Construction General Permit". Construction impacts due to development of the proposed project would be minimized through compliance with the Construction General Permit, which requires completing a construction site risk assessment to determine appropriate coverage level, filing a Notice of Intent (NOI) with the SWRCB, and having a Qualified SWPPP Developer prepare a SWPPP. The SWPPP must include erosion- and sediment-control BMPs that would meet or exceed measures required by the determined risk level of the Construction General Permit in addition to BMPs that control the other potential construction-related pollutants. A Construction Site Monitoring Program that identifies monitoring and sampling requirements implemented by a Qualified SWPPP Practitioner 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-stormwater management; training and education; and inspections, maintenance, monitoring, and sampling. The BMPs would be implemented in compliance with the Construction General Permit and the general waste discharge requirements in the General WDRs.

The construction-phase BMPs would ensure effective control not only of sediment discharge, but also of pollutants associated with sediments (e.g., nutrients, heavy metals, and certain pesticides, including legacy pesticides). In addition, compliance with Best Available Technology Economically Achievable and Best Conventional Pollutant Control Technology (BAT/BCT) requires that BMPs used to control construction water quality impacts are updated over time as

new water quality control technologies are developed and become available for use. Therefore, compliance with the BAT/BCT performance standard ensures mitigation of construction water quality impacts over time.

In summary, compliance with the Construction General Permit, including filing an NOI, which includes preparation of an SWPPP by a Qualified SWPPP Developer, would ensure impacts to receiving waters from non-stormwater flows during construction are less than significant consistent with the findings of the 2018 EFMP EIR.

Operational Water Quality

Development associated with the 2018 EFMP is expected to be a source of various pollutants entering the stormwater. Pollutants of concern for the campus, including proposed uses in the 2018 EFMP, include those expected pollutants that coincide with pollutants on the 303(d) list for receiving waters. Pollutants that are typically found in urban stormwater runoff include:

- Sediment soils or other surface materials
- Nutrients inorganic substances such as nitrogen and phosphorus
- Trash paper, plastic, glass, polystyrene foam
- Metals cadmium, aluminum, chromium, copper, lead, mercury, and zinc
- Bacteria indicator of the presence of viruses
- Oil and grease petroleum hydrocarbon products, esters, oils, fats, and waxes
- Organics leaves, grass cuttings, food waste, and carbon-based substances found in solvents and hydrocarbons
- Pesticides (including herbicides) chemical compounds used to control nuisance growth of organisms

As previously discussed, existing campus infrastructure generally drains southward and conveys stormwater to several public main lines. The western portions of campus generally drain to Snow Creek in the Wildlife Sanctuary, while the eastern portions of campus generally drain to an unnamed tributary of Snow Creek. Storm drainage lines that serve the academic core are adequately sized to accommodate a 25-year storm as required by the Los Angeles County Department of Public Works. In addition, Mt. SAC is in the process of improving its stormwater management system.

The anticipated pollutants of concern that may be generated on site as identified in Table 4.9-2 of the 2018 EFMP EIR, include Ammonia, Coliform Bacteria, pH, Total Dissolved Solids, and Toxicity, would result in a significant impact. However, implementation of MM HYD-1 requires site-specific water quality management plans to be prepared for each new building and site project, as part of the 2018 EFMP, to determine the pre-development runoff and to identify design strategies that would minimize the post-development runoff. The design of new site improvement and building projects would comply with the Los Angeles County stormwater quality management program and Low Impact Design (LID) Ordinance. Infiltration systems that treat and percolate stormwater to recharge the local aquifer would be most highly prioritized, followed by stormwater capture and reuse and high-removal-efficiency biofiltration. The proposed project would incorporate permanent stormwater management features that will collectively meet the requirements set forth in the LID Manual and include treatment control BMPs as well as source control BMPs. These stormwater quality design measures would provide "High" removal efficiency for the targeted pollutants of concern and would include stormwater quality design measure maintenance providing inspection criteria, maintenance indicators, and maintenance activities for

the BMPs requiring permanent maintenance. BMPs would be implemented as part of the project to ensure compliance is maintained with all applicable NPDES requirements at the time of the construction. BMPs that may be implemented include, but are not limited to, the following: site design principles, including site planning, and minimizing impervious area; LID BMPs including underground infiltration vaults, biofiltration basin, stormwater planters, bio-retention system, and vegetated bioswales; non-structural source-control BMPs such as BMP inspection and maintenance; and structural source-control BMPs including storm drain message and signage, outdoor material storage area, outdoor trash storage and waste handling area, landscape irrigation practices, and building material selection.

All BMPs would be located within the development footprint of the project as analyzed throughout this document. The final BMP system for the proposed project would be sized and the outlet structures designed to ensure that the post-development stormwater runoff flows comply with the applicable requirements. This would occur during final design and through preparation of final Water Quality Management Plans (WQMPs) for the proposed project; therefore, implementation of MM HYD-1 would reduce impacts related to water quality to less than significant levels consistent with the findings of the 2018 EFMP EIR.

Additional Project-Level Mitigation Measures

None required.

Level of Significance

The proposed project would have a less than significant impact related to the violation of water quality standards or waste discharge requirements, or otherwise substantially degrade water quality with incorporation of the MM HYD-1 noted above. The proposed project impacts were adequately addressed in the 2018 EFMP EIR.

Question B: Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

The analysis of Impact 4.9-2 in the 2018 EFMP EIR concluded that there would be a less than significant impact related to substantial depletion of groundwater supplies or interference with groundwater recharge.

Discussion

As previously discussed, Mt. SAC purchases all of its potable water on a wholesale basis from Three Valleys Municipal Water District (TVMWD). As a local water agency, Mt. SAC has the legal right to produce groundwater from its own wells located on campus for on-campus domestic uses, landscape irrigation, athletic field irrigation, pasture and rangeland irrigation, and wildlife sanctuary uses. Development of the proposed project would result in an increase in impervious area and would allow for less groundwater recharge when compared to existing conditions. However, the proposed project would incorporate permanent stormwater management features that will collectively meet the requirements set forth in the LID Manual and include treatment control BMPs as well as source control BMPs.

Further, impacts to groundwater supplies as a result of increased on-site development are not expected to occur. Mt. SAC's potable water is provided entirely through wholesale purchases from TVMWD and not from local groundwater. Local groundwater from the Puente and Spadra Basins is of poor quality and is used only to supplement TVMWD's recycled water system and

does not serve the majority of the campus. Thus, the increased water demand for the proposed project would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the proposed project might impede sustainable groundwater management of the basin. Therefore, a less than significant impact would be related to groundwater recharge. No additional mitigation is required consistent with the findings of the 2018 EFMP EIR.

Additional Project-Level Mitigation Measures

None required.

Level of Significance

The proposed project would have a less than significant impact related to substantial decrease of groundwater supplies; it would have a less than significant impact related to interference with groundwater recharge such that the project may impede sustainable groundwater management of the basin. The proposed project impacts were adequately addressed in the 2018 EFMP EIR.

- Question C: Would the project 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?

The analysis of Impacts 4.9-3(i)-(iv) in the 2018 EFMP EIR concluded that there would be a less than significant impact related to alteration of existing drainage patterns and storm drain system capacity.

Discussion

Existing stormwater runoff at Mt. SAC predominantly drains to the southwest and is gathered by a network of catch basins, area drains, and storm drains and is directed into five main public storm drain lines that ultimately discharge to San Jose Creek Reach 2 (Psomas 2016). Stormwater runoff currently drains to a public, City-owned storm drain line in Temple Avenue. The proposed project would continue to drain to the same storm drain system as existing conditions. As indicated above, stormwater BMPs being considered for this project include the following, which would reduce the amount of runoff existing at the project site: infiltration, biofiltration, hydrodynamic separators, media filtration, and capture and reuse.

The project site is currently developed with Buildings 27A, 27B, 27C, and Swimming Pool (27P) and with limited vegetation within landscaped areas. Development of the proposed project would result in an increase in impervious area; however, the anticipated change in the rate and volume of storm flows is anticipated to be nominal and the BMPs being considered for the project would ensure that stormwater flows exiting the site would not exceed current conditions. The proposed

project would not result in an impact to the capacity of the stormwater drainage system and no impacts related to on- or off-site flooding would occur. Compliance with required construction and long-term BMPs would reduce any erosion-related impacts to less than significant levels, consistent with the findings of the 2018 EFMP EIR.

As discussed previously, the proposed project would result in an increase in impervious surface and associated runoff as under existing conditions. The proposed project would continue to drain to the same public storm drain line in Temple Avenue as under current conditions and would not result in an impact to the capacity of the stormwater drainage system.

As described above in the response to Question A, stormwater BMPs for this project may include the following: infiltration, biofiltration, hydrodynamic separators, media filtration, and capture and reuse. In addition, the proposed project would comply with the NPDES Construction General Permit to control construction-related pollutants. Therefore, the proposed project would not result in substantial additional sources of polluted runoff. This impact is less than significant consistent with the findings of the 2018 EFMP EIR.

Additional Project-Level Mitigation Measures

None required.

Level of Significance

The proposed project would have a less than significant impact related to (1) altering the existing drainage pattern in a manner that would result in substantial erosion or siltation on- or off-site; (2) altering the existing drainage pattern or substantially increasing the rate or amount of surface runoff in a manner that would result in flooding on- or off-site; and (3) creating or contributing to runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff. The proposed project impacts were adequately addressed in the 2018 EFMP EIR.

Question D: Would the project in flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

The analysis of Impacts 4.9-4 in the 2018 EFMP EIR concluded that there would be no impact related to flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation.

Discussion

The Puddingstone Reservoir is the nearest dam to the project site, located approximately 3 miles to the northeast. Due to distance and intervening topography, the reservoir's inundation area would not affect the City of Walnut, including the project site (City of Walnut 2018a). Additionally, according to the County of Los Angeles All-Hazard Mitigation Plan, the City of Walnut, including the project site, is not located within a dam inundation area (County of Los Angeles 2014). Therefore, there would be no impacts associated with the risk of loss, injury, or death involving flooding. No mitigation is required, consistent with the findings of the 2018 EFMP EIR.

The nearest large body of water is the Puddingstone Reservoir, located approximately 3 miles to northeast of the project site. Due to distance and intervening topography, a seiche at the Puddingstone Reservoir would not affect the project site. The project site is located over 35 miles east of the Pacific Ocean; therefore, there is no potential for inundation of the project site by tsunami. Additionally, the project site is located within a relatively flat, developed area of the

campus and would not be subject to mudflows. No impact would occur, and no mitigation is required, consistent with the findings of the 2018 EFMP EIR.

Additional Project-Level Mitigation Measures

None required.

Level of Significance

The proposed project would have no impact related to flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation. The proposed project impacts were adequately addressed in the 2018 EFMP EIR.

Question E: Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

The analysis of Impact 4.9-5 in the 2018 EFMP EIR concluded that the project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.

Discussion

As discussed previously, surface flow from the project enters the municipal storm drain system which outlets into the San Gabriel River and ultimately discharges into the Pacific Ocean (City of Walnut 2018a. Table 4.9-1 in the 2018 EFMP EIR lists the designated beneficial uses for San Jose Creek Reach 2 and San Gabriel River Reach 3, the water bodies that would receive discharges from the campus. The Mt. SAC campus is located within the San Gabriel Watershed and is part of the San Gabriel River Watershed Management Area. Implementation of the 2018 EFMP would be developed in compliance with all applicable requirements articulated in the Water Quality Control Plan for the Basin Plan, designed to preserve and enhance water quality and protect the beneficial uses of all regional waters (LARWQCB 2021).

In addition, implementation of the proposed project would be required to comply with the Los Angeles County Department of Public Works Hydrology Manual (2006), including the Standard Urban Storm Water Mitigation Plan (SUSMP) that applies to development and re-development projects within Los Angeles County. The SUSMP includes Total Maximum Daily Loads (TMDLs) for pollutants in CWA Section 303(d) and contains BMPs for managing stormwater quality during construction projects and design techniques for storm drain systems (City of Walnut 2018a).

Development under the 2018 EFMP would be required to comply with all requirements of the Walnut Municipal Code Article IV, Standard Urban Stormwater Mitigation Plan, which requires new development and significant redevelopment projects (as described in the NPDES permit) to prepare a SUSMP. Further, prior to issuance of a grading permit, building permit, and/or safety permit for any new development or significant redevelopment, the property owner is required to submit to and obtain the approval of the SUSMP by the City (City of Walnut 2018a). Thus, implementation of the proposed project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan consistent with the findings of the 2018 EFMP EIR.

Additional Project-Level Mitigation Measures

None required.

Level of Significance

The proposed project would have a less than significant impacts related implementation of a water quality control plan or sustainable groundwater management plan. The proposed project impacts were adequately addressed in the 2018 EFMP EIR.

XI. LAND USE AND PLANNING

The analysis of land use and planning is tiered from the 2018 EFMP EIR and was addressed in Section 4.10, Land Use and Planning, of the document. Relevant elements of the proposed project related to land use and planning include (1) removal of existing landscape and hardscape areas; (2) construction of a new approximately 253,866 gsf, 4-story Technology and Health building; and (3) the introduction of new landscaping and hardscape. The proposed project would serve the projected Mt. SAC campus population with the addition of approximately 90 net new staff positions. Population growth would not exceed the projections as analyzed in the 2018 EFMP EIR.

There were no applicable MMs adopted as part of the 2018 EFMP EIR related to land use and planning.

Thresholds of Significance

Mt. SAC 2016 CEQA Thresholds of Significance

To the extent the following thresholds of significance are applicable to the project, they shall be applied to determine the project's environmental impact.

Environmental Topic in the CEQA Checklist	Impact	Mt. San Antonio Community College District Threshold of Significance	Agencies and Regulations	CEQA Procedures
Land Use/Planning	FMPs Campus Zoning Districts	Inconsistency with the District Land Use Plan (e.g., location, gsf) in the latest FMP or for a site- specific project is a significant impact Inconsistency with a Campus Zoning District in the latest FMP is a significant impact	SCAG's Regional Comprehensive Plan – Land Use & Housing Chapter Certain District facilities are exempt from local agencies' land use and planning controls	Chapter 2.5: Definitions: Section 21061.3. Infill Site; Section 21071 Urbanized Area; Definition; Chapter 2.6: General: Section 21080.09 Public Higher Education; Campus Location; Long-Range Development Plans; Chapter 3: Guidelines for Implementation of the California Environmental Quality Act: Section 15061, subsection (b)(3) Review for Exemption under "common sense" provision; Section 15300 Categorical Exemptions;

Environmental Topic in the CEQA Checklist	Impact	Mt. San Antonio Community College District Threshold of Significance	Agencies and Regulations	CEQA Procedures
				Section 15301, subsection (e)(2) Existing Facilities with 10,000 sf increase;
				Section 15304 Minor Alterations to Land, including grading, trenching or backfilling;
				Section 15323 Normal Operations of Facilities for Public Gatherings including stadiums, auditoriums, amphitheaters, planetariums, and swimming pools;
				Section 15332 In-Fill Development Projects, no more than five (5) acres when compatible with campus zoning.

Project Impact Analysis

Question A: Would the project physically divide an established community?

Discussion

The analysis of Impact 4.10-1 in the 2018 EFMP EIR concluded that the project would not physically divide an established community.

The Mt. SAC campus is bound by residential development to the north and south, commercial and residential uses to the west, and open space to the east. As shown in Exhibits 1 and 2, the project site is developed and located in the center of the campus. As described in Section 2.0, Project Description, the proposed project does not involve the introduction of any new roadways or uses that have the potential to physically divide an established community. No impacts related to the project physically dividing an established community would result and no mitigation is required consistent with the findings of the 2018 EFMP EIR.

Additional Project-Level Mitigation Measures

None required.

Level of Significance

The proposed project would have no impact related to physically dividing an established community. The proposed project impacts were adequately addressed in the 2018 EFMP EIR.

Question B: Would the project 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?

Discussion

The analysis of Impact 4.10-2 in the 2018 EFMP EIR concluded that development of the Mt. SAC campus under the 2018 EFMP would not conflict with applicable local or regional land use plans, policies, or regulations.

The project site is located on the Mt. SAC campus and is within the campus Primary Educational Zone. Implementation of this project would be consistent with the goals set forth in the 2018 EFMP. Additionally, as previously described in Section 2.1, Project Location and Setting, the project site is designated as Schools and Public Institutional according to the City of Walnut General Plan and zoned for Residential Planned Development with a Civic Center Overlay (Walnut 2018b). The City of Walnut Zoning Map also identifies the project area as part of the Mt. SAC Community College. However, the City of Walnut has adopted a Zoning Code Amendment (ZCA) – ZCA No. 2018-01 and Zone Change (ZC) 2018-02. ZCA 2018-01 and ZC 2018-02 that establishes the Schools and Public Institutional Zoning District to be consistent with the recently adopted Walnut General Plan. The Land Use Element of the Walnut General Plan has created a new land use designation that identifies public uses, such as schools, civic center complex, and other government and utility property and uses as being included in the new Zone. The proposed project would not conflict with the existing or proposed zoning for the campus. Therefore, impacts would be less than significant, and no mitigation is required, consistent with the findings of the 2018 EFMP EIR.

City of Walnut General Plan

The 2018 WGP included a comprehensive update and now includes an SPI designation which applies to the Mt. SAC campus. In the Land Use Plan of the 2018 WGP, the land use designation for the campus is SPI. Consistent with the 2018 EFMP EIR findings, the proposed project does not involve a change in the land use of the entire campus, although changes to individual structures and uses of the structures are recommended at various sites. No conflict with the SPI designation would occur, since the 2018 EFMP recommends campus-related facilities and site improvements. The proposed Project would maintain the primary school use of the campus and does not involve a General Plan Amendment (to the land use designation). Therefore, the proposed project is consistent with the land use designation for the campus.

Additional Project-Level Mitigation Measures

None required.

Level of Significance

The proposed project would have a less than significant impact due to conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. The proposed project impacts were adequately addressed in the 2018 EFMP EIR.

XII. MINERAL RESOURCES

Section 15128 of the State CEQA Guidelines states that "an EIR shall contain a statement briefly indicating the reasons that various possible significant effects of a project were determined not to be significant and were therefore not discussed in detail in the EIR". Through review of the 2018 EFMP site, Mt. SAC determined that detailed discussions for mineral resources were not required because the proposed project would result in effects found not to be significant due to the lack of resources on the 2018 EFMP site. Additionally, there are no relevant MMs adopted as part of the 2018 EFMP EIR.

- Question A: Would the project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?
- Question B: Would the project result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?

Discussion

Important mineral resource areas are recognized at the federal and State levels through environmental resource management plans and adopted mineral resource mapping. Based on review of the California Geological Survey Updated Mineral Land Classification map for Portland Cement Concrete-Grade Aggregate in the Claremont-Upland Production-Consumption Region, Los Angeles and San Bernardino Counties, California (CGS 2007), no locally important mineral resources recovery sites are designated in the City of Walnut. Therefore, implementation of the proposed project would not result in the loss of such mineral resources. No mineral resources impacts would occur, and no mitigation is required.

Additional Project-Level Mitigation Measures

None required.

Level of Significance

The proposed project would have no impact related to (1) the availability of a known mineral resource that would be of value to the region and the residents of the State or (2) the availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan.

XII. NOISE

The analysis of noise is tiered from the 2018 EFMP EIR and was addressed in Section 4.11, Noise, of that document. Relevant elements of the proposed project related to noise and vibration include the use of diesel-powered and other heavy equipment during construction. The proposed project would include construction activities at the project site, which would involve demolition, grading, and other construction-related activities. With respect to operations, the proposed project would increase the Mt. SAC campus employee population by approximately 90 net new staff members. Additionally, the proposed project includes use of mechanical equipment (e.g., air conditioning units) and as well as additional vehicle trips. These vehicle trips were accounted for within the 2018 EFMP EIR. Hours of operation will be similar to existing academic facilities on campus.

MMs adopted as part of the 2018 EFMP EIR related to noise are not applicable to this project.

Thresholds of Significance

Mt. SAC 2016 CEQA Thresholds of Significance

To the extent the following thresholds of significance are applicable to the project, they shall be applied to determine the project's environmental impact.

Environmental Topic in the CEQA Checklist	Impact	Mt. San Antonio Community College District Threshold of Significance	Agencies and Regulations	CEQA Procedures
Noise	Traffic and construction-related noise	Written evidence supporting the District's noise thresholds is identified in Footnote 5. Traffic-generated net noise increase on public roadways equal or less than 3 dBA at 100 feet from centerline that result in noise levels at or below 65 CNEL in off-campus sensitive-noise-receptor areas (residential or hospitals), or at or below 70 CNEL for off-campus commercial areas, due to baseline versus buildout project net FMP trip increases are not a significant impact Cumulative projects traffic-generated noise impacts (existing + project baseline versus existing + project + cumulative) are not significant if the same noise criteria stated above is applied to sensitive receptors or commercial areas off-campus Site-specific construction projects lasting one year or less for site	OPR's General Plan Guidelines, Chapter 4: Required Elements (Noise Element);	Case-by-case studies for unusually high noise issues (i.e. on-campus for permanent new equipment, or new special events with attendance above 8,000 weekdays except for summer intersessions; Whenever feasible, classrooms, campus housing, laboratories, auditoriums and libraries shall be located in areas where the existing noise environment is 65 CNEL or less. If not, special sound attenuation measures are required; Unless there are special circumstances (i.e. biological, special projects, etc.), no additional mitigation for construction noise beyond that included in the latest approved FMP MMP (e.g. MM-5a) for new construction or renovation; If applicable, prepare a site-specific ground-borne vibration study to
		preparation, demolition, grading and shell building construction located within 1,500 feet or less from a sensitive off-site land use have a significant construction		ascertain potential building damage if rough grading occurs within 50 feet of off-site buildings in sensitive receptor areas;
		noise impact if construction occurs outside of permitted construction hours.		MM-5a: All construction activities, except in emergencies or unusual circumstances, shall be limited to the hours of 7
		Construction hours are defined in MM-5a in the latest approved FMP		am to 7 pm Monday- Saturday, excluding federal holidays. Staging

Environmental Topic in the CEQA Checklist	Impact	Mt. San Antonio Community College District Threshold of Significance	Agencies and Regulations	CEQA Procedures
	Impact			areas for construction shall be located away from existing off-site residences. All construction equipment shall use properly operating mufflers. These requirements shall be included in construction contracts and implemented. Facilities Planning & Management shall monitor compliance. (Revised from 2012 FMP MMP)
		noise impact if:		

Environmental Topic in the CEQA Checklist	Impact	Mt. San Antonio Community College District Threshold of Significance	Agencies and Regulations	CEQA Procedures
		(1) Construction occurs outside of permitted construction hours. (Construction hours are defined in MM-5a in the MMP) and;		
		(2) Lmax noise levels from 7 am to 7 pm are less than 90 dBA and less than 65 dBA Leq at any off-site sensitive receptor property line and;		
		(3) From 7 pm to 7 am, the Lmax is less than 75 dBA and less than 55 dBA Leq off-site at any off-site sensitive property line; See Report 15-116		
		On-campus generated site-specific operational noise shall not exceed 55 dBA Leq during the day from 7 am to 10 pm and 50 dBA Leq during the night from 10 pm to 7 am. (The noise level criterion is applied to the closest property line of the off-campus noise sensitive receptor);		
		A site-specific project shall also not exceed 75 dBA Lmax during the day or 70 dBA Lmax during the night from 10 pm to 7 am at any noise sensitive land use. (If the ambient noise levels are higher than the noise criteria, the standard should be increased to the ambient noise level. See Report		

Noise and Vibration Descriptors

"Sound" is a vibratory disturbance created by a moving or vibrating source and is capable of being detected. "Noise" is defined as sound that is loud, unpleasant, unexpected, or undesired and may therefore be classified as a more specific group of sounds. The effects of noise on people can include general annoyance; interference with speech communication; sleep disturbance; and, in the extreme, hearing impairment.

Sound pressure levels are described in a unit called the decibel (dB). Decibels are measured on a logarithmic scale. A doubling of the energy of a noise source (such as doubling of traffic volume) would increase the noise level by 3 dB. The human ear is not equally sensitive to all frequencies within the sound spectrum. To accommodate this phenomenon, the A-scale was devised; the A-weighted decibel scale (dBA) approximates the frequency response of the average healthy ear when listening to most ordinary everyday sounds and is used in this analysis.

Human perception of noise has no simple correlation with acoustical energy. Due to subjective thresholds of tolerance, the annoyance of a given noise source is perceived very differently from person to person. The most common sounds vary between 40 dBA (very quiet) to 100 dBA (very loud). Normal conversation at 3 feet is approximately 60 dBA, while loud jet engine noises at 1,000 feet equate to 100 dBA, which can cause serious discomfort. Several rating scales (or noise "metrics") exist to analyze effects of noise on a community. These scales include the equivalent noise level (L_{eq}), including L_{max} and L_{min} , which are, respectively, the highest and lowest A-weighted sound levels that occur during a noise event, and the Community Noise Equivalent Level (CNEL). Average noise levels over a period of minutes or hours are usually expressed as dBA Leq, which is the equivalent noise level for that period of time. The period of time averaging may be specified; for example, $Leq_{(3)}$ would be a three-hour average. 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 many 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 nighttime noise. CNEL represents the 24-hour average sound level with a penalty for noise occurring at night. The CNEL computation divides 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 with daytime hourly sound levels.

In quantifying vibration, vibration is described as peak particle velocity (ppv), which is defined as the maximum instantaneous peak of the vibration signal. Typically, ground-borne vibration generated by man-made activities attenuates rapidly with distance from the source.

Project Impact Analysis

Question 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?

Discussion

As indicated above, Mt. SAC has established its own CEQA thresholds of significance for noise, allowing for construction activities between the hours of 7:00 am and 7:00 pm, Monday through Saturday. All construction activities would conform to Mt. SAC standards.

Construction Noise

Project construction is estimated to start in 2023 with project completion in 2026. Construction activities associated with the proposed project would include demolition, grading, and construction activities. Construction noise levels for each phase of construction (ground clearing/demolition, excavation, foundation construction, building construction, paving, and site cleanup) are based

on a typical construction equipment mix for a school project and do not include use of atypical, very loud, and vibration-intensive equipment (e.g., pile drivers).

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 14, Construction Noise Levels at Noise-Sensitive Uses.

TABLE 14
CONSTRUCTION NOISE LEVELS AT NOISE-SENSITIVE USES

	Noise Levels (Leq dBA)						
	Residents to the North of the Project Site	Residents to the East of the Project Site	Residents to the South of the Project Site	Residents to the West of the Project Site			
Construction Phase	(dBA@1,370 ft)	(dBA@6,960 ft)	(dBA@2,770 ft)	(dBA@2,265 ft)			
Ground Clearing/Demolition	55	41	49	51			
Excavation (Site Preparation)	60	46	54	56			
Foundation Construction	49	35	43	45			
Building Construction	58	44	52	54			
Paving	60	46	54	56			
Mt. SAC Construction Noise Limit	65	65	65	65			
Exceeds?	No	No	No	No			

Lea dBA: Average noise energy level; ft: feet

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

Source: Psomas 2021.

Table 14 shows the noise levels for construction equipment. Noise levels at off-campus residences from general project-related construction activities would range from 35 to 60 dBA $L_{\rm eq}$. Noise level reductions from intervening structures were not included. The noise levels provided by the EPA's *Noise from Construction Equipment and Operations, Building Equipment, and Home Appliances* indicates that noise levels from construction equipment would be below Mt. SAC's noise limit of 65 dBA for construction activities. Substantially noisy equipment, such as pile drivers, would not be used for the project. Consequently, noise associated with project-related construction would not result in significant impacts; and no mitigation is required.

Operational Noise

Noise Generated by On-Site Sources

Operational noise sources associated with the proposed project would include, but are not limited to, landscape maintenance equipment, HVAC (Heating Ventilation and Air Conditioning) parking activities, and automobile travel within the project site. Activities associated with the aircraft maintenance program that currently occurs in Building 28 immediately south of the Project site will be moved to the proposed Project site. Noise associated with these activities would be generated by motors and turbines. When this use is moved to the project site, aircraft maintenance activities will occur both indoors and outdoors within the project site. Activities occurring indoors will be substantially attenuated within the project's building. The outdoor air maintenance yard is surrounded on three sides with multi-story project structures which would also provide noise attenuation. Noise monitoring of the loudest aircraft maintenance activities were conducted on March 2, 2021. These noise measurements included operation of riveting, a

propeller plane engine, and a jet turbine. Riveting is typically done by approximately eight students within the air maintenance building but approximately 5 percent of these activities would occur outside within the air maintenance yard. The propeller airplane located within the air maintenance yard would be operated approximately 1 hour per day and twice a week. The jet turbine would be enclosed within the jet engine test cell. This enclosure would attenuate noise generated by the turbine. The jet turbine is operated approximately 1 hour per week. The noise measurements of the turbine were taken outside of the existing jet engine test cell.

Table 15 shows the noise levels associated with each of these activities and the noise exposure of noise sensitive residential uses located outside of the Mt. SAC campus. Noise levels would be attenuated based on the large distance of these activities to off-campus residential uses as well as from intervening buildings and topography. Noise generated by these activities are required to comply with the noise limits established by Mt. SAC of 55 dBA L_{eq} during the day from 7:00 am to 10:00 pm and 50 dBA Leq during the night from 10:00 pm to 7:00 am at off-campus noise sensitive residential uses.

TABLE 15
NOISE EXPOSURE FROM AIRCRAFT MAINTENANCE ACTIVITIES
AT SENSITIVE USES

Noise Source	Noise Level (dBA)	Offsite Source Receptor Distance (ft)	Distance Attenuatio n (dBA)	Barrier Reduction (dBA)	Offsite Noise Exposure (dBA)	Noise Limit (dBA)	Exceeds?
		North	ern Off-camp	us Receptors	•		
Riveting	112	1,370	-47	-24	41	55	No
Propeller Plane	107	1,370	-37	-24	46	55	No
Turbine Outdoor	91	1,370	-47	-24	20	55	No
		South	ern Off-camp	us Receptors	3		
Riveting	112	2,730	-53	-15	44	55	No
Propeller Plane	107	2,730	-43	-15	49	55	No
Turbine Outdoor	91	2,730	-53	-15	23	55	No
		Easte	rn Off-campu	ıs Receptors			
Riveting	112	6,960	-61	-26	24	55	No
Propeller Plane	107	6,960	-51	-26	30	55	No
Turbine Outdoor	91	6,960	-61	-26	4	55	No
Western Off-campus Receptors							
Riveting	112	2,265	-52	-23	38	55	No
Propeller Plane	107	2,265	-42	-23	43	55	No
Turbine Outdoor	91	2,265	-52	-23	17	55	No

As shown in Table 15, the noisiest activities that would occur at the relocated aircraft maintenance program within the project site would result in noise exposure levels that are below the noise limits established by Mt. SAC at the nearest off-campus noise sensitive residential uses. Noise sensitive uses located further from these analyzed locations would be expected to result in less project related noise exposure. As such, impacts would be less than significant.

Noise Generated by Off-Site Sources

Operational noise sources associated with the proposed project occurring off-site is related to vehicle traffic. Traffic noise from the development of the 2018 EFMP was evaluated in the DEIR and found to result in a 0-1 dBA change in noise levels without the 2018 EFMP. A substantial noise increase would occur if future traffic noise levels increased by more than 3 dBA compared to future conditions without the project. As such, the evaluation of traffic noise impacts associated with the 2018 EFMP did not result in significant noise impacts. Because the project comprises a small portion of the 2018 EFMP, it would likewise generate noise levels of less than 3 dBA and would result in less than significant traffic noise impacts.

Additional Project-Level Mitigation Measures

None required.

Level of Significance

The proposed project would result in a less than significant temporary or permanent increase in ambient noise levels in the project vicinity. The proposed project impacts were adequately addressed in the 2018 EFMP EIR.

Question B: Generation of excessive groundborne vibration or groundborne noise levels?

Discussion

Vibration is an oscillatory motion through a solid medium in which the motion's amplitude can be described in terms of displacement, velocity, or acceleration. Vibration is normally associated with activities such as railroads or vibration-intensive stationary sources but can also be associated with construction equipment such as jackhammers, pile drivers, and hydraulic hammers. During construction of a project, the operation of construction equipment can cause groundborne vibration. During the operational phase of a project, the project does not involve receptors may be subject to levels of vibration that can cause annoyance due to noise generated from vibration of a structure or items within a structure.

Vibration is described as peak particle velocity (ppv), which is defined as the maximum instantaneous peak of the vibration signal. The units for ppv are normally inches per second (in/sec) and the threshold of perception is approximately 0.3 ppv.

Pile driving and blasting are generally the sources of the most severe vibration during construction. Neither pile driving nor blasting would be used during project construction. Conventional construction equipment would be used for demolition and grading activities. As noted previously, the project site is located within the Mt. SAC campus with the nearest off-site residential properties located approximately 1,370 feet away.

As shown in Table 16, the Mt. SAC 2016 CEQA Thresholds of Significance indicates that a significant impact would occur if a ppv of 0.04 inches/second or more occurs off-site in a sensitive receptor area for more than fifteen (15) minutes in any one hour.

TABLE 16 VIBRATION ANNOYANCE CRITERIA AT SENSITIVE USES

	Vibration Levels (ppv)						
	Residents to the North of the Project Site	Residents to the East of the Project Site	Residents to the South of the Project Site	Residents to the West of the Project Site			
Equipment	(dBA@1,370 ft)	(dBA@6,960 ft)	(dBA@2,770 ft)	(dBA@2,265 ft)			
Large bulldozer	0.0	0.0	0.0	0.0			
Small bulldozer	0.0	0.0	0.0	0.0			
Jackhammer	0.0	0.0	0.0	0.0			
Loaded trucks	0.0	0.0	0.0	0.0			
Mt. SAC Significance Criteria	0.04	0.04	0.04	0.04			
Exceeds Criteria?	No	No	No	No			

ppv: peak particle velocity; Max: maximum; avg: average; ft: feet

Source: Psomas 2021.

As shown in Table 16, the proposed Project would not generate or expose persons or structures to excessive groundborne vibration from the construction phase as there would be no increase in ppv resulting from project construction activities.

The operations phase of the project would not result in machinery or vehicles that generate substantial levels of vibration that would exceed Mt. SAC's vibration limits or be perceptible at residential uses adjacent to the campus. Vehicles traveling to the project site are travelling on air-filled tires that do not effectively transmit vibration. The aircraft maintenance program may involve machinery that generate vibration but not to the extent that it would result in exceedances of Mt. SAC's limits due to the very large distance between the project site and off-campus residential uses.

As shown in Table 16, construction related vibration levels would be below the significance thresholds for vibration and vibration impacts from construction of the project and would be less than significant. Project operations would not generate additional traffic along roadways in the project vicinity and would not generate any new vibration resulting from operations. Construction and operational vibration impacts would be less than significant, and no mitigation required.

Level of Significance

The proposed project would have less than significant temporary construction vibration impacts to off-campus receptors.

The proposed project would have less than significant impacts for temporary related to groundborne vibration or groundborne noise levels impacts to occupied on-campus buildings. The proposed project impacts were adequately addressed in the 2018 EFMP EIR.

Question 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?

Discussion

The Project site is not located within 2 miles of a public airport or private use airport. The nearest airport is Brackett Field, which is located approximately 4 miles northeast of the campus. This airport serves general aviation (GA) aircraft. According to the Brackett Field Airport Land Use Compatibility Plan (LACALUC 2015), the project site is not located in the Airport Influence Area of the airport; therefore, no impact would result, and no mitigation is required.

Additional Project-Level Mitigation Measures

None required.

Level of Significance

The proposed project would have no impact related to public use airports or private airstrips. The proposed project impacts were adequately addressed in the 2018 EFMP EIR.

XIV. POPULATION AND HOUSING

The analysis of population and housing is tiered from the 2018 EFMP and was addressed in Section 4.12, Population and Housing, of that document. Relevant elements of the proposed project related to population and housing include the addition of 90 net new staff positions.

There were no applicable MMs adopted as part of the 2018 EFMP EIR related to population and housing.

Project Impact Analysis

Question A: Would the project induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

Discussion

The analysis of Impact 4.12-1 in the 2018 EFMP EIR determined that implementation of the 2018 EFMP would not induce substantial population growth, directly or indirectly.

As stated previously, the project proposes to develop a new Technology and Health Building consisting of classroom laboratory, office, library and other support space. No housing would be developed as part of the project. Approximately 90 net new staff positions would be generated by the proposed project, which is expected to primarily be filled by the local labor pool. Additionally, this increase in the on-campus population is within the remaining projected growth on campus (464 faculty and staff), as identified in the 2018 EFMP.

Because the projected housing supply in both the City of Walnut and the region was determined adequate for the additional non-student population associated with implementation of the 2018 EFMP, it can be concluded that there would be adequate supply for additional staff positions associated with the Technology and Health building.

Therefore, the proposed project would not result in substantial population growth or growth beyond what was projected in the 2018 EFMP. This impact is less than significant, consistent with the findings of the 2018 EFMP EIR.

Additional Project-Level Mitigation Measures

None required.

Level of Significance

The proposed project would have a less than significant impact related to inducing substantial population growth in the area either directly or indirectly. The proposed project impacts were adequately addressed in the 2018 EFMP EIR.

Question B: Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

Discussion

As discussion in Section 4.12, Population and Housing, of the 2018 EFMP EIR, no housing is present on campus, and the proposed project would not result in the displacement of housing necessitating the construction of replacement housing elsewhere. No impact would result, and no mitigation is required, consistent with the findings of the 2018 EFMP EIR.

Additional Project-Level Mitigation Measures

None required.

Level of Significance

The proposed project would have no impacts related to displacement of a substantial amount of existing housing that would necessitate the construction of replacement housing or displacement of substantial numbers of people that would necessitate the construction of replacement housing. The proposed project impacts were adequately addressed in the LRDP EIR.

XV. PUBLIC SERVICES

The analysis of the provision of public services on campus (i.e., fire, police, schools, and other public facilities) is tiered from the 2018 EFMP EIR and is addressed in Section 4.13, Public Services, of those documents. Relevant elements of the proposed project related to public services include the construction and operation of the Technology and Health building. Buildings 27A, 27B, 27C, and Swimming Pool (27P) would be demolished to provide a construction site for the new building. Following occupancy of the new Technology and Health building, Technology Center A (28A) and B (28B), and Health Careers Center A (67A) would then be inactivated. The TERC modular (18C) would also be inactivated and relocated offsite. In addition, spaces from within the Design Technology building (13) and Health Careers Center B (67B) would be vacated and inactivated. Additionally, pathways would be developed and/or improved to provide adequate requirements for emergency vehicle access.

There were no applicable MMs adopted as part of the 2018 EFMP EIR related to public services.

Thresholds of Significance

Mt. SAC 2016 CEQA Thresholds of Significance

To the extent the following thresholds of significance are applicable to the project, they shall be applied to determine the project's environmental impact.

Environmental Topic in the CEQA Checklist	Impact	Mt. San Antonio Community College District Threshold of Significance	Agencies and Regulations	CEQA Procedures	
Public Services	Fire & police protection	Substantial adverse physical impacts from new construction associated with required new or physically altered facilities required for the latest FMP or for a site-specific campus project to maintain acceptable performance objectives for fire or police protection is a significant impact.	Los Angeles County Sheriff's Department (LASD) LACoFD	Impacts of new facilities on physical environment only; Unless there are special circumstances, no additional mitigation measures for public services beyond those included in the latest approved FMP MMP.	

Project Impact Analysis

Question A: Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

Fire Protection?

Discussion

The analysis of Impact 4.13-1 in the 2018 EFMP EIR concluded that there would be less than significant direct and cumulative impacts related to the need for new or physically altered fire protection facilities to accommodate the increased demand resulting from implementation of the 2018 EFMP and to maintain acceptable service levels.

The LACoFD provides fire protection, fire suppression, and emergency medical services on a contract basis to the City of Walnut, including Mt. SAC and the project area. Fire Station No. 153 located at 1577 East Cypress Street in Covina, is approximately 3.1 miles from the campus and is the jurisdictional station for the project area, providing first response. Fire Station 153 is staffed with a 4-person quint company. Fire Station No. 85 provides secondary response to the project area. This station has a three-person engine company and a two-person emergency support team. Fire Station No. 85 located at 650 E. Gladstone Street in Glendora, is approximately 4.2 miles from the campus.

The proposed project involves the construction of a new Technology and Health building that would encompass 253,866 gsf. Functional space within the building would include classroom, laboratory, office, library, and other support space. Based on correspondence with Los Angeles County Fire Department (Takeshita 2018), the proposed project would not affect the Fire Department's ability to maintain acceptable response times. In addition, the proposed project would not require the construction of new facilities, the expansion of existing facilities, or additional personnel or equipment to maintain acceptable response times. Impacts would be less than significant, and no mitigation is required consistent with the findings of the 2018 EFMP EIR.

Additional Project-Level Mitigation Measures

None required.

Level of Significance

The proposed project would have a less than significant impact on fire protection services. The proposed project impacts were adequately addressed in the 2018 EFMP EIR.

Question A: Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

Police Protection?

Discussion

The analysis of Impact 4.13-2 in the 2018 EFMP EIR identified that the proposed project would have a less than significant impact to police services.

Police protection services for the Mt. SAC campus including the project area are provided by the Los Angeles County Sheriff's Department (LASD). The Mt. SAC Department of Police and Campus Safety also provides safety and security services to the campus; however, Mt. SAC police personnel are not sworn peace officers. The nearest LASD station is the Walnut/Diamond Bar Sheriff's Station located at 21695 East Valley Boulevard in Walnut. The Walnut/Diamond Bar Station is responsible for policing the cities of Walnut and Diamond Bar and the unincorporated areas of Rowland Heights, Covina Hills, and West Covina. The station is currently staffed by 102 sworn law enforcement officers and 50 civilian support staff. The City of Walnut contracts for nine deputies, which equates to three patrol units on the day shift, three patrol units on the evening shift, and three patrol units on the early morning shift. The LASD uses the following response time standards: 10 minutes (emergency calls), 20 minutes (priority calls), and 60 minutes (routine calls). The Walnut/Diamond Bar Station has the following response time averages in the City of Walnut for a one-year timeframe: 4.2 minutes for emergency calls for service, 8.5 minutes for priority calls for service, and 20.9 minutes for routine calls for service. Based on consultation with the LASD (Reves 2018), the proposed project would not generate demand for additional staffing or affect current response times. Existing LASD facilities would be sufficient to serve the proposed project along with the existing demand of the area; therefore, a significant impact would not occur related to the construction of law enforcement facilities, and no mitigation is required consistent with the findings of the 2018 EFMP EIR.

Additional Project-Level Mitigation Measures

None required.

Level of Significance

The proposed project would have a less than significant impact to police services. The proposed project impacts were adequately addressed in the 2018 EFMP EIR.

Question A: Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

Schools?

Discussion

The analysis of Impact 4.13-3 in the 2018 EFMP EIR identified that the proposed project would have a less than significant impact to schools and no new or altered school facilities would be required. The 2018 EFMP does not involve the development of new residential uses or include a housing element that would result in a direct increase/generation of students in the Mt. San Antonio Community College District encompassed by the Mt. SAC boundary or within the service area. However, the 2018 EFMP would generate a relatively small number of new staff. As previously discussed in Section XIV, Population and Housing, these positions would likely be filled by the local labor pool. Therefore, it is not expected that a substantial number of new students attending schools within the Mt. SAC boundaries or service area school districts would be generated as a result of the 2018 EFMP.

As stated previously, the proposed project involves the construction of a new Technology and Health building that would encompass 253,866 gsf. Functional space within the building would include classroom, laboratory, office, library, and other support space. The project would result in the introduction of approximately 90 net new staff member positions; however, no housing is proposed and the increase in population is consistent with the growth projections assumed in the 2018 LRDP, and analyzed in the 2018 EFMP EIR. Therefore, substantial adverse impacts associated with new or physically altered school facilities would not result from implementation of the proposed project, and there would be a less than significant impact, consistent with the findings of the 2018 EFMP EIR.

Additional Project-Level Mitigation Measures

None required.

Level of Significance

The proposed project would have a less than significant impact to schools; no new or altered school facilities would be required. The proposed project impacts were adequately addressed in the 2018 EFMP EIR.

Question A: Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

Other public facilities?

Discussion

The analysis of Impact 4.13-4 in the 2018 EFMP EIR identified that the proposed project would have a less than significant impact to other public facilities, including libraries.

The development and renovation of the institutional and library uses identified in the 2018 EFMP would involve the construction of a new, expanded Library/Learning Resources facility in Phase 2. Based on an analysis of the Mt. SAC Library usage, including gate count, study room reservations, instructional workshops, and circulation of print and media materials, between 2012–2013 and 2015–2016 student use of the Mt. SAC Library increased 14 percent, college-wide student headcount increased approximately 10 percent, and seating capacity increased by 9 percent and is currently at the maximum capacity allowed to ensure Americans with Disabilities Act compliance. The Mt. SAC Library added 24/7 online chat reference librarian service, electronic databases, online library research guides, and other digital learning tools; extended operation hours during finals week; and added operations on Sundays (Mt. SAC 2021b). To facilitate the growing demand for library services, implementation of the 2018 EFMP, which includes the construction of a new, expanded Library/Learning Resources facility, will meet the demands of the projected growth.

As discussed previously, the proposed project would accommodate approximately 90 net new faculty/staff member positions; however, this increase in population is within the growth projections for the campus as identified in the 2018 LRDP, and analyzed in the 2018 EFMP EIR. As such, the proposed project would not result in an increased demand for on- or off-campus library services or other public services not identified in the 2018 EFMP EIR. Therefore, consistent with the findings of the 2018 EFMP EIR, substantial adverse impacts associated with new or physically altered libraries or other public services would not result from implementation of the proposed project.

Additional Project-Level Mitigation Measures

None required.

Level of Significance

The proposed project would have a less than significant impact to other public facilities, including libraries. The proposed project impacts were adequately addressed in the 2018 EFMP EIR.

Question A: Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

Parks?

Discussion

The analysis of the proposed project's impacts on parks and other recreation facilities is provided in Section VVI, Recreation, of this IS/MND.

Additional Project-Level Mitigation Measures

None required.

Level of Significance

The proposed project would not involve the development of new and expanded recreational facilities, and no new or altered park/recreation facilities would be required as a result of the proposed project. The proposed project impacts were adequately addressed in the 2018 EFMP EIR.

XVI. RECREATION

The analysis of recreation is tiered from the 2018 LRDP EIR and was addressed in Section 4.13, Public Services and Recreation, of that document. The proposed project does not include the development of any recreational facilities or propose a use that would result in a substantial increase in campus population above what was identified in the 2018 EFMP EIR.

There were no applicable MMs adopted as part of the 2018 EFMP EIR related to recreation.

Project Impact Analysis

- Question A: Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?
- Question B: Would the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

Discussion

The analysis of Impacts 4.13-5 and 4.13-6 in the 2018 EFMP EIR identified that the proposed project would not involve the development of new and expanded recreational facilities, and no new or altered park/recreation facilities would be required as a result of the proposed project.

As discussed previously, the proposed project would accommodate approximately 90 net new faculty members, which is within with the total campus population identified in the 2018 EMFP. The staff members/faculty positions are expected to be filled by the local labor pool. As such, there could be a limited increase in the demand for on-campus recreational facilities associated with the increase in population. However, the proposed project would not result in an increased demand for recreational facilities not projected in the 2018 EFMP.

Therefore, consistent with the findings of the 2018 EFMP EIR, the proposed project would result in a less than significant impact related to substantial or accelerated physical deterioration of existing neighborhood or regional parks or other recreational facilities.

Additional Project-Level Mitigation Measures

None required.

Level of Significance

The proposed project would not involve the development of new and expanded recreational facilities, and no new or altered park/recreation facilities would be required as a result of the proposed project. The proposed project impacts were adequately addressed in the 2018 EFMP EIR.

XVII. TRANSPORTATION

The analysis of transportation is tiered from the 2018 EFMP EIR and was addressed in Section 4.14, Transportation and Traffic, of that document.

SB 743, signed into law in 2013, changed transportation impact analysis as part of CEQA compliance. SB 743 required Office of Planning and Research to identify new metrics for identifying and mitigating transportation impacts and eliminated capacity and level of service as a consideration for determining significance under CEQA. In December 2018, the California Natural Resources Agency finalized updates to CEQA Guidelines to incorporate VMT-based analysis methodology and thresholds for the purposes of evaluating transportation impacts. Statewide application of the new guidelines was required beginning July 1, 2020.

The analysis of transportation is also based on the *Draft Traffic Impact Analysis Mt. San Antonio College Technology & Health Building, Walnut, CA* prepared by Psomas for the project in February 2021 and included as Appendix D to this IS/MND. Relevant elements of the proposed project related to transportation include (1) an increase in staff members on campus; (2) temporary construction activities that would involve heavy trucks on the identified construction routes; and (3) maintaining existing emergency vehicle access in addition to providing adequate access for the future Technology and Health building.

The following MMS were identified in the 2019 Mitigation Monitoring Program prepared for the certified 2018 EFMP EIR and are incorporated as part of the proposed project and assumed in the analysis presented in this section.

MM TRA-1 Prior to the completion of new construction under the 2018 EFMP, Mt. SAC shall be responsible for fair share contributions towards the installation of the following improvements:

- 4. Temple Avenue and Grand Avenue
 - Convert the eastbound right turn lane to a shared thru-right turn lane.
 This will not require any physical reconstruction but will require additional striping to provide a third eastbound thru lane on the east leg of the intersection.
 - Convert the westbound right turn lane to a shared thru-right turn lane.
 This will not require any physical reconstruction but will require
 additional striping to provide a third westbound thru lane on the west
 leg of the intersection.
- 9. Temple Avenue and University Drive
 - Convert the westbound right turn lane to a shared thru-right turn lane.
 This will not require any physical reconstruction but will require
 additional striping to provide a third westbound thru lane on the west
 leg of the intersection.

10. Temple Avenue and Campus Drive

Convert the westbound right turn lane to a shared thru-right turn lane.
This will not require any physical reconstruction but will require
additional striping to provide a third westbound thru lane on the west
leg of the intersection.

11. Kellogg Drive and Campus Drive

• Convert the shared eastbound thru-right turn lane to an exclusive right turn lane. This will only require restriping on the eastbound approach.

12. Temple Avenue and Valley Boulevard

 Add a second northbound left turn lane. This will require restriping of both the north and south legs of the intersection (no physical reconstruction) and may result in the loss of some parking spaces along Valley Boulevard, south of Temple Avenue.

13. Temple Avenue and Pomona Boulevard

• Convert the southbound lanes to provide two exclusive left turn lanes and a shared thru-right turn lane. This will require restriping on the southbound approach and the removal of the existing "right lane must turn right" and "right turn only" signs.

18. Holt Avenue and Grand Avenue

• Convert the southbound right turn lane to a shared thru-right turn lane. This will require additional striping on the south leg to either extend the right turn lane at Virginia Avenue north to Holt Avenue to act as a trap right turn lane (where drivers in that lane will be forced to turn right at Virginia Avenue), or to convert the lane to a shared thru-right turn lane at Virginia Avenue. Some physical improvements, including the removal of the existing raised median island and relocation of the signal pole, will also be needed for the northwest corner of the Holt Avenue/Grand Avenue intersection.

21. Cameron Avenue and Grand Avenue

 Add a second eastbound right turn lane. This will only require restriping and will not require any physical improvements.

22. Mountaineer Road and Grand Avenue

 This intersection already includes dual southbound and westbound left turn lanes, dual westbound right turn lanes, and a northbound (de-facto) right turn lane. To mitigate the impacts, a northbound through lane would need to be added on Grand Avenue, which is not feasible due to right-of-way constraints.

23. San Jose Hills Road and Grand Avenue

- Convert the westbound thru lane to a shared thru-left turn lane. This will only require striping, no physical reconstruction.
- Convert the northbound right turn lane to a shared thru-right turn lane.
 This will not require any physical reconstruction but will require
 additional striping to provide a third northbound thru lane on the north
 leg of the intersection.

24. La Puente Road and Grand Avenue

Modify the signal phasing to include an eastbound right turn overlap.

MM TRA-2 Prior to the completion of new construction under the 2018 EFMP, Mt. SAC shall be responsible for fair share contributions towards the installation of the following improvements:

- 1. Amar Road and Nogales Street
 - Convert the eastbound right turn lane to a shared thru-right turn lane.
 This will not require any physical reconstruction but will require
 additional striping to provide a third eastbound thru lane on the east leg
 of the intersection.
- 5. Temple Avenue and Mt. SAC Way
 - Convert the westbound right turn lane to a shared thru-right turn lane.
 This will not require any physical reconstruction but will require
 additional striping to provide a third westbound thru lane on the west
 leg of the intersection.
- MM TRA-3 Construction contractors shall submit an application for a truck hauling plan to the City of Walnut for review and approval prior to the start of any grading, demolition, or construction activities, in compliance with Title 2, Chapter 2.40, Hauling of Earth Materials, of the Walnut Municipal Code. The contractor shall comply with the conditions of the permit, including designated haul routes, time limits for hauling operations, debris on City roadways, temporary signage requirements, and other restrictions.
- MM TRA-4 Construction contractors shall submit traffic control plans and other construction documents that show compliance with the Work Area Traffic Control Handbook (WATCH) to Mt. SAC Facilities Planning and Management. The Traffic Control Plan shall be implemented by the contractor throughout the construction phase of each project. This shall include the use of signs and flag persons during truck hauling activities and heavy equipment movement outside the construction site and notification of the City of Walnut, the Los Angeles County Fire Department, and the Los Angeles Sheriff's Department of planned changes in vehicle circulation patterns, street closures, detours, parking, and other traffic and access issues.
- **MM TRA-5** For any construction work on public rights-of-way, the contractor shall obtain an encroachment permit from the City of Walnut and shall comply with the conditions of the permit, including restoration of roadways and public improvements, time limits for construction, debris on City roadways, and other restrictions.

MM TRA-6 For any temporary street, sidewalk, walkway, and/or bike lane closure, the construction contractor shall submit plans to Mt. SAC Facilities Planning and Management to maintain pedestrian access on adjacent sidewalks and ensure vehicle, pedestrian, and bicyclist safety along the construction site perimeter and along construction equipment and haul routes on campus.

MM TRA-7 Construction staging areas and construction worker parking areas shall be designated at specific locations on campus and not on public rights-of-way or internal roads, sidewalks, walkways, and bike paths/bike lanes, as approved by Mt. SAC Facilities Planning and Management.

MM TRA-8 Construction sites shall be surrounding by temporary fencing to secure construction equipment, prevent vehicle and pedestrian access and trespassing, and reduce hazards during grading, demolition, or construction activities.

Thresholds of Significance

Mt. SAC 2016 CEQA Thresholds of Significance

To the extent the following thresholds of significance are applicable to the project, they shall be applied to determine the project's environmental impact.

Environmental Topic in the CEQA Checklist	Impact	Mt. San Antonio Community College District Threshold of Significance	Agencies and Regulations	CEQA Procedures
Transportation	Intersection, freeway ramp, and main line capacity	Non-compliance with campus parking demand projections based on parking demand and supply studies completed for the latest FMP (or every five years if no FMP has occurred beginning in 2020), based on fall student headcount enrollment and projected faculty and staff levels, is a significant impact.	SCAG's 2012– 2035 Regional Transportation Plan/Sustainable Communities Strategy; California Department of Transportation (Caltrans); Metropolitan Transportation Authority (MTA); Los Angeles Department of Water & Power (DWP);	Unless there are unusual circumstances, no additional mitigation measures for traffic and parking beyond those included in the latest approved FMP MMP; Haul Routes – Specific traffic congestion analysis is required when truck hauling exceeds 15 trucks per hour and 100,000 cubic yards (cy) of earth movement for a single project. Both criteria must be met to require a Truck Haul Plan (MM-2c in 2015 Addendum to 2012 FMP EIR); Beginning in 2015, whenever there is not a traffic/parking study for a FMP, a new traffic/parking study shall be completed every 5 years; Complete a site-specific traffic study for 56,000 asf (80,000 gsf) or more of new construction for a

Environmental Topic in the CEQA Checklist	Impact	Mt. San Antonio Community College District Threshold of Significance	Agencies and Regulations	CEQA Procedures
				site-specific project (excludes renovation) that generates more than 1,925 daily trips [waived when included in FMP in last 5) years; Based on ITE trip rate of 27.49/ksf: Site-specific traffic and parking studies for new special events are required with projected maximum daily attendance above 15,000 weekdays (excludes summer intersession and campus holidays).

Project Impact Analysis

Question A: Would the project Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?

Discussion

The analysis of Impact 4.14-1 in the 2018 EFMP EIR concluded that, with implementation of MM TRA-1 and MM TRA-2, impacts would be reduced to a less than significant level for 11 of the 15 intersections for the proposed 2018 EFMP. However, the implementation of the identified improvements is subject to the approval of the cities of Walnut, Pomona, and West Covina as well as the County of Los Angeles. While Mt. SAC would work with these jurisdictions to implement the recommended improvements, Mt. SAC does not have the legal ability to compel these agencies to implement the improvements needed to mitigate this impact to a level of insignificance. Therefore, impacts would be significant and unavoidable.

Short-Term Construction Traffic

Construction activities associated with the proposed project could result in temporary closure of on-campus traffic lanes or roadway segments in the project vicinity to permit the delivery of construction materials; to transport exported soil; or to provide adequate site access during construction of utility connections or other project-related features located adjacent to, or within, Temple Avenue. As previously discussed under Section 2.0, Project Description, of this IS/MND, demolition of the existing Buildings 27A, 27B, 27C, and Swimming Pool (27P) is anticipated to occur over a 12- to 16-week period. It is estimated that approximately 4,626 tons of demolition materials that would be hauled off-site and recycled. Demolition activities would generate approximately 127 heavy truck round trips during the demolition period for export of the demolition material. The project includes the export of approximately 18,000 cy of soil requiring heavy truck trips during grading activities.

Additionally, there is a chance that construction of the proposed project may overlap with construction of other on-campus projects that are either proposed or approved; however, it is not

expected that they would have overlapping construction traffic routes. The proposed project would not require lane closures or other access restrictions for extended periods of time.

The proposed project would not require lane closures or other access restrictions for extended periods of time. Construction vehicles are expected to access the site via Temple Avenue. The ongoing transit center construction would include a new traffic signal at the transit center access driveway on Temple Avenue which construction vehicles can use for easy access to the site. A secondary access path would be through Lot D, approaching the site from the west. Construction is not expected to affect access for other areas of campus. Service vehicles and emergency vehicles would have access to the Technology and Health building as needed.

Long-Term Operational Traffic and Projected Growth

Operations associated with the proposed project would generate minor increased operational traffic at the project site primarily associated with service vehicle activities and the addition of up to 90 net new staff member positions from existing conditions. These positions are expected to be filled by the local labor pool. Due to the nature of the campus growth and ongoing projects, student population growth is not directly attributable to a single facility. However, based on recent growth and College projections, a 1 percent per year growth rate was assumed for the student population. Student growth from Fall 2017 to Fall 2019 was 0.3 percent per year. Therefore, the 1 percent per year is conservative and is on the high end of the range of growth in the 2018 EFMP but still falls within the previously evaluated conditions.

The student population growth was calculated based on the 2019 Fall student enrollment because enrollment in the Fall semester is generally higher than the Spring semester and because Fall 2019 enrollment was not affected by the current COVID-19 pandemic. For traffic analysis purposes, total student population (not full-time-equivalents) is used. Mt. SAC had 38,084 total students in Fall 2019. Assuming a 1 percent per year growth through 2026 (not accounting for the pandemic, to be conservative), the campus will add 2,747 students by buildout of this project.

Trip Generation

The anticipated traffic generation for growth at Mt. SAC through opening year of this project (2026) was estimated using the Institute of Transportation Engineers (ITE) *Trip Generation Manual* for morning and evening weekday peak hour trips. The resulting project trip generation is shown in Table 17.

TABLE 17
PROJECT TRIP GENERATION

ITE LU 540 (Junior/Community College)							
Students			2,747				
Period	Trips/Unit	Trips	%In %Out Trips In Trips (
AM Peak	0.11	302	81%	23%	245	69	
PM Peak	0.11	302	56%	50%	169	151	
Daily	1.15	3,159	50%	50%	1,580	1,580	
Source: Psom	Source: Psomas 2021.						

As seen in the table, the campus is expected to include 302 new peak hour trips as well as 3,159 new daily trips. Again, these trips are not all attributable to the project, but the trip generation is provided for reference.

Summary

The traffic analysis provided an evaluation of the proposed Technology and Health building at Mt. SAC. The proposed building is part of the 2018 EFMP for the Mt. SAC campus and is shown in to be consistent with that plan. Although enrollment growth cannot be quantified for this specific building, its construction along with development of other areas of campus per the 2018 EFMP is expected to result in a student population growth of 1 percent per year through 2026. This would result in an additional 2,747 students (when compared to Fall 2019 enrollment), generating 302 peak hour trips and 3,159 daily trips. This growth is within the assumptions for the 2018 EFMP, the 2018 EFMP EIR, and the 2019 TIA.

Additional Project-Level Mitigation Measures

None required.

Level of Significance

The proposed project would not conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities with the incorporation of the MMs noted above. The proposed project impacts were adequately analyzed in the 2018 EFMP EIR.

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

Discussion

The analysis of Impact 4.14-2 in Section 4.14, Transportation/Traffic, of the 2018 EFMP EIR, concluded that impacts related to a conflict with or inconsistent with CEQA Guidelines section 15064.3, subdivision (b) would be less than significant.

Per the Los Angeles County Transportation Impact Analysis Guidelines, if a project is located within one-half mile of a major transit stop, the project is determined to have a less-than-significant impact on transportation and no further VMT analysis is required. In addition to the existing transit routes which operate within one-half mile of the project site, a transit center is currently being constructed on the Mt. SAC campus. The transit center would be located immediately adjacent to this project and would serve multiple Foothill Transit routes. Therefore, the project is exempt from further VMT analysis and is assumed to have a less than significant impact on transportation consistent with the findings of the 2018 EFMP EIR.

Additional Project-Level Mitigation Measures

None required.

Level of Significance

The proposed project would have a less than significant impact related to a conflict with or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b), which would be reduced to less than significant from the analysis provided in the 2018 EFMP EIR.

Question C: Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

Discussion

The analysis of Impact 4.14-3 in Section 4.14, Transportation/Traffic, of the 2018 EFMP EIR, concluded that impacts related to an increase hazards due to a geometric design feature or incompatible uses would be less than significant.

As discussed in Section 2.0, Project Description, the proposed Technology and Health building is located immediately south of Miracle Mile, the pedestrian path which runs through the center of campus. Currently, those wishing to access buildings in the project area are directed to park in Lot F or Lot G.

Lot F is connected to the center of campus near the project via a pedestrian bridge over Bonita Drive. Once parking structure S is completed, it is assumed those wishing to access the new building can also easily do so from that area. Vehicle access to the three parking areas discussed would not change from existing conditions; Lot F and Structure S can both be accessed from Bonita Drive or Temple Avenue, and Lot G can be accessed from either Bonita Drive or other areas of campus to the west. It is not expected that there would be any direct public vehicle access to the building. However, service vehicles and emergency vehicles would have direct access to the building after completion.

Construction vehicles are expected to access the site via Temple Avenue. The ongoing transit center construction would include a new traffic signal at the transit center access driveway on Temple Avenue which construction vehicles can use for easy access to the site. A secondary access path will be through Lot D, approaching the site from the west. Construction is not expected to affect access for other areas of campus.

No impacts would occur related to an increase in hazards due to a design feature or incompatible uses and no mitigation is required consistent with the findings of the 2018 EFMP EIR.

Additional Project-Level Mitigation Measures

None required.

Level of Significance

The proposed project would have no impact related to a substantial increase in traffic hazards due to a design feature or incompatible uses. The proposed project impacts were adequately addressed in the LRDP EIR.

Question D: Would the project result in inadequate emergency access?

Discussion

The analysis of Impact 4.14-4 in the 2018 EFMP EIR concluded that, with implementation of MM TRA-1 through MM TRA-8, impacts related to emergency access would be reduced to a less than significant level.

Access to the project site is via Temple Avenue. Throughout project-related construction, vehicular access along Temple Avenue as well as access to the surrounding land uses would be maintained and would not interfere with vehicle movement or emergency access along this roadway. As discussed previously, applicable MMs from the certified 2018 EFMP EIR, are incorporated into the proposed project. Implementation of MMs TRA-1 through TRA-8 would ensure that short-term impacts related to emergency access would be less than significant.

During the project operation, the project area would not experience an increase in traffic volumes and the proposed traffic signal would create more control over vehicular movement along Temple Avenue; therefore, the proposed project would not interfere with the movement of emergency vehicles along local roadways.

Additional Project-Level Mitigation Measures

None required.

Level of Significance

The proposed project would have a less than significant impact related to emergency access with incorporation of the MMs TRA-1 through TRA-8 noted above. The proposed project impacts were adequately addressed in the 2018 EFMP EIR.

XVIII. TRIBAL CULTURAL RESOURCES

The analysis of tribal cultural resources is tiered from the 2018 EFMP EIR and was addressed in Section 4.15, Tribal Cultural Resources, of that document. Additionally, information in this section is synthesized from cultural resource research conducted in support of the Mt. SAC 2015 Facilities Master Plan Update and Physical Education Projects Subsequent Program and Project Final Environmental Impact Report (2015 SEIR). The results of these research methods were used to assess the potential impacts for the proposed project.

The following MM was identified in the 2019 Mitigation Monitoring Program prepared for the certified 2018 EFMP EIR and is incorporated as part of the proposed project and assumed in the analysis presented in this section.

MM TCR-1

Tribal Cultural Resources Monitoring. Prior to the commencement of any grading activities in which native soil is disturbed, Mt. SAC shall ensure that a Native American monitor has been retained to observe grading activities in native sediment and to salvage and catalogue tribal cultural resources as necessary. The Native American monitor shall be present at the pre-grading conference, shall establish procedures for tribal cultural resource surveillance, and shall establish, in cooperation with Mt. SAC, procedures for temporarily halting or redirecting work to permit the sampling, identification, and evaluation of the tribal cultural resource as appropriate. If the tribal cultural resources are found to be significant, the Native

American observer shall determine appropriate actions, in cooperation with Mt. SAC for exploration and/or recovery.

Existing Conditions

This section evaluates the Project's potential for any adverse effects on Tribal Cultural Resources (TCR). A TCR, as defined in Section 21074 of the Public Resources Code, is a site, feature, place, or cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to California Native American tribe.

Various Native American coordination efforts were completed for the proposed project. On March 22, 2018, Psomas submitted a request to the NAHC to conduct a search of the Sacred Lands File (SLF) database for the project. The results received from the NAHC on March 23, 2018, indicated that the SLF database search was completed with negative results.

AB 52 became effective on July 1, 2015 and requires that the lead agency provide project notifications to California Native American tribes on the NAHC Tribal Consultation list that request notification in writing prior to a lead agency's release of a Notice of Preparation (NOP) for an EIR, a MND, or ND. Once Native American tribes receive a project notification, they have 30 days to respond as to whether they wish to initiate consultation regarding the project and specifically consultation regarding mitigation for any potential project impacts.

To date, Mt. SAC has received one written request from a tribe recognized by the NAHC to be notified of projects in the City of Walnut—Gabrieleño Band of Mission Indians – Kizh Nation; this request was received on April 1, 2018. A project notification letter was sent to the Gabrieleño Band of Mission Indians – Kizh Nation on February 16, 2021 as requested.

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:

Project Impact Analysis

Question 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), or

Discussion

There are no resources on the project site that are currently listed, individually or collectively, in either the National Register of Historic Places or the CRHR. Therefore, there would be no impacts to historical resources.

Additional Project-Level Mitigation Measures

None required.

Level of Significance

The proposed project would have no impact related to tribal cultural resources.

Question 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 Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

Discussion

There are no known prehistoric resources within half mile of the project site and no resources have been recorded on the site itself. It is likely that native populations used the project area in prehistoric times, as supported by information provided by the Gabrieliño Band of Mission Indians—Kizh Nation during tribal consultation. However, the project site and surrounding area has been developed through significant landscaping and hardscaping. As such, potential archaeological resources buried beneath the site's surface are likely to be heavily disturbed. While unlikely, buried resources, such as prehistoric artifacts relating to Gabrieliño village sites, historic artifacts relating to Spanish ranching, and human remains could exist on the project site and be damaged by drilling activities for project construction, which would represent a significant impact.

An email, dated February 17, 2021, was sent to the Gabrielino Band of Mission Indians – Kizh Nation from John Gaston, Project Manager, Facilities Planning & Management, to indicate that the request for consultation was received and to initiate phone consultation with the tribe. Consultation has not been scheduled to date. Nonetheless, in accordance with Public Resources Code Sections 21080.3.1(b) and 21082.3(d)(1),the IS/MND may go out for public review; however, consultation between Mt. SAC and the Gabrieleño Band of Mission Indians – Kizh Nation must be concluded before approval of the IS/MND.

To avoid impacts to tribal resources, MM TCR-1, which was drafted based on consultation with tribal representatives during preparation of the 2018 EFMP EIR, requires that a qualified Tribal monitor be retained for earth moving activities within the first 10 feet of grading. Any discovered resources would be evaluated for significance by the monitor and a mitigation plan would be developed. Impacts on tribal cultural resources would be less than significant with implementation of MM TCR-1 consistent with the findings of the 2018 EFMP EIR.

Additional Project-Level Mitigation Measures

None required.

Level of Significance

The proposed project would a less than significant impact related to tribal cultural resources.

XIX. UTILITIES AND SERVICE SYSTEMS

The analysis of utilities and service systems (i.e., water supply, solid waste, wastewater, and energy) is tiered from the 2018 EFMP and was addressed in Section 4.16, Utilities and Service Systems, of that document. Relevant elements of the proposed project related to utilities and service systems include an approximately 253,866 gross gsf of building space at the project site, which would subsequently increase the demand for water and energy and the generation of solid waste and wastewater at the project site. The proposed project would be designed to achieve, at a minimum, a LEED Silver rating.

There were no applicable MMs adopted as part of the 2018 EFMP EIR related to agricultural resources.

Thresholds of Significance

Mt. SAC 2016 CEQA Thresholds of Significance

To the extent the following thresholds of significance are applicable to the project, they shall be applied to determine the project's environmental impact.

Environmental Topic in the CEQA Checklist	Impact	Mt. San Antonio Community College District Threshold of Significance	Agencies and Regulations	CEQA Procedures
Energy	Wasteful, inefficient or unnecessary consumption of energy Renewable energy or energy efficiency measures.	Non-compliance with an Energy Conservation Plan for site-specific projects is a significant impact.	California Energy Commission	
Utilities/Service Systems	Demand and supply availability; Water and sewer facilities and infrastructure; Landfill capacity; Compliance with solid waste regulations.	Significant physical impacts of construction of new water, wastewater treatment, or stormwater drainage facilities required for the latest FMP or for a site-specific project is a significant impact; Inadequate capacity of a water provider to have sufficient supplies to serve the latest FMP's or for a site-specific project's projected demand during normal, dry and multiple dry years in addition to their existing commitments is a significant impact; Inadequate capacity of a wastewater treatment provider to serve the	TVMWD DPW Solid waste regulations	Permits required from LACSD for occupied buildings (net increase in gsf) when the Utility Master Plan is updated for a FMP or every 5 years, beginning in 2020; Consultation with DPW for regional landfill capacity; Consultation for special circumstances; Unless there are special circumstances, no additional mitigation measures for utilities/service systems beyond those included in the latest approved FMP MMP;

Environmental Topic in the CEQA Checklist	Impact	Mt. San Antonio Community College District Threshold of Significance	Agencies and Regulations	CEQA Procedures
		latest FMP or site-specific project's projected demand in addition to their existing commitments is a significant impact; Non-compliance with federal, State statutes and regulations related to solid waste and lack of sufficient permitted landfill capacity to accommodate the latest FMP or a site-specific project's needs is a significant impact.		Request "will serve" letters from TVMWD and LACSD for projects 56,000 asf (80,000 gsf) or more [waived when included in FMP or Utility Master Plan in last 5 years].

Project Impact Analysis

Question A: Would the proposed project require or result in the relocation or construction of new or expanded water, wastewater treatment facilities or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction of which could cause significant environmental effects?

Discussion

Water and Wastewater Treatment

The analysis of Impact 4.16-1 in the 2018 EFMP EIR concluded there would be a less than significant impact related to construction of new or expanded water and wastewater treatment facilities.

The campus is currently provided with water service (potable and recycled) from TVMWD. To calculate water demand for the 2018 EFMP, the assumption that new water demands would be strictly from inside use and be equivalent to the increase in sewer demand was used. This is based on the assumption that because specific buildings to be demolished and constructed are quite varied in use, water demand factors by building could also vary and due to their varied use could be somewhat difficult to determine by specific building. Therefore, it is conservatively assumed that landscape irrigation demand would remain unchanged since there would be less area available for landscaping with the 2018 EFMP and any landscaping that is replaced should utilize lower water use plant material and more efficient irrigation systems than what is currently in place. It is also conservatively assumed that the building renovations would not result in additional water demand as any plumbing modifications would likely result in lower demand due to new plumbing codes requiring lower flow fixtures.

Existing water consumption at the project site is approximately 200 GPM (gallon per minute). The anticipated total use rate for the proposed project is approximately 160 GPM. The anticipated indoor water use rate is approximately 40 GPM, and the anticipated outdoor water use (landscaping, etc.) is approximately 15,000 gallons per day. The proposed project would include indoor water conservation measures such as low flow fixtures and faucets and high-efficient

equipment. Additionally, outdoor/landscape water conservation measures would include drought tolerant landscaping.

Wastewater service for the campus is provided by Los Angeles County Sanitation District (LACSD). LACSD publishes sewer demand factors for various land uses and there are two factors for institutional/college uses that could be applied, either 20 gallons per day per student (gpd/student) or 200 gallons per day per thousand square feet (gpd/ksf) of building area. Table 4.16-1, of the 2018 EFMP EIR, shows the projected net water demand broken down by building and phase using 200 gpd/ksf, which results in a total new water demand of 58,849 gpd or 66 acre-feet per year (AFY) under Phase 2, which includes the proposed project. This water demand is the same as the wastewater generated by the project.

The existing potable water distribution system currently provides Mt. SAC's domestic, fire protection, and landscape irrigation needs. To meet the needs of the new facilities and renovations identified in the 2018 EFMP, the 2018 EFMP EIR identified the campus would likely require an increase in potable water storage capacity and potential upgrades and extension of Mt. SAC's on-campus water distribution system. As part of the 2018 EFMP, an update of Mt. SAC's Utilities Infrastructure Master Plan was conducted to ensure that infrastructure, including the campus water distribution system, would meet the future capacity and needs of the proposed project. Anticipated infrastructure improvements will include removal, upsizing, and/or rerouting of existing water (potable) lines and installation of new lines on the campus to serve proposed uses; these lines are owned and maintained by Mt. SAC. Off-campus, TVMWD provides water to the campus through the 12-inch water main line in Temple Avenue and provides sufficient capacity to serve the 2018 EFMP. No infrastructure improvements related to water distribution would be required to serve the proposed project since the site is already fully connected to the water distribution system.

With respect to sewer lines, the existing main campus sewer system discharges through an existing campus-owned 18-inch sanitary sewer main to the LACSD 15-inch Mt. SAC trunk sewer in Temple Avenue, east of Grand Avenue. As part of the 2018 EFMP, an update of Mt. SAC's Utilities Infrastructure Master Plan was conducted to ensure that infrastructure, including the campus wastewater distribution system, would meet the future capacity and needs of proposed Project. Sewer service to the campus would continue to be provided by the 15-inch LACSD trunk sewer located in Temple Avenue, east of Grand Avenue and no modifications to current connections to the LACSD are required to serve the 2018 EFMP, including the proposed project. As previously indicated, the San Jose Creek Water Reclamation Plan (WRP) has a capacity of 100 million gallons per day (mgd) and currently processes an average flow of 63.8 mgd (approximately 64 percent of capacity) and has adequate capacity to serve the proposed project.

Stormwater Drainage

The analysis of Impact 4.16-1 in the 2018 EFMP EIR concluded there would be a less than significant impact related to construction of new or expanded stormwater drainage.

Existing and proposed storm drain lines that would serve the 2018 EFMP are shown on Exhibit 3-38 Existing Stormwater System and Exhibits 3-42, 3-43a–c, 3-44, 3-46a–c, 3-48, 3-50a-d, 3-51, and 3-52, in the 2018 EFMP EIR. The backbone infrastructure would be protected in place during construction and operation and it is not anticipated that upgrades to the backbone infrastructure would be required to implement facilities proposed as part of the 2018 EFMP including the proposed project. However, as identified in the 2018 EFMP, an update to Mt. SAC's Campus Utilities Infrastructure Plan will be prepared to ensure that that essential services and systems would have enough capacity and would be available in time for the new facilities that will depend on them. The design of new site improvement and building projects, including the proposed

project, would comply with the Los Angeles County stormwater quality management program and LID Ordinance. Infiltration systems that treat and percolate stormwater to recharge the local aquifer would be most highly prioritized, followed by stormwater capture and reuse and high-removal-efficiency biofiltration.

As discussed previously in Section X, Hydrology and Water Quality, LID BMPs would be implemented for individual project components associated with the 2018 EFMP to regulate the amount and volume of stormwater runoff and to treat the water quality before it enters the regional storm drain system. The final sizing and design of on-site facilities would occur during final building design; however, as discussed previously in Section X, Hydrology and Water Quality, project specific utility, grading and drainage, and stormwater plans have been developed to provide sufficient capacity in proposed on-campus storm drain lines to ensure that required water quality treatment is accomplished and to ensure the increase in stormwater runoff from implementation of the 2018 EFMP, including the proposed project, would not exceed the capacity of the existing local storm drains serving the site.

Construction activities associated with the proposed on-site storm drain facilities would be within the physical impact area identified for the proposed project, as shown on Exhibit 3-34, Construction Impact Area, and evaluated in the 2018 EFMP EIR. No additional impacts associated with construction of on-site storm drains or connections to existing facilities would occur. Impacts would be less than significant, and no mitigation is required. Therefore, impacts from the proposed project related to storm drain facilities would be less than significant consistent with the findings of the 2018 EFMP EIR.

Electric Power

The analysis of Impact 4.16-1 in the 2018 EFMP EIR concluded there would be a less than significant impact related to construction of new or expanded electric power. SCE provides electricity to the campus. The college's 12 kilovolt (medium-voltage) electrical distribution system distributes power from the utility to each building on campus. To meet the needs of new facilities and renovations identified in the 2018 EFMP, it would be necessary to further increase the capacity and extent of the medium voltage electrical distribution system and reconsider the phasing of system-wide improvements. Extensions of existing feeders would serve the proposed renovations and additions. New loops are recommended within new areas of development or areas that would be extensively redeveloped.

Existing electrical consumption at the site is approximately 500,000 kilowatt hours per year (kWh/year). Based on square footage, the anticipated electrical consumption for the proposed project is approximately 2,000,000 kWh/year.

Construction activities associated with the proposed electrical facility upgrades would be within the physical impact area identified for the proposed project, as shown on Exhibit 3-34, Construction Impact Area, and evaluated in the 2018 EFMP EIR. No additional impacts associated with construction of electrical facility upgrades or connections to existing facilities would occur. Impacts would be less than significant, and no mitigation is required. Therefore, impacts from the proposed project related to electric power facilities would be less than significant consistent with the findings of the 2018 EFMP EIR.

Natural Gas

The analysis of Impact 4.16-1 in the 2018 EFMP EIR concluded there would be a less than significant impact related to construction of new or expanded natural gas. Southern California Gas (SCG) provides natural gas to the campus. The campus is currently supplied from SCG's

high-pressure system. The campus areas located north and south of Temple Avenue are each supplied through a single high-pressure line with a single meter/regulator assembly that reduces the high pressure to medium pressure. These i medium-pressure lines at 5 pounds per square inch, distribute gas to various facilities on campus. To meet the needs of new facilities and renovations that are identified in the 2018 EFMP, it would be necessary to further increase the extent of the medium-pressure distribution system and reconsider the phasing of system-wide improvements.

Additionally, the following improvements to the on-campus natural gas system would be implemented as part of the construction projects associated with the 2018 EFMP:

- Upgrade the main meter and install submeters.
- Add a meter to each sub-area of the campus. In a few locations, the re-routing of existing underground lines would be required to coordinate the system with the location of recommended facilities.
- Replace existing steel lines that are part of the campus distribution system with polyethylene pipe.
- Provide earthquake valves at meter assembly locations on the downstream side of the regulator, to shut off the flow during a seismic event.
- Install sub-meters at each building to track the energy consumption of buildings and measure the impact of energy-conservation measures.

Existing natural gas consumption at the project site is approximately 4,500 cubic feet/therm (CFH). The anticipated natural gas consumption for the proposed project is approximately 1,500 CFH. The project would utilize heat recovery chillers; no gas boilers are proposed.

Construction activities associated with the proposed upgrades to natural gas facilities would be within the physical impact area identified for the proposed project, as shown on Exhibit 3-34, Construction Impact Area, and evaluated in the 2018 EFMP EIR. No additional impacts associated with construction of natural gas upgrades or connections to existing facilities would occur. Impacts would be less than significant, and no mitigation is required. Therefore, impacts from the proposed project related to natural gas facilities would be less than significant consistent with the findings of the 2018 EFMP EIR.

Telecommunications Facilities

The analysis of Impact 4.16-1 in the 2018 EFMP EIR concluded there would be a less than significant impact related to construction of new or expanded telecommunications facilities.

Verizon is the local exchange carrier for communication services and Mt. SAC uses an underground system of conduits to distribute all fiber and copper cables to its buildings. As part of the 2018 EFMP, Mt. SAC would provide redundant data and voice services to all new buildings. The campus has been converting its communications system backbone to single-mode fiber optic cable to meet future needs for higher speeds and this effort will continue. To meet the needs of new facilities and renovations, new conduit pathways, fiber optic cables, and copper cables to each of the new and renovated facilities would be installed. Voice over internet protocol services would be provided over fiber. Each facility would require limited copper cable connections for elevator phones, alarms, modems, and fax lines.

Additionally, the following improvements to the on-campus telecommunications system would be implemented:

- Communications equipment rooms in all buildings would renovated to provide grounding and bonding of all cable to meet ANSI/EIA/TIA 607 Commercial Building Grounding and Bonding requirements.
- Existing communications equipment rooms would be renovated to meet ANSI/EIA/TIA requirements, potentially requiring the upgrade of the electrical and HVAC systems that serve these rooms
- A proposed 100-foot high Replacement Communications Tower would be constructed to replace the existing facility on Reservoir Hill, at a location slightly to the southwest of the existing tower. The proposed tower would support 2-way communication for the campus associated with the Emergency Operations Center, Alertus (campus mass notification system), and the campus radio station (90.1 FM Mt Rock transmitter).

Construction activities associated with the proposed upgrades to telecommunications facilities would be within the physical impact area identified for the proposed project, as shown on Exhibit 3-34, Construction Impact Area, and evaluated in the 2018 EFMP EIR. No additional impacts associated with construction of telecommunication upgrades or connections to existing facilities would occur. Impacts would be less than significant, and no mitigation is required. Therefore, impacts from the proposed project related to telecommunications facilities would be less than significant consistent with the findings of the 2018 EFMP EIR.

Additional Project-Level Mitigation Measures

None required.

Level of Significance

Water/Wastewater Treatment

The proposed project would not require construction of new wastewater treatment facilities beyond the installation of new lines to connect to the proposed project; the physical limits of utility construction are within the impact area addressed throughout this IS. The proposed project would have a less than significant impact related to the capacity of existing wastewater systems. Impacts associated with the proposed project were adequately addressed in the 2018 EFMP EIR.

Water Distribution

There are adequate water distribution facilities available to serve the proposed project resulting in a less than significant impact. Impacts associated with the proposed project were adequately addressed in the 2018 EFMP EIR.

Wastewater Collection

There are adequate wastewater collection facilities available to serve the proposed project resulting in a less than significant impact. Impacts associated with the proposed project were adequately addressed in the 2018 EFMP EIR.

Electricity and Natural Gas

The proposed project would have a less than significant impact related to provision of electricity to the project site or the inefficient use of energy. The proposed project would have no impact related to natural gas. Impacts associated with the proposed project were adequately addressed in the 2018 EFMP EIR.

Telecommunications Facilities

The proposed project would have a less than significant impact related to telecommunications facilities. Impacts associated with the proposed project were adequately addressed in the 2018 EFMP EIR.

Storm Water Drainage

There is a less than significant impact related to the need for new or expanded storm drainage facilities beyond the installation of new storm waste management facilities to serve the proposed project. The physical limits of construction are within the impact area addressed throughout this IS. Impacts associated with the proposed project were adequately addressed in the 2018 EFMP EIR.

Question B: Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?

Discussion

The analysis of Impact 4.16-2 in the 2018 EFMP EIR concluded there would be a less than significant impact related to water supply. Development of the proposed project would result in both temporary construction-related and long-term operational increases in water demand. Temporary demand for water would occur during construction activities on campus and would cease following completion of construction. Overall, construction activities require minimal water as compared to water consumption associated with long-term operations of the proposed project and are not expected to have any adverse impacts on the existing water system or available water supplies. Therefore, sufficient water supplies are available for temporary construction activities, and impacts are considered less than significant consistent with the findings of the 2018 EFMP EIR.

With respect to long-term increases in water demand, the TVWMD does not allocate specific supplies to any project but identifies total supplies for its service area. The TVWMD has 14-member agencies which includes Mt. SAC.

The 2015 Urban Water Management Plan (UWMP) provides the TVMWD's existing and projected sources of water available to the TVMWD through the year 2040 as well as projected water uses, water conservation measures, water rate structure, and drought management programs. As stated in the 2015 UWMP, the TVWMD's water demands are anticipated to increase for an average year from approximately 131,511 afy (117.4 mgd) in 2020 to approximately 137,040 afy (122.3 mgd) in 2040. Implementation of the 2018 EFMP, including the proposed project, would result in a net increase of 544,195 gsf of campus structures on campus which includes the proposed project. As indicated in Table 4.16-1, of the 2018 EFMP EIR, these uses would increase the potable water demand by approximately 122 afy (108,839 gpd) compared to existing conditions. This represents approximately 2 percent contribution of the estimated water demand increase of the 2015 UWMP from 2020 to 2040. The 2015 UWMP indicates that the TVMWD will

have adequate water supplies to meet demands during normal, single-dry, and multiple-dry years to 2040 (TVMWD 2015).

The TVWMD has indicated that it has capacity to provide for the 2018 EFMP (TVWMD 2018). Therefore, with existing available supplies and the completion of supplies currently under development, the total water supplies available to the TVMWD during normal, single-dry, and multiple-dry years through 2040 would meet the projected water demand of existing and other planned future uses, which include the proposed project. As previously described, it should be noted that TVMWD offers reclaimed water for non-potable uses and the college plans to build a non-potable water system that would serve the entire campus; however, for purposes of this analysis, reclaimed water use in not assumed, but would reduce Mt. SAC's future demands on potable water at the time it is implemented. In addition, the use of higher efficiency fixtures, use of aggressive water conservation measures, and future use of non-potable water for irrigation use would reduce potable water demand. Therefore, sufficient water supplies are available for long-term project operational activities, and potential impacts of the 2018 EFMP are considered less than significant consistent with the findings of the 2018 EFMP EIR.

Therefore, the 2015 UWMP indicates that TVMWD will have adequate water supplies to meet demands during normal, single-dry, and multiple-dry years to 2040. TVMWD would have available water supplies to serve buildout of the 2018 EFMP, including the proposed project. Therefore, impacts from the proposed project would be less than significant and no mitigation is required consistent with the findings of the 2018 EFMP EIR.

Additional Project-Level Mitigation Measures

None required.

Level of Significance

The proposed project would have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years. Impacts would be less than significant. The proposed project impacts were adequately addressed in the 2018 EFMP EIR.

Question C: Would the project 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?

Discussion

The analysis of Impact 4.16-3 in the 2018 EFMP EIR concluded there would be a less than significant impact related to construction of new or expanded wastewater treatment facilities.

The 2018 EMFP would result in a net increase of 544,195 gsf of new structures which would generate an estimated 108,839 gpd (0.10 mgd) of wastewater (LACSD 2018). The increase in wastewater from the proposed project would represent less than one percent of the existing excess daily capacity of the San Jose Creek WRP, which has a capacity of 100 mgd and currently processes an average flow of 63.8 mgd. Therefore, LACSD has sufficient capacity in the San Jose Creek WRP to treat wastewater flows from the campus with implementation of the proposed 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. A less than significant impact from the proposed project would occur consistent with the findings of the 2018 EFMP EIR.

Additional Project-Level Mitigation Measures

None required.

Level of Significance

The proposed project would not generate wastewater that exceeds the capacity of the wastewater treatment facilities resulting in a less than significant impact. The proposed project impacts were adequately addressed in the 2018 EFMP EIR.

Question D: Would the project 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?

Discussion

The analysis of Impact 4.16-4 in the 2018 EFMP EIR concluded there would be a less than significant impact related to landfill capacity.

According to the 2018 EFMP, Mt. SAC generated approximately 11.9 pounds of solid waste per GSF, or 8,314 metric tons (575.7 pounds) of solid waste per capita in 2012. This total includes mixed construction and demolition waste from campus construction projects, as well as paper, aluminum, glass, plastic, food waste, electronic waste, and clinical waste from non-construction waste. Except for construction waste, Mt. SAC does not track waste generated from different sources separately.

With implementation of the proposed project, solid waste would be generated during construction, and there would also be an increase in daily solid waste generation during operation. As stated in the 2018 EFMP EIR and based on the USEPA's new construction and demolition waste generation rate of 3.89 pounds per square foot for non-residential uses, construction of the proposed 253,866 sf building, and demolition of 82,000 207,805 sf of existing structures, a net total of approximately 653 tons³ of solid waste would be generated over the construction period for the proposed project.

Based on the operational solid waste disposal factor of 32.85 cubic yards (cy) per 1,000 square feet per year for institutional facilities, the project's proposed net increase of 46,061 sf of new institutional buildings would generate approximately 1,513 cy of solid waste per year⁴ requiring landfill disposal. It should be noted that Mt. SAC currently recycles green waste for mulching landscaped areas; these activities would continue with implementation of the proposed project. Additionally, Mt. SAC is implementing an increase of its diversion rate by increasing efforts to pre-sort recyclables and reuse materials before they leave the campus by distributing recycling bins throughout the campus. As such, it is not anticipated that the proposed project additional waste stream would exceed the capacity of these landfills. Therefore, there would be less than significant impacts related to landfill capacity, and no mitigation is required consistent with the findings of the 2018 EFMP EIR.

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³ (752,000 sf + 207,8051sf) x 3.89 lbs/sf = 1,306,519 3,733,641 lbs or approximately 653 tons.

 $^{^4}$ (46,061 sf x 32.85 cy/yr) = 1,513 cy/yr.

Additional Project-Level Mitigation Measures

None required.

Level of Significance

The proposed project would have a less than significant impact related to landfill capacity and solid waste disposal. The proposed project impacts were adequately addressed in the 2018 EFMP EIR.

Question G: Would the project comply with federal, State, and local management and reduction statutes and regulations related to solid waste?

Discussion

The analysis of Impact 4.16-5 in the 2018 EFMP EIR concluded there would be a less than significant impact related to compliance with applicable federal, State, and local solid waste-related statutes and regulations.

Solid waste practices in California are governed by multiple federal, State, and local agencies that enforce legislation and regulations to ensure that landfill operations minimize impacts to public health and safety and the environment. Construction of the proposed project would comply with all applicable construction waste regulations. Additionally, according to the 2018 EFMP, the campus is exceeding a 75-percent diversion rate of construction waste from landfills and is well positioned to reach a construction waste landfill diversion rate of 95 percent. Operationally, the proposed project would continue to comply with recycling programs in compliance with county policies and those that have been adopted to comply with solid waste regulations such as the California Integrated Waste Management Act (AB 939). Further, Mt. SAC has prepared a draft Climate Action Plan (Mt. SAC 2018) which includes solid waste reduction strategies to achieve a Net Zero Waste goal by year 2050. Some of the Phase 1 (by 2025) goals and strategies include but are not limited to supporting and funding of student-run recycling programs such as RecycleMania, a friendly competition and benchmarking tool for college and university recycling programs, improving recycling and waste receptacles on campus, implementing sustainable food purchasing, installing additional water refilling stations, and end use of Styrofoam, straws, and plastic place settings and plastic bottles on site. Goals for Phase 2 (year 2025 to year 2035) include installation of a small-scale anaerobic biodigester on campus and construction waste management diversion of 100 percent. The goal for Phase 3 (year 2035 to year 2050) is to implement a large scale anaerobic biodigester on campus. Although the project is not expected to generate large amounts of solid waste during project operation, the project would comply with these future programs to manage solid waste. Therefore, impacts related to solid waste regulations would be less than significant, and no mitigation is required, consistent with the findings of the 2018 EFMP EIR.

Additional Project-Level Mitigation Measures

None required.

Level of Significance

The proposed project would have a less than significant impact related to compliance with applicable federal, State, and local statutes and regulations related to solid waste. The proposed project impacts were adequately addressed in the 2018 EFMP EIR.

XX. WILDFIRE

Project Impact Analysis

- Question A: Substantially impair an adopted emergency response plan or emergency evacuation plan?
- Question 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?
- Question 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?
- Question 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?

Discussion

The analysis of Impacts 4.8-8 through 4.8-11 in the 2018 EFMP EIR concluded that development under the 2018 EFMP would have a less than significant impact related to wildfires.

As previously described, the Mt. SAC campus is not within a designated VHFHSZ as defined by CalFire. As discussed in Section 4.3, Biological Resources, of the 2018 EFMP EIR, the Mt. SAC campus contains ornamental vegetation throughout as well as natural habitat areas that support ecological and educational objectives of the campus. The campus is surrounded by developed land to the north, south, and west and open space and undeveloped areas to the east. These open space areas are limited in acreage and abut development or agricultural areas and livestock areas associated with Cal Poly Pomona, thus reducing the potential for wildland fires. In the event of fire emergency, Mt. SAC has an established Campus Emergency Response and Evacuation Plan that identifies procedures and actions for emergencies, including wildfires. All recommended structures associated with the 2018 EFMP would be constructed to meet current building and fire codes, and the buildings would be sprinklered accordingly. Implementation of the proposed project would not expose people or structures to a significant risk of loss, injury, or death involving wildland fires. Additionally, because thresholds 8.8 through 8.11 of the 2018 EFMP EIR 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. Specifically, implementation of the proposed project would not impair an adopted emergency response plan or evacuation plan; expose project occupants to pollutant concentrations from wildfire; require installation or maintenance of infrastructure that may exacerbate fire risk; and would not expose people or structures to significant risks as a result of runoff, post-fire slope instability, or drainage changes. No impacts would occur consistent with the findings of the 2018 EFMP EIR.

Additional Project-Level Mitigation Measures

None required.

Level of Significance

The proposed project would have no impact related to wildland fires. The proposed project was adequately addressed in the 2018 EFMP EIR.

XXI. MANDATORY FINDINGS OF SIGNIFICANCE

Question A: Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?

Discussion

There are no sensitive biological resources, habitats, or species on the project site that would be affected by the proposed project. Incorporation of MMs BIO-1 (focused special status plant surveys), BIO-2 (Mt. SAC Black Walnut Management Plan) BIO-3 (MBTA and nesting birds) into the proposed project would ensure a less than significant impact on biological resources.

Due to the location of the project site in a developed, urban area that has been subjected to previous disturbance related to urban development, and because excavation would not occur in native sediments, no impacts to archaeological resources or paleontological resources would occur. However, the proposed project incorporates MM CULT-3 which outlines steps to take in the event that cultural resources are discovered. Incorporation of this measure into the proposed project would ensure a less than significant impact.

Question B: Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?

Discussion

As identified in the preceding analysis provided in Section 4.0, Environmental Evaluation, of this IS/MND, applicable mitigation measures identified in the certified 2018 EFMP EIR are incorporated as part of the proposed project and assumed in the analysis and all project-level impacts have been determined to be less than significant. Only one additional project level mitigation measure is identified as required for this project. Thus, with continued implementation of applicable MMs (identified for each environmental topic analyzed above in Sections 4.I through 4.XIX of this IS/MND), the proposed project's impacts would be limited and its contribution to cumulative impacts would not be cumulatively considerable.

Question C: Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

Discussion

Based on the preceding analysis provided in Section 4.0, Environmental Evaluation, of this IS/MND, applicable mitigation measures identified in the certified 2018 EFMP EIR are incorporated as part of the proposed project and assumed in the analysis. Implementation of the

proposed project would not result in significant impacts that could degrade the quality of the environment or cause substantial adverse effects on human beings, either directly or indirectly.

SECTION 5.0 SUMMARY OF MITIGATION MEASURES

The proposed project incorporates mitigation measures (MMs) identified in the 2018 Mitigation Monitoring Program prepared for the 2018 Educational and Facilities Master Plan (EFMP) EIR which are assumed in the analysis presented this IS as well as project-specific MMs to address potentially significant impacts. The following mitigation measures are organized by environmental topics as presented in the IS and the numbering is consistent with the 2018 Mitigation Monitoring Program. Project-specific MMs are noted below.

I. Aesthetics

MM AES-1 Prior to the issuance of grading permits, the Project Applicant shall provide evidence to the City that the contractor specifications require any temporary nighttime lighting installed during construction for security or any other purpose 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 Department during inspections of the construction site.

III. Air Quality

MM AQ-1

All off-road diesel-powered construction equipment greater than 50 horsepower (hp) shall meet Tier 4 final off-road emissions standards. In addition, all construction equipment shall be outfitted with Best Available Control Technology (BACT) devices certified by the California Air Resources Board (CARB). Any emissions-control device used by the contractor shall achieve emissions reductions that are no less than what could be achieved by a Level 3 diesel emissions control strategy for a similarly sized engine as defined by CARB regulations.

IV. Biological Resources

MM BIO-1

Focused special status plant surveys will be conducted in habitat suitable for special status plant species in the survey area within two years prior to any ground disturbance at that location. Focused surveys shall be conducted by qualified Biologists and shall be conducted per the most current CNPS protocol and during the appropriate blooming period for each potentially occurring special status plant species. If special status plant species are not found within the proposed Project impact area, no further mitigation would be required. If special status plant species are detected within impact areas, an Avoidance and Mitigation Plan will be developed and implemented by Mt. SAC prior to project implementation. The Avoidance and Mitigation Plan would include on-site translocation of any bulbs of special status plant species within the impact area.

MM BIO-2

During grading and construction activities, should any southern California black walnut tree be impacted, including trimming greater than one-quarter of a tree's canopy, significant digging or trenching within the tree's dripline, or tree removal, the impacts shall be mitigated according to the Mt. SAC California Black Walnut Management Plan (Psomas 2019). At a minimum, the loss of any southern California black walnut trees resulting from the project shall be replaced in the designated on-site conservation area at a ratio of 1:1 for each tree with a trunk

greater than 6 inches in diameter at breast height and at a higher replacement ratio for smaller trees.

MM BIO-3

No project-related activities shall result in the failure of a nest protected under the conditions set forth in the *California Fish and Game Code*. The nature of the project may require that work would be initiated during the breeding season for nesting birds (March 15–September 15) and nesting raptors (February 1–June 30). To avoid direct impacts on active nests, a pre-construction survey shall be conducted by a qualified Biologist for nesting birds and/or raptors within three days prior to clearing of any vegetation or any work near existing structures (i.e., within 50 feet for nesting birds and within 500 feet for nesting raptors). If the Biologist does not find any active nests within or immediately adjacent to the impact area, the vegetation clearing/construction work shall be allowed to proceed.

If the Biologist finds an active nest within or immediately adjacent to the construction area and determines that the nest may be impacted or breeding activities substantially disrupted, the Biologist shall delineate an appropriate buffer zone (at a minimum of 25 feet) around the nest depending on the sensitivity of the species and the nature of the construction activity. Any nest found during survey efforts shall be mapped on the construction plans. The active nest shall be protected until nesting activity has ended. To protect any nest site, the following restrictions to construction activities shall be required until nests are no longer active, as determined by a qualified Biologist: (1) clearing limits shall be established within a buffer around any occupied nest (the buffer shall be 25-100 feet for nesting birds and 300-500 feet for nesting raptors), unless otherwise determined by a qualified Biologist; and (2) access and surveying shall be restricted within the buffer of any occupied nest, unless otherwise determined by a qualified Biologist. Encroachment into the buffer area around a known nest shall only be allowed if the Biologist determines that the proposed activity would not disturb the nest occupants. Construction can proceed when the qualified Biologist has determined that fledglings have left the nest or the nest has failed.

V. Cultural Resources

- **MM CULT-3** Prior to initiation of grading activities, the following requirements shall be incorporated on the cover sheet of the Grading Plan under the general heading "Conditions of Approval":
 - a. A qualified archaeologist that meets the Secretary of the Interior's Standards and Guidelines for Professional Qualifications in Archaeology (Archaeologist) shall be present at the pre-grade meeting to consult with the Contractor and other consultants prior to the start of earth-moving activities.
 - b. During construction grading and site preparation activities, the Contractor shall monitor all construction activities. In the event that cultural resources (i.e., prehistoric sites, historic sites, and/or isolated artifacts) are discovered, work shall be halted immediately within 50 feet of the discovery and the Contractor shall inform the Mt. SAC Project Manager. The Archaeologist shall analyze the significance of the discovery and recommend further appropriate measures to reduce further impacts on archaeological resources. Such measures may include avoidance, preservation in place, excavation, documentation, curation, data recovery,

or other appropriate measures. Facilities Planning & Management shall monitor compliance.

VII. Geology and Soils

- MM GEO-1 Prior to the approval of project plans by the Division of the State Architect (DSA), a site-specific geotechnical study 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 DSA as part of the project certification process, which includes review and approval of the site-specific geotechnical studies by the California Geological Survey (CGS).
- MM GEO-2 In accordance with the Memorandum of Agreement (MOA) between the Mt. San Antonio Community College District and the City of Walnut, grading and drainage plans for all future Mt. SAC exempt education facilities shall be subject to administrative review and approval by the City of Walnut's Building Official.
- **MM GEO-3** Prior to initiation of grading activities, the following requirements shall be incorporated on the cover sheet of the Grading Plan under the general heading "Conditions of Approval":
 - a. A qualified Paleontologist and Paleontological Monitor shall be present at the pre-grade meeting to consult with the grading contractor and other consultants prior to the start of earth-moving activities. At the meeting, the Paleontologist shall establish procedures for paleontological resources surveillance based on the location and depths of paleontologically sensitive sediments, and shall establish, in cooperation the Mt. SAC Project Manager, procedures for temporarily halting or redirecting work to permit the sampling, identification, and evaluation of the fossils as appropriate.
 - b. A qualified Paleontological Monitor shall be present at the site when grading and excavation in paleontologically sensitive sediments (Puente Formation and Quaternary older alluvial fan deposits). Paleontological monitoring is not required in areas where excavation occurs within fill soils.
 - c. The Monitor shall have the authority to temporarily direct, divert, or halt grading to allow recovery of paleontological resources. In areas rich in micro-vertebrates, collection of large bulk samples of matrix for later water screening to recover small bones and teeth shall be part of the paleontological salvage program.
 - d. Fossils recovered from this project shall be cleaned, stabilized, identified, and documented. A report on the paleontological resources recovered from the parcels shall be prepared by the Paleontologist and submitted to Mt. SAC Facilities Planning & Management.
 - e. Fossils with their contextual data must be deposited at a recognized museum or institution.

VIII. Greenhouse Gas Emissions

MM GHG-1 All major capital projects (10,000 square feet and above) shall be designed to outperform Title 24, Part 6, Energy Efficiency Standards, by a minimum of 15%.

X. Hydrology and Water Quality

MM HYD-1 Prior to the issuance of grading permits, Mt. SAC shall ensure preparation of a site-specific hydrologic evaluation for each proposed development project based on the project-specific grading plan and site design of each individual project. This evaluation shall include, but not be limited to: (1) an assessment of runoff quality, volume, and flow rate from the proposed Project site; (2) identification of projectspecific BMPs (structural and non-structural) to reduce the runoff rate and volume to appropriate levels; and (3) identification of the need for new or upgraded storm drain infrastructure (on and off campus) to serve the project. Project design shall include measures to upgrade and expand campus storm drain capacity where necessary, as identified through the project-specific hydrologic evaluation. Design of future projects shall include measures to reduce runoff, including, but not limited to, the provision of permeable landscaped areas adjacent to structures to absorb runoff and the use of pervious or semi-pervious paving materials. All recommendations from forthcoming site-specific hydrologic evaluations shall be included in the site preparation and building design specifications.

XVII. Transportation

- **MM TRA-1** Prior to the completion of new construction under the 2018 EFMP, Mt. SAC shall be responsible for fair share contributions towards the installation of the following improvements:
 - 4. Temple Avenue and Grand Avenue
 - Convert the eastbound right turn lane to a shared thru-right turn lane.
 This will not require any physical reconstruction but will require additional striping to provide a third eastbound thru lane on the east leg of the intersection.
 - Convert the westbound right turn lane to a shared thru-right turn lane.
 This will not require any physical reconstruction but will require
 additional striping to provide a third westbound thru lane on the west
 leg of the intersection.
 - 9. Temple Avenue and University Drive
 - Convert the westbound right turn lane to a shared thru-right turn lane.
 This will not require any physical reconstruction but will require
 additional striping to provide a third westbound thru lane on the west
 leg of the intersection.
 - 10. Temple Avenue and Campus Drive
 - Convert the westbound right turn lane to a shared thru-right turn lane.
 This will not require any physical reconstruction but will require

additional striping to provide a third westbound thru lane on the west leg of the intersection.

11. Kellogg Drive and Campus Drive

• Convert the shared eastbound thru-right turn lane to an exclusive right turn lane. This will only require restriping on the eastbound approach.

12. Temple Avenue and Valley Boulevard

 Add a second northbound left turn lane. This will require restriping of both the north and south legs of the intersection (no physical reconstruction) and may result in the loss of some parking spaces along Valley Boulevard, south of Temple Avenue.

13. Temple Avenue and Pomona Boulevard

• Convert the southbound lanes to provide two exclusive left turn lanes and a shared thru-right turn lane. This will require restriping on the southbound approach and the removal of the existing "right lane must turn right" and "right turn only" signs.

18. Holt Avenue and Grand Avenue

• Convert the southbound right turn lane to a shared thru-right turn lane. This will require additional striping on the south leg to either extend the right turn lane at Virginia Avenue north to Holt Avenue to act as a trap right turn lane (where drivers in that lane will be forced to turn right at Virginia Avenue), or to convert the lane to a shared thru-right turn lane at Virginia Avenue. Some physical improvements, including the removal of the existing raised median island and relocation of the signal pole, will also be needed for the northwest corner of the Holt Avenue/Grand Avenue intersection.

21. Cameron Avenue and Grand Avenue

• Add a second eastbound right turn lane. This will only require restriping and will not require any physical improvements.

22. Mountaineer Road and Grand Avenue

 This intersection already includes dual southbound and westbound left turn lanes, dual westbound right turn lanes, and a northbound (defacto) right turn lane. To mitigate the impacts, a northbound through lane would need to be added on Grand Avenue, which is not feasible due to right-of-way constraints.

23. San Jose Hills Road and Grand Avenue

• Convert the westbound thru lane to a shared thru-left turn lane. This will only require striping, no physical reconstruction.

Convert the northbound right turn lane to a shared thru-right turn lane.
This will not require any physical reconstruction but will require
additional striping to provide a third northbound thru lane on the north
leg of the intersection.

24. La Puente Road and Grand Avenue

Modify the signal phasing to include an eastbound right turn overlap.

MM TRA-2 Prior to the completion of new construction under the 2018 EFMP, Mt. SAC shall be responsible for fair share contributions towards the installation of the following improvements:

- 1. Amar Road and Nogales Street
 - Convert the eastbound right turn lane to a shared thru-right turn lane.
 This will not require any physical reconstruction but will require additional striping to provide a third eastbound thru lane on the east leg of the intersection.
- 5. Temple Avenue and Mt. SAC Way
 - Convert the westbound right turn lane to a shared thru-right turn lane.
 This will not require any physical reconstruction but will require additional striping to provide a third westbound thru lane on the west leg of the intersection.
- MM TRA-3 Construction contractors shall submit an application for a truck hauling plan to the City of Walnut for review and approval prior to the start of any grading, demolition, or construction activities, in compliance with Title 2, Chapter 2.40, Hauling of Earth Materials, of the Walnut Municipal Code. The contractor shall comply with the conditions of the permit, including designated haul routes, time limits for hauling operations, debris on City roadways, temporary signage requirements, and other restrictions.
- MM TRA-4 Construction contractors shall submit traffic control plans and other construction documents that show compliance with the Work Area Traffic Control Handbook (WATCH) to Mt. SAC Facilities Planning and Management. The Traffic Control Plan shall be implemented by the contractor throughout the construction phase of each project. This shall include the use of signs and flag persons during truck hauling activities and heavy equipment movement outside the construction site and notification of the City of Walnut, the Los Angeles County Fire Department, and the Los Angeles Sheriff's Department of planned changes in vehicle circulation patterns, street closures, detours, parking, and other traffic and access issues.
- **MM TRA-5** For any construction work on public rights-of-way, the contractor shall obtain an encroachment permit from the City of Walnut and shall comply with the conditions of the permit, including restoration of roadways and public improvements, time limits for construction, debris on City roadways, and other restrictions.
- MM TRA-6 For any temporary street, sidewalk, walkway, and/or bike lane closure, the construction contractor shall submit plans to Mt. SAC Facilities Planning and Management to maintain pedestrian access on adjacent sidewalks and ensure

vehicle, pedestrian, and bicyclist safety along the construction site perimeter and along construction equipment and haul routes on campus.

MM TRA-7 Construction staging areas and construction worker parking areas shall be designated at specific locations on campus and not on public rights-of-way or internal roads, sidewalks, walkways and bike paths/bike lanes, as approved by Mt. SAC Facilities Planning and Management.

MM TRA-8 Construction sites shall be surrounding by temporary fencing to secure construction equipment, prevent vehicle and pedestrian access and trespassing, and reduce hazards during grading, demolition, or construction activities.

XVIII. Tribal Cultural Resources

MM TCR-1 Tribal Cultural Resources Monitoring. Prior to the commencement of any grading activities in which native soil is disturbed, Mt. SAC shall ensure that a Native American monitor has been retained to observe grading activities in native sediment and to salvage and catalogue tribal cultural resources as necessary. The Native American monitor shall be present at the pre-grading conference, shall establish procedures for tribal cultural resource surveillance, and shall establish, in cooperation with Mt. SAC, procedures for temporarily halting or redirecting work to permit the sampling, identification, and evaluation of the tribal cultural resource as appropriate. If the tribal cultural resources are found to be significant, the Native American observer shall determine appropriate actions, in cooperation with Mt. SAC for exploration and/or recovery.

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SECTION 6.0 PREPARERS

Mt. San Antonio College

Project ManagerFacilities Planning & Management	Gary Gidcumb John Gaston
Psomas (Environmental Document Preparation)	
Senior Project Manager Assistant Project Manager Air Quality/Energy/Greenhouse Gas Analysis/Noise Manager Air Quality/Energy/Greenhouse Gas Analysis/Noise Cultural Resources Analysis GIS/Graphics Technical Editor Senior Word Processor	Megan Larum Tin CheungJames KurtzCharles CisnerosMike DeseoDanae Overman

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SECTION 7.0 REFERENCES

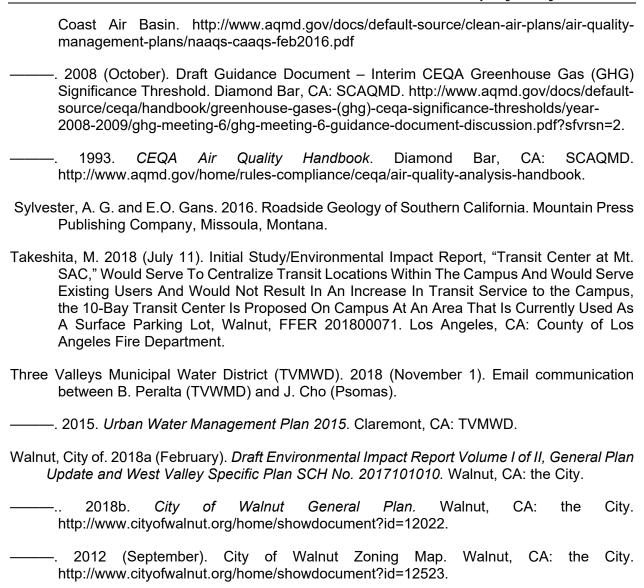
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APPENDIX A AIR QUALITY AND GHG ANALYSIS

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Mt. SAC Technology & Health Building - Los Angeles-South Coast County, Annual

Mt. SAC Technology & Health Building

Los Angeles-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
University/College (4Yr)	90.00	Employee	1.46	253,866.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	33
Climate Zone	9			Operational Year	2026
Utility Company	Southern California Edisor	า			
CO2 Intensity (lb/MWhr)	399.04	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Based on SCE 2020 CO2 Intensity Factors

Land Use - Based on project description

Construction Phase - Schedule provided by college

Demolition -

Grading -

Architectural Coating - Based on zero VOC interior per page 55 of the Mt. SAC Climate Action Plan

Vehicle Trips - Based on traffic study

Energy Use - Based on estimates provided by the developer. CalEEMod also doesn't take into account the 2019 energy efficiency standards.

Construction Off-road Equipment Mitigation - Per MM AQ-1

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2.0 Emissions Summary

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2.1 Overall Construction <u>Unmitigated Construction</u>

	ROG	NOx	СО	SO2	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					ton	s/yr							MT	/yr		
2023	0.1533	1.7044	1.1438	3.3000e- 003	0.5135	0.0648	0.5783	0.2355	0.0601	0.2956	0.0000	300.2814	300.2814	0.0637	0.0000	301.8735
2024	0.2468	1.8728	2.1653	5.5900e- 003	0.2249	0.0606	0.2854	0.0595	0.0584	0.1179	0.0000	491.7885	491.7885	0.0499	0.0000	493.0357
2025	0.2319	1.7742	2.1276	5.5200e- 003	0.1875	0.0528	0.2403	0.0506	0.0509	0.1015	0.0000	485.0969	485.0969	0.0483	0.0000	486.3050
2026	1.5239	1.1601	1.4952	3.5700e- 003	0.1137	0.0379	0.1516	0.0306	0.0363	0.0669	0.0000	313.6529	313.6529	0.0380	0.0000	314.6029
Maximum	1.5239	1.8728	2.1653	5.5900e- 003	0.5135	0.0648	0.5783	0.2355	0.0601	0.2956	0.0000	491.7885	491.7885	0.0637	0.0000	493.0357

Mt. SAC Technology & Health Building - Los Angeles-South Coast County, Annual

2.1 Overall Construction

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					tor	ns/yr							M ⁻	Г/уг		
2020	0.0380	0.3398	1.3396	3.3000e- 003	0.2221	4.0500e- 003	0.2262	0.0978	4.0200e- 003	0.1018	0.0000	300.2811	300.2811	0.0637	0.0000	301.8733
2021	0.0997	0.9073	2.2463	5.5900e- 003	0.2103	5.5800e- 003	0.2159	0.0561	5.4600e- 003	0.0615	0.0000	491.7882	491.7882	0.0499	0.0000	493.0354
2025	0.0972	0.8998	2.2169	5.5200e- 003	0.1875	5.5400e- 003	0.1931	0.0506	5.4300e- 003	0.0560	0.0000	485.0966	485.0966	0.0483	0.0000	486.3047
2026	1.4350	0.5192	1.5836	3.5700e- 003	0.1137	4.1700e- 003	0.1179	0.0306	4.1100e- 003	0.0347	0.0000	313.6527	313.6527	0.0380	0.0000	314.6027
Maximum	1.4350	0.9073	2.2463	5.5900e- 003	0.2221	5.5800e- 003	0.2262	0.0978	5.4600e- 003	0.1018	0.0000	491.7882	491.7882	0.0637	0.0000	493.0354
	ROG	NOx	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	22.54	59.06	-6.56	0.00	29.43	91.05	40.03	37.52	90.75	56.33	0.00	0.00	0.00	0.01	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
8	11-17-2022	2-16-2023	0.1083	0.0164
9	2-17-2023	5-16-2023	0.5351	0.0809
10	5-17-2023	8-16-2023	0.4540	0.0415
11	8-17-2023	11-16-2023	0.5004	0.1439
12	11-17-2023	2-16-2024	0.5266	0.2191
13	2-17-2024	5-16-2024	0.5191	0.2466
14	5-17-2024	8-16-2024	0.5296	0.2510
15	8-17-2024	11-16-2024	0.5307	0.2521

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16	11-17-2024	2-16-2025	0.5180	0.2519
17	2-17-2025	5-16-2025	0.4874	0.2416
18	5-17-2025	8-16-2025	0.5029	0.2488
19	8-17-2025	11-16-2025	0.5039	0.2498
20	11-17-2025	2-16-2026	0.5038	0.2497
21	2-17-2026	5-16-2026	0.4854	0.2396
22	5-17-2026	8-16-2026	0.4707	0.2479
23	8-17-2026	9-30-2026	0.7491	0.6545
		Highest	0.7491	0.6545

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	СО	SO2	Fugitive 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	1.0351	1.0000e- 005	1.1500e- 003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.2300e- 003	2.2300e- 003	1.0000e- 005	0.0000	2.3800e- 003	
Energy	0.0371	0.3370	0.2831	2.0200e- 003		0.0256	0.0256	, 	0.0256	0.0256	0.0000	728.9467	728.9467	0.0334	0.0122	733.4071	
Mobile	0.5151	0.5861	6.8953	0.0237	2.6989	0.0190	2.7179	0.7164	0.0175	0.7339	0.0000	2,141.037 4	2,141.037 4	0.0652	0.0000	2,142.668 2	
Waste	 			i i		0.0000	0.0000	 	0.0000	0.0000	14.6154	0.0000	14.6154	0.8637	0.0000	36.2089	
Water	r;	 			 	0.0000	0.0000		0.0000	0.0000	0.2348	4.0714	4.3061	0.0244	6.3000e- 004	5.1042	
Total	1.5873	0.9231	7.1795	0.0257	2.6989	0.0446	2.7435	0.7164	0.0431	0.7595	14.8501	2,874.057 7	2,888.907 8	0.9867	0.0128	2,917.390 7	

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2.2 Overall Operational

Mitigated Operational

	ROG	NOx	СО	SO2	Fugitive 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	1.0351	1.0000e- 005	1.1500e- 003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.2300e- 003	2.2300e- 003	1.0000e- 005	0.0000	2.3800e- 003
Energy	0.0371	0.3370	0.2831	2.0200e- 003		0.0256	0.0256	1 	0.0256	0.0256	0.0000	728.9467	728.9467	0.0334	0.0122	733.4071
Mobile	0.5151	0.5861	6.8953	0.0237	2.6989	0.0190	2.7179	0.7164	0.0175	0.7339	0.0000	2,141.037 4	2,141.037 4	0.0652	0.0000	2,142.668 2
Waste	,,					0.0000	0.0000	1 1 1 1	0.0000	0.0000	14.6154	0.0000	14.6154	0.8637	0.0000	36.2089
Water						0.0000	0.0000	,	0.0000	0.0000	0.2348	4.0714	4.3061	0.0244	6.3000e- 004	5.1042
Total	1.5873	0.9231	7.1795	0.0257	2.6989	0.0446	2.7435	0.7164	0.0431	0.7595	14.8501	2,874.057 7	2,888.907 8	0.9867	0.0128	2,917.390 7

	ROG	NOx	СО	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

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Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/30/2023	5/22/2023	5	81	
2	Site Preparation	Site Preparation	5/23/2023	9/12/2023	5	81	
3	Grading	Grading	9/13/2023	1/3/2024	5	81	
4	Building Construction	Building Construction	1/4/2024	7/16/2026	5	661	
5	Paving	Paving	7/17/2026	10/9/2026	5	61	
6	Architectural Coating	Architectural Coating	8/12/2026	11/17/2026	5	60	

Acres of Grading (Site Preparation Phase): 40.5

Acres of Grading (Grading Phase): 30.38

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 380,799; Non-Residential Outdoor: 126,933; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

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Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Rubber Tired Dozers	1	7.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	6.00	187	0.41
Grading	Rubber Tired Dozers	1	6.00	247	0.40
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Building Construction	Cranes	1	6.00	231	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Paving	Pavers	1	6.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

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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	5	13.00	0.00	457.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	2,250.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	107.00	42.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	21.00	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 - 2023**

Unmitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	ory tons/yr							MT/yr								
Fugitive Dust					0.0495	0.0000	0.0495	7.4900e- 003	0.0000	7.4900e- 003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0596	0.5799	0.5450	9.8000e- 004		0.0274	0.0274		0.0256	0.0256	0.0000	85.4006	85.4006	0.0217	0.0000	85.9419
Total	0.0596	0.5799	0.5450	9.8000e- 004	0.0495	0.0274	0.0769	7.4900e- 003	0.0256	0.0331	0.0000	85.4006	85.4006	0.0217	0.0000	85.9419

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3.2 Demolition - 2023

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive 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	1.2000e- 003	0.0385	0.0132	1.7000e- 004	3.9300e- 003	7.0000e- 005	4.0000e- 003	1.0800e- 003	7.0000e- 005	1.1400e- 003	0.0000	16.4945	16.4945	1.1100e- 003	0.0000	16.5222
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	2.0000e- 003	1.4400e- 003	0.0169	5.0000e- 005	5.7700e- 003	4.0000e- 005	5.8100e- 003	1.5300e- 003	4.0000e- 005	1.5700e- 003	0.0000	4.8398	4.8398	1.2000e- 004	0.0000	4.8429
Total	3.2000e- 003	0.0400	0.0301	2.2000e- 004	9.7000e- 003	1.1000e- 004	9.8100e- 003	2.6100e- 003	1.1000e- 004	2.7100e- 003	0.0000	21.3343	21.3343	1.2300e- 003	0.0000	21.3651

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					0.0193	0.0000	0.0193	2.9200e- 003	0.0000	2.9200e- 003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0114	0.0493	0.5961	9.8000e- 004		1.5200e- 003	1.5200e- 003		1.5200e- 003	1.5200e- 003	0.0000	85.4005	85.4005	0.0217	0.0000	85.9418
Total	0.0114	0.0493	0.5961	9.8000e- 004	0.0193	1.5200e- 003	0.0208	2.9200e- 003	1.5200e- 003	4.4400e- 003	0.0000	85.4005	85.4005	0.0217	0.0000	85.9418

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3.2 Demolition - 2023

<u>Mitigated Construction Off-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/уг		
Hauling	1.2000e- 003	0.0385	0.0132	1.7000e- 004	3.9300e- 003	7.0000e- 005	4.0000e- 003	1.0800e- 003	7.0000e- 005	1.1400e- 003	0.0000	16.4945	16.4945	1.1100e- 003	0.0000	16.5222
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	2.0000e- 003	1.4400e- 003	0.0169	5.0000e- 005	5.7700e- 003	4.0000e- 005	5.8100e- 003	1.5300e- 003	4.0000e- 005	1.5700e- 003	0.0000	4.8398	4.8398	1.2000e- 004	0.0000	4.8429
Total	3.2000e- 003	0.0400	0.0301	2.2000e- 004	9.7000e- 003	1.1000e- 004	9.8100e- 003	2.6100e- 003	1.1000e- 004	2.7100e- 003	0.0000	21.3343	21.3343	1.2300e- 003	0.0000	21.3651

3.3 Site Preparation - 2023

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Fugitive Dust					0.2349	0.0000	0.2349	0.1196	0.0000	0.1196	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0459	0.5032	0.2690	7.0000e- 004		0.0206	0.0206		0.0189	0.0189	0.0000	61.2126	61.2126	0.0198	0.0000	61.7075
Total	0.0459	0.5032	0.2690	7.0000e- 004	0.2349	0.0206	0.2554	0.1196	0.0189	0.1385	0.0000	61.2126	61.2126	0.0198	0.0000	61.7075

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3.3 Site Preparation - 2023
Unmitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/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	1.2300e- 003	8.9000e- 004	0.0104	3.0000e- 005	3.5500e- 003	3.0000e- 005	3.5800e- 003	9.4000e- 004	3.0000e- 005	9.7000e- 004	0.0000	2.9783	2.9783	8.0000e- 005	0.0000	2.9803
Total	1.2300e- 003	8.9000e- 004	0.0104	3.0000e- 005	3.5500e- 003	3.0000e- 005	3.5800e- 003	9.4000e- 004	3.0000e- 005	9.7000e- 004	0.0000	2.9783	2.9783	8.0000e- 005	0.0000	2.9803

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	⁻ /yr		
Fugitive Dust					0.0916	0.0000	0.0916	0.0467	0.0000	0.0467	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	8.5300e- 003	0.0370	0.3512	7.0000e- 004		1.1400e- 003	1.1400e- 003		1.1400e- 003	1.1400e- 003	0.0000	61.2125	61.2125	0.0198	0.0000	61.7074
Total	8.5300e- 003	0.0370	0.3512	7.0000e- 004	0.0916	1.1400e- 003	0.0927	0.0467	1.1400e- 003	0.0478	0.0000	61.2125	61.2125	0.0198	0.0000	61.7074

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3.3 Site Preparation - 2023

<u>Mitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/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	1.2300e- 003	8.9000e- 004	0.0104	3.0000e- 005	3.5500e- 003	3.0000e- 005	3.5800e- 003	9.4000e- 004	3.0000e- 005	9.7000e- 004	0.0000	2.9783	2.9783	8.0000e- 005	0.0000	2.9803
Total	1.2300e- 003	8.9000e- 004	0.0104	3.0000e- 005	3.5500e- 003	3.0000e- 005	3.5800e- 003	9.4000e- 004	3.0000e- 005	9.7000e- 004	0.0000	2.9783	2.9783	8.0000e- 005	0.0000	2.9803

3.4 Grading - 2023

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Fugitive Dust					0.1933	0.0000	0.1933	0.0987	0.0000	0.0987	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0364	0.3970	0.2165	5.5000e- 004		0.0164	0.0164		0.0151	0.0151	0.0000	48.2859	48.2859	0.0156	0.0000	48.6763
Total	0.0364	0.3970	0.2165	5.5000e- 004	0.1933	0.0164	0.2097	0.0987	0.0151	0.1138	0.0000	48.2859	48.2859	0.0156	0.0000	48.6763

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3.4 Grading - 2023

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	5.7000e- 003	0.1826	0.0627	7.9000e- 004	0.0192	3.3000e- 004	0.0195	5.2500e- 003	3.1000e- 004	5.5600e- 003	0.0000	78.2016	78.2016	5.2400e- 003	0.0000	78.3326
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	1.1800e- 003	8.5000e- 004	0.0100	3.0000e- 005	3.4200e- 003	3.0000e- 005	3.4500e- 003	9.1000e- 004	2.0000e- 005	9.3000e- 004	0.0000	2.8680	2.8680	7.0000e- 005	0.0000	2.8699
Total	6.8800e- 003	0.1835	0.0727	8.2000e- 004	0.0226	3.6000e- 004	0.0229	6.1600e- 003	3.3000e- 004	6.4900e- 003	0.0000	81.0697	81.0697	5.3100e- 003	0.0000	81.2025

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Fugitive Dust	 				0.0754	0.0000	0.0754	0.0385	0.0000	0.0385	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.7300e- 003	0.0292	0.2791	5.5000e- 004		9.0000e- 004	9.0000e- 004		9.0000e- 004	9.0000e- 004	0.0000	48.2858	48.2858	0.0156	0.0000	48.6763
Total	6.7300e- 003	0.0292	0.2791	5.5000e- 004	0.0754	9.0000e- 004	0.0763	0.0385	9.0000e- 004	0.0394	0.0000	48.2858	48.2858	0.0156	0.0000	48.6763

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3.4 Grading - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	5.7000e- 003	0.1826	0.0627	7.9000e- 004	0.0192	3.3000e- 004	0.0195	5.2500e- 003	3.1000e- 004	5.5600e- 003	0.0000	78.2016	78.2016	5.2400e- 003	0.0000	78.3326
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	1.1800e- 003	8.5000e- 004	0.0100	3.0000e- 005	3.4200e- 003	3.0000e- 005	3.4500e- 003	9.1000e- 004	2.0000e- 005	9.3000e- 004	0.0000	2.8680	2.8680	7.0000e- 005	0.0000	2.8699
Total	6.8800e- 003	0.1835	0.0727	8.2000e- 004	0.0226	3.6000e- 004	0.0229	6.1600e- 003	3.3000e- 004	6.4900e- 003	0.0000	81.0697	81.0697	5.3100e- 003	0.0000	81.2025

3.4 Grading - 2024

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Fugitive Dust					0.0239	0.0000	0.0239	5.6200e- 003	0.0000	5.6200e- 003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Oil Roda	1.3700e- 003	0.0146	8.3200e- 003	2.0000e- 005		6.0000e- 004	6.0000e- 004		5.5000e- 004	5.5000e- 004	0.0000	1.8570	1.8570	6.0000e- 004	0.0000	1.8720
Total	1.3700e- 003	0.0146	8.3200e- 003	2.0000e- 005	0.0239	6.0000e- 004	0.0245	5.6200e- 003	5.5000e- 004	6.1700e- 003	0.0000	1.8570	1.8570	6.0000e- 004	0.0000	1.8720

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3.4 Grading - 2024

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	2.2000e- 004	6.9800e- 003	2.4400e- 003	3.0000e- 005	0.0147	1.0000e- 005	0.0147	3.6300e- 003	1.0000e- 005	3.6400e- 003	0.0000	2.9942	2.9942	2.0000e- 004	0.0000	2.9993
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- 005	3.0000e- 005	3.6000e- 004	0.0000	1.3000e- 004	0.0000	1.3000e- 004	3.0000e- 005	0.0000	4.0000e- 005	0.0000	0.1069	0.1069	0.0000	0.0000	0.1070
Total	2.6000e- 004	7.0100e- 003	2.8000e- 003	3.0000e- 005	0.0149	1.0000e- 005	0.0149	3.6600e- 003	1.0000e- 005	3.6800e- 003	0.0000	3.1011	3.1011	2.0000e- 004	0.0000	3.1062

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Fugitive Dust	 				9.3200e- 003	0.0000	9.3200e- 003	2.1900e- 003	0.0000	2.1900e- 003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.6000e- 004	1.1200e- 003	0.0107	2.0000e- 005		3.0000e- 005	3.0000e- 005		3.0000e- 005	3.0000e- 005	0.0000	1.8570	1.8570	6.0000e- 004	0.0000	1.8720
Total	2.6000e- 004	1.1200e- 003	0.0107	2.0000e- 005	9.3200e- 003	3.0000e- 005	9.3500e- 003	2.1900e- 003	3.0000e- 005	2.2200e- 003	0.0000	1.8570	1.8570	6.0000e- 004	0.0000	1.8720

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3.4 Grading - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	2.2000e- 004	6.9800e- 003	2.4400e- 003	3.0000e- 005	0.0147	1.0000e- 005	0.0147	3.6300e- 003	1.0000e- 005	3.6400e- 003	0.0000	2.9942	2.9942	2.0000e- 004	0.0000	2.9993
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- 005	3.0000e- 005	3.6000e- 004	0.0000	1.3000e- 004	0.0000	1.3000e- 004	3.0000e- 005	0.0000	4.0000e- 005	0.0000	0.1069	0.1069	0.0000	0.0000	0.1070
Total	2.6000e- 004	7.0100e- 003	2.8000e- 003	3.0000e- 005	0.0149	1.0000e- 005	0.0149	3.6600e- 003	1.0000e- 005	3.6800e- 003	0.0000	3.1011	3.1011	2.0000e- 004	0.0000	3.1062

3.5 Building Construction - 2024

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Off-Road	0.1839	1.4328	1.6210	2.8600e- 003		0.0584	0.0584		0.0563	0.0563	0.0000	235.1866	235.1866	0.0392	0.0000	236.1658
Total	0.1839	1.4328	1.6210	2.8600e- 003		0.0584	0.0584		0.0563	0.0563	0.0000	235.1866	235.1866	0.0392	0.0000	236.1658

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3.5 Building Construction - 2024 Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/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	0.0115	0.3839	0.1198	1.3200e- 003	0.0343	4.4000e- 004	0.0347	9.8900e- 003	4.2000e- 004	0.0103	0.0000	128.2187	128.2187	6.9100e- 003	0.0000	128.3915
Worker	0.0498	0.0346	0.4134	1.3600e- 003	0.1518	1.1600e- 003	0.1530	0.0403	1.0700e- 003	0.0414	0.0000	123.4251	123.4251	3.0100e- 003	0.0000	123.5002
Total	0.0613	0.4184	0.5332	2.6800e- 003	0.1861	1.6000e- 003	0.1877	0.0502	1.4900e- 003	0.0517	0.0000	251.6438	251.6438	9.9200e- 003	0.0000	251.8917

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Off-Road	0.0379	0.4807	1.6996	2.8600e- 003		3.9200e- 003	3.9200e- 003		3.9200e- 003	3.9200e- 003	0.0000	235.1863	235.1863	0.0392	0.0000	236.1655
Total	0.0379	0.4807	1.6996	2.8600e- 003		3.9200e- 003	3.9200e- 003		3.9200e- 003	3.9200e- 003	0.0000	235.1863	235.1863	0.0392	0.0000	236.1655

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3.5 Building Construction - 2024 Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/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	0.0115	0.3839	0.1198	1.3200e- 003	0.0343	4.4000e- 004	0.0347	9.8900e- 003	4.2000e- 004	0.0103	0.0000	128.2187	128.2187	6.9100e- 003	0.0000	128.3915
Worker	0.0498	0.0346	0.4134	1.3600e- 003	0.1518	1.1600e- 003	0.1530	0.0403	1.0700e- 003	0.0414	0.0000	123.4251	123.4251	3.0100e- 003	0.0000	123.5002
Total	0.0613	0.4184	0.5332	2.6800e- 003	0.1861	1.6000e- 003	0.1877	0.0502	1.4900e- 003	0.0517	0.0000	251.6438	251.6438	9.9200e- 003	0.0000	251.8917

3.5 Building Construction - 2025

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Off-Road	0.1729	1.3589	1.6233	2.8800e- 003		0.0512	0.0512		0.0494	0.0494	0.0000	237.0300	237.0300	0.0387	0.0000	237.9975
Total	0.1729	1.3589	1.6233	2.8800e- 003		0.0512	0.0512		0.0494	0.0494	0.0000	237.0300	237.0300	0.0387	0.0000	237.9975

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3.5 Building Construction - 2025 Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/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	0.0113	0.3835	0.1176	1.3200e- 003	0.0345	4.4000e- 004	0.0350	9.9700e- 003	4.2000e- 004	0.0104	0.0000	128.5048	128.5048	6.8600e- 003	0.0000	128.6764
Worker	0.0477	0.0319	0.3867	1.3200e- 003	0.1530	1.1500e- 003	0.1542	0.0406	1.0500e- 003	0.0417	0.0000	119.5621	119.5621	2.7600e- 003	0.0000	119.6311
Total	0.0590	0.4154	0.5042	2.6400e- 003	0.1875	1.5900e- 003	0.1891	0.0506	1.4700e- 003	0.0521	0.0000	248.0669	248.0669	9.6200e- 003	0.0000	248.3075

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
	0.0382	0.4844	1.7127	2.8800e- 003		3.9500e- 003	3.9500e- 003		3.9500e- 003	3.9500e- 003	0.0000	237.0298	237.0298	0.0387	0.0000	237.9973
Total	0.0382	0.4844	1.7127	2.8800e- 003		3.9500e- 003	3.9500e- 003		3.9500e- 003	3.9500e- 003	0.0000	237.0298	237.0298	0.0387	0.0000	237.9973

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3.5 Building Construction - 2025 <u>Mitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/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	0.0113	0.3835	0.1176	1.3200e- 003	0.0345	4.4000e- 004	0.0350	9.9700e- 003	4.2000e- 004	0.0104	0.0000	128.5048	128.5048	6.8600e- 003	0.0000	128.6764
Worker	0.0477	0.0319	0.3867	1.3200e- 003	0.1530	1.1500e- 003	0.1542	0.0406	1.0500e- 003	0.0417	0.0000	119.5621	119.5621	2.7600e- 003	0.0000	119.6311
Total	0.0590	0.4154	0.5042	2.6400e- 003	0.1875	1.5900e- 003	0.1891	0.0506	1.4700e- 003	0.0521	0.0000	248.0669	248.0669	9.6200e- 003	0.0000	248.3075

3.5 Building Construction - 2026

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Off-Road	0.0934	0.7341	0.8770	1.5600e- 003		0.0277	0.0277		0.0267	0.0267	0.0000	128.0507	128.0507	0.0209	0.0000	128.5734
Total	0.0934	0.7341	0.8770	1.5600e- 003		0.0277	0.0277		0.0267	0.0267	0.0000	128.0507	128.0507	0.0209	0.0000	128.5734

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3.5 Building Construction - 2026 Unmitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/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	5.9500e- 003	0.2052	0.0622	7.1000e- 004	0.0187	2.3000e- 004	0.0189	5.3800e- 003	2.2000e- 004	5.6100e- 003	0.0000	69.0570	69.0570	3.6500e- 003	0.0000	69.1484
Worker	0.0246	0.0159	0.1952	6.9000e- 004	0.0827	6.0000e- 004	0.0833	0.0220	5.5000e- 004	0.0225	0.0000	62.3475	62.3475	1.3700e- 003	0.0000	62.3817
Total	0.0306	0.2211	0.2574	1.4000e- 003	0.1013	8.3000e- 004	0.1022	0.0273	7.7000e- 004	0.0281	0.0000	131.4046	131.4046	5.0200e- 003	0.0000	131.5301

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Off-Road	0.0207	0.2617	0.9253	1.5600e- 003		2.1400e- 003	2.1400e- 003		2.1400e- 003	2.1400e- 003	0.0000	128.0506	128.0506	0.0209	0.0000	128.5732
Total	0.0207	0.2617	0.9253	1.5600e- 003		2.1400e- 003	2.1400e- 003		2.1400e- 003	2.1400e- 003	0.0000	128.0506	128.0506	0.0209	0.0000	128.5732

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3.5 Building Construction - 2026 Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	ıs/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	5.9500e- 003	0.2052	0.0622	7.1000e- 004	0.0187	2.3000e- 004	0.0189	5.3800e- 003	2.2000e- 004	5.6100e- 003	0.0000	69.0570	69.0570	3.6500e- 003	0.0000	69.1484
Worker	0.0246	0.0159	0.1952	6.9000e- 004	0.0827	6.0000e- 004	0.0833	0.0220	5.5000e- 004	0.0225	0.0000	62.3475	62.3475	1.3700e- 003	0.0000	62.3817
Total	0.0306	0.2211	0.2574	1.4000e- 003	0.1013	8.3000e- 004	0.1022	0.0273	7.7000e- 004	0.0281	0.0000	131.4046	131.4046	5.0200e- 003	0.0000	131.5301

3.6 Paving - 2026

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Off-Road	0.0175	0.1624	0.2683	4.1000e- 004		7.5200e- 003	7.5200e- 003		6.9400e- 003	6.9400e- 003	0.0000	35.9093	35.9093	0.0114	0.0000	36.1939
l aving	0.0000					0.0000	0.0000	 	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0175	0.1624	0.2683	4.1000e- 004		7.5200e- 003	7.5200e- 003		6.9400e- 003	6.9400e- 003	0.0000	35.9093	35.9093	0.0114	0.0000	36.1939

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3.6 Paving - 2026

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/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	1.2900e- 003	8.3000e- 004	0.0103	4.0000e- 005	4.3400e- 003	3.0000e- 005	4.3800e- 003	1.1500e- 003	3.0000e- 005	1.1800e- 003	0.0000	3.2771	3.2771	7.0000e- 005	0.0000	3.2789
Total	1.2900e- 003	8.3000e- 004	0.0103	4.0000e- 005	4.3400e- 003	3.0000e- 005	4.3800e- 003	1.1500e- 003	3.0000e- 005	1.1800e- 003	0.0000	3.2771	3.2771	7.0000e- 005	0.0000	3.2789

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Off-Road	6.2200e- 003	0.0295	0.3075	4.1000e- 004		9.8000e- 004	9.8000e- 004	 	9.8000e- 004	9.8000e- 004	0.0000	35.9092	35.9092	0.0114	0.0000	36.1938
Paving	0.0000		 		 	0.0000	0.0000	 	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	6.2200e- 003	0.0295	0.3075	4.1000e- 004		9.8000e- 004	9.8000e- 004		9.8000e- 004	9.8000e- 004	0.0000	35.9092	35.9092	0.0114	0.0000	36.1938

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3.6 Paving - 2026

<u>Mitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/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	1.2900e- 003	8.3000e- 004	0.0103	4.0000e- 005	4.3400e- 003	3.0000e- 005	4.3800e- 003	1.1500e- 003	3.0000e- 005	1.1800e- 003	0.0000	3.2771	3.2771	7.0000e- 005	0.0000	3.2789
Total	1.2900e- 003	8.3000e- 004	0.0103	4.0000e- 005	4.3400e- 003	3.0000e- 005	4.3800e- 003	1.1500e- 003	3.0000e- 005	1.1800e- 003	0.0000	3.2771	3.2771	7.0000e- 005	0.0000	3.2789

3.7 Architectural Coating - 2026

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Archit. Coating	1.3728		! !			0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.9800e- 003	0.0401	0.0633	1.0000e- 004		1.8000e- 003	1.8000e- 003		1.8000e- 003	1.8000e- 003	0.0000	8.9364	8.9364	4.9000e- 004	0.0000	8.9486
Total	1.3788	0.0401	0.0633	1.0000e- 004		1.8000e- 003	1.8000e- 003		1.8000e- 003	1.8000e- 003	0.0000	8.9364	8.9364	4.9000e- 004	0.0000	8.9486

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3.7 Architectural Coating - 2026 Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/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	2.4000e- 003	1.5500e- 003	0.0190	7.0000e- 005	8.0500e- 003	6.0000e- 005	8.1100e- 003	2.1400e- 003	5.0000e- 005	2.1900e- 003	0.0000	6.0748	6.0748	1.3000e- 004	0.0000	6.0782
Total	2.4000e- 003	1.5500e- 003	0.0190	7.0000e- 005	8.0500e- 003	6.0000e- 005	8.1100e- 003	2.1400e- 003	5.0000e- 005	2.1900e- 003	0.0000	6.0748	6.0748	1.3000e- 004	0.0000	6.0782

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Archit. Coating	1.3728					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.0400e- 003	4.5100e- 003	0.0641	1.0000e- 004		1.4000e- 004	1.4000e- 004	1	1.4000e- 004	1.4000e- 004	0.0000	8.9364	8.9364	4.9000e- 004	0.0000	8.9486
Total	1.3738	4.5100e- 003	0.0641	1.0000e- 004		1.4000e- 004	1.4000e- 004		1.4000e- 004	1.4000e- 004	0.0000	8.9364	8.9364	4.9000e- 004	0.0000	8.9486

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3.7 Architectural Coating - 2026 Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/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	2.4000e- 003	1.5500e- 003	0.0190	7.0000e- 005	8.0500e- 003	6.0000e- 005	8.1100e- 003	2.1400e- 003	5.0000e- 005	2.1900e- 003	0.0000	6.0748	6.0748	1.3000e- 004	0.0000	6.0782
Total	2.4000e- 003	1.5500e- 003	0.0190	7.0000e- 005	8.0500e- 003	6.0000e- 005	8.1100e- 003	2.1400e- 003	5.0000e- 005	2.1900e- 003	0.0000	6.0748	6.0748	1.3000e- 004	0.0000	6.0782

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					ton	s/yr							МТ	/yr		
Mitigated	0.5151	0.5861	6.8953	0.0237	2.6989	0.0190	2.7179	0.7164	0.0175	0.7339	0.0000	2,141.037 4	2,141.037 4	0.0652	0.0000	2,142.668 2
Unmitigated	0.5151	0.5861	6.8953	0.0237	2.6989	0.0190	2.7179	0.7164	0.0175	0.7339	0.0000	2,141.037 4	2,141.037 4	0.0652	0.0000	2,142.668 2

4.2 Trip Summary Information

	Avei	rage Daily Trip Ra	ate	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
University/College (4Yr)	3,159.00	1,099.80	0.00	7,250,011	7,250,011
Total	3,159.00	1,099.80	0.00	7,250,011	7,250,011

4.3 Trip Type Information

		Miles			Trip %			Trip Purpos	e %
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
University/College (4Yr)	16.60	8.40	6.90	6.40	88.60	5.00	91	9	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	МН
University/College (4Yr)	0.591120	0.048204	0.226593	0.127275	0.000000	0.000000	0.000000	0.001086	0.000000	0.000000	0.005721	0.000000	0.000000

5.0 Energy Detail

Historical Energy Use: N

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5.1 Mitigation Measures 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												МТ	/yr		
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	362.0870	362.0870	0.0263	5.4400e- 003	364.3673
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	362.0870	362.0870	0.0263	5.4400e- 003	364.3673
NaturalGas Mitigated	0.0371	0.3370	0.2831	2.0200e- 003		0.0256	0.0256		0.0256	0.0256	0.0000	366.8597	366.8597	7.0300e- 003	6.7300e- 003	369.0398
NaturalGas Unmitigated	0.0371	0.3370	0.2831	2.0200e- 003		0.0256	0.0256		0.0256	0.0256	0.0000	366.8597	366.8597	7.0300e- 003	6.7300e- 003	369.0398

5.2 Energy by Land Use - NaturalGas <u>Unmitigated</u>

	NaturalGa s Use	ROG	NOx	СО	SO2	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					ton	s/yr							MT	/yr		
University/College (4Yr)	6.87469e +006	0.0371	0.3370	0.2831	2.0200e- 003		0.0256	0.0256		0.0256	0.0256	0.0000	366.8597	366.8597	7.0300e- 003	6.7300e- 003	369.0398
Total		0.0371	0.3370	0.2831	2.0200e- 003		0.0256	0.0256		0.0256	0.0256	0.0000	366.8597	366.8597	7.0300e- 003	6.7300e- 003	369.0398

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5.2 Energy by Land Use - NaturalGas Mitigated

	NaturalGa s 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		
University/College (4Yr)	6.87469e +006	0.0371	0.3370	0.2831	2.0200e- 003		0.0256	0.0256		0.0256	0.0256	0.0000	366.8597	366.8597	7.0300e- 003	6.7300e- 003	369.0398
Total		0.0371	0.3370	0.2831	2.0200e- 003		0.0256	0.0256		0.0256	0.0256	0.0000	366.8597	366.8597	7.0300e- 003	6.7300e- 003	369.0398

5.3 Energy by Land Use - Electricity <u>Unmitigated</u>

	Electricity Use	Total CO2	CH4	N2O	CO2e					
Land Use	kWh/yr	MT/yr								
University/College (4Yr)	2.00046e +006	362.0870	0.0263	5.4400e- 003	364.3673					
Total		362.0870	0.0263	5.4400e- 003	364.3673					

5.3 Energy by Land Use - Electricity Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e					
Land Use	kWh/yr	MT/yr								
University/College (4Yr)	2.00046e +006	362.0870	0.0263	5.4400e- 003	364.3673					
Total		362.0870	0.0263	5.4400e- 003	364.3673					

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	1.0351	1.0000e- 005	1.1500e- 003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.2300e- 003	2.2300e- 003	1.0000e- 005	0.0000	2.3800e- 003
Unmitigated	1.0351	1.0000e- 005	1.1500e- 003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.2300e- 003	2.2300e- 003	1.0000e- 005	0.0000	2.3800e- 003

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6.2 Area by SubCategory Unmitigated

	ROG	NOx	СО	SO2	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	0.1177					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.9173		i			0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.1000e- 004	1.0000e- 005	1.1500e- 003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.2300e- 003	2.2300e- 003	1.0000e- 005	0.0000	2.3800e- 003
Total	1.0351	1.0000e- 005	1.1500e- 003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.2300e- 003	2.2300e- 003	1.0000e- 005	0.0000	2.3800e- 003

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												МТ	-/yr		
Architectural Coating	0.1177					0.0000	0.0000	! !	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.9173					0.0000	0.0000	1 1 1 1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.1000e- 004	1.0000e- 005	1.1500e- 003	0.0000		0.0000	0.0000	1 1 1 1	0.0000	0.0000	0.0000	2.2300e- 003	2.2300e- 003	1.0000e- 005	0.0000	2.3800e- 003
Total	1.0351	1.0000e- 005	1.1500e- 003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.2300e- 003	2.2300e- 003	1.0000e- 005	0.0000	2.3800e- 003

7.0 Water Detail

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7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category		МТ	√yr	
Miligatod		0.0244	6.3000e- 004	5.1042
Unmitigated	4.3061	0.0244	6.3000e- 004	5.1042

7.2 Water by Land Use <u>Unmitigated</u>

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e					
Land Use	Mgal	MT/yr								
University/College (4Yr)	0.739964 / 1.15738	4.3061	0.0244	6.3000e- 004	5.1042					
Total		4.3061	0.0244	6.3000e- 004	5.1042					

7.2 Water by Land Use

Mitigated

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e						
Land Use	Mgal	MT/yr									
University/College (4Yr)	0.739964 / 1.15738	4.3061	0.0244	6.3000e- 004	5.1042						
Total		4.3061	0.0244	6.3000e- 004	5.1042						

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e					
		MT/yr							
willigated	14.6154	0.8637	0.0000	36.2089					
Jgatea	14.6154	0.8637	0.0000	36.2089					

8.2 Waste by Land Use <u>Unmitigated</u>

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons		МТ	-/yr	
University/College (4Yr)	72	14.6154	0.8637	0.0000	36.2089
Total		14.6154	0.8637	0.0000	36.2089

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons		MT	/yr	
University/College (4Yr)	72	14.6154	0.8637	0.0000	36.2089
Total		14.6154	0.8637	0.0000	36.2089

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

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Mt. SAC Technology & Health Building - Los Angeles-South Coast County, Summer

Mt. SAC Technology & Health Building

Los Angeles-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
University/College (4Yr)	90.00	Employee	1.46	253,866.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	33
Climate Zone	9			Operational Year	2026
Utility Company	Southern California Edison	1			
CO2 Intensity (lb/MWhr)	399.04	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Based on SCE 2020 CO2 Intensity Factors

Land Use - Based on project description

Construction Phase - Schedule provided by college

Demolition -

Grading -

Architectural Coating - Based on zero VOC interior per page 55 of the Mt. SAC Climate Action Plan

Vehicle Trips - Based on traffic study

Energy Use - Based on estimates provided by the developer. CalEEMod also doesn't take into account the 2019 energy efficiency standards.

Construction Off-road Equipment Mitigation - Per MM AQ-1

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Table Name	Column Name	Default Value	New Value
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	7.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstructionPhase	NumDays	10.00	60.00
tblConstructionPhase	NumDays	200.00	661.00

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tblConstructionPhase	NumDays	20.00	81.00		
tblConstructionPhase	NumDays	4.00	81.00		
tblConstructionPhase	NumDays	10.00	61.00		
tblConstructionPhase	NumDays	2.00	81.00		
tblEnergyUse	LightingElect	3.39	2.67		
tblEnergyUse	NT24E	3.59	2.82		
tblEnergyUse	T24E	3.04	2.39		
tblFleetMix	HHD	0.03	1.0860e-003		
tblFleetMix	LDA	0.54	0.59		
tblFleetMix	LDT1	0.04	0.05		
tblFleetMix	LDT2	0.21	0.23		
tblFleetMix	LHD1	0.01	0.00		
tblFleetMix	LHD2	6.3010e-003	0.00		
tblFleetMix	MCY	5.2670e-003	5.7210e-003		
tblFleetMix	MDV	0.12	0.13		
tblFleetMix	MH	8.3400e-004	0.00		
tblFleetMix	MHD	0.02	0.00		
tblFleetMix	OBUS	2.5890e-003	0.00		
tblFleetMix	SBUS	7.0500e-004	0.00		
tblFleetMix	UBUS	1.9030e-003	0.00		
tblGrading	MaterialExported	0.00	18,000.00		
tblLandUse	LandUseSquareFeet	63,520.41	253,866.00		
tblProjectCharacteristics	CO2IntensityFactor	702.44	399.04		
tblVehicleTrips	ST_TR	3.12	12.22		
tblVehicleTrips	WD_TR	8.96	35.10		

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/d	day					
2023	1.5509	15.2772	14.2232	0.0354	5.8890	0.6794	6.3971	2.9774	0.6354	3.4448	0.0000	3,676.018 8	3,676.018 8	0.6225	0.0000	3,690.765 4
2024	1.8884	14.2814	16.8139	0.0434	15.0632	0.4629	15.4722	5.0300	0.4462	5.4066	0.0000	4,203.310 2	4,203.310 2	0.5897	0.0000	4,213.750 2
2025	1.7716	13.5341	16.4702	0.0429	1.4649	0.4046	1.8695	0.3946	0.3898	0.7844	0.0000	4,154.933 2	4,154.933 2	0.4079	0.0000	4,165.131 8
2026	40.0763	13.4902	16.2472	0.0424	1.4649	0.4042	1.8691	0.3946	0.3894	0.7841	0.0000	4,112.439 1	4,112.439 1	0.4339	0.0000	4,122.566 9
Maximum	40.0763	15.2772	16.8139	0.0434	15.0632	0.6794	15.4722	5.0300	0.6354	5.4066	0.0000	4,203.310 2	4,203.310 2	0.6225	0.0000	4,213.750 2

2.1 Overall Construction (Maximum Daily Emission)

Mitigated Construction

Percent

Reduction

8.52

54.34

-5.08

0.00

26.74

91.43

31.10

	ROG	NOx	СО	SO2	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/d	day		
2023	0.3594												3,676.018 8	0.6225	0.0000	3,690.765 4
2024	0.7614	6.8782	17.4208	0.0434	12.0502	0.0426	12.0820	3.4871	0.0418	3.5186	0.0000	4,203.310 2	4,203.310 2	0.5897	0.0000	4,213.750 2
2025	0.7400	6.8333	17.1550	0.0429	1.4649	0.0424	1.5073	0.3946	0.0415	0.4362	0.0000	4,154.933 2	4,154.933 2	0.4079	0.0000	4,165.131 8
2026	39.5657	6.7894	16.9319	0.0424	1.4649	0.0420	1.5070	0.3946	0.0412	0.4358	0.0000	4,112.439 1	4,112.439 1	0.4339	0.0000	4,122.566 9
Maximum	39.5657	6.8782	17.4208	0.0434	12.0502	0.0426	12.0820	3.4871	0.0418	3.5186	0.0000	4,203.310 2	4,203.310 2	0.6225	0.0000	4,213.750 2
	ROG	NOx	СО	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

38.02

91.15

46.31

0.00

0.00

0.00

0.00

0.00

0.00

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2.2 Overall Operational Unmitigated Operational

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					day				lb/d	day						
Area	5.6721	8.0000e- 005	9.1700e- 003	0.0000		3.0000e- 005	3.0000e- 005		3.0000e- 005	3.0000e- 005		0.0197	0.0197	5.0000e- 005		0.0210
Energy	0.2031	1.8466	1.5511	0.0111		0.1403	0.1403		0.1403	0.1403		2,215.855 4	2,215.855 4	0.0425	0.0406	2,229.023 1
Mobile	3.9669	3.7680	51.9115	0.1777	19.7990	0.1369	19.9359	5.2474	0.1260	5.3734		17,737.06 56	17,737.06 56	0.5280		17,750.26 52
Total	9.8421	5.6146	53.4717	0.1888	19.7990	0.2773	20.0762	5.2474	0.2664	5.5138		19,952.94 06	19,952.94 06	0.5705	0.0406	19,979.30 92

Mitigated Operational

	ROG	NOx	СО	SO2	Fugitive 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/e				lb/d	day						
Area	5.6721	8.0000e- 005	9.1700e- 003	0.0000		3.0000e- 005	3.0000e- 005		3.0000e- 005	3.0000e- 005		0.0197	0.0197	5.0000e- 005		0.0210
Energy	0.2031	1.8466	1.5511	0.0111	 	0.1403	0.1403		0.1403	0.1403		2,215.855 4	2,215.855 4	0.0425	0.0406	2,229.023 1
Mobile	3.9669	3.7680	51.9115	0.1777	19.7990	0.1369	19.9359	5.2474	0.1260	5.3734		17,737.06 56	17,737.06 56	0.5280		17,750.26 52
Total	9.8421	5.6146	53.4717	0.1888	19.7990	0.2773	20.0762	5.2474	0.2664	5.5138		19,952.94 06	19,952.94 06	0.5705	0.0406	19,979.30 92

	ROG	NOx	СО	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	1/30/2023	5/22/2023	5	81	
2	Site Preparation	Site Preparation	5/23/2023	9/12/2023	5	81	
3	Grading	Grading	9/13/2023	1/3/2024	5	81	
4	Building Construction	Building Construction	1/4/2024	7/16/2026	5	661	
5	Paving	Paving	7/17/2026	10/9/2026	5	61	
6	Architectural Coating	Architectural Coating	8/12/2026	11/17/2026	5	60	

Acres of Grading (Site Preparation Phase): 40.5

Acres of Grading (Grading Phase): 30.38

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 380,799; Non-Residential Outdoor: 126,933; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

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Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	 1	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Rubber Tired Dozers	1	7.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	6.00	187	0.41
Grading	Rubber Tired Dozers	1	6.00	247	0.40
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Building Construction	Cranes	1	6.00	231	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Paving	Pavers	1	6.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

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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	5	13.00	0.00	457.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	2,250.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	107.00	42.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	21.00	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 - 2023**

	ROG	NOx	CO	SO2	Fugitive 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/d	day							lb/c	lay		
Fugitive Dust					1.2221	0.0000	1.2221	0.1850	0.0000	0.1850			0.0000			0.0000
Off-Road	1.4725	14.3184	13.4577	0.0241		0.6766	0.6766		0.6328	0.6328		2,324.395 9	2,324.395 9	0.5893		2,339.127 8
Total	1.4725	14.3184	13.4577	0.0241	1.2221	0.6766	1.8988	0.1850	0.6328	0.8178		2,324.395 9	2,324.395 9	0.5893		2,339.127 8

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3.2 Demolition - 2023

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive 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/d	day							lb/d	lay		
Hauling	0.0294	0.9275	0.3206	4.1500e- 003	0.0987	1.6800e- 003	0.1003	0.0271	1.6100e- 003	0.0287		452.2409	452.2409	0.0297		452.9837
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	0.0490	0.0313	0.4449	1.3800e- 003	0.1453	1.1100e- 003	0.1464	0.0385	1.0200e- 003	0.0396		137.6027	137.6027	3.5500e- 003		137.6915
Total	0.0784	0.9588	0.7655	5.5300e- 003	0.2440	2.7900e- 003	0.2468	0.0656	2.6300e- 003	0.0682		589.8436	589.8436	0.0333		590.6752

	ROG	NOx	CO	SO2	Fugitive 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/d	day							lb/c	lay		
Fugitive Dust					0.4766	0.0000	0.4766	0.0722	0.0000	0.0722			0.0000			0.0000
Off-Road	0.2811	1.2179	14.7184	0.0241		0.0375	0.0375	i i	0.0375	0.0375	0.0000	2,324.395 9	2,324.395 9	0.5893		2,339.127 8
Total	0.2811	1.2179	14.7184	0.0241	0.4766	0.0375	0.5141	0.0722	0.0375	0.1097	0.0000	2,324.395 9	2,324.395 9	0.5893		2,339.127 8

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3.2 Demolition - 2023

<u>Mitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive 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/d	day							lb/d	lay		
Hauling	0.0294	0.9275	0.3206	4.1500e- 003	0.0987	1.6800e- 003	0.1003	0.0271	1.6100e- 003	0.0287		452.2409	452.2409	0.0297		452.9837
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	0.0490	0.0313	0.4449	1.3800e- 003	0.1453	1.1100e- 003	0.1464	0.0385	1.0200e- 003	0.0396		137.6027	137.6027	3.5500e- 003		137.6915
Total	0.0784	0.9588	0.7655	5.5300e- 003	0.2440	2.7900e- 003	0.2468	0.0656	2.6300e- 003	0.0682		589.8436	589.8436	0.0333		590.6752

3.3 Site Preparation - 2023

	ROG	NOx	CO	SO2	Fugitive 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/d	day							lb/c	lay		
Fugitive Dust					5.7996	0.0000	5.7996	2.9537	0.0000	2.9537			0.0000			0.0000
Off-Road	1.1339	12.4250	6.6420	0.0172		0.5074	0.5074		0.4668	0.4668		1,666.057 3	1,666.057 3	0.5388		1,679.528 2
Total	1.1339	12.4250	6.6420	0.0172	5.7996	0.5074	6.3070	2.9537	0.4668	3.4205		1,666.057 3	1,666.057 3	0.5388		1,679.528 2

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3.3 Site Preparation - 2023

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive 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/d	day							lb/d	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	0.0302	0.0193	0.2738	8.5000e- 004	0.0894	6.8000e- 004	0.0901	0.0237	6.3000e- 004	0.0243		84.6786	84.6786	2.1900e- 003		84.7332
Total	0.0302	0.0193	0.2738	8.5000e- 004	0.0894	6.8000e- 004	0.0901	0.0237	6.3000e- 004	0.0243		84.6786	84.6786	2.1900e- 003		84.7332

	ROG	NOx	CO	SO2	Fugitive 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/d	day							lb/c	lay		
Fugitive Dust					2.2618	0.0000	2.2618	1.1519	0.0000	1.1519			0.0000			0.0000
Off-Road	0.2106	0.9126	8.6714	0.0172		0.0281	0.0281	 	0.0281	0.0281	0.0000	1,666.057 3	1,666.057 3	0.5388		1,679.528 2
Total	0.2106	0.9126	8.6714	0.0172	2.2618	0.0281	2.2899	1.1519	0.0281	1.1800	0.0000	1,666.057 3	1,666.057 3	0.5388		1,679.528 2

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3.3 Site Preparation - 2023

<u>Mitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive 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/d	day							lb/d	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	0.0302	0.0193	0.2738	8.5000e- 004	0.0894	6.8000e- 004	0.0901	0.0237	6.3000e- 004	0.0243		84.6786	84.6786	2.1900e- 003		84.7332
Total	0.0302	0.0193	0.2738	8.5000e- 004	0.0894	6.8000e- 004	0.0901	0.0237	6.3000e- 004	0.0243		84.6786	84.6786	2.1900e- 003		84.7332

3.4 Grading - 2023

	ROG	NOx	СО	SO2	Fugitive 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/d	day							lb/c	day		
Fugitive Dust					4.9395	0.0000	4.9395	2.5294	0.0000	2.5294			0.0000			0.0000
Off-Road	0.9335	10.1789	5.5516	0.0141	 	0.4201	0.4201		0.3865	0.3865		1,364.771 3	1,364.771 3	0.4414	 	1,375.806 2
Total	0.9335	10.1789	5.5516	0.0141	4.9395	0.4201	5.3595	2.5294	0.3865	2.9159		1,364.771 3	1,364.771 3	0.4414		1,375.806 2

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3.4 Grading - 2023

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	СО	SO2	Fugitive 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/d	lay		
Hauling	0.1446	4.5664	1.5786	0.0205	0.4999	8.2700e- 003	0.5082	0.1366	7.9200e- 003	0.1445		2,226.568 9	2,226.568 9	0.1463		2,230.226 0
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	0.0302	0.0193	0.2738	8.5000e- 004	0.0894	6.8000e- 004	0.0901	0.0237	6.3000e- 004	0.0243		84.6786	84.6786	2.1900e- 003		84.7332
Total	0.1747	4.5856	1.8524	0.0213	0.5893	8.9500e- 003	0.5983	0.1603	8.5500e- 003	0.1689		2,311.247 5	2,311.247 5	0.1485		2,314.959 2

	ROG	NOx	CO	SO2	Fugitive 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/d	day							lb/c	day		
Fugitive Dust					1.9264	0.0000	1.9264	0.9865	0.0000	0.9865			0.0000			0.0000
Off-Road	0.1725	0.7475	7.1557	0.0141		0.0230	0.0230] 	0.0230	0.0230	0.0000	1,364.771 3	1,364.771 3	0.4414		1,375.806 2
Total	0.1725	0.7475	7.1557	0.0141	1.9264	0.0230	1.9494	0.9865	0.0230	1.0095	0.0000	1,364.771 3	1,364.771 3	0.4414		1,375.806 2

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Mt. SAC Technology & Health Building - Los Angeles-South Coast County, Summer

3.4 Grading - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/	day							lb/d	lay		
Hauling	0.1446	4.5664	1.5786	0.0205	0.4999	8.2700e- 003	0.5082	0.1366	7.9200e- 003	0.1445		2,226.568 9	2,226.568 9	0.1463		2,230.226 0
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	0.0302	0.0193	0.2738	8.5000e- 004	0.0894	6.8000e- 004	0.0901	0.0237	6.3000e- 004	0.0243		84.6786	84.6786	2.1900e- 003		84.7332
Total	0.1747	4.5856	1.8524	0.0213	0.5893	8.9500e- 003	0.5983	0.1603	8.5500e- 003	0.1689		2,311.247 5	2,311.247 5	0.1485		2,314.959 2

3.4 Grading - 2024

	ROG	NOx	CO	SO2	Fugitive 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/d	day							lb/c	day		
Fugitive Dust					4.9395	0.0000	4.9395	2.5294	0.0000	2.5294			0.0000			0.0000
Off-Road	0.9132	9.7297	5.5468	0.0141		0.4001	0.4001		0.3681	0.3681		1,364.662 3	1,364.662 3	0.4414		1,375.696 2
Total	0.9132	9.7297	5.5468	0.0141	4.9395	0.4001	5.3396	2.5294	0.3681	2.8975		1,364.662 3	1,364.662 3	0.4414		1,375.696 2

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3.4 Grading - 2024

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	СО	SO2	Fugitive 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/d	day		
Hauling	0.1450	4.5341	1.5961	0.0203	10.0344	8.1900e- 003	10.0426	2.4769	7.8400e- 003	2.4848		2,216.441 8	2,216.441 8	0.1463		2,220.098 9
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	0.0285	0.0176	0.2552	8.2000e- 004	0.0894	6.7000e- 004	0.0901	0.0237	6.2000e- 004	0.0243		82.0543	82.0543	2.0100e- 003	 	82.1044
Total	0.1735	4.5517	1.8514	0.0212	10.1238	8.8600e- 003	10.1327	2.5006	8.4600e- 003	2.5091		2,298.496 0	2,298.496 0	0.1483		2,302.203 3

	ROG	NOx	CO	SO2	Fugitive 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/d	day							lb/c	lay		
Fugitive Dust					1.9264	0.0000	1.9264	0.9865	0.0000	0.9865			0.0000			0.0000
Off-Road	0.1725	0.7475	7.1557	0.0141		0.0230	0.0230		0.0230	0.0230	0.0000	1,364.662 3	1,364.662 3	0.4414	 	1,375.696 2
Total	0.1725	0.7475	7.1557	0.0141	1.9264	0.0230	1.9494	0.9865	0.0230	1.0095	0.0000	1,364.662 3	1,364.662 3	0.4414		1,375.696 2

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3.4 Grading - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.1450	4.5341	1.5961	0.0203	10.0344	8.1900e- 003	10.0426	2.4769	7.8400e- 003	2.4848		2,216.441 8	2,216.441 8	0.1463		2,220.098 9
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	0.0285	0.0176	0.2552	8.2000e- 004	0.0894	6.7000e- 004	0.0901	0.0237	6.2000e- 004	0.0243		82.0543	82.0543	2.0100e- 003		82.1044
Total	0.1735	4.5517	1.8514	0.0212	10.1238	8.8600e- 003	10.1327	2.5006	8.4600e- 003	2.5091		2,298.496 0	2,298.496 0	0.1483		2,302.203 3

3.5 Building Construction - 2024

	ROG	NOx	CO	SO2	Fugitive 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/d	day							lb/c	lay		
- Cirribad	1.4200	11.0639	12.5172	0.0221		0.4506	0.4506		0.4348	0.4348		2,001.921 4	2,001.921 4	0.3334		2,010.256 3
Total	1.4200	11.0639	12.5172	0.0221		0.4506	0.4506		0.4348	0.4348		2,001.921 4	2,001.921 4	0.3334		2,010.256 3

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3.5 Building Construction - 2024 Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/	day							lb/c	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	0.0868	2.9312	0.8832	0.0103	0.2689	3.3600e- 003	0.2723	0.0774	3.2100e- 003	0.0806		1,103.913 0	1,103.913 0	0.0574		1,105.347 3
Worker	0.3817	0.2350	3.4135	0.0110	1.1960	8.9600e- 003	1.2050	0.3172	8.2500e- 003	0.3254		1,097.475 7	1,097.475 7	0.0268		1,098.146 7
Total	0.4684	3.1661	4.2967	0.0213	1.4649	0.0123	1.4772	0.3946	0.0115	0.4061		2,201.388 8	2,201.388 8	0.0842		2,203.494 0

	ROG	NOx	CO	SO2	Fugitive 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/d	day							lb/c	lay		
Off-Road	0.2930	3.7120	13.1241	0.0221		0.0303	0.0303		0.0303	0.0303	0.0000	2,001.921 4	2,001.921 4	0.3334		2,010.256 3
Total	0.2930	3.7120	13.1241	0.0221		0.0303	0.0303		0.0303	0.0303	0.0000	2,001.921 4	2,001.921 4	0.3334		2,010.256 3

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3.5 Building Construction - 2024 Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/	day							lb/d	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	0.0868	2.9312	0.8832	0.0103	0.2689	3.3600e- 003	0.2723	0.0774	3.2100e- 003	0.0806		1,103.913 0	1,103.913 0	0.0574	 	1,105.347 3
Worker	0.3817	0.2350	3.4135	0.0110	1.1960	8.9600e- 003	1.2050	0.3172	8.2500e- 003	0.3254		1,097.475 7	1,097.475 7	0.0268	 	1,098.146 7
Total	0.4684	3.1661	4.2967	0.0213	1.4649	0.0123	1.4772	0.3946	0.0115	0.4061		2,201.388 8	2,201.388 8	0.0842		2,203.494 0

3.5 Building Construction - 2025

	ROG	NOx	CO	SO2	Fugitive 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/d	day							lb/c	lay		
Off-Road	1.3246	10.4128	12.4393	0.0221		0.3925	0.3925		0.3785	0.3785		2,002.152 4	2,002.152 4	0.3269		2,010.324 8
Total	1.3246	10.4128	12.4393	0.0221		0.3925	0.3925		0.3785	0.3785		2,002.152 4	2,002.152 4	0.3269		2,010.324 8

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3.5 Building Construction - 2025 <u>Unmitigated Construction Off-Site</u>

	ROG	NOx	СО	SO2	Fugitive 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/d	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	0.0846	2.9063	0.8605	0.0102	0.2689	3.3000e- 003	0.2722	0.0774	3.1600e- 003	0.0806		1,097.830 4	1,097.830 4	0.0566		1,099.244 5
Worker	0.3624	0.2150	3.1704	0.0106	1.1960	8.7800e- 003	1.2048	0.3172	8.0800e- 003	0.3253		1,054.950 4	1,054.950 4	0.0245		1,055.562 5
Total	0.4470	3.1213	4.0309	0.0208	1.4649	0.0121	1.4770	0.3946	0.0112	0.4059		2,152.780 8	2,152.780 8	0.0810		2,154.807 0

	ROG	NOx	CO	SO2	Fugitive 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/d	day							lb/d	lay		
- Cirribad	0.2930	3.7120	13.1241	0.0221		0.0303	0.0303		0.0303	0.0303	0.0000	2,002.152 4	2,002.152 4	0.3269		2,010.324 8
Total	0.2930	3.7120	13.1241	0.0221		0.0303	0.0303		0.0303	0.0303	0.0000	2,002.152 4	2,002.152 4	0.3269		2,010.324 8

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3.5 Building Construction - 2025 <u>Mitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive 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/d	day							lb/d	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	0.0846	2.9063	0.8605	0.0102	0.2689	3.3000e- 003	0.2722	0.0774	3.1600e- 003	0.0806		1,097.830 4	1,097.830 4	0.0566		1,099.244 5
Worker	0.3624	0.2150	3.1704	0.0106	1.1960	8.7800e- 003	1.2048	0.3172	8.0800e- 003	0.3253		1,054.950 4	1,054.950 4	0.0245		1,055.562 5
Total	0.4470	3.1213	4.0309	0.0208	1.4649	0.0121	1.4770	0.3946	0.0112	0.4059		2,152.780 8	2,152.780 8	0.0810		2,154.807 0

3.5 Building Construction - 2026

	ROG	NOx	СО	SO2	Fugitive 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/d	day							lb/c	lay		
	1.3246	10.4128	12.4393	0.0221		0.3925	0.3925		0.3785	0.3785		2,002.152 4	2,002.152 4	0.3269		2,010.324 8
Total	1.3246	10.4128	12.4393	0.0221		0.3925	0.3925		0.3785	0.3785		2,002.152 4	2,002.152 4	0.3269		2,010.324 8

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3.5 Building Construction - 2026 Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/	day							lb/d	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	0.0827	2.8793	0.8431	0.0102	0.2689	3.2400e- 003	0.2722	0.0774	3.1000e- 003	0.0805		1,091.989 5	1,091.989 5	0.0558		1,093.383 5
Worker	0.3458	0.1981	2.9647	0.0102	1.1960	8.4800e- 003	1.2045	0.3172	7.8100e- 003	0.3250		1,018.297 2	1,018.297 2	0.0225		1,018.858 6
Total	0.4285	3.0774	3.8078	0.0204	1.4649	0.0117	1.4767	0.3946	0.0109	0.4055		2,110.286 7	2,110.286 7	0.0782		2,112.242 1

	ROG	NOx	CO	SO2	Fugitive 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/d	day							lb/c	lay		
Off-Road	0.2930	3.7120	13.1241	0.0221		0.0303	0.0303		0.0303	0.0303	0.0000	2,002.152 4	2,002.152 4	0.3269		2,010.324 8
Total	0.2930	3.7120	13.1241	0.0221		0.0303	0.0303		0.0303	0.0303	0.0000	2,002.152 4	2,002.152 4	0.3269		2,010.324 8

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3.5 Building Construction - 2026 Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
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	0.0827	2.8793	0.8431	0.0102	0.2689	3.2400e- 003	0.2722	0.0774	3.1000e- 003	0.0805		1,091.989 5	1,091.989 5	0.0558		1,093.383 5
Worker	0.3458	0.1981	2.9647	0.0102	1.1960	8.4800e- 003	1.2045	0.3172	7.8100e- 003	0.3250		1,018.297 2	1,018.297 2	0.0225		1,018.858 6
Total	0.4285	3.0774	3.8078	0.0204	1.4649	0.0117	1.4767	0.3946	0.0109	0.4055		2,110.286 7	2,110.286 7	0.0782		2,112.242 1

3.6 Paving - 2026 Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Off-Road	0.5732	5.3259	8.7951	0.0136	i i	0.2465	0.2465	 	0.2276	0.2276		1,297.809 6	1,297.809 6	0.4114		1,308.095 1
Paving	0.0000		1 1 1 1			0.0000	0.0000	 	0.0000	0.0000			0.0000			0.0000
Total	0.5732	5.3259	8.7951	0.0136		0.2465	0.2465		0.2276	0.2276		1,297.809 6	1,297.809 6	0.4114		1,308.095 1

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3.6 Paving - 2026

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	СО	SO2	Fugitive 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/d	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	0.0420	0.0241	0.3602	1.2400e- 003	0.1453	1.0300e- 003	0.1463	0.0385	9.5000e- 004	0.0395		123.7184	123.7184	2.7300e- 003	 	123.7866
Total	0.0420	0.0241	0.3602	1.2400e- 003	0.1453	1.0300e- 003	0.1463	0.0385	9.5000e- 004	0.0395		123.7184	123.7184	2.7300e- 003		123.7866

	ROG	NOx	CO	SO2	Fugitive 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/d	day							lb/c	lay		
Off-Road	0.2038	0.9684	10.0824	0.0136		0.0320	0.0320		0.0320	0.0320	0.0000	1,297.809 6	1,297.809 6	0.4114		1,308.095 1
Paving	0.0000	 				0.0000	0.0000	1 1 1	0.0000	0.0000			0.0000		 	0.0000
Total	0.2038	0.9684	10.0824	0.0136		0.0320	0.0320		0.0320	0.0320	0.0000	1,297.809 6	1,297.809 6	0.4114		1,308.095 1

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Mt. SAC Technology & Health Building - Los Angeles-South Coast County, Summer

3.6 Paving - 2026

<u>Mitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive 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/d	day							lb/d	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	0.0420	0.0241	0.3602	1.2400e- 003	0.1453	1.0300e- 003	0.1463	0.0385	9.5000e- 004	0.0395		123.7184	123.7184	2.7300e- 003		123.7866
Total	0.0420	0.0241	0.3602	1.2400e- 003	0.1453	1.0300e- 003	0.1463	0.0385	9.5000e- 004	0.0395		123.7184	123.7184	2.7300e- 003		123.7866

3.7 Architectural Coating - 2026

	ROG	NOx	CO	SO2	Fugitive 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/d	day							lb/c	lay		
Archit. Coating	39.2223					0.0000	0.0000	! !	0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e- 003		0.0515	0.0515	1	0.0515	0.0515		281.4481	281.4481	0.0154	! ! !	281.8319
Total	39.3932	1.1455	1.8091	2.9700e- 003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319

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3.7 Architectural Coating - 2026 <u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive 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/d	day							lb/d	lay		
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	0.0679	0.0389	0.5819	2.0000e- 003	0.2347	1.6600e- 003	0.2364	0.0623	1.5300e- 003	0.0638		199.8527	199.8527	4.4100e- 003		199.9629
Total	0.0679	0.0389	0.5819	2.0000e- 003	0.2347	1.6600e- 003	0.2364	0.0623	1.5300e- 003	0.0638		199.8527	199.8527	4.4100e- 003		199.9629

	ROG	NOx	СО	SO2	Fugitive 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/d	day							lb/d	day		
Archit. Coating	39.2223	 				0.0000	0.0000	 	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0297	0.1288	1.8324	2.9700e- 003	 	3.9600e- 003	3.9600e- 003	 	3.9600e- 003	3.9600e- 003	0.0000	281.4481	281.4481	0.0154	 	281.8319
Total	39.2520	0.1288	1.8324	2.9700e- 003		3.9600e- 003	3.9600e- 003		3.9600e- 003	3.9600e- 003	0.0000	281.4481	281.4481	0.0154		281.8319

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Mt. SAC Technology & Health Building - Los Angeles-South Coast County, Summer

3.7 Architectural Coating - 2026 Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	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	0.0679	0.0389	0.5819	2.0000e- 003	0.2347	1.6600e- 003	0.2364	0.0623	1.5300e- 003	0.0638		199.8527	199.8527	4.4100e- 003	 	199.9629
Total	0.0679	0.0389	0.5819	2.0000e- 003	0.2347	1.6600e- 003	0.2364	0.0623	1.5300e- 003	0.0638		199.8527	199.8527	4.4100e- 003		199.9629

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Mt. SAC Technology & Health Building - Los Angeles-South Coast County, Summer

	ROG	NOx	CO	SO2	Fugitive 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/d	day							lb/c	lay		
Mitigated	3.9669	3.7680	51.9115	0.1777	19.7990	0.1369	19.9359	5.2474	0.1260	5.3734		17,737.06 56	17,737.06 56	0.5280		17,750.26 52
Unmitigated	3.9669	3.7680	51.9115	0.1777	19.7990	0.1369	19.9359	5.2474	0.1260	5.3734		17,737.06 56	17,737.06 56	0.5280	 	17,750.26 52

4.2 Trip Summary Information

	Avei	rage Daily Trip Ra	ate	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
University/College (4Yr)	3,159.00	1,099.80	0.00	7,250,011	7,250,011
Total	3,159.00	1,099.80	0.00	7,250,011	7,250,011

4.3 Trip Type Information

		Miles			Trip %			Trip Purpos	e %
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
University/College (4Yr)	16.60	8.40	6.90	6.40	88.60	5.00	91	9	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
University/College (4Yr)	0.591120	0.048204	0.226593	0.127275	0.000000	0.000000	0.000000	0.001086	0.000000	0.000000	0.005721	0.000000	0.000000

5.0 Energy Detail

Historical Energy Use: N

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Mt. SAC Technology & Health Building - Los Angeles-South Coast County, Summer

5.1 Mitigation Measures 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/d	day							lb/c	lay		
NaturalGas Mitigated	0.2031	1.8466	1.5511	0.0111		0.1403	0.1403		0.1403	0.1403		2,215.855 4	2,215.855 4	0.0425	0.0406	2,229.023 1
NaturalGas Unmitigated	0.2031	1.8466	1.5511	0.0111		0.1403	0.1403		0.1403	0.1403		2,215.855 4	2,215.855 4	0.0425	0.0406	2,229.023 1

5.2 Energy by Land Use - NaturalGas <u>Unmitigated</u>

	NaturalGa s 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/d	day							lb/c	lay		
University/College (4Yr)	18834.8	0.2031	1.8466	1.5511	0.0111		0.1403	0.1403		0.1403	0.1403		2,215.855 4	2,215.855 4	0.0425	0.0406	2,229.023 1
Total		0.2031	1.8466	1.5511	0.0111		0.1403	0.1403		0.1403	0.1403		2,215.855 4	2,215.855 4	0.0425	0.0406	2,229.023

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Mt. SAC Technology & Health Building - Los Angeles-South Coast County, Summer

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGa s 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/d	day							lb/c	lay		
University/College (4Yr)	18.8348	0.2031	1.8466	1.5511	0.0111		0.1403	0.1403		0.1403	0.1403		2,215.855 4	2,215.855 4	0.0425	0.0406	2,229.023 1
Total		0.2031	1.8466	1.5511	0.0111		0.1403	0.1403		0.1403	0.1403		2,215.855 4	2,215.855 4	0.0425	0.0406	2,229.023 1

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/d	day							lb/d	day		
Mitigated	5.6721	8.0000e- 005	9.1700e- 003	0.0000		3.0000e- 005	3.0000e- 005		3.0000e- 005	3.0000e- 005		0.0197	0.0197	5.0000e- 005		0.0210
Unmitigated	5.6721	8.0000e- 005	9.1700e- 003	0.0000		3.0000e- 005	3.0000e- 005		3.0000e- 005	3.0000e- 005		0.0197	0.0197	5.0000e- 005		0.0210

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6.2 Area by SubCategory Unmitigated

	ROG	NOx	СО	SO2	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/d	day				lb/day						
Architectural Coating	0.6448					0.0000	0.0000	! !	0.0000	0.0000			0.0000			0.0000
Consumer Products	5.0266					0.0000	0.0000	1 	0.0000	0.0000			0.0000			0.0000
Landscaping	8.4000e- 004	8.0000e- 005	9.1700e- 003	0.0000		3.0000e- 005	3.0000e- 005	1 	3.0000e- 005	3.0000e- 005		0.0197	0.0197	5.0000e- 005		0.0210
Total	5.6721	8.0000e- 005	9.1700e- 003	0.0000		3.0000e- 005	3.0000e- 005		3.0000e- 005	3.0000e- 005		0.0197	0.0197	5.0000e- 005		0.0210

Mitigated

	ROG	NOx	СО	SO2	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/d	day							lb/d	day		
Architectural Coating	0.6448					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	5.0266					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	8.4000e- 004	8.0000e- 005	9.1700e- 003	0.0000		3.0000e- 005	3.0000e- 005		3.0000e- 005	3.0000e- 005		0.0197	0.0197	5.0000e- 005		0.0210
Total	5.6721	8.0000e- 005	9.1700e- 003	0.0000		3.0000e- 005	3.0000e- 005		3.0000e- 005	3.0000e- 005		0.0197	0.0197	5.0000e- 005		0.0210

7.0 Water Detail

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Mt. SAC Technology & Health Building - Los Angeles-South Coast County, Summer

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number
----------------	--------

11.0 Vegetation

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Mt. SAC Technology & Health Building - Los Angeles-South Coast County, Winter

Mt. SAC Technology & Health Building

Los Angeles-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
University/College (4Yr)	90.00	Employee	1.46	253,866.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	33
Climate Zone	9			Operational Year	2026
Utility Company	Southern California Edisc	on			
CO2 Intensity (lb/MWhr)	399.04	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Based on SCE 2020 CO2 Intensity Factors

Land Use - Based on project description

Construction Phase - Schedule provided by college

Demolition -

Grading -

Architectural Coating - Based on zero VOC interior per page 55 of the Mt. SAC Climate Action Plan

Vehicle Trips - Based on traffic study

Energy Use - Based on estimates provided by the developer. CalEEMod also doesn't take into account the 2019 energy efficiency standards.

Construction Off-road Equipment Mitigation - Per MM AQ-1

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Table Name	Column Name	Default Value	New Value		
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00		
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00		
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00		
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00		
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00		
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00		
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00		
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00		
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00		
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00		
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	7.00		
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00		
tblConstEquipMitigation	Tier	No Change	Tier 4 Final		
tblConstEquipMitigation	Tier	No Change	Tier 4 Final		
tblConstEquipMitigation	Tier	No Change	Tier 4 Final		
tblConstEquipMitigation	Tier	No Change	Tier 4 Final		
tblConstEquipMitigation	Tier	No Change	Tier 4 Final		
tblConstEquipMitigation	Tier	No Change	Tier 4 Final		
tblConstEquipMitigation	Tier	No Change	Tier 4 Final		
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tblConstEquipMitigation	Tier	No Change	Tier 4 Final		
tblConstEquipMitigation	Tier	No Change	Tier 4 Final		
tblConstEquipMitigation	Tier	No Change	Tier 4 Final		
tblConstructionPhase	NumDays	10.00	60.00		
tblConstructionPhase	NumDays	200.00	661.00		

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Mt. SAC Technology & Health Building - Los Angeles-South Coast County, Winter

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	_				
tblConstructionPhase	NumDays	20.00	81.00		
tblConstructionPhase	NumDays	4.00	81.00		
tblConstructionPhase	NumDays	10.00	61.00		
tblConstructionPhase	NumDays	2.00	81.00		
tblEnergyUse	LightingElect	3.39	2.67		
tblEnergyUse	NT24E	3.59	2.82		
tblEnergyUse	T24E	3.04	2.39		
tblFleetMix	HHD	0.03	1.0860e-003		
tblFleetMix	LDA	0.54	0.59		
tblFleetMix	LDT1	0.04	0.05		
tblFleetMix	LDT2	0.21	0.23		
tblFleetMix	LHD1	0.01	0.00		
tblFleetMix	LHD2	6.3010e-003	0.00		
tblFleetMix	MCY	5.2670e-003	5.7210e-003		
tblFleetMix	MDV	0.12	0.13		
tblFleetMix	MH	8.3400e-004	0.00		
tblFleetMix	MHD	0.02	0.00		
tblFleetMix	OBUS	2.5890e-003	0.00		
tblFleetMix	SBUS	7.0500e-004	0.00		
tblFleetMix	UBUS	1.9030e-003	0.00		
tblGrading	MaterialExported	0.00	18,000.00		
tblLandUse	LandUseSquareFeet	63,520.41	253,866.00		
tblProjectCharacteristics	CO2IntensityFactor	702.44	399.04		
tblVehicleTrips	ST_TR	3.12	12.22		
tblVehicleTrips	WD_TR	8.96	35.10		

2.0 Emissions Summary

Mt. SAC Technology & Health Building - Los Angeles-South Coast County, Winter

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	СО	SO2	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/d	day							lb/d	lay		
2023	1.5574	15.2871	14.1973	0.0350	5.8890	0.6795	6.3971	2.9774	0.6354	3.4448	0.0000	3,632.392 9	3,632.392 9	0.6232	0.0000	3,647.240 8
2024	1.9395	14.3164	16.5846	0.0424	15.0632	0.4631	15.4724	5.0300	0.4464	5.4068	0.0000	4,109.462 9	4,109.462 9	0.5936	0.0000	4,119.942 4
2025	1.8215	13.5443	16.2582	0.0420	1.4649	0.4047	1.8696	0.3946	0.3899	0.7845	0.0000	4,063.930 3	4,063.930 3	0.4095	0.0000	4,074.168 9
2026	40.0905	13.4987	16.0497	0.0416	1.4649	0.4043	1.8693	0.3946	0.3896	0.7842	0.0000	4,023.903 9	4,023.903 9	0.4334	0.0000	4,034.072 0
Maximum	40.0905	15.2871	16.5846	0.0424	15.0632	0.6795	15.4724	5.0300	0.6354	5.4068	0.0000	4,109.462 9	4,109.462 9	0.6232	0.0000	4,119.942 4

Mt. SAC Technology & Health Building - Los Angeles-South Coast County, Winter

2.1 Overall Construction (Maximum Daily Emission)

54.28

8.50

-5.13

0.00

26.74

91.40

Mitigated Construction

Percent

Reduction

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year					lb/	/day						•	lb/	day	•	
2023	0.3660	5.3673	15.4580	0.0350	2.5157	0.0403	2.5479	1.1757	0.0401	1.2044	0.0000	3,632.392 9	3,632.392 9	0.6232	0.0000	3,647.240 8
2024	0.8126	6.8904	17.1915	0.0424	12.0502	0.0428	12.0822	3.4871	0.0419	3.5188	0.0000	4,109.462 9	4,109.462 9	0.5936	0.0000	4,119.942 4
2025	0.7899	6.8436	16.9430	0.0420	1.4649	0.0425	1.5075	0.3946	0.0417	0.4363	0.0000	4,063.930 3	4,063.930 3	0.4095	0.0000	4,074.168 9
2026	39.5800	6.7979	16.7345	0.0416	1.4649	0.0422	1.5071	0.3946	0.0413	0.4359	0.0000	4,023.903 9	4,023.903 9	0.4334	0.0000	4,034.072 0
Maximum	39.5800	6.8904	17.1915	0.0424	12.0502	0.0428	12.0822	3.4871	0.0419	3.5188	0.0000	4,109.462 9	4,109.462 9	0.6232	0.0000	4,119.942 4
	ROG	NOx	СО	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

38.02

31.10

91.13

46.30

0.00

0.00

0.00

0.00

0.00

0.00

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2.2 Overall Operational Unmitigated Operational

	ROG	NOx	СО	SO2	Fugitive 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/e	day							lb/d	day		
Area	5.6721	8.0000e- 005	9.1700e- 003	0.0000		3.0000e- 005	3.0000e- 005		3.0000e- 005	3.0000e- 005		0.0197	0.0197	5.0000e- 005		0.0210
Energy	0.2031	1.8466	1.5511	0.0111		0.1403	0.1403		0.1403	0.1403		2,215.855 4	2,215.855 4	0.0425	0.0406	2,229.023 1
Mobile	3.7996	4.1186	48.6357	0.1675	19.7990	0.1369	19.9359	5.2474	0.1260	5.3734		16,718.15 45	16,718.15 45	0.5136		16,730.99 51
Total	9.6748	5.9652	50.1960	0.1786	19.7990	0.2773	20.0763	5.2474	0.2664	5.5138		18,934.02 96	18,934.02 96	0.5561	0.0406	18,960.03 91

Mitigated Operational

	ROG	NOx	СО	SO2	Fugitive 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/d	day		
Area	5.6721	8.0000e- 005	9.1700e- 003	0.0000	i i	3.0000e- 005	3.0000e- 005		3.0000e- 005	3.0000e- 005		0.0197	0.0197	5.0000e- 005		0.0210
Energy	0.2031	1.8466	1.5511	0.0111	, 	0.1403	0.1403		0.1403	0.1403		2,215.855 4	2,215.855 4	0.0425	0.0406	2,229.023 1
Mobile	3.7996	4.1186	48.6357	0.1675	19.7990	0.1369	19.9359	5.2474	0.1260	5.3734		16,718.15 45	16,718.15 45	0.5136		16,730.99 51
Total	9.6748	5.9652	50.1960	0.1786	19.7990	0.2773	20.0763	5.2474	0.2664	5.5138		18,934.02 96	18,934.02 96	0.5561	0.0406	18,960.03 91

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	ROG	NOx	СО	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	1/30/2023	5/22/2023	5	81	
2	Site Preparation	Site Preparation	5/23/2023	9/12/2023	5	81	
3	Grading	Grading	9/13/2023	1/3/2024	5	81	
4	Building Construction	Building Construction	1/4/2024	7/16/2026	5	661	
5	Paving	Paving	7/17/2026	10/9/2026	5	61	
6	Architectural Coating	Architectural Coating	8/12/2026	11/17/2026	5	60	

Acres of Grading (Site Preparation Phase): 40.5

Acres of Grading (Grading Phase): 30.38

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 380,799; Non-Residential Outdoor: 126,933; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

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Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	 1	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Rubber Tired Dozers	1	7.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	6.00	187	0.41
Grading	Rubber Tired Dozers	1	6.00	247	0.40
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Building Construction	Cranes	1	6.00	231	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Paving	Pavers	1	6.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

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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	5	13.00	0.00	457.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	2,250.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	107.00	42.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	21.00	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 - 2023**

	ROG	NOx	СО	SO2	Fugitive 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/d	day							lb/c	day		
Fugitive Dust					1.2221	0.0000	1.2221	0.1850	0.0000	0.1850			0.0000			0.0000
Off-Road	1.4725	14.3184	13.4577	0.0241		0.6766	0.6766		0.6328	0.6328		2,324.395 9	2,324.395 9	0.5893	 	2,339.127 8
Total	1.4725	14.3184	13.4577	0.0241	1.2221	0.6766	1.8988	0.1850	0.6328	0.8178		2,324.395 9	2,324.395 9	0.5893		2,339.127 8

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3.2 Demolition - 2023

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive 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/d	day							lb/d	day		
Hauling	0.0301	0.9340	0.3343	4.0800e- 003	0.0987	1.7300e- 003	0.1004	0.0271	1.6500e- 003	0.0287		444.3835	444.3835	0.0306		445.1476
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	0.0549	0.0346	0.4053	1.3000e- 003	0.1453	1.1100e- 003	0.1464	0.0385	1.0200e- 003	0.0396		129.5737	129.5737	3.3300e- 003		129.6570
Total	0.0850	0.9686	0.7396	5.3800e- 003	0.2440	2.8400e- 003	0.2468	0.0656	2.6700e- 003	0.0683		573.9572	573.9572	0.0339		574.8046

	ROG	NOx	CO	SO2	Fugitive 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/d	day							lb/c	lay		
Fugitive Dust	ii ii				0.4766	0.0000	0.4766	0.0722	0.0000	0.0722			0.0000			0.0000
Off-Road	0.2811	1.2179	14.7184	0.0241		0.0375	0.0375		0.0375	0.0375	0.0000	2,324.395 9	2,324.395 9	0.5893	 	2,339.127 8
Total	0.2811	1.2179	14.7184	0.0241	0.4766	0.0375	0.5141	0.0722	0.0375	0.1097	0.0000	2,324.395 9	2,324.395 9	0.5893		2,339.127 8

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3.2 Demolition - 2023

<u>Mitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive 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/d	day							lb/d	day		
Hauling	0.0301	0.9340	0.3343	4.0800e- 003	0.0987	1.7300e- 003	0.1004	0.0271	1.6500e- 003	0.0287		444.3835	444.3835	0.0306		445.1476
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	0.0549	0.0346	0.4053	1.3000e- 003	0.1453	1.1100e- 003	0.1464	0.0385	1.0200e- 003	0.0396		129.5737	129.5737	3.3300e- 003		129.6570
Total	0.0850	0.9686	0.7396	5.3800e- 003	0.2440	2.8400e- 003	0.2468	0.0656	2.6700e- 003	0.0683		573.9572	573.9572	0.0339		574.8046

3.3 Site Preparation - 2023

	ROG	NOx	CO	SO2	Fugitive 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/d	day							lb/c	day		
Fugitive Dust					5.7996	0.0000	5.7996	2.9537	0.0000	2.9537			0.0000			0.0000
Off-Road	1.1339	12.4250	6.6420	0.0172		0.5074	0.5074		0.4668	0.4668		1,666.057 3	1,666.057 3	0.5388	 	1,679.528 2
Total	1.1339	12.4250	6.6420	0.0172	5.7996	0.5074	6.3070	2.9537	0.4668	3.4205		1,666.057 3	1,666.057 3	0.5388		1,679.528 2

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3.3 Site Preparation - 2023

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive 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/d	day							lb/d	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	0.0338	0.0213	0.2494	8.0000e- 004	0.0894	6.8000e- 004	0.0901	0.0237	6.3000e- 004	0.0243		79.7377	79.7377	2.0500e- 003		79.7890
Total	0.0338	0.0213	0.2494	8.0000e- 004	0.0894	6.8000e- 004	0.0901	0.0237	6.3000e- 004	0.0243		79.7377	79.7377	2.0500e- 003		79.7890

	ROG	NOx	CO	SO2	Fugitive 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/d	day							lb/c	lay		
Fugitive Dust					2.2618	0.0000	2.2618	1.1519	0.0000	1.1519			0.0000			0.0000
Off-Road	0.2106	0.9126	8.6714	0.0172		0.0281	0.0281		0.0281	0.0281	0.0000	1,666.057 3	1,666.057 3	0.5388	 	1,679.528 2
Total	0.2106	0.9126	8.6714	0.0172	2.2618	0.0281	2.2899	1.1519	0.0281	1.1800	0.0000	1,666.057 3	1,666.057 3	0.5388		1,679.528 2

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3.3 Site Preparation - 2023

<u>Mitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive 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/d	day							lb/d	lay		
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	0.0338	0.0213	0.2494	8.0000e- 004	0.0894	6.8000e- 004	0.0901	0.0237	6.3000e- 004	0.0243		79.7377	79.7377	2.0500e- 003		79.7890
Total	0.0338	0.0213	0.2494	8.0000e- 004	0.0894	6.8000e- 004	0.0901	0.0237	6.3000e- 004	0.0243		79.7377	79.7377	2.0500e- 003		79.7890

3.4 Grading - 2023

	ROG	NOx	CO	SO2	Fugitive 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/d	day							lb/c	day		
Fugitive Dust					4.9395	0.0000	4.9395	2.5294	0.0000	2.5294			0.0000			0.0000
Off-Road	0.9335	10.1789	5.5516	0.0141	 	0.4201	0.4201		0.3865	0.3865		1,364.771 3	1,364.771 3	0.4414	 	1,375.806 2
Total	0.9335	10.1789	5.5516	0.0141	4.9395	0.4201	5.3595	2.5294	0.3865	2.9159		1,364.771 3	1,364.771 3	0.4414		1,375.806 2

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3.4 Grading - 2023

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	СО	SO2	Fugitive 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/d	day							lb/d	day		
Hauling	0.1482	4.5985	1.6461	0.0201	0.4999	8.5000e- 003	0.5084	0.1366	8.1300e- 003	0.1448		2,187.883 9	2,187.883 9	0.1505		2,191.645 6
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	0.0338	0.0213	0.2494	8.0000e- 004	0.0894	6.8000e- 004	0.0901	0.0237	6.3000e- 004	0.0243		79.7377	79.7377	2.0500e- 003	 	79.7890
Total	0.1819	4.6198	1.8955	0.0209	0.5893	9.1800e- 003	0.5985	0.1603	8.7600e- 003	0.1691		2,267.621 6	2,267.621 6	0.1525		2,271.434 6

	ROG	NOx	CO	SO2	Fugitive 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/d	day							lb/c	lay		
Fugitive Dust					1.9264	0.0000	1.9264	0.9865	0.0000	0.9865			0.0000			0.0000
Off-Road	0.1725	0.7475	7.1557	0.0141		0.0230	0.0230	i i	0.0230	0.0230	0.0000	1,364.771 3	1,364.771 3	0.4414	 	1,375.806 2
Total	0.1725	0.7475	7.1557	0.0141	1.9264	0.0230	1.9494	0.9865	0.0230	1.0095	0.0000	1,364.771 3	1,364.771 3	0.4414		1,375.806 2

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3.4 Grading - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/	day							lb/d	lay		
Hauling	0.1482	4.5985	1.6461	0.0201	0.4999	8.5000e- 003	0.5084	0.1366	8.1300e- 003	0.1448		2,187.883 9	2,187.883 9	0.1505		2,191.645 6
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	0.0338	0.0213	0.2494	8.0000e- 004	0.0894	6.8000e- 004	0.0901	0.0237	6.3000e- 004	0.0243		79.7377	79.7377	2.0500e- 003		79.7890
Total	0.1819	4.6198	1.8955	0.0209	0.5893	9.1800e- 003	0.5985	0.1603	8.7600e- 003	0.1691		2,267.621 6	2,267.621 6	0.1525		2,271.434 6

3.4 Grading - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Fugitive Dust					4.9395	0.0000	4.9395	2.5294	0.0000	2.5294			0.0000			0.0000
Off-Road	0.9132	9.7297	5.5468	0.0141		0.4001	0.4001		0.3681	0.3681		1,364.662 3	1,364.662 3	0.4414		1,375.696 2
Total	0.9132	9.7297	5.5468	0.0141	4.9395	0.4001	5.3396	2.5294	0.3681	2.8975		1,364.662 3	1,364.662 3	0.4414		1,375.696 2

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3.4 Grading - 2024

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive 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/d	day		
Hauling	0.1485	4.5672	1.6623	0.0200	10.0344	8.4000e- 003	10.0428	2.4769	8.0300e- 003	2.4850		2,178.192 4	2,178.192 4	0.1503		2,181.950 8
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	0.0320	0.0194	0.2322	7.7000e- 004	0.0894	6.7000e- 004	0.0901	0.0237	6.2000e- 004	0.0243		77.2643	77.2643	1.8800e- 003	 	77.3113
Total	0.1806	4.5866	1.8945	0.0208	10.1238	9.0700e- 003	10.1329	2.5006	8.6500e- 003	2.5093		2,255.456 7	2,255.456 7	0.1522		2,259.262 1

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/e	day							lb/c	day		
Fugitive Dust					1.9264	0.0000	1.9264	0.9865	0.0000	0.9865			0.0000			0.0000
Off-Road	0.1725	0.7475	7.1557	0.0141		0.0230	0.0230	i i	0.0230	0.0230	0.0000	1,364.662 3	1,364.662 3	0.4414	i i	1,375.696 2
Total	0.1725	0.7475	7.1557	0.0141	1.9264	0.0230	1.9494	0.9865	0.0230	1.0095	0.0000	1,364.662 3	1,364.662 3	0.4414		1,375.696 2

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3.4 Grading - 2024

Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive 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/d	day							lb/c	lay		
Hauling	0.1485	4.5672	1.6623	0.0200	10.0344	8.4000e- 003	10.0428	2.4769	8.0300e- 003	2.4850		2,178.192 4	2,178.192 4	0.1503		2,181.950 8
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	0.0320	0.0194	0.2322	7.7000e- 004	0.0894	6.7000e- 004	0.0901	0.0237	6.2000e- 004	0.0243		77.2643	77.2643	1.8800e- 003		77.3113
Total	0.1806	4.5866	1.8945	0.0208	10.1238	9.0700e- 003	10.1329	2.5006	8.6500e- 003	2.5093		2,255.456 7	2,255.456 7	0.1522		2,259.262 1

3.5 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive 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/d	day							lb/c	lay		
Off-Road	1.4200	11.0639	12.5172	0.0221		0.4506	0.4506		0.4348	0.4348		2,001.921 4	2,001.921 4	0.3334		2,010.256 3
Total	1.4200	11.0639	12.5172	0.0221		0.4506	0.4506		0.4348	0.4348		2,001.921 4	2,001.921 4	0.3334		2,010.256 3

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3.5 Building Construction - 2024 Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/	day							lb/d	lay		
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	0.0912	2.9185	0.9618	0.0100	0.2689	3.5100e- 003	0.2724	0.0774	3.3600e- 003	0.0808		1,074.131 4	1,074.131 4	0.0606	 	1,075.647 4
Worker	0.4284	0.2599	3.1056	0.0104	1.1960	8.9600e- 003	1.2050	0.3172	8.2500e- 003	0.3254		1,033.410 0	1,033.410 0	0.0252	 	1,034.038 7
Total	0.5196	3.1784	4.0674	0.0204	1.4649	0.0125	1.4774	0.3946	0.0116	0.4062		2,107.541 4	2,107.541 4	0.0858		2,109.686 1

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/d	day							lb/c	lay		
	0.2930	3.7120	13.1241	0.0221		0.0303	0.0303		0.0303	0.0303	0.0000	2,001.921 4	2,001.921 4	0.3334		2,010.256 3
Total	0.2930	3.7120	13.1241	0.0221		0.0303	0.0303		0.0303	0.0303	0.0000	2,001.921 4	2,001.921 4	0.3334		2,010.256 3

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3.5 Building Construction - 2024 Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/	day							lb/c	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	0.0912	2.9185	0.9618	0.0100	0.2689	3.5100e- 003	0.2724	0.0774	3.3600e- 003	0.0808		1,074.131 4	1,074.131 4	0.0606	 	1,075.647 4
Worker	0.4284	0.2599	3.1056	0.0104	1.1960	8.9600e- 003	1.2050	0.3172	8.2500e- 003	0.3254		1,033.410 0	1,033.410 0	0.0252	 	1,034.038 7
Total	0.5196	3.1784	4.0674	0.0204	1.4649	0.0125	1.4774	0.3946	0.0116	0.4062		2,107.541 4	2,107.541 4	0.0858		2,109.686 1

3.5 Building Construction - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Off-Road	1.3246	10.4128	12.4393	0.0221		0.3925	0.3925		0.3785	0.3785		2,002.152 4	2,002.152 4	0.3269		2,010.324 8
Total	1.3246	10.4128	12.4393	0.0221		0.3925	0.3925		0.3785	0.3785		2,002.152 4	2,002.152 4	0.3269		2,010.324 8

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3.5 Building Construction - 2025 Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/	day							lb/d	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	0.0888	2.8938	0.9372	9.9600e- 003	0.2689	3.4500e- 003	0.2724	0.0774	3.2900e- 003	0.0807		1,068.371 9	1,068.371 9	0.0597	 	1,069.865 0
Worker	0.4081	0.2377	2.8816	9.9600e- 003	1.1960	8.7800e- 003	1.2048	0.3172	8.0800e- 003	0.3253		993.4060	993.4060	0.0229	 	993.9791
Total	0.4969	3.1315	3.8188	0.0199	1.4649	0.0122	1.4772	0.3946	0.0114	0.4060		2,061.777 9	2,061.777 9	0.0827		2,063.844 1

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/d	day							lb/c	lay		
Off-Road	0.2930	3.7120	13.1241	0.0221		0.0303	0.0303		0.0303	0.0303	0.0000	2,002.152 4	2,002.152 4	0.3269		2,010.324 8
Total	0.2930	3.7120	13.1241	0.0221		0.0303	0.0303		0.0303	0.0303	0.0000	2,002.152 4	2,002.152 4	0.3269		2,010.324 8

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3.5 Building Construction - 2025 <u>Mitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive 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/d	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	0.0888	2.8938	0.9372	9.9600e- 003	0.2689	3.4500e- 003	0.2724	0.0774	3.2900e- 003	0.0807		1,068.371 9	1,068.371 9	0.0597	 	1,069.865 0
Worker	0.4081	0.2377	2.8816	9.9600e- 003	1.1960	8.7800e- 003	1.2048	0.3172	8.0800e- 003	0.3253		993.4060	993.4060	0.0229	 	993.9791
Total	0.4969	3.1315	3.8188	0.0199	1.4649	0.0122	1.4772	0.3946	0.0114	0.4060		2,061.777 9	2,061.777 9	0.0827		2,063.844 1

3.5 Building Construction - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
	1.3246	10.4128	12.4393	0.0221		0.3925	0.3925		0.3785	0.3785		2,002.152 4	2,002.152 4	0.3269		2,010.324 8
Total	1.3246	10.4128	12.4393	0.0221		0.3925	0.3925		0.3785	0.3785		2,002.152 4	2,002.152 4	0.3269		2,010.324 8

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3.5 Building Construction - 2026 Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/	day							lb/d	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	0.0868	2.8669	0.9183	9.9100e- 003	0.2689	3.3700e- 003	0.2723	0.0774	3.2200e- 003	0.0807		1,062.846 3	1,062.846 3	0.0588		1,064.316 9
Worker	0.3907	0.2190	2.6921	9.6100e- 003	1.1960	8.4800e- 003	1.2045	0.3172	7.8100e- 003	0.3250		958.9051	958.9051	0.0210		959.4303
Total	0.4775	3.0859	3.6104	0.0195	1.4649	0.0119	1.4768	0.3946	0.0110	0.4056		2,021.751 4	2,021.751 4	0.0798		2,023.747 2

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/d	day							lb/d	lay		
Off-Road	0.2930	3.7120	13.1241	0.0221		0.0303	0.0303		0.0303	0.0303	0.0000	2,002.152 4	2,002.152 4	0.3269		2,010.324 8
Total	0.2930	3.7120	13.1241	0.0221		0.0303	0.0303		0.0303	0.0303	0.0000	2,002.152 4	2,002.152 4	0.3269		2,010.324 8

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3.5 Building Construction - 2026 Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/	day							lb/d	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	0.0868	2.8669	0.9183	9.9100e- 003	0.2689	3.3700e- 003	0.2723	0.0774	3.2200e- 003	0.0807		1,062.846 3	1,062.846 3	0.0588	,	1,064.316 9
Worker	0.3907	0.2190	2.6921	9.6100e- 003	1.1960	8.4800e- 003	1.2045	0.3172	7.8100e- 003	0.3250		958.9051	958.9051	0.0210	,	959.4303
Total	0.4775	3.0859	3.6104	0.0195	1.4649	0.0119	1.4768	0.3946	0.0110	0.4056		2,021.751 4	2,021.751 4	0.0798		2,023.747 2

3.6 Paving - 2026

Unmitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive 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/e	day							lb/c	day		
Off-Road	0.5732	5.3259	8.7951	0.0136		0.2465	0.2465		0.2276	0.2276		1,297.809 6	1,297.809 6	0.4114		1,308.095 1
Paving	0.0000		 			0.0000	0.0000		0.0000	0.0000			0.0000		 	0.0000
Total	0.5732	5.3259	8.7951	0.0136		0.2465	0.2465		0.2276	0.2276		1,297.809 6	1,297.809 6	0.4114		1,308.095 1

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Mt. SAC Technology & Health Building - Los Angeles-South Coast County, Winter

3.6 Paving - 2026

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive 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/d	day							lb/d	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	0.0475	0.0266	0.3271	1.1700e- 003	0.1453	1.0300e- 003	0.1463	0.0385	9.5000e- 004	0.0395		116.5025	116.5025	2.5500e- 003		116.5663
Total	0.0475	0.0266	0.3271	1.1700e- 003	0.1453	1.0300e- 003	0.1463	0.0385	9.5000e- 004	0.0395		116.5025	116.5025	2.5500e- 003		116.5663

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/d	day							lb/c	lay		
Off-Road	0.2038	0.9684	10.0824	0.0136	! !	0.0320	0.0320	 	0.0320	0.0320	0.0000	1,297.809 6	1,297.809 6	0.4114		1,308.095 1
Paving	0.0000				 	0.0000	0.0000	 	0.0000	0.0000			0.0000			0.0000
Total	0.2038	0.9684	10.0824	0.0136		0.0320	0.0320		0.0320	0.0320	0.0000	1,297.809 6	1,297.809 6	0.4114		1,308.095 1

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Mt. SAC Technology & Health Building - Los Angeles-South Coast County, Winter

3.6 Paving - 2026

<u>Mitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive 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/d	day							lb/d	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	0.0475	0.0266	0.3271	1.1700e- 003	0.1453	1.0300e- 003	0.1463	0.0385	9.5000e- 004	0.0395		116.5025	116.5025	2.5500e- 003		116.5663
Total	0.0475	0.0266	0.3271	1.1700e- 003	0.1453	1.0300e- 003	0.1463	0.0385	9.5000e- 004	0.0395		116.5025	116.5025	2.5500e- 003		116.5663

3.7 Architectural Coating - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Archit. Coating	39.2223					0.0000	0.0000	! !	0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e- 003		0.0515	0.0515	1	0.0515	0.0515		281.4481	281.4481	0.0154	! ! !	281.8319
Total	39.3932	1.1455	1.8091	2.9700e- 003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319

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3.7 Architectural Coating - 2026 <u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive 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/d	day							lb/d	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	0.0767	0.0430	0.5284	1.8900e- 003	0.2347	1.6600e- 003	0.2364	0.0623	1.5300e- 003	0.0638		188.1963	188.1963	4.1200e- 003		188.2994
Total	0.0767	0.0430	0.5284	1.8900e- 003	0.2347	1.6600e- 003	0.2364	0.0623	1.5300e- 003	0.0638		188.1963	188.1963	4.1200e- 003		188.2994

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/d	day							lb/c	day		
Archit. Coating	39.2223					0.0000	0.0000	! !	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0297	0.1288	1.8324	2.9700e- 003		3.9600e- 003	3.9600e- 003	,	3.9600e- 003	3.9600e- 003	0.0000	281.4481	281.4481	0.0154	 	281.8319
Total	39.2520	0.1288	1.8324	2.9700e- 003		3.9600e- 003	3.9600e- 003		3.9600e- 003	3.9600e- 003	0.0000	281.4481	281.4481	0.0154		281.8319

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3.7 Architectural Coating - 2026 Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	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	0.0767	0.0430	0.5284	1.8900e- 003	0.2347	1.6600e- 003	0.2364	0.0623	1.5300e- 003	0.0638		188.1963	188.1963	4.1200e- 003		188.2994
Total	0.0767	0.0430	0.5284	1.8900e- 003	0.2347	1.6600e- 003	0.2364	0.0623	1.5300e- 003	0.0638		188.1963	188.1963	4.1200e- 003		188.2994

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Mt. SAC Technology & Health Building - Los Angeles-South Coast County, Winter

	ROG	NOx	CO	SO2	Fugitive 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/d	day							lb/c	day		
Mitigated	3.7996	4.1186	48.6357	0.1675	19.7990	0.1369	19.9359	5.2474	0.1260	5.3734		16,718.15 45	16,718.15 45	0.5136		16,730.99 51
Unmitigated	3.7996	4.1186	48.6357	0.1675	19.7990	0.1369	19.9359	5.2474	0.1260	5.3734		16,718.15 45	16,718.15 45	0.5136	 	16,730.99 51

4.2 Trip Summary Information

	Ave	rage Daily Trip Ra	ate	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
University/College (4Yr)	3,159.00	1,099.80	0.00	7,250,011	7,250,011
Total	3,159.00	1,099.80	0.00	7,250,011	7,250,011

4.3 Trip Type Information

		Miles			Trip %			Trip Purpos	e %		
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	Primary Diverted Pass-by			
University/College (4Yr)	16.60	8.40	6.90	6.40	88.60	5.00	91	9	0		

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	МН
University/College (4Yr)	0.591120	0.048204	0.226593	0.127275	0.000000	0.000000	0.000000	0.001086	0.000000	0.000000	0.005721	0.000000	0.000000

5.0 Energy Detail

Historical Energy Use: N

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Mt. SAC Technology & Health Building - Los Angeles-South Coast County, Winter

5.1 Mitigation Measures 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/d	day							lb/c	lay		
NaturalGas Mitigated	0.2031	1.8466	1.5511	0.0111		0.1403	0.1403		0.1403	0.1403		2,215.855 4	2,215.855 4	0.0425	0.0406	2,229.023 1
NaturalGas Unmitigated	0.2031	1.8466	1.5511	0.0111		0.1403	0.1403		0.1403	0.1403		2,215.855 4	2,215.855 4	0.0425	0.0406	2,229.023 1

5.2 Energy by Land Use - NaturalGas Unmitigated

	NaturalGa s Use	ROG	NOx	СО	SO2	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/d	day							lb/c	lay		
University/College (4Yr)	18834.8	0.2031	1.8466	1.5511	0.0111		0.1403	0.1403		0.1403	0.1403		2,215.855 4	2,215.855 4	0.0425	0.0406	2,229.023 1
Total		0.2031	1.8466	1.5511	0.0111		0.1403	0.1403		0.1403	0.1403		2,215.855 4	2,215.855 4	0.0425	0.0406	2,229.023 1

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Mt. SAC Technology & Health Building - Los Angeles-South Coast County, Winter

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGa s 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/d	day							lb/c	lay		
University/College (4Yr)	18.8348	0.2031	1.8466	1.5511	0.0111		0.1403	0.1403		0.1403	0.1403		2,215.855 4	2,215.855 4	0.0425	0.0406	2,229.023 1
Total		0.2031	1.8466	1.5511	0.0111		0.1403	0.1403		0.1403	0.1403		2,215.855 4	2,215.855 4	0.0425	0.0406	2,229.023 1

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/d	day							lb/d	lay		
Mitigated	5.6721	8.0000e- 005	9.1700e- 003	0.0000		3.0000e- 005	3.0000e- 005		3.0000e- 005	3.0000e- 005		0.0197	0.0197	5.0000e- 005		0.0210
Unmitigated	5.6721	8.0000e- 005	9.1700e- 003	0.0000		3.0000e- 005	3.0000e- 005		3.0000e- 005	3.0000e- 005		0.0197	0.0197	5.0000e- 005		0.0210

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Mt. SAC Technology & Health Building - Los Angeles-South Coast County, Winter

6.2 Area by SubCategory Unmitigated

	ROG	NOx	СО	SO2	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/d	day							lb/d	day		
Architectural Coating	0.6448					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	5.0266		i			0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	8.4000e- 004	8.0000e- 005	9.1700e- 003	0.0000		3.0000e- 005	3.0000e- 005		3.0000e- 005	3.0000e- 005		0.0197	0.0197	5.0000e- 005		0.0210
Total	5.6721	8.0000e- 005	9.1700e- 003	0.0000		3.0000e- 005	3.0000e- 005		3.0000e- 005	3.0000e- 005		0.0197	0.0197	5.0000e- 005		0.0210

Mitigated

	ROG	NOx	СО	SO2	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/d	day							lb/d	day		
Architectural Coating	0.6448					0.0000	0.0000		0.0000	0.0000	! !		0.0000			0.0000
Consumer Products	5.0266		1 1 1			0.0000	0.0000	1 1 1 1 1	0.0000	0.0000		,	0.0000			0.0000
Landscaping	8.4000e- 004	8.0000e- 005	9.1700e- 003	0.0000		3.0000e- 005	3.0000e- 005	1 1 1 1 1	3.0000e- 005	3.0000e- 005		0.0197	0.0197	5.0000e- 005		0.0210
Total	5.6721	8.0000e- 005	9.1700e- 003	0.0000		3.0000e- 005	3.0000e- 005		3.0000e- 005	3.0000e- 005		0.0197	0.0197	5.0000e- 005		0.0210

7.0 Water Detail

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Mt. SAC Technology & Health Building - Los Angeles-South Coast County, Winter

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
' ' ' ''		, ,	· ·	ŭ	,,

User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

APPENDIX B ENERGY ANALYSIS

Energy Use Summary

Construction Phase (gallons/construction period	Gasoline	Diesel		
Construction Vehicles	39,845	15,413		
Worker Trips	42,949	204		
Vendor Trips	9,061	151		
Haul Trucks	9	7,578		
Total	91,864	23,346		
			Natural Gas	
Operations Phase (gallons/year)	Gasoline	Diesel	(kBTU/yr)	Electricity (kWh/yr)
University	233,757	2,989	6,874,690	2,000,000
All Land Uses	233,757	2,989	6,874,690	2,000,000

Operations Onroad Energy Use

Vehicle Types	MPG by Fuel Typ	e		Population by Fuel Type						
	GAS	DSL	ELEC	GAS	DSL	ELEC	Total			
LDA	34.4	53.9		6,890,013	71,374	232,749	6,961,387			
LDT1	29.3	24.3		820,893	277	13,403	821,171			
LDT2	28.2	39.6		2,406,087	19,279	50,413	2,425,365			
LHDT1	11.1	22.9		173,057	143,072		316,129			
LHDT2	9.6	20.7		30,381	57,538		87,918			
MCY	36.2			330,653			330,653			
MDV	22.8	30.5		1,623,219	43,701	32,680	1,666,920			
UBUS	5.5	5.7		975	6	16	981			

Demolition Demolition
 Site Preparation Site Preparation
 Grading Grading
 Building Construx Building Construx
 Pawing Pawing
 Architectural Coa Architectural Coa

Trips/Day Land Use University	We	os/day ekday 59.00	Trips/day Saturday 1,100.00	Trips/day Sunday 0.00	Total Weekly 16895	VMT/day Weekday 26,069	VMT/day Saturday 9,078	VMT/day Sunday 0	Trip Length 8.25							
Total	3.	.159	1,100	0												
Fleet Mix Land Use University	0 0 0 0	. DA 0.59112	LDT1 0.048204	LDT2 0.226593	MDV 0.127275	LHD1 0	LHD2 0	MHD 0	HHD 0.001086	OBUS 0	UBUS 0	MCY 0.005721	SBUS 0	MH C	Total 100.0% 0.0% 0.0% 0.0% 0.0% 0.0%	
Vehicle Trips Weekday Trips University	0 0 0 0	DA 867 0 0 0 0	LDT1 152 0 0 0 0	716 0 0 0 0 0	MDV 402 0 0 0 0	LHDT1 0 0 0 0 0 0	0 0 0 0 0 0 0	MHDT 0 0 0 0 0	HHDT 3 0 0 0 0	Obus 0 0 0 0 0	Ubus 0 0 0 0 0	MCY 18 0 0 0 0	Sbus 0 0 0 0 0	MH 0 0 0 0 0	Total 3,159 0 0 0 0	Daily VMT 26,069.14 - - - -
Total		867	152	716	402	Ó	Ō	Ō	3	0	0	18	0	0	3,159	
Saturday Trips University Total	0 0 0 0	DA 650 0 0 0 0 0 0	LDT1 53 0 0 0 0 0 0	249 0 0 0 0 0 0 249	MDV 140 0 0 0 0 0 0	0 0 0 0 0 0 0	LHDT2 0 0 0 0 0 0 0	MHDT 0 0 0 0 0 0	HHDT 1 0 0 0 0 0 0	Obus 0 0 0 0 0 0 0 0 0	O O O O O O O O O O O O O O O O O O O	MCY 6 0 0 0 0 0	Sbus 0 0 0 0 0 0 0 0 0	MH 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Total 1,100 0 0 0 0 0 1,100	Daily VMT 9,077.57 - - - - -
Sunday Trips University	0 0 0	.DA 0 0 0 0	LDT1 0 0 0 0	LDT2 0 0 0 0	MDV 0 0 0	LHDT1 0 0 0 0	LHDT2 0 0 0 0	MHDT 0 0 0 0	HHDT 0 0 0 0	Obus 0 0 0 0	Ubus 0 0 0 0	MCY 0 0 0 0	Sbus 0 0 0 0	MH 0 0 0 0	Total 0 0 0 0 0	Daily VMT 0.00 - - - -
Total		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	-
Gallons of Fuel																
Gasoline University	0 0 0 0 0 0	DA 3,400 0 0 0 0 0 0 0 0	LDT1 11,941 0 0 0 0 0 0 11,941	LDT2 57,799 0 0 0 0 0 0 57,799	MDV 39.469 0 0 0 0 0 39,469	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	MHDT 0 0 0 0 0 0	HHD 1 0 0 0 0 0 0	Obus 0 0 0 0 0 0 0 0 0 0	Ubus 0 0 0 0 0 0	MCY 1,147 0 0 0 0 0 0 1,147	Sbus 0 0 0 0 0 0 0 0 0 0	MH 0 0 0 0 0 0	Total 233,757 0 0 0 0 0 233,757	Total Gallons
Diesel University	0 0 0 0 0	DA 315 0 0 0 0 0 0 0	LDT1 5 0 0 0 0 5 5 5 5 5 6 6 7 7 8 7 8 8 8 8 8 8 8 8 8 8 8 8 8 8	LDT2 329 0 0 0 0 0 0 0	MDV 794 0 0 0 0 0 794	OBUS 0 0 0 0 0 0	0 0 0 0 0 0 0 0	MHDT 0 0 0 0 0 0	HHD 1,045 0 0 0 0 0 1,045	Obus 0 0 0 0 0 0 0 0 0 0	Ubus 0 0 0 0 0 0 0	MCY 0 0 0 0 0 0	Sbus 0 0 0 0 0 0 0 0 0 0	MH 0 0 0 0 0 0	Total 2,989 0 0 0 0 0 0 0 0	Total Gallons

236,746 Total Gallons

31 Average MPC

Offroad Construction Equipment Energy Use

		OffRoadEqui pmentUnitA							Fuel Consumption Rate		Total Fuel Consumption
PhaseName	OffRoadEquipmentType	mount	UsageHours	HorsePower	Load Factor	Horsepower Category	Num Days	Year	(gal/hour)	Fuel Type	(gal/construction period)
Demolition	Concrete/Industrial Saws	1	8	81	0.73	100	81	2023	4.7	Gasoline	2,230
Demolition	Rubber Tired Dozers	1	8	247	0.4	300	81	2023	4.5	Diesel	1,159
Demolition	Tractors/Loaders/Backhoes	3	8	97	0.37	100	81	2023	1.6	Diesel	1,145
Site Preparation	Graders	1	8	187	0.41	175	81	2023	3.2	Diesel	838
Site Preparation	Rubber Tired Dozers	1	7	247	0.4	300	81	2023	4.5	Diesel	1,014
Site Preparation	Tractors/Loaders/Backhoes	1	8	97	0.37	100	81	2023	1.6	Diesel	382
Grading	Graders	1	6	187	0.41	175	81	2023	3.2	Diesel	629
Grading	Rubber Tired Dozers	1	6	247	0.4	300	81	2023	4.5	Diesel	869
Building Construction	Welders	3	8	46	0.45	50	661	2023	2.4	Gasoline	17,209
Paving	Cement and Mortar Mixers	1	6	9	0.56	25	61	2023	0.4	Gasoline	79
Paving	Pavers	1	6	130	0.42	100	61	2023	1.7	Diesel	266
Paving	Paving Equipment	1	8	132	0.36	100	61	2023	1.6	Diesel	288
Paving	Rollers	1	7	80	0.38	100	61	2023	1.7	Diesel	275
Paving	Tractors/Loaders/Backhoes	1	8	97	0.37	100	61	2023	1.6	Diesel	288
Architectural Coating	Air Compressors	1	6	78	0.48	100	60	2023	1.3	Diesel	229
									Total Total	Gasoline Diesel	39,845 15,413

Onroad Construction Energy Use Year 2023

Vehicle Types	MPG by Fuel Type			Population by Fuel Type					
	GAS	DSL	ELEC	GAS	DSL	ELEC	Total		
LDA	31.7	50.0		6,635,002	62,493	150,700	6,697,495		
LDT1	27.2	22.9		758,468	361	7,123	758,828		
LDT2	25.5	36.7		2,285,150	15,595	28,810	2,300,745		
LHDT1	10.7	21.9		174,910	125,545		300,455		
LHDT2	9.3	19.8		30,103	50,003		80,106		
MCY	36.4			305,045			305,045		
MDV	20.7	28.1		1,589,863	36,128	16,377	1,625,991		
UBUS	5.1	5.9		958	13	16	971		

Input							Gasoline Con	sumption		Diesel Con	sumption	
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	13	0	457	14.7	6.9	20						
Site Preparation	8	0	0	14.7	6.9	20						
Grading	8	0	2250	14.7	6.9	20						
Building Construction	107	42	0	14.7	6.9	20						
Paving	13	0	0	14.7	6.9	20						
Architectural Coating	21	0	0	14.7	6.9	20						
Adjusted												
Demolition	1053	0	457	14.7	6.9	20	602	0	1	3	0	1,279
Site Preparation	648	0	0	14.7	6.9	20	370	0	0	2	0	0
Grading	648	0	2250	14.7	6.9	20	370	0	7	2	0	6,298
Building Construction	70727	27762	0	14.7	6.9	20	40,432	9,061	0	192	151	0
Paving	793	0	0	14.7	6.9	20	453	0	0	2	0	0
Architectural Coating	1260	0	0	14.7	6.9	20	720	0	0	3	0	0
Total							42.949	9.061	9	204	151	7.578

7,578

APPENDIX C NOISE AND AIRCRAFT MAINTENANCE ANALYSIS

Building Type Construction Noise at 50 Feet (dBA Leq)	Office, Hotel, Hospital, School, Public Works		Distance (
Construction Phase	All Applicable Equipment in Use ¹	Minimum Required Equipment in Use ¹	50
Ground Clearing/Demolition	84	84	
excavation	89	79	
oundation Construction	78	78	
uilding Construction	87	75	
inishing and Site Cleanup	89	75	
lorth - Residential Uses			
Maximum Construction Noise (dBA Leq) Construction Phase	All Applicable Equipment in Use ¹	Minimum Required Equipment in Use ¹	1,370
round Clearing/Demolition	55	55	
xcavation (Site Preparation)	60	50	
oundation Construction	49	49	
uilding Construction	58	46	
aving	60	46	
verage Construction Noise (dBA Leq)			1,370
Construction Phase Ground Clearing/Demolition	All Applicable Equipment in Use ¹	Minimum Required Equipment in Use ¹	
	55	55	
excavation (Site Preparation)	60	50	
oundation Construction	49	49	
building Construction	58	46	
aving	60	46	
ast - Residential Uses			0.000
faximum Construction Noise (dBA Leq)			6,960
Construction Phase	All Applicable Equipment in Use ¹	Minimum Required Equipment in Use ¹	
Fround Clearing/Demolition	41	41	
xcavation (Site Preparation)	46	36	
oundation Construction	35	35	
duilding Construction	44 46	32	
Paving	40	32	
verage Construction Noise (dBA Leq) Construction Phase	All Applicable Equipment in Use ¹	Minimum Required Equipment in Use ¹	6,960
Ground Clearing/Demolition	41	41	
Excavation (Site Preparation)	46	36	
oundation Construction	35	35	
Building Construction	44	32	
Paving	46	32	
outh - Residential Uses			
verage Construction Noise (dBA Leq)	1	1	2,770
Construction Phase	All Applicable Equipment in Use ¹	Minimum Required Equipment in Use ¹	
Ground Clearing/Demolition	49	49	
excavation (Site Preparation)	54	44	
Foundation Construction Building Construction	43 52	43 40	
aving Construction Paving	52 54	40 40	
/est - Residential Uses			
verage Construction Noise (dBA Leg)			2,265
Construction Phase	All Applicable Equipment in Use ¹	Minimum Required Equipment in Use ¹	2,200
Ground Clearing/Demolition	51	51	
xcavation (Site Preparation)	56	46	
oundation Construction	45	45	
uilding Construction	54	45	
aving	56	42	

Construction Generated Vibration

North - Residential Uses		Closest Distance (feet):	1,370
	Approximate RMS a	Approximate RMS	
	66	73.000	
Equipment	inch/second	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	
East - Residential Uses		Closest Distance (feet):	6,96
	Approximate RMS a	Approximate RMS	
	Velocity at 25 ft,	Velocity Level,	
Equipment	inch/second	inch/second	
Vibratory roller	0.21	0.000	
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	
South - Residential Uses		Closest Distance (feet):	2,770
	Approximate RMS a	Approximate RMS	
	Velocity at 25 ft,	Velocity Level,	
Equipment	inch/second	inch/second	
Vibratory roller	0.21	0.000	
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	
West - Residential Uses		Closest Distance (feet):	2,26
	Approximate RMS a	Approximate RMS	
	Velocity at 25 ft,	Velocity Level,	
Equipment	inch/second	inch/second	
Vibratory roller	0.21	0.000	
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			
Determined based on use of jackhammers or	pneumatic hammers that may be used for pavem	ent demolition at a distance of 25 feet	
Notes: RMS velocity calculated from vibration le	vel (VdB) using the reference of one microinch/se	cond.	
Source: Based on methodology from the Ur Assessment (2006).	nited States Department of Transportation Fe	ederal Transit Administration, <i>Transit Noise and</i>	Vibration Impact

Aircraft Maintenance Noise Exposure

Aircraft Waintenance	voise Exposure									
	De	ference Distanc		Adjusted Noise	Offsite Source Receptor Distant		Barrier Reduction	Offsite Noise		
				•						
Noise Source	Noise Level (dBA)	(ft)	Quantity	Level (dBA)	(ft)	Distance Attenuatio	(dBA)	Exposure (dBA)	Noise Limi	Exceeds?
Northern Receptors										
Rivetting	103	6	8	112	1,370	-47	-24	41	55	No
Propeller Plane	107	19	1	107	1,370	-37	-24	46	55	No
Turbine Outdoor	91	6	1	91	1,370	-47	-24	20	55	No
Southern Receptors										
Rivetting	103	6	8	112	2,730	-53	-15	44	55	No
Propeller Plane	107	19	1	107	2,730	-43	-15	49	55	No
Turbine Outdoor	91	6	1	91	2,730	-53	-15	23	55	No
Eastern Receptors										
Rivetting	103	6	8	112	6,960	-61	-26	24	55	No
Propeller Plane	107	19	1	107	6,960	-51	-26	30	55	No
Turbine Outdoor	91	6	1	91	6,960	-61	-26	4	55	No
Western Receptors										
Rivetting	103	6	8	112	2,265	-52	-23	38	55	No
Propeller Plane	107	19	1	107	2,265	-42	-23	43	55	No
Turbine Outdoor	91	6	1	91	2,265	-52	-23	17	55	No
Frequency (Hz)	500									
Speed of Sound (f/s)	1128									

Wavelength (ft)

Barrier Reduction

2.256

Receptor	Distance (ft)	Source	Source Elevation	Source to Barrier 1	Barrier 1 Height	Barrier 1 Elevation	Barrier 1 to Receiver	Receiver Height	Receiver Elevation	Distance Reduction	Breaks LOS 1	А	В	D	Fresnel	Barrier Reduction
North	1,370	5	748	50	50	748	1320	5	890	47.2	1.0	67.3	1323.6	1377.3	12.0	23.8
South	2770	5	748	1530	50	730	1240	5	710	0.0	1.0	1530.2	1241.7	2770.3	1.5	14.8
East	6960	5	748	30	50	748	6930	5	680	0.0	1.0	54.1	6930.9	6960.3	21.9	26.4
West	2265	5	748	30	50	730	2235	5	750	0.0	1.0	40.4	2235.1	2265.0	9.3	22.7

Record #	Date	Time	Run Duration	Run Time	Pause	LAeq	LAE	LASmin	LASmin Time	LASmax	LASmax Time	LApeak (max)	LApeak (max) Time
42	2021-03-02	13:19:04	00:00:55.4	00:00:55.4	0.00:00.0	96.5	114.0	62.6	13:19:10	100.0	13:19:15	120.0	13:19:14
43	2021-03-02	13:20:00	00:00:31.5	00:00:31.5	0.00:00.0	96.0	110.9	85.3	13:20:31	99.0	13:20:04	117.0	13:20:16
44	2021-03-02	13:22:27	00:00:33.0	00:00:33.0	0.00:00.0	102.8	117.9	63.3	13:22:27	105.3	13:22:39	125.3	13:22:40
45	2021-03-02	13:23:00	00:00:46.1	00:00:46.1	0.00:00.0	91.6	108.2	64.6	13:23:43	97.3	13:23:17	116.3	13:23:05

Riveting at 6'. Riveting by 1 person. Typically rivetting done by 8 students. 95% occurs indoors. 5% outdoors.

Record #	Date	Time	Run Duration	Run Time	Pause	LAeq	LAE	LASmin	LASmin Time	LASmax	LASmax Time	LApeak (max)
1	2021-03-02	13:30:11	00:00:49.0	00:00:49.0	0.00:00.0	87.2	104.1	58.6	13:30:16	90.1	13:30:59	108.8
2	2021-03-02	13:31:00	00:01:00.0	00:01:00.0	0.00:00.0	107.3	125.1	84.4	13:31:59	112.7	13:31:41	130.1
3	2021-03-02	13:32:00	00:00:38.1	00:00:38.1	0.00:00.0	76.1	91.9	58.4	13:32:38	84.4	13:32:00	97.1

Outside Aircraft propeller engine at 19'

Used 1 hour/day, twice a week.

Record #	Date	Time	Run Duration	Run Time	Pause	LAeq	LAE	LASmin	LASmin Time	LASmax	LASmax Time	LApeak (max)	LApeak (max) Time
1	2021-03-02	13:53:37	00:00:22.2	00:00:22.2	0.00:00.0	77.8	91.3	76.1	13:53:37	81.4	13:53:59	95.3	13:53:59
2	2021-03-02	13:54:00	00:01:00.0	00:01:00.0	0.00:00:0	91.4	109.2	76.2	13:54:23	98.0	13:54:55	110.5	13:54:54
3	2021-03-02	13:55:00	00:00:43.2	00:00:43.2	0.00:00:0	83.1	99.4	76.0	13:55:14	94.1	13:55:00	107.3	13:55:00

Outdoor jet turbine at 6' from enclosure door. Used for about 1 hour /day and 1 day/week.

APPENDIX D TRAFFIC STUDY

Traffic Impact Analysis Mt. San Antonio College Technology and Health Building







February 2021



DRAFT

TRAFFIC IMPACT ANALYSIS MT. SAN ANTONIO COLLEGE TECHNOLOGY & HEALTH BUILDING WALNUT, CA

PREPARED FOR



PREPARED BY

PSOMAS PROJECT NO. 3MTS010600 FEBRUARY 2021

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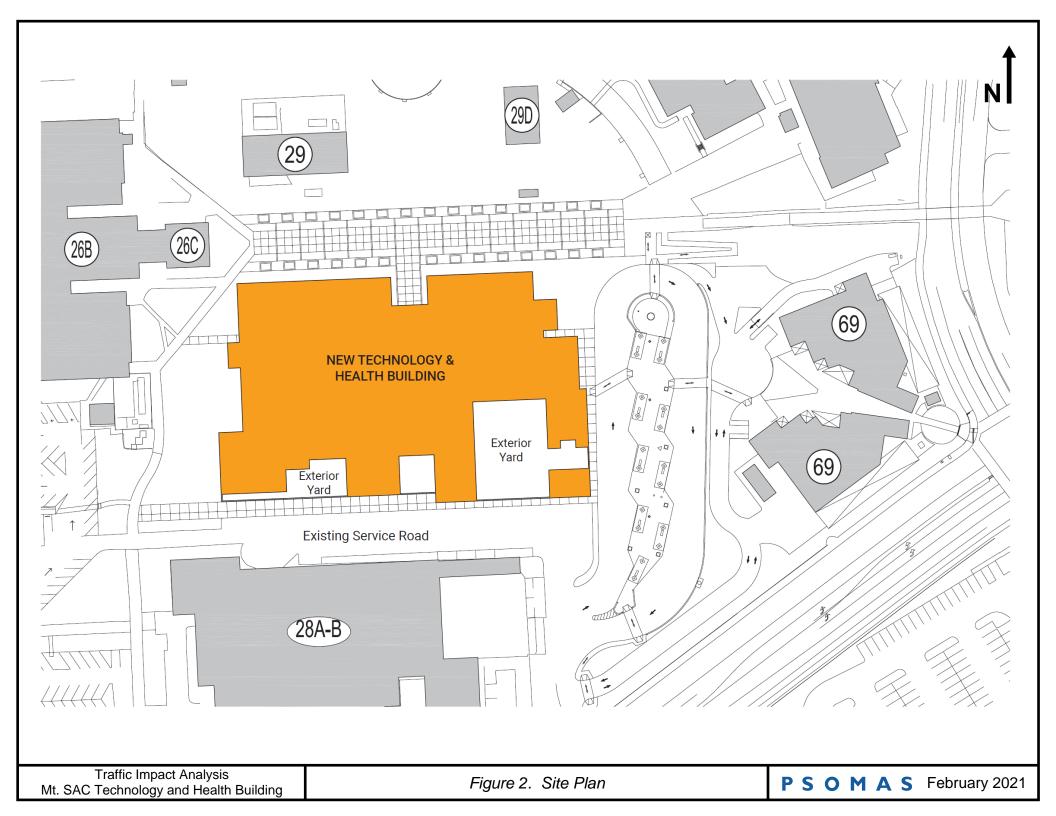
1. INTRODUCTION

This project consists of the construction of a new four-story Technology and Health building at Mt. San Antonio College. The Technology and Health Division is currently housed within six different facilities throughout campus, including both temporary and permanent structures, but those existing facilities are no longer sufficient for instruction. The proposed project will increase instructional capacity, consolidate the Technology and Health Division into a single facility, and will support industry standards for technology instruction.

The proposed 253,866-square-foot building will include approximately 153,000 square feet of assignable space. The new building will require the demolition of existing buildings 27A, 27B, 27C, and the swimming pool (27P). In addition, the new building will relocate students from existing buildings 28A, 28B, and 67A, all of which will be inactivated after the new building is in place. The construction of this project is consistent with improvements in the 2018 Educational and Facilities Master Plan (2018 EFMP)¹ and is one piece of the overall buildout of the EFMP. Figure 1 shows the project location and Figure 2 shows the site plan.

IKEA Covina Plome Furnishings Diamond Bar Temple Avenue

Figure 1. Site Location



2. CONSISTENCY WITH 2018 EFMP EIR

The 2018 EFMP provides guidance on how to best serve Mt. SAC students into the future. Among the recommended facilities listed within the plan is a new multi-story technical education facility. The 2018 EFMP states that the new facility would house various technology and health departments and would include classrooms, office, and specialized laboratories. The proposed Technology and Health building being evaluated in this report is consistent with the recommended facility in the 2018 EFMP.

Also discussed in the 2018 EFMP is the project student population growth for the College. Growth was expected to range between 0.18% and 1.22% per year. As discussed later in this report, current projections for the campus include 1.0% student enrollment growth per year, falling within the assumptions in the 2018 EFMP. Further, the traffic analysis (2019 TIA)² completed for the 2018 Educational and Facilities Master Plan Environmental Impact Report (2018 EFMP EIR)³ estimated an additional 4,881 students at the campus at buildout of the EFMP, assumed to be in 2027. The Technology and Health building is estimated to open in 2026; projections estimate an additional 2,747 students at that time. Note, however, that the growth is not solely attributable to this project. Instead, growth will occur at the campus over time due to this project and several others expected to be completed by 2026.

Based on the information above, the proposed Technology and Health building project is considered to be consistent with the previously approved documentation, including the 2018 EFMP EIR. Due to its consistency, a full traffic study is not required for this project.

3. PROJECT DESCRIPTION

As previously discussed, this project consists of constructing a new four-story Technology and Health building. The current Technology and Health program has a student enrollment of approximately 6,850 students. The project will replace four existing buildings which serve a combined 2,200 students in other disciplines. Students from the demolished buildings will be served in other areas of campus; however, even as students are relocated, traffic patterns are not expected to change significantly because parking access and location will not be directly affected by this project.

3.1. PROJECTED GROWTH

Due to the nature of the campus growth and ongoing projects, student population growth is not directly attributable to a single facility. However, based on recent growth and College projections, a 1% per year growth rate was assumed for the student population. Student growth from Fall 2017 to Fall 2019 was 0.3% per year. Therefore, the 1% per year is conservative and is on the high end of the range of growth in the *2018 EFMP* but still falls within the previously evaluated conditions.

The student population growth was calculated based on the 2019 Fall student enrollment because enrollment in the Fall semester is generally higher than the Spring semester and because Fall 2019 enrollment was not affected by the current COVID-19 pandemic. For traffic analysis purposes, total student population (not full-time-equivalents) is used. Mt. SAC had 38,084 total students in Fall 2019⁴. Assuming a 1% per year growth through 2026 (not accounting for the pandemic, to be conservative), the campus will add 2,747 students by buildout of this project.

3.2. TRIP GENERATION

The anticipated traffic generation for growth at Mt. SAC through opening year of this project (2026) was estimated using the Institute of Transportation Engineers (ITE) *Trip Generation Manual*⁵ for morning and evening weekday peak hour trips. The resulting project trip generation is shown in Table 1.

Table 1. Project Trip Generation

ITE LU 540 (Junior/Community College)						
Students			2,747			
Period	Trips/Unit	Trips	%In	% Out	Trips In	Trips Out
AM Peak	0.11	302	81%	23%	245	69
PM Peak	0.11	302	56%	50%	169	151
Daily	1.15	3,159	50%	50%	1,580	1,580

As seen in the table, the campus is expected to include 302 new peak hour trips as well as 3,159 new daily trips. Again, these trips are not all attributable to the project, but the trip generation is provided for reference.

4. SITE ANALYSIS

4.1. VEHICLE MILES TRAVELED (VMT)

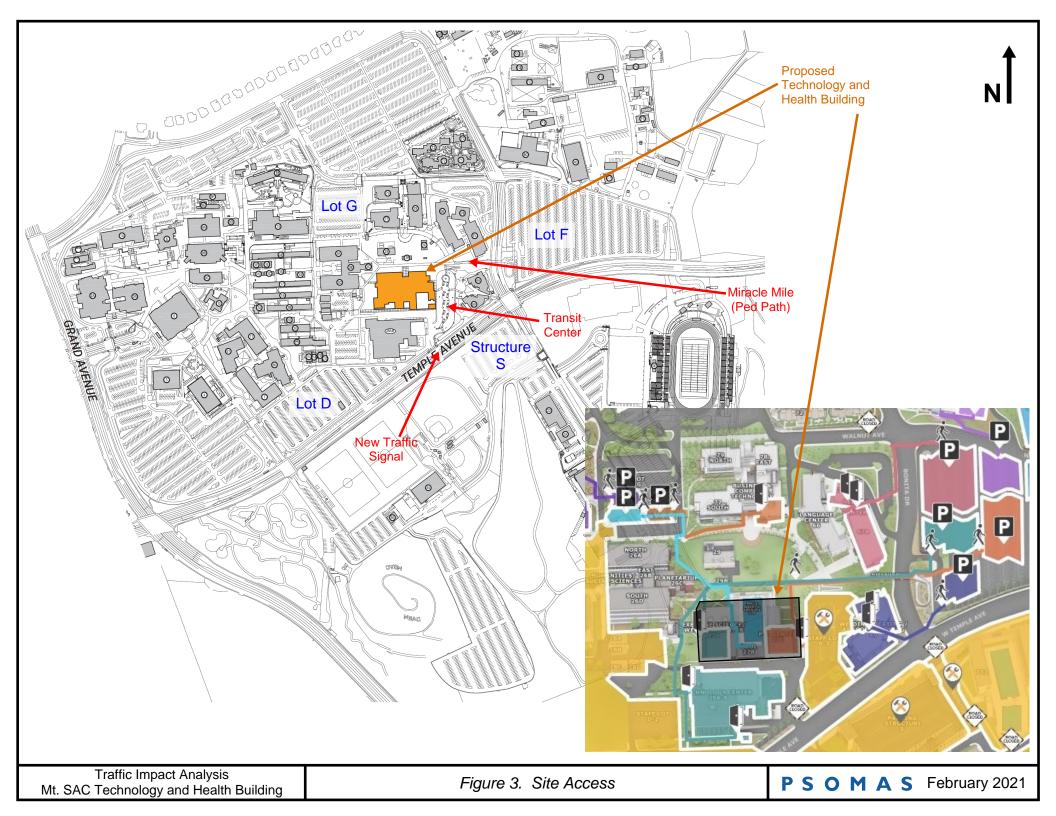
Per the Los Angeles County Transportation Impact Analysis Guidelines⁶, if a project is located within one-half mile of a major transit stop, the project is determined to have a less-than-significant impact on transportation and no further VMT analysis is required. In addition to the existing transit routes which operate within one-half mile of the project site, a transit center is currently being constructed on the Mt. SAC campus. The transit center will be located immediately adjacent to this project and will serve multiple Foothill Transit routes. Therefore, the project is exempt from further VMT analysis and is assumed to have a less-than-significant impact on transportation.

4.2. ACCESS

The proposed Technology and Health building is located immediately south of Miracle Mile, the pedestrian path which runs through the center of campus. Currently, those wishing to access buildings in the project area are directed to park in Lot F or Lot G⁷. Figure 3 shows the parking areas, and the inset was taken from the Mt. SAC website.

Lot F is connected to the center of campus near the project via a pedestrian bridge over Bonita Drive. Once parking structure S is completed, it is assumed those wishing to access the new building can also easily do so from that area. Vehicle access to the three parking areas discussed will not change from existing conditions; Lot F and Structure S can both be accessed from Bonita Drive or Temple Avenue, and Lot G can be accessed from either Bonita Drive or other areas of campus to the west. It is not expected that there will be any direct public vehicle access to the building. However, service vehicles and emergency vehicles will have direct access to the building after completion.

Construction vehicles are expected to access the site via Temple Avenue. The ongoing transit center construction will include a new traffic signal at the transit center access driveway on Temple Avenue which construction vehicles can use for easy access to the site. A secondary access path will be through Lot D, approaching the site from the west. Construction is not expected to affect access for other areas of campus.



5. MITIGATION MEASURES

In the 2019 EFMP EIR, several mitigation measures were identified to address traffic impacts related to the recommended projects in the EFMP. Mt. SAC is responsible for contributing its fair share of project costs to improvements at several area intersections before completion of new construction of projects in the EFMP, anticipated to occur in 2027. Because this project is consistent with the EFMP and because student growth is expected to remain consistent with the assumptions in the EFMP, the mitigation measures are still applicable. Traffic volume and student enrollment changes due to the COVID-19 pandemic may have an affect on the need for certain improvements, but any changes to the required mitigation cannot be determined at this time.

The mitigation measures are listed below for reference. Note that several mitigation measures for construction activities are also included, all of which are applicable to this project.

- MM TRA-1 Prior to the completion of new construction under the EFMP Project, Mt. San Antonio College shall be responsible for fair share contributions towards the installation of the following improvements:
 - Temple Avenue and Grand Avenue
 - Convert the eastbound right turn lane to a shared thru-right turn lane. This will not require any physical reconstruction but will require additional striping to provide a third eastbound thru lane on the east leg of the intersection.
 - Convert the westbound right turn lane to a shared thru-right turn lane. This will not require any physical reconstruction but will require additional striping to provide a third westbound thru lane on the west leg of the intersection.
 - Temple Avenue and University Drive
 - Convert the westbound right turn lane to a shared thru-right turn lane. This will not require any physical reconstruction but will require additional striping to provide a third westbound thru lane on the west leg of the intersection.

• Temple Avenue and Campus Drive

Convert the westbound right turn lane to a shared thru-right turn lane. This will not require any physical reconstruction but will require additional striping to provide a third westbound thru lane on the west leg of the intersection.

Kellogg Drive and Campus Drive

 Convert the shared eastbound thru-right turn lane to an exclusive right turn lane. This will only require restriping on the eastbound approach.

Temple Avenue and Valley Boulevard

Add a second northbound left turn lane. This will require restriping of both the north and south legs of the intersection (no physical reconstruction) and may result in the loss of some parking spaces along Valley Boulevard, south of Temple Avenue.

Temple Avenue and Pomona Boulevard

Convert the southbound lanes to provide two exclusive left turn lanes and a shared thru-right turn lane. This will require restriping on the southbound approach and the removal of the existing "right lane must turn right" and "right turn only" signs.

Holt Avenue and Grand Avenue

Convert the southbound right turn lane to a shared thru-right turn lane. This will require additional striping on the south leg to either extend the right turn lane at Virginia Avenue north to Holt Avenue to act as a trap right turn lane (where drivers in that lane will be forced to turn right at Virginia Avenue), or to convert the lane to a shared thru-right turn lane at Virginia Avenue. Some physical improvements, including the removal of the existing raised median island and relocation of the signal pole, will also be needed for the northwest corner of the Holt Avenue/Grand Avenue intersection.

• Cameron Avenue and Grand Avenue

Add a second eastbound right turn lane.

- San Jose Hills Road and Grand Avenue
 - Convert the westbound thru lane to a shared thru-left turn lane. This will only require striping, no physical reconstruction.
 - Convert the northbound right turn lane to a shared thru-right turn lane. This will not require any physical reconstruction but will require additional striping to provide a third northbound thru lane on the north leg of the intersection.
- La Puente Road and Grand Avenue
 - Modify the signal phasing to include an eastbound right turn overlap.
- **MM TRA-2** Prior to the completion of new construction under the 2018 EFMP, Mt. SAC shall be responsible for fair share contributions towards the installation of the following improvements:
 - Amar Road and Nogales Street
 - Convert the eastbound right turn lane to a shared thru-right turn lane. This will not require any physical reconstruction but will require additional striping to provide a third eastbound thru lane on the east leg of the intersection.
 - Temple Avenue and Mt. SAC Way
 - Convert the westbound right turn lane to a shared thru-right turn lane. This will not require any physical reconstruction but will require additional striping to provide a third westbound thru lane on the west leg of the intersection.
- MM TRA-3 Construction contractors shall submit an application for a Truck Hauling Plan to the City for review and approval prior to the start of any grading, demolition, or construction activities, in compliance with Title 2, Chapter 2.40, Hauling of Earth Materials, of the Walnut Municipal Code. The Contractor shall comply with the conditions of the permit, including designated haul routes, time limits for hauling operations, debris on City roadways, temporary signage requirements, and other restrictions.

MM TRA-4 Construction contractors shall submit Traffic Control Plan(s) and other construction documents that show compliance with the Work Area Traffic Control Handbook (WATCH) to the Facilities Planning and Management Department of Mt. SAC. The traffic control plan shall be implemented by the Contractor throughout the construction phase of each project. This shall include the use of signs and flag persons during truck hauling activities and heavy equipment movement outside the construction site and notification of the City of Walnut, the Los Angeles County Fire Department, and the Los Angeles Sheriff's Department of planned changes in vehicle circulation patterns, street closures, detours, parking, and other traffic and access issues.

- MM TRA-5 For any construction work on public rights-of-way, the Contractor shall obtain an encroachment permit from the City of Walnut, shall provide a copy of the permit to the Mt. SAC Project Manager, and shall comply with the conditions of the permit, including restoration of roadways and public improvements, time limits for construction, debris on City roadways, and other restrictions.
- MM TRA-6 For any temporary street, sidewalk, walkway, and/or bike lane closure, the construction Contractor shall submit plans to the Facilities Planning and Management Department of Mt. SAC to maintain pedestrian access on adjacent sidewalks and ensure vehicle, pedestrian, and bicyclist safety along the construction site perimeter and along construction equipment and haul routes on campus.
- MM TRA-7 Construction Contractors shall submit Construction Staging Area and Parking Plans to the Mt. SAC Project Manager. Construction staging areas and construction worker parking areas shall be designated at specific locations on campus and shall avoid public rights-of-way, internal roads, sidewalks, walkways, and bike paths/bike lanes, unless approved by the Facilities Planning and Management Department of Mt. SAC.

MM TRA-8 Construction Contractors shall submit Temporary Fencing Plans to the Mt. SAC Project Manager. Construction sites shall be surrounded by temporary fencing to secure construction equipment, prevent vehicle and pedestrian access and trespassing, and reduce hazards during grading, demolition, or construction activities.

6. SUMMARY

This traffic analysis provided an evaluation of the proposed Technology and Health building at Mt. SAC. The proposed building is part of the 2018 Educational and Facilities Master Plan for the Mt. SAC campus and is shown in this report to be consistent with that plan. Although enrollment growth cannot be quantified for this specific building, its construction along with development of other areas of campus per the EFMP is expected to result in a student population growth of 1% per year through 2026. This will result in an additional 2,747 students (when compared to Fall 2019 enrollment), generating 302 peak hour trips and 3,159 daily trips. This growth is within the assumptions for the EFMP, the 2019 EFMP EIR, and the 2019 TIA.

Because of the proximity of the new Technology and Health building to the new transit center being constructed on campus, it is considered to be located in a Transit Priority Area and therefore is assumed to have a less-than-significant impact on transportation. In addition, the project itself will not change vehicular or pedestrian access, and private vehicles will not have direct access to the building and will therefore park in nearby existing parking lots or structures. (Service vehicles and emergency vehicles will have access to the building as needed.) Consequently, the project is not expected to significantly alter vehicular traffic patterns around campus, so the operational analyses in the 2019 TIA and the mitigation measures listed in the 2019 EFMP EIR remain appropriate and applicable.

7. REFERENCES

¹ 2018 Educational and Facilities Master Plan. Mt. San Antonio College, 2018.

² Traffic Impact Analysis for Mt. San Antonio College Long Range Development Plan; 2018 Educational and Facilities Master Plan. Psomas, May 2019.

³ 2018 Educational and Facilities Master Plan Environmental Impact Report. Psomas, 2019.

⁴ California Community Colleges Chancellor's Office Management Information Systems Data Mart. https://datamart.ccco.edu/datamart.aspx, accessed February 2021.

⁵ *Trip Generation, 10th Edition.* Institute of Transportation Engineers (ITE). Washington, D.C., 2017.

⁶ Los Angeles County Transportation Impact Analysis Guidelines. Los Angeles County Public Works, July 2020.

⁷ Mt. San Antonio College Campus Maps. https://www.mtsac.edu/maps/, accessed February 2021.

