PSOMAS

Mt. San Antonio College 2018 Educational and Facilities Master Plan Draft Environmental Impact Report

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Mt. San Antonio College

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1.1 INTRODUCTION

The California Environmental Quality Act (CEQA) (*California Public Resources Code,* Sections 21000 et seq.) requires that local government agencies, prior to taking action on projects over which they have discretionary approval authority, consider the environmental consequences of such projects. An Environmental Impact Report (EIR) is a public document designed to provide the lead responsible and interested agencies, special districts, local and State governmental agency decision makers, and the public with an analysis of potential environmental consequences to support informed decision making.

This Draft EIR has been prepared to identify, analyze, and mitigate, to the extent feasible, the potential environmental effects associated with construction and implementation of the uses allowed by the proposed the Mt. San Antonio College (Mt. SAC or college) 2018 Educational and Facilities Master Plan (proposed 2018 EFMP). This Draft EIR has been prepared pursuant to the requirements of CEQA (*California Public Resources Code,* Sections 21000 et seq.), and the Guidelines for the Implementation of CEQA (State CEQA Guidelines) (Title 14, *California Code of Regulations,* Chapter 3, Sections 15000 et seq.). Mt. SAC is the Lead Agency under CEQA and is responsible for preparing the Draft EIR. The determination that Mt. SAC is the "lead agency" is made in accordance with Sections 15051 and 15367 of the State CEQA Guidelines, which define the lead agency as the public agency that has the principal responsibility for carrying out or approving a project. Further, preparation of this Draft EIR is subject to Section 21080.09(d) of the California Public Resources Code, which requires that public higher education institutions consider the environmental impacts of academic and enrollment plans. The Mt. SAC Board of Trustees (Board) is empowered by the California State Constitution to be the policy-making body of the college, and the Board will ultimately determine whether to approve the proposed 2018 EFMP and certify the Final EIR.

A summary description of the proposed 2018 EFMP, the development that would be allowed by the proposed 2018 EFMP, and implementing actions needed are provided in Section 1.3, Project Description, below. A complete description of the proposed Project is provided in Section 3.0, Project Description.

This Draft EIR serves as the primary environmental document for all entitlements associated with the proposed 2018 EFMP, including all discretionary approvals requested or required to implement the Project, as further discussed in Section 3.6, Intended Uses of this Draft EIR. Proposed Phase 1Aand 1B components of the proposed 2018 EFMP, as described in Section 3.0, Project Description, which are anticipated to be constructed over the next few years, are being evaluated in this EIR at a "project level" and include development of the Student Center and Central Campus Infrastructure, Parking Structure R and Tennis Courts, Parking Structure S and West Temple Avenue Pedestrian Bridge, and the Sand Volleyball Courts and Parking Lot W Reconstruction (Phase 1A); and Bookstore (Phase 1B). The proposed Project buildout of Phases 1A, 1B, and 2 of the proposed 2018 EFMP is being evaluated at a "program level". Additional information about the purposes of the Draft EIR is provided in Section 2, Introduction, of this Draft EIR. Mt. SAC has reviewed and revised all submitted drafts, technical studies, and reports as needed for consistency with Mt. SAC regulations and policies, and this Draft EIR reflects its own independent judgment. Preparation of this Draft EIR included reliance on appropriate Mt. SAC technical personnel and review of all technical subconsultant reports.

This Executive Summary has been prepared in accordance with Section 15123(b) of the State CEQA Guidelines, which states that an EIR should contain a brief summary of the proposed actions and its consequences and should identify (1) each significant effect with proposed mitigation measures and alternatives that would reduce or avoid that effect; (2) areas of controversy known to the Lead Agency; and (3) issues to be resolved, including the choice among alternatives and how to mitigate significant effects.

1.2 PROJECT LOCATION AND SETTING

The Mt. San Antonio College (Mt. SAC or college) campus is located in the southeastern part of Los Angeles County in the City of Walnut (refer to Exhibit 3-1, Regional and Local Vicinity Map, in Section 3.0, Project Description of this Draft EIR). The campus encompasses 418.44 acres (comprised of 3 parcels) and is located north and south of Temple Avenue east of Grand Avenue, with the "West Parcel" located west of Grand Avenue and south of Amar Road/Temple Avenue. Mountaineer Road and Edinger Way form the northern boundary of the campus and the eastern boundary is consistent with the City of Walnut's eastern boundary. The California State Polytechnic University (Cal Poly) Pomona is located immediately east of the campus. The Mt. SAC campus is approximately 1.8 miles west of State Route (SR)-57, 1.0 mile south of Interstate (I)-10, and 0.9 mile north of SR-60. Exhibit 3-1 depicts the regional and local vicinity of the campus.

A general description of the current environmental setting for the campus is provided in Section 3.2, Environmental Setting, of this Draft EIR, with more detailed information for each topical issue provided in Sections 4.1 through 4.16). The *Mt. San Antonio College 2012 Facilities Master Plan Campus Final Program EIR* (SCH 2002041161) was certified by the Board of Trustees in December 2013. Subsequently, the Board of Trustees approved the 2015 Facilities Master Plan Update (FMPU) in October 2016. In summary, the campus is currently developed with various educational (e.g., classrooms, class laboratories, athletics facilities) and support uses (offices, library, assembly and meeting rooms, child care, audiovisual, radio and television facilities), as allowed by the 2015 Facilities Master Plan Update (FMPU). Primary educational buildings and uses are located north of Temple Avenue and east of Grand Avenue on approximately 160 acres of gently sloping terrain. Agriculture buildings, facilities, and uses ("The Farm") are located on gently sloping and hilly areas covering approximately 70 acres, at the northeastern section of campus. The 10-acre wildlife sanctuary and an additional 16 acres of open space are located south of Temple Avenue near Grand Avenue, with a surface parking lot and athletic facilities located on a relatively flat 91-acre portion of campus area south of Temple Avenue and east of Grand Avenue. In addition, the southeastern section of campus (approximately 26 acres of hilly terrain) is preserved as a Land Use Management and Grazing Area. The campus areas west of Grand Avenue are undeveloped and include an area preserved as habitat for sensitive plant and animal species.

The City of Walnut filed lawsuits related to the environmental documentation and approval of the Mt. SAC Physical Education Project (PEP) and West Parcel Solar Project. In April 2018, Mt. SAC and the City of Walnut entered into a Memorandum of Agreement (MOA) that established mutual understanding of the scope of work for the West Parcel, the Stadium (PEP) Project, parking structures, and future projects at Mt. SAC. The MOA is included in Appendix A of this Draft EIR.

As further discussed in Section 4.1, Aesthetics, and Section 4.10, Land Use and Planning, of this Draft EIR, the area occupied by Mt. SAC east of Grand Avenue is zoned as Residential Planned Development (RPD)–61,700–0.6 DU with a Civic Center Overlay and the area west of Grand Avenue and south of Temple Avenue is zoned RPD–28,500–1.3 DU. Per Section 53094 of the California Government Code, Mt. SAC does not have to comply with the zoning regulations of the

City of Walnut since the City's current Planning and Zoning Ordinance does not make specific provisions for the location of public schools. The City is undertaking a zoning consistency process to create an Schools and Public Institutional (SPI) zone that would apply to the Mt. SAC campus and other schools and public institutional uses in the City, consistent with its SPI land use designation in the recently adopted 2018 *City of Walnut General Plan* (WGP), including development standards; permitted, conditionally permitted, and prohibited uses, and other regulations for the SPI zone. Relevant to the proposed 2018 EFMP, the campus area east of Grand Avenue is proposed to be rezoned to SPI. The proposed Zoning Code Amendment (ZCA) and Zone Change (ZC) were recommended by the Walnut Planning Commission to the City Council for approval on September 5, 2018. On January 9, 2019, The ZCA and ZC were presented to the Walnut City Council for review and the Council moved to continue the item until the settlement agreement between Mt. SAC and the City of Walnut is approved and enforceable. At this time the settlement agreement has not been finalized or approved by the governing bodies of Mt. SAC and the City. With adoption of the ZCA and ZC, which involves zoning the portion of the Mt. SAC campus east of Grand Avenue as Schools and Public Institutional zone, Mt. SAC would be required to comply with established zoning regulations. For educational facilities, the Mt. SAC Board of Trustees may exempt Mt. SAC from the City's zoning requirements, pursuant to the provisions of CGC Section 53094(b).

Additionally, as further discussed in Section 4.3, Biological Resources, of this Draft EIR, developed and/or disturbed areas dominate the campus; however, portions of the campus contain naturally vegetated areas. These areas include the Mt. SAC Wildlife Sanctuary, the hills that support running and athletic trails, and the hills leading to the adjacent water storage tanks. The proposed 2018 EFMP would occur in predominantly developed areas that contain sparse, ornamental vegetation subject to heavily landscaped activities. The portions of the proposed Project that will occur in naturally vegetated areas, totaling approximately 105.26 acres, is limited to those areas identified for future development and/or improvements associated with buildout of Phases 1A, 1B and 2 of the proposed 2018 EFMP. One special status plant species was observed during the general survey: southern California black walnut. No special status wildlife species were observed during the general survey.

No jurisdictional waters are anticipated to be impacted. Measures to avoid indirect impacts to any adjacent drainages are discussed in Section 4.9, Hydrology and Water Quality, of this Draft EIR.

The campus is expected to support local wildlife movement exclusively, with no potential for regional wildlife movement. Implementation of the proposed 2018 EFMP is not expected to further limit local wildlife movement on site due to the lack of any new substantial obstructions resulting from proposed Project implementation. Indirect effects on movement such as increased night lighting, increased noise, or other increases associated with increased human activity would be considered negligible and unlikely to further degrade the quality of the open spaces on site and other local travel routes used by wildlife in the campus.

1.3 PROJECT DESCRIPTION

The proposed 2018 EFMP involves facilities and site and infrastructure improvements anticipated to occur with implementation of the proposed 2018 EFMP 10-year horizon period (Phases 1A, 1B, and 2). The proposed Project components include Buildings/Facilities, Vehicular Circulation and Parking, Bicycle and Pedestrian Circulation, Open Space, Public Art, Wayfinding/Signage, Lighting, Natural Habitat and Urban Forest, Sustainable Practices/Energy, Utility Infrastructure and Construction Activities.

The proposed 2018 EFMP identifies the framework for the uses and development of land on campus necessary to accommodate an identified level of enrollment and physical development. However, enrollment decisions and the actual implementation of specific capital projects are influenced by multiple factors, including funding decisions, demographics, and other factors external to the proposed 2018 EFMP process. Thus, while the proposed 2018 EFMP identifies the physical resources necessary to meet Mt. SAC's mission and its long-range development plans, it makes no commitments regarding the timing for achieving identified enrollment projections or implementing physical development. The current and proposed Mt. SAC Land Use Plans are shown on Exhibit 3-3 of this Draft EIR. As shown, the proposed Mt. SAC Land Use Plan anticipates future development in six zones on campus: Primary Educational Zone, Athletics and Support Zone, Agricultural Zone, Wildlife Sanctuary/Open Space Zone, Land Management and Athletics Zone, and Agricultural/Sustainable Development Zone. These zones are further described in Section 4.10, Land Use and Planning, of this Draft EIR.

Assumptions regarding the rate of growth and potential phasing of the proposed physical development are presented in Section 3.5.2, Growth Projections, of this Draft EIR for planning and analysis purposes. In summary, the proposed 2018 EFMP generally has a planning horizon of approximately 10 years (through 2027) and anticipates an increase in the unduplicated student headcount from 37,864 students in fall 2017 to between 40,802 and 42,745 students in fall 2027 (based on estimated medium and high growth rates). For analysis purposes, the phases and timeframes are assumed as Phase 1A – 2019 to 2021, Phase 1B – 2022 to 2025, and Phase 2 – 2025 to 2027.

As identified on Table 3-1, 2018 Educational and Facilities Master Plan Statistical Summary (Phases 1A, 1B and 2) of this Draft EIR, with implementation of the proposed 2018 EFMP: 33 aged and/or temporary facilities (approximately 207,805 gsf of building space) would be removed/demolished; 13 new buildings (approximately 752,000 gsf), including 10 major buildings would be constructed; up to four parking structures would be constructed; and 9 buildings (405,023 gsf) would be renovated. Therefore, should the proposed 2018 EFMP be fully implemented, there would be approximately 2,474,053 gsf of building space on campus (including the previously approved Physical Education Project [PEP]). This represents a net increase of approximately 766,925 gsf compared to existing conditions when taking into consideration the PEP, and a net increase of approximately 544,195 gsf when considering the proposed development under Phases 1A, 1B and 2 of the proposed 2018 EFMP. The proposed 2018 Facilities Master Plan is presented in Exhibit 3-4 of this Draft EIR.

The proposed 2018 EFMP identifies vehicular circulation, parking, and non-vehicular circulation improvements for the campus. The recommended approach for additional parking includes improving existing surface parking lots to increase capacity and circulation flow and building up to four new parking structures. The recommended approach to on-campus vehicular circulation keeps vehicles on the outer portions of campus, thus helping to separate pedestrian and vehicular circulation and reserve the academic core of campus for pedestrians. Improvements to campus vehicular circulation, emergency/service access, campus parking (surface and parking structures), bicycle circulation, and pedestrian circulation (including pedestrian bridges) are described in Sections 3.5.4 and 3.5.5 of this Draft EIR.

In addition to the demolition and renovation of existing buildings, construction of new buildings, and parking and circulation components, implementation of the proposed 2018 EFMP would include athletic facilities, enhanced open space areas and public art, implementation of an Urban Forest Initiative, infrastructure improvements, and utility infrastructure and roadway improvements at the Farm Precinct.

Further, as described in Section 3.5.8, Sustainability Practices/Energy of this Draft EIR, the Mt. SAC Board of Trustees adopted the 2018 Climate Action Plan (2018 CAP) to guide the campus towards becoming a more sustainable institution, and to prepare students to engage in finding solutions to the college's environmental challenges. The 2018 CAP articulates the vision, goals, and strategies which will move Mt. SAC to become a sustainable campus with net-zero carbon emissions and has been developed in coordination with campus stakeholders to ensure that it meets the various needs of the campus. In addition to compliance with applicable goals set forth in the 2018 CAP, Mt. SAC has committed to the sustainable strategies/practices during the 10-year planning period for the proposed 2018 EFMP.

As discussed previously, certain projects in Phases 1A and 1B are being evaluated at a "project-specific level" as described in Section 3.0, Project Description of this Draft EIR, and include development of the Student Center and Central Campus Infrastructure, Parking Structure R and Tennis Courts, Parking Structure S and West Temple Avenue Pedestrian Bridge, and Sand Volleyball Courts and Parking Lot W Reconstruction (Phase 1A); and Bookstore (Phase 1B). Impacts resulting from construction and operation of the proposed 2018 EFMP as a long-range planning and development plan at a "program level" (Phases 1A, 1B and 2), including components that were included in previous Facilities Master Plans but not yet implemented.

As further discussed in Section 2, Introduction of this Draft EIR, it is not anticipated that Phase 3 components of the proposed 2018 EFMP would be built during the 10-year horizon period; therefore, they are not being evaluated in this Draft EIR. Implementation of Phase 3 components of the proposed 2018 EFMP would be subject to separate environmental review pursuant to CEQA; however, they are considered in the cumulative impacts analysis in this Draft EIR and are described in Section 4.0, Introduction to the Environmental Analyses, of this Draft EIR.

1.4 PROJECT ALTERNATIVES

CEQA requires an evaluation of the comparative effects of a reasonable range of alternatives to the proposed Project that would feasibly attain most of the proposed 2018 EFMP's basic objectives and would avoid or substantially lessen any of the significant impacts of the proposed Project (Title 14, *California Code of Regulations* [CCR] Section 15126.6). A feasible alternative is one that can be accomplished successfully in a reasonable period of time, taking economic, legal, social, and technological factors into consideration (14 CCR 15126.6). The range of alternatives is governed by the "rule of reason" that requires the Draft EIR to set forth only those alternatives necessary to permit a reasonable choice.

Section 5.0, Alternatives, of this Draft EIR, addresses alternatives to reduce the proposed 2018 EFMP's potential impacts that have been identified as significant and unavoidable. Specifically, these include impacts related to Cultural Resources and Transportation/Traffic. Section 5.0 provides descriptions of each alternative, a comparative analysis of the potential environmental effects of each alternative to those associated with the proposed 2018 EFMP, and a discussion of each alternative's ability to meet the proposed Project objectives. The following is a summary description of the alternatives evaluated in this Draft EIR.

- **No Project/No Development.** This alternative assumes that no additional development would occur at the Mt. SAC campus. This No Project alternative is evaluated in accordance with Section 15126.6(e)(3).
- **Medium Growth Rate Alternative.** The purpose of this alternative is primarily to reduce the amount of traffic generated by the proposed 2018 EFMP. As discussed in Section 3.0, Project Description, Mt. SAC projects that its annual growth rate will range between 0.18 and 1.22 percent, with a mid-point of 0.75 percent. For purposes of analysis, this Draft

EIR analyzes the high growth rate of 1.22 percent, therefore this alternative involves implementation of the proposed 2018 EFMP based on a medium growth rate of 0.75 percent. As noted in Table 3-2 of the Project Description, the full-time equivalent students (FTES) is projected to increase from 13,185 during the fall semester of 2017 to 14,237 FTES under the medium growth rate, compared to 15,055 students under a high growth rate in the fall semester of 2027. The unduplicated headcount is projected to increase from 37,864 students (during the fall semester of 2017) to 40,802 students under a medium growth rate, compared to 42,745 students under a high growth rate in the fall semester of 2027. Under this alternative, the increase in daily traffic resulting from the proposed Project for the 2027 horizon year would be reduced from 5,613 daily trips with the proposed 2018 EFMP, to approximately 3,379 daily trips.

The Medium Growth Rate Alternative would continue to construct new and renovate existing buildings and structures, thus resulting in a similar impact footprint. The primary difference in anticipated projects would be the need for less parking which could result in smaller structures or elimination of one or more parking structures.

As required by CEQA, Section 5.0 also identifies alternatives considered but eliminated from the detailed analysis and the environmentally superior alternative. Alternatives that were considered and eliminated from detailed analysis include: Alternative Site, Mt. SAC Historic District Retention, and 2015 Facilities Master Plan Update.

1.5 ISSUES TO BE RESOLVED

Section 15123(b)(3) of the State CEQA Guidelines requires that a Draft EIR contain issues to be resolved, including the choice among alternatives and whether or how to mitigate significant impacts. With respect to the proposed 2018 EFMP, the major issues to be resolved by Mt. SAC, as the Lead Agency, include the following:

- Whether this environmental document adequately describes the environmental impacts of the proposed 2018 EFMP.
- Whether the recommended mitigation measures and proposed Project design features should be modified and/or adopted.
- Whether the benefits of the proposed Project override its significant adverse impacts, including impacts that cannot be mitigated to a level below significance after adoption of feasible mitigation measures.
- Whether there are other mitigation measures that should be applied to the proposed 2018 EFMP besides those identified in the Draft EIR.
- Whether there are any alternatives to the proposed Project that would substantially lessen any of its significant impacts while achieving most of the basic project objectives.

1.6 AREAS OF CONTROVERSY

Section 15123(b)(2) of the State CEQA Guidelines indicates that a Draft EIR summary should identify areas of controversy known to the Lead Agency, including issues raised by agencies and the public. This Draft EIR has taken into consideration the comments received from the public and various agencies in response to the Notice of Preparation (NOP) of this Draft EIR and through the scoping process. Written comments received during the NOP and scoping period are contained in Appendix A. Environmental issues that have been raised during opportunities for public input regarding the scope of the Draft EIR are summarized in Section 2.5, Public Review

Process, of this Draft EIR and are addressed in each relevant environmental issue area analyzed in Sections 4.1 through 4.16 of this Draft EIR.

It should also be noted that during the NOP public review period, Mt. SAC received a consultation request pursuant to Assembly Bill (AB) 52 from the Gabrieleño Band of Mission Indians – Kizh Nation.

The primary areas of controversy currently known to Mt. SAC that have been raised to date related to the implementation of the proposed 2018 EFMP are related to excavation and construction activities, traffic (construction and operation), and parking and circulation (including pedestrian, bicycle and vehicular). The recommended facilities and site and infrastructure improvements anticipated to occur with implementation of the proposed 2018 EFMP including construction activities, are described in Section 3.0, Project Description. Construction activities as they pertain to specific environmental topics are discussed for each topical issue in Sections 4.1 through 4.16. Potential traffic and parking impacts (including pedestrian and vehicular circulation) are addressed in Section 4.14, noise impacts are addressed in Section 4.11, and lighting impacts are addressed in Section 4.1, Aesthetics.

1.7 SUMMARY OF ENVIRONMENTAL IMPACTS FROM THE PROJECT

Pursuant to Sections 15126.2 and 15126.4 of the State CEQA Guidelines, a Draft EIR is required to identify any potentially significant adverse impacts and recommend mitigation that would eliminate or reduce these impacts to levels of less than significant. At the onset of the CEQA process, Mt. SAC determined that an EIR is required for the proposed 2018 EFMP and, as allowed by CEQA, did not prepare an Initial Study (refer to State CEQA Guidelines Sections 15060 and 15081). It was determined that, with the exception of agricultural resources (Farmland), forestry resources, and mineral resources, which do not exist on campus, implementation of the proposed 2018 EFMP could have potentially significant impacts for each of the remaining topical environmental issues identified in the environmental checklist included in Appendix G to the State CEQA Guidelines. This Draft EIR focuses on those remaining environmental impact resource areas that are identified in the environmental checklist included in Appendix G to the State CEQA Guidelines The scope of the Draft EIR was further determined based upon comments received in response to the Notice of Preparation (NOP), and comments received at the public scoping meeting held by Mt. SAC. Based on the determination by Mt. SAC and input received during the scoping process, the environmental issue areas identified for study in this Draft EIR are:

- Aesthetics,
- Air Quality,
- Biological Resources,
- Cultural Resources,
- Energy
- Geology and Soils,
- Greenhouse Gas Emissions,
- Hazards and Hazardous Materials and Wildfire
- Hydrology and Water Quality,
- Land Use and Planning,
- Noise,
- Population and Housing,
- Public Services and Recreation,
- Transportation/Traffic,
- Tribal Cultural Resources, and
- Utilities and Service Systems.

Sections 4.1 through 4.16 of this Draft EIR provide the required environmental analysis for these topical issues. Table 1-1 presents a summary of the thresholds analyzed; environmental impacts of the proposed 2018 EFMP; project-specific Mitigation Measures (MMs) that reduce any potentially significant impacts; and the level of significance of each impact after mitigation. Significant irreversible environmental changes and growth-inducing impacts, are addressed in Section 6.0, Other CEQA Considerations.

If Mt. SAC, as Lead Agency, determines that unavoidable significant adverse impacts will result from the proposed 2018 EFMP, Mt. SAC must prepare a Statement of Overriding Considerations before it can approve the proposed Project. A Statement of Overriding Considerations states that the decision-making body has balanced the benefits of the proposed 2018 EFMP against its unavoidable significant environmental effects and has determined that the benefits of the proposed Project outweigh the adverse effects and, therefore, the adverse effects are considered to be acceptable. Based on the analysis presented in the Draft EIR, implementation of the proposed 2018 EFMP (Phases 1A, 1B, and 2) would result in significant unavoidable impacts related to cultural resources and transportation/traffic. A Statement of Overriding Considerations would be required for the proposed 2018 EFMP.

TABLE 1-1
SUMMARY OF THRESHOLDS OF SIGNIFICANCE, PROJECT IMPACTS, MITIGATION, AND LEVEL OF SIGNIFICANCE AFTER MITIGATION

Thresholds of Significance	Project Impacts Prior to Mitigation		Mitigation Measures [MMs]	Level of Significance After Mitigation
	2018 Educational and Facilities Master Plan (Phases 1A, 1B, and 2)	Project-Specific		
Section 4.1 – Aesthetics				
Threshold 1.1: Would the project have a substantial adverse effect on a scenic vista?	Less than significant	Less than significant	No mitigation is required.	2018 Educational and Facilities Master Plan (Phases 1A, 1B, and 2) Less than significant Project Specific Less than significant.
Threshold 1.2: Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway?	No impact	No impact	No mitigation is required.	2018 Educational and Facilities Master Plan (Phases 1A, 1B, and 2) No impact Project Specific No impact
Threshold 1.3: 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?	Less than significant	Less than significant	No mitigation is required.	2018 Educational and Facilities Master Plan (Phases 1A, 1B, and 2) Less than significant Project Specific Less than significant.
Threshold 1.4: Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	Potentially significant	Potentially significant	**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.	2018 Educational and Facilities Master Plan (Phases 1A, 1B, and 2) Less than significant Project Specific Less than significant.
Section 4.2 – Air Quality				
Threshold 2.1: Would the project conflict with or obstruct implementation of the applicable air quality plan?	Potentially significant	Potentially significant	**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.	Less than significant

TABLE 1-1 (Continued)
SUMMARY OF THRESHOLDS OF SIGNIFICANCE, PROJECT IMPACTS, MITIGATION, AND LEVEL OF SIGNIFICANCE AFTER MITIGATION

Thresholds of Significance	Project Impacts Prior to Mitigation		Mitigation Measures [MMs]	Level of Significance After Mitigation
	2018 Educational and Facilities Master Plan (Phases 1A, 1B, and 2)	Project-Specific		
Threshold 2.2: Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	Construction Emissions Potentially significant Operational Emissions Less than significant	Construction Emissions Potentially significant Operational Emissions Less than significant	Please refer to **MM AQ-1** above.	Less than significant
Threshold 2.3: Would the project expose sensitive receptors to substantial pollutant concentrations?	Less than significant	Less than significant	No mitigation is required.	Less than significant
Section 4.3 – Biological Resources				
Threshold 3.1: Would the project have a substantial adverse effect, either directly or through habitat modification, 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?	Potentially significant	Potentially significant	**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 (Helix 2012). 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.	Less than significant

TABLE 1-1 (Continued)
SUMMARY OF THRESHOLDS OF SIGNIFICANCE, PROJECT IMPACTS, MITIGATION, AND LEVEL OF SIGNIFICANCE AFTER MITIGATION

Thresholds of Significance	Project Impacts Prior to Mitigation		Mitigation Measures [MMs]	Level of Significance After Mitigation
	2018 Educational and Facilities Master Plan (Phases 1A, 1B, and 2)	Project-Specific		
			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.	
Threshold 3.2: 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 U.S. Fish and Wildlife Service?	Potentially significant	Less than significant	Please refer to **MMs BIO-1 through BIO-3** above.	Less than significant.
Threshold 3.3: Would the project have a substantial adverse effect on state or federally protected (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	Less than significant	Less than significant	No mitigation is required.	Less than significant
Threshold 3.4: 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?	Less than significant	Less than significant	No mitigation is required.	Less than significant
Threshold 3.5: Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	Potentially significant	Less than significant	Please refer to **MM BIO-2** above.	Less than significant
Threshold 3.6: 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?	Less than significant	Less than significant	No mitigation is required.	Less than significant

TABLE 1-1 (Continued)
SUMMARY OF THRESHOLDS OF SIGNIFICANCE, PROJECT IMPACTS, MITIGATION, AND LEVEL OF SIGNIFICANCE AFTER MITIGATION

Thresholds of Significance	Project Impacts Prior to Mitigation		Mitigation Measures [MMs]	Level of Significance After Mitigation
	2018 Educational and Facilities Master Plan (Phases 1A, 1B, and 2)	Project-Specific		
Section 4.4 – Cultural Resources				
Threshold 4.1: Would the project cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	Potentially significant	Potentially significant	**MM CULT-1** Historic American Buildings Survey (HABS) documentation shall be implemented to reduce the significant impact on contributing resources to the Mt. SAC Historic District. An augment to the prior HABS documentation package shall be prepared to include all contributing resources within the Historic District not previously recorded. Specifically HABS documentation shall be prepared for Buildings 4, 7, 10, 11, 19A, 26A, 26B, 26C, 26D, 47, 48, F1, F2A, F2B, F3A, F4A, F5A, F7, G2, and the Wildlife Sanctuary: • **HABS Level II Narrative Historical Report.** As HABS documentation has been prepared for the historic district, this report would serve as an addendum to the extant documentation prepared consistent with *Historic American Buildings Survey Guidelines for Historical Reports* (National Park Service 2007). Prior to the demolition or renovation of resources contributing to the Mt. SAC Historic District, the college shall enlist the services of a qualified architectural historian to prepare an Addendum HABS Narrative Historical Report as well as California Department of Parks and Recreation (CA DPR) 523 forms that documents all contributing resources that were not previously documented. Documentation through HABS is an important measure because it allows documentation of the resource before alterations begin. Given the relative historic significance of the resources, Level II HABS is the recommended documentation standard, to be prepared in accordance with the Secretary of Interior Standards and Guidelines for Architectural and Engineering Documentation and HABS specific guidelines. A narrative historical report following the *Historic American Buildings Survey Guidelines for Historical Reports* (National Park Service 2007) should be prepared for the adversely impacted resources. All historic documents shall be made available to the public in the collection of the College's Library/Learning Technology Center. Facilities Planning & Management shall ensure compliance. • **HABS Level II Large-format Photographs.** A qualified HABS photographer shall provide photo-documentation that documents all contributing resources that were not previously documented. The photo-documentation shall be made available to the public in the collection of the College's Library/Learning Technology Center. The documentation shall be done in accordance with the Guidelines provided in the *Photographic Specifications: Historic American Building Survey, Historic American Engineering Record, Division of National Register Programs, National Park Service, Western Region*. Mt. SAC Facilities Planning & Management shall ensure compliance.	<u>2018 Educational and Facilities Master Plan (Phases 1A, 1B, and 2)</u> Significant and unavoidable <u>Project Specific</u> Significant and unavoidable for Student Center and Central Campus Infrastructure and Bookstore Less than significant for Parking Structure R and Tennis Courts and Sand Volleyball Courts and Parking Lot W Reconstruction

TABLE 1-1 (Continued)
SUMMARY OF THRESHOLDS OF SIGNIFICANCE, PROJECT IMPACTS, MITIGATION, AND LEVEL OF SIGNIFICANCE AFTER MITIGATION

Thresholds of Significance	Project Impacts Prior to Mitigation		Mitigation Measures [MMs]	Level of Significance After Mitigation
	2018 Educational and Facilities Master Plan (Phases 1A, 1B, and 2)	Project-Specific		
			• **HABS Level II Reproduction of select existing drawings (if available)** The college shall prepare archivally stable reproduction of original as-built drawings for all contributors that were not previously included in the HABS documentation. Reproductions of drawings shall be done in accordance with the *Secretary of the Interior's Guidelines for Architectural and Engineering Documentation*. Select existing drawings, where available, may be photographed with large-format negatives or photographically reproduced on Mylar or Vellum in accordance with the U.S. Copyright Act, as amended. Mt. SAC's Facilities Planning & Management shall ensure compliance. **MM CULT-2** Prior to demolition of any additional buildings that are contributors to the Mt. SAC Historic District, to recognize the history of Mt. SAC, interpretive sign(s) shall be established in one or adjacent to one of the major buildings in the historical heart of the campus, such as the new Library/Learning Resources or Student Center. The interpretative panels could utilize information from the HABS Level II Narrative Historical Report and large-format photographic documentation, as well as historical views of the campus. Mt. SAC Facilities Planning & Management shall ensure compliance.	
Threshold 4.2: Would the project cause a substantial adverse change in the significance of an archaeological resource as defined in Section 15064.5?	Potentially significant	Potentially significant	**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.	Less than significant.
Threshold 4.3: Would the project disturb any human remains, including those interred outside of formal cemeteries?	Less than significant	Less than significant	No mitigation is required.	Less than significant

TABLE 1-1 (Continued)
SUMMARY OF THRESHOLDS OF SIGNIFICANCE, PROJECT IMPACTS, MITIGATION, AND LEVEL OF SIGNIFICANCE AFTER MITIGATION

Thresholds of Significance	Project Impacts Prior to Mitigation		Mitigation Measures [MMs]	Level of Significance After Mitigation
	2018 Educational and Facilities Master Plan (Phases 1A, 1B, and 2)	Project-Specific		
Section 4.5 – Energy				
Threshold 5.1: Would the project result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	Less than significant	Less than significant	No mitigation is required.	Less than significant
Threshold 5.2: Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	Less than significant	Less than significant	No mitigation is required.	Less than significant
Section 4.6 – Geology and Soils				
Threshold 6.1(i): Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?	No impact	No impact	No mitigation is required	No impact
Threshold 6.1(ii): Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking?	Potentially significant	Potentially significant	**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** Prior to the approval of project plans by the Division of the State Architect (DSA), recommendations from the *Geotechnical Study Report Proposed Parking Structure at Parking Lot S Mt. San Antonio College Walnut, California* (October 23, 2017), *Geotechnical Study Report Proposed Student Center Building Mt. San Antonio College 1100 North Grand Avenue Walnut, California 91789* (October 5, 2017), and *Geotechnical Study Report Proposed Lot R Tennis and Parking Structure Mt. San Antonio College 1100 North Grand Avenue Walnut, California* (December 1, 2017) prepared by Converse Consultants 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.	Less than significant

TABLE 1-1 (Continued)
SUMMARY OF THRESHOLDS OF SIGNIFICANCE, PROJECT IMPACTS, MITIGATION, AND LEVEL OF SIGNIFICANCE AFTER MITIGATION

Thresholds of Significance	Project Impacts Prior to Mitigation		Mitigation Measures [MMs]	Level of Significance After Mitigation
	2018 Educational and Facilities Master Plan (Phases 1A, 1B, and 2)	Project-Specific		
Threshold 6.1(iii): Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction?	Potentially significant	Bookstore, Parking Structure R and Tennis Courts, Parking Structure S and West Temple Avenue Bridge Potentially significant Student Center and Central Campus Infrastructure Less than significant	Please refer to **MMs GEO-1 and GEO-2** above.	Less than significant
Threshold 6.1(iv): Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving landslides?	Potentially significant	Less than significant	Please refer to **MMs GEO-1 and GEO-2** above. **MM GEO-3** 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.	Less than significant
Threshold 6.2: Would the project result in substantial soil erosion or the loss of topsoil?	Potentially significant	Potentially significant	Please refer to **MM GEO-3** above. **MM HYD-2** Prior to the issuance of a grading permits for the Bookstore, Sand Volleyball Courts and Parking Lot W Reconstruction, Parking Structure R and Tennis Courts, Parking Structure S and West Temple Avenue Pedestrian Bridge, and Student Center and Central Campus Infrastructure projects, recommendations from the *Preliminary Low Impact Development Report (LID) For Mt SAC Parking Structure [S]* (September 14, 2018) prepared by BkF, *Preliminary Low Impact Development Report (LID) For Mt. SAC Student Center* (September 27, 2018) prepared by BkF, and *Storm Water Low Impact Development (LID) Report Athletic Complex East Storm Water Improvements* (August 30, 2018) prepared by Psomas shall be included in the site preparation and building design specifications.	Less than significant
Threshold 6.3: 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-site or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	Potentially significant	Bookstore and restroom building associated with Sand Volleyball Courts and Parking Lot W Reconstruction Potentially significant Student Center and Central Campus Infrastructure, Parking Structure R and Tennis Courts, and Parking Structure S and West Temple Avenue Pedestrian Bridge Less than significant	Please refer to **MMs GEO-1 through GEO-3** above.	Less than significant

TABLE 1-1 (Continued)
SUMMARY OF THRESHOLDS OF SIGNIFICANCE, PROJECT IMPACTS, MITIGATION, AND LEVEL OF SIGNIFICANCE AFTER MITIGATION

Thresholds of Significance	Project Impacts Prior to Mitigation		Mitigation Measures [MMs]	Level of Significance After Mitigation
	2018 Educational and Facilities Master Plan (Phases 1A, 1B, and 2)	**Project-Specific**		
Threshold 6.4: 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?	Potentially significant	Structure R and Tennis Courts, Parking Structure S and West Temple Avenue Pedestrian Bridge, and Bookstore Potentially significant Student Center and Central Campus Infrastructure, Sand Volleyball Courts and Parking Lot W Reconstruction Less than significant	Please refer to **MMs GEO-1 and GEO-2** above.	Less than significant
Threshold 6.5: Would the project have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	No impact	No impact	No mitigation is required	No impact
Threshold 6.6: Would the project directly or indirectly destroy a unique paleontological resource or site or unique geological feature?	Potentially significant	Student Center, Bookstore, and Parking Structure S and Pedestrian Bridge Potentially significant Parking Structure R and Tennis Courts and Sand Volleyball Courts and Parking Lot W Reconstruction Less than significant	**MM GEO-4** 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.	Less than significant

TABLE 1-1 (Continued)
SUMMARY OF THRESHOLDS OF SIGNIFICANCE, PROJECT IMPACTS, MITIGATION, AND LEVEL OF SIGNIFICANCE AFTER MITIGATION

Thresholds of Significance	Project Impacts Prior to Mitigation		Mitigation Measures [MMs]	Level of Significance After Mitigation
	2018 Educational and Facilities Master Plan (Phases 1A, 1B, and 2)	Project-Specific		
			e. Fossils with their contextual data must be deposited at a recognized museum or institution.	
Section 4.7 – Greenhouse Gas Emissions				
Threshold 7.1: Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	Potentially significant	Potentially significant	**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%.	Less than significant
Threshold 7.2: Would the project conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gas emissions?	Less than significant	Less than significant	No mitigation is required	Less than significant
Section 4.8 – Hazards and Hazardous Materials and Wildfire				
Threshold 8.1: Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials? **Threshold 8.2:** 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?	Less than significant	Less than significant	No mitigation is required	Less than significant
Threshold 8.3: 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?	Less than significant	Less than significant	No mitigation is required	Less than significant
Threshold 8.4: 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?	Less than significant	Less than significant	No mitigation is required	Less than significant
Threshold 8.5: For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	No impact	No impact	No mitigation is required	No impact
Threshold 8.6: Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	Less than significant	Less than significant	No mitigation is required	Less than significant

TABLE 1-1 (Continued)
SUMMARY OF THRESHOLDS OF SIGNIFICANCE, PROJECT IMPACTS, MITIGATION, AND LEVEL OF SIGNIFICANCE AFTER MITIGATION

Thresholds of Significance	Project Impacts Prior to Mitigation		Mitigation Measures [MMs]	Level of Significance After Mitigation
	2018 Educational and Facilities Master Plan (Phases 1A, 1B, and 2)	Project-Specific		
Threshold 8.7: Would the project expose people or structures to a significant risk of loss, injury, or death involving wildland fires? **Threshold 8.8:** Would the project substantially impair an adopted emergency response plan or emergency evacuation plan? **Threshold 8.9:** Would the project, 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? **Threshold 8.10:** Would the project 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? **Threshold 8.11:** Would the project expose people or structures to significant risks, including downslope or downstream flooding or landslide, as a result of runoff, post-fire slope instability, or drainage changes?	No impact	No impact	No mitigation is required	No impact
Section 4.9 – Hydrology and Water Quality				
Threshold 9.1: Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade water quality?	Potentially significant	Potentially significant	**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. **MM HYD-2** Prior to the issuance of a grading permits for the Bookstore, Sand Volleyball Courts and Parking Lot W Reconstruction, Parking Structure R and Tennis Courts, Parking Structure S and West Temple Avenue Pedestrian Bridge, and Student Center and Central Campus Infrastructure projects, recommendations from the *Preliminary Low Impact Development Report (LID) For Mt SAC Parking Structure [S]* (September 14, 2018) prepared by BkF, *Preliminary Low Impact Development Report (LID) For Mt. SAC Student Center* (September 27, 2018) prepared by BkF, and *Storm Water Low Impact Development (LID) Report Athletic Complex East Storm Water Improvements* (August 30, 2018) prepared by Psomas shall be included in the site preparation and building design specifications.	Less than significant

TABLE 1-1 (Continued)
SUMMARY OF THRESHOLDS OF SIGNIFICANCE, PROJECT IMPACTS, MITIGATION, AND LEVEL OF SIGNIFICANCE AFTER MITIGATION

Thresholds of Significance	Project Impacts Prior to Mitigation		Mitigation Measures [MMs]	Level of Significance After Mitigation
	2018 Educational and Facilities Master Plan (Phases 1A, 1B, and 2)	Project-Specific		
Threshold 9.2: 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?	Less than significant	Less than significant	No mitigation is required	Less than significant
Threshold 9.3(i): 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 result in substantial erosion or siltation on or off site? **Threshold 9.3(ii):** 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 substantially increase the rate or amount of surface runoff in a manner which would result in flooding on or off site? **Threshold 9.3(iii):** 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 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? **Threshold 9.3(iv):** 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 impede or redirect flood flows?	Less than significant	Less than significant	No mitigation is required	Less than significant
Threshold 9.4: In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	Less than significant	Less than significant	No mitigation is required	Less than significant
Threshold 9.5: Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	Less than significant	Less than significant	No mitigation is required	Less than significant
Section 4.10 – Land Use and Planning				
Threshold 10.1: Would the proposed project physically divide an established community?	No impact	No impact	No mitigation is required	No impact
Threshold 10.2: Would the proposed 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?	Less than significant	Less than significant	No mitigation is required	Less than significant

TABLE 1-1 (Continued)
SUMMARY OF THRESHOLDS OF SIGNIFICANCE, PROJECT IMPACTS, MITIGATION, AND LEVEL OF SIGNIFICANCE AFTER MITIGATION

Thresholds of Significance	Project Impacts Prior to Mitigation		Mitigation Measures [MMs]	Level of Significance After Mitigation
	2018 Educational and Facilities Master Plan (Phases 1A, 1B, and 2)	Project-Specific		
Section 4.11 – Noise				
Threshold 11.1: Would the project generate substantial temporary 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?	Potentially significant	Less than significant	**MM NOI-1** Prior to the first grading permit, the Project Applicant shall prepare a Construction Noise Management Plan to ensure that noise levels from project-related construction activities do not exceed 65 dBA L_{eq} at off-campus uses. The Construction Noise Management Plan shall identify which construction areas could be developed concurrently such that noise from these project areas do not exceed the established noise limit. The Construction Noise Management Plan shall identify measures to reduce construction related noise to off-campus uses, including, but not limited to: 1. Use of erected sound barriers or existing structures to minimize noise transmission. 2. Phasing of construction activities at project areas such that noisier construction phases shall not occur concurrently. 3. Phasing of concurrent project areas such that multiple construction areas shall not be located in close proximity to the same offsite use.	Less than significant
Threshold 11.2: Would the generate substantial 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?	Less than significant	Less than significant	No mitigation is required	Less than significant
Threshold 11.3: Would the project generate excessive groundborne vibration or groundborne noise levels?	Less than significant	Less than significant	No mitigation is required	Less than significant
Threshold 11.4: For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	No impact	No impact	No mitigation is required	No impact
Section 4.12 – Population and Housing				
Threshold 12.1: Would the project induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through the extension of roads or other infrastructure)?	Less than significant	Less than significant	No mitigation is required	Less than significant
Threshold 12.2: Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	No impact	No impact	No mitigation is required	No impact
Section 4.13 – Public Services and Recreation				
Threshold 13.1: Would the proposed project result in substantial adverse physical impacts associated with the provision of new or physically altered government facilities, need for new or physically altered government facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for fire protection?	Less than significant	Less than significant	No mitigation is required	Less than significant

TABLE 1-1 (Continued)
SUMMARY OF THRESHOLDS OF SIGNIFICANCE, PROJECT IMPACTS, MITIGATION, AND LEVEL OF SIGNIFICANCE AFTER MITIGATION

Thresholds of Significance	Project Impacts Prior to Mitigation		Mitigation Measures [MMs]	Level of Significance After Mitigation
	2018 Educational and Facilities Master Plan (Phases 1A, 1B, and 2)	Project-Specific		
Threshold 13.2: Would the proposed project result in substantial adverse physical impacts associated with the provision of new or physically altered government facilities, need for new or physically altered government facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for police protection?	Less than significant	Less than significant	No mitigation is required	Less than significant
Threshold 13.3: Would the proposed project result in substantial adverse physical impacts associated with the provision of new or physically altered government facilities, need for new or physically altered government facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for schools?	Less than significant	Less than significant	No mitigation is required	Less than significant
Threshold 13.4: Would the proposed project result in substantial adverse physical impacts associated with the provision of new or physically altered government facilities, need for new or physically altered government facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for other public facilities?	Less than significant	Less than significant	No mitigation is required	Less than significant
Threshold 13.5 Would the proposed 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?	Less than significant	Less than significant	No mitigation is required	Less than significant
Threshold 13.6: Would the proposed project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	Less than significant	Less than significant	No mitigation is required	Less than significant
Section 4.14 – Transportation/Traffic				
Threshold 14.1: Would the project conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadways, bicycle lanes and pedestrian facilities paths?	Existing Plus Project Potentially significant Interim Year 2021 Cumulative Plus Project Potentially significant Buildout Year 2027 Cumulative Plus Project Potentially significant Construction-Related Traffic Potentially significant	Existing Plus Project Potentially significant Interim Year 2021 Cumulative Plus Project Potentially significant Buildout Year 2027 Cumulative Plus Project Potentially significant Construction-Related Traffic Potentially significant	**MM TRA-1** Prior to the completion of new construction under the proposed 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	Existing Plus Project Significant and unavoidable Interim Year 2021 Cumulative Plus Project Significant and unavoidable Buildout Year 2027 Cumulative Plus Project Significant and unavoidable Construction-Related Traffic Less than significant

TABLE 1-1 (Continued)
SUMMARY OF THRESHOLDS OF SIGNIFICANCE, PROJECT IMPACTS, MITIGATION, AND LEVEL OF SIGNIFICANCE AFTER MITIGATION

Thresholds of Significance	Project Impacts Prior to Mitigation		Mitigation Measures [MMs]	Level of Significance After Mitigation
	2018 Educational and Facilities Master Plan (Phases 1A, 1B, and 2)	Project-Specific		
			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	

TABLE 1-1 (Continued)
SUMMARY OF THRESHOLDS OF SIGNIFICANCE, PROJECT IMPACTS, MITIGATION, AND LEVEL OF SIGNIFICANCE AFTER MITIGATION

Thresholds of Significance	Project Impacts Prior to Mitigation		Mitigation Measures [MMs]	Level of Significance After Mitigation
	2018 Educational and Facilities Master Plan (Phases 1A, 1B, and 2)	Project-Specific		
			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 proposed 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	

TABLE 1-1 (Continued)
SUMMARY OF THRESHOLDS OF SIGNIFICANCE, PROJECT IMPACTS, MITIGATION, AND LEVEL OF SIGNIFICANCE AFTER MITIGATION

Thresholds of Significance	Project Impacts Prior to Mitigation		Mitigation Measures [MMs]	Level of Significance After Mitigation
	2018 Educational and Facilities Master Plan (Phases 1A, 1B, and 2)	Project-Specific		
			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.	
Threshold 14.2: Would the project conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?	Less than significant	Less than significant	No mitigation is required	Less than significant
Threshold 13.3: Would the project substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	Less than significant	Less than significant	No mitigation is required	Less than significant
Threshold 13.4: Would the project result in inadequate emergency access?	Potentially significant	Potentially significant	Please refer to MMs TRA-3 through TRA-8 above.	Less than significant
4.15 Tribal Cultural Resources				
Threshold 15.1: 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 listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?	No impact	No impact	No mitigation is required	No impact

TABLE 1-1 (Continued)
SUMMARY OF THRESHOLDS OF SIGNIFICANCE, PROJECT IMPACTS, MITIGATION, AND LEVEL OF SIGNIFICANCE AFTER MITIGATION

Thresholds of Significance	Project Impacts Prior to Mitigation		Mitigation Measures [MMs]	Level of Significance After Mitigation
	2018 Educational and Facilities Master Plan (Phases 1A, 1B, and 2)	Project-Specific		
Threshold 15.2: Would the project Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is a 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?	Potentially significant	Potentially significant	**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.	
Section 4.16 – Utilities and Service Systems				
Threshold 16.1: 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 or relocation of which could cause significant environmental effects.?	Less than significant	Less than significant	No mitigation is required	Less than significant
Threshold 16.2: Would the project have insufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?	Less than significant	Less than significant	No mitigation is required	Less than significant
Threshold 16.3: 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?	Less than significant	Less than significant	No mitigation is required	Less than significant
Threshold 16.4: 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 goal?	Less than significant	Less than significant	No mitigation is required	Less than significant
Threshold 16.5: Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	Less than significant	Less than significant	No mitigation is required	Less than significant

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SECTION 2.0
INTRODUCTION

2.1 PURPOSE OF THIS ENVIRONMENTAL IMPACT REPORT

This Draft Environmental Impact Report (EIR) has been prepared to evaluate the potential environmental effects associated with implementation of the Mt. San Antonio College (Mt. SAC or college) 2018 Educational and Facilities Master Plan (proposed 2018 EFMP). As further described in Section 3.0, Project Description, of this Draft EIR, the proposed 2018 EFMP is Mt. SAC's long-range development plan and serves as the foundation for other components of the college's integrated planning process. Among other purposes, the proposed 2018 EFMP projects Mt. SAC's overall growth and the growth of programs and services during the planning horizon and develops recommendations for site and facilities improvements that are informed by educational planning. The proposed 2018 EFMP would involve the construction of new buildings, removal/demolition of aged and/or temporary facilities, renovations, and campus-wide site and infrastructure improvement projects.

This Draft EIR is prepared in accordance with the California Environmental Quality Act (CEQA) (*California Public Resources Code,* Sections 21000, et seq.), and the Guidelines for Implementation of CEQA (*State CEQA Guidelines*, *California Code of Regulations* (CCR)*,* Title 14, Sections 15000 et seq.). Mt. SAC is the Lead Agency under CEQA and is responsible for preparing the Draft EIR. The determination that Mt. SAC is the "lead agency" is made in accordance with Sections 15051 and 15367 of the State CEQA Guidelines, which define the lead agency as the public agency that has the principal responsibility for carrying out or approving a proposed Project. Further, preparation of this Draft EIR is subject to Section 21080.09(d) of the *California Public Resources Code,* which requires that public higher education institutions consider the environmental impacts of academic and enrollment plans. The Mt. SAC Board of Trustees (Board) is empowered by the California State Constitution to be the policy-making body of the college, and the Board will ultimately determine whether to approve the proposed 2018 EFMP and certify the Final EIR.

Mt. SAC has prepared this Draft EIR for the following purposes:

- To satisfy the requirements of CEQA (*California Public Resources Code,* Sections 21000–21178), and the State CEQA Guidelines (Title 14, CCR, Chapter 14, Sections 15000–15387)
- To inform the general public, the local community, responsible and interested public agencies, and the Board of the scope of the proposed 2018 EFMP and to communicate the potential environmental effects, measures to mitigate those effects, and alternatives to the proposed 2018 EFMP
- To enable the Board to consider environmental consequences when deciding whether to approve the proposed 2018 EFMP
- To serve as a source document for responsible agencies, including the City of Walnut, to issue permits and approvals, as required, for implementation of the proposed 2018 EFMP

As described in CEQA and the State CEQA Guidelines, public agencies are charged with the duty to avoid or substantially lessen significant environmental effects, where feasible. In satisfying this duty, a public agency has an obligation to balance the proposed Project's significant effects on the environment with its benefits, including economic, social, technological, legal, and other benefits. This Draft EIR is an informational document, the purpose of which is to identify the

potentially significant effects of the proposed 2018 EFMP on the environment and to indicate the manner in which those significant effects can be avoided or significantly lessened, to identify any significant and unavoidable adverse impacts that cannot be mitigated, and to identify reasonable and feasible alternatives to the proposed 2018 EFMP that would eliminate any significant adverse environmental effects or reduce the impacts to a less than significant level.

The lead agency is required to consider the information in the Draft EIR, along with any other relevant information, in making its decisions on a proposed Project. Although this Draft EIR does not determine the ultimate decision that will be made regarding approval of the proposed 2018 EFMP, CEQA requires the Board of Trustees to consider the information in the Draft EIR and make findings regarding each significant and unavoidable effect identified in the Draft EIR. Further, the Board of Trustees is required to adopt an Statement of Overriding Considerations for significant and unavoidable impacts. The Board of Trustees will review and consider certification of the Final EIR prior to any decision on whether to approve the proposed 2018 EFMP.

2.2 TYPE OF ENVIRONMENTAL IMPACT REPORT

This Draft EIR is intended to serve as the primary environmental document for all future entitlements associated with implementation of the proposed 2018 EFMP, including all discretionary approvals requested or required to implement the proposed Project. This Draft EIR analyzes the phased implementation of the proposed 2018 EFMP as a long-range planning and development plan at a program-level (Phases 1A, 1B, and 2), including components that were included in previous Facilities Master Plans but not yet implemented. It should be noted that it is not anticipated that Phase 3 components of the proposed 2018 EFMP would be built during the ten-year horizon period; therefore, with the exception of cumulative impacts, they are not being evaluated in this Draft EIR. Subsequent actions implementing the proposed 2018 EFMP will be reviewed as required by Section 21166 of the *California Public Resources Code* and Section 15162 of the State CEQA Guidelines. Section 15168 of the State CEQA Guidelines states:

> **15168. Program EIR**
>
> (a) General. A program EIR is an EIR which may be prepared on a series of actions that can be characterized as one large project and are related either:
>
> (1) Geographically,
>
> (2) As logical parts in the chain of contemplated actions,
>
> (3) In connection with issuance of rules, regulations, plans, or other general criteria to govern the conduct of a continuing program, or
>
> (4) As individual activities carried out under the same authorizing statutory or regulatory authority and having generally similar environmental effects which can be mitigated in similar ways.
>
> (b) Advantages. Use of a program EIR can provide the following advantages. The program EIR can:
>
> (1) Provide an occasion for a more exhaustive consideration of effects and alternatives than would be practical in an EIR on an individual action,
>
> (2) Ensure consideration of cumulative impacts that might be slighted in a case-by-case analysis,

(3) Avoid duplicative reconsideration of basic policy considerations,

(4) Allow the Lead Agency to consider broad policy alternatives and program-wide mitigation measures at an early time when the agency has greater flexibility to deal with basic problems or cumulative impacts, and

(5) Allow reduction in paperwork.

(c) Use with Later Activities. Subsequent activities in the program must be examined in the light of the program EIR to determine whether an additional environmental document must be prepared.

(1) If a later activity would have effects that were not examined in the program EIR, a new Initial Study would need to be prepared leading to either an EIR or a Negative Declaration.

(2) If the agency finds that pursuant to Section 15162, no new effects could occur or no new mitigation measures would be required, the agency can approve the activity as being within the scope of the proposed Project covered by the program EIR, and no new environmental document would be required.

(3) An agency shall incorporate feasible mitigation measures and alternatives developed in the program EIR into subsequent actions in the program.

(4) Where the subsequent activities involve site-specific operations, the agency should use a written checklist or similar device to document the evaluation of the site and the activity to determine whether the environmental effects of the operation were covered in the program EIR.

(5) A program EIR will be most helpful in dealing with subsequent activities if it deals with the effects of the program as specifically and comprehensively as possible. With a good and detailed analysis of the program, many subsequent activities could be found to be within the scope of the proposed Project described in the program EIR, and no further environmental documents would be required.

This Draft EIR has been prepared "with a sufficient degree of analysis to provide decision makers with information which enables them to make a decision which intelligently takes account of environmental consequences," as identified in Section 15151 of the State CEQA Guidelines. While detailed design information for all of the projects included in the proposed 2018 EFMP is currently not available, sufficient information is available: (1) to identify specific development sites and associated potential physical impact areas and construction assumptions; (2) to identify the maximum amount of development anticipated with each individual project associated with the proposed 2018 EFMP, as appropriate; and (3) to determine the size (e.g., square footage, height, and massing) of potential structures at each site, as necessary to accommodate the proposed 2018 EFMP uses. This level of information is sufficient to allow for an analysis of the assumed build-out scenario on campus and at the individual development sites. Therefore, while this is a program-level EIR, the intent of the Draft EIR is to provide sufficient detailed analysis such that future design approvals for individual projects are within the scope of the proposed 2018 EFMP described and analyzed in this Draft EIR. At the design approval stage, Mt. SAC will evaluate each individual project to determine whether it is within the scope of the program described and

evaluated in this Draft EIR and to determine what, if any, additional environmental documentation pursuant to CEQA is needed.

It should be noted that this Draft EIR is specifically analyzing the construction and operation of the following projects implementing the proposed 2018 EFMP at a project-specific level: Parking Structure R and Tennis Courts, Parking Structure S and West Temple Avenue Pedestrian Bridge, Student Center and Central Campus Infrastructure, Bookstore, and Sand Volleyball Courts and Parking Lot W Reconstruction. Pursuant to Section 15161 of the *State CEQA Guidelines*, a Project EIR examines the environmental impacts of a specific development project.

2.2.1 REVIEW OF AN ENVIRONMENTAL IMPACT REPORT

Mt. SAC, as lead agency, is responsible for processing and approving the proposed 2018 EFMP, associated discretionary actions, and will consider the information in this Draft EIR along with other information that may be presented during the CEQA process in their decision-making process. Other public agencies (i.e., responsible and trustee agencies) may also use this Draft EIR in their decision-making or permitting processes. The actions involved in the implementation of the proposed 2018 EFMP are described in Section 3.6, Intended Uses of this Draft EIR.

Upon certification of the Final EIR, the Board will consider whether to approve the proposed 2018 EFMP and associated discretionary actions. As a part of their consideration for approval of the proposed 2018 EFMP and associated actions, the Board must approve Findings of Fact and a Statement of Overriding Considerations for any significant and unavoidable impacts and adopt a Mitigation Monitoring and Reporting Program (MMRP).

2.3 SCOPE OF THIS DRAFT ENVIRONMENTAL IMPACT REPORT

At the onset of the CEQA process, Mt. SAC determined that an EIR is required for the project and, as allowed by CEQA, did not prepare an Initial Study (refer to State CEQA Guidelines Sections 15060 and 15081). It was determined that, with the exception of agricultural resources (Farmland), forestry resources, and mineral resources, which do not exist on campus, implementation of the proposed 2018 EFMP could have potentially significant impacts for each of the remaining topical environmental issues identified in the environmental checklist included in Appendix G to the State CEQA Guidelines. The scope of the EIR was further determined based upon comments received in response to the Notice of Preparation (NOP), and comments received at the public scoping meeting held by Mt. SAC. NOP comments and comments received at the scoping meeting are discussed below.

2.4 DOCUMENTS INCORPORATED BY REFERENCE

The following reports and/or studies are hereby incorporated by reference, along with the referenced data and information.

- *City of Walnut General Plan Update and West Valley Specific Plan Final Environmental Impact Report* (SCH No. 2017101010) certified May 2018. Relevant citywide and regional environmental setting information and applicable citywide goals and policies are discussed in this Draft EIR.
- *City of Walnut General Plan* adopted May 9, 2018 (Housing Element adopted February 2014) – Relevant environmental setting information, applicable citywide goals and policies, and applicable environmental impact conclusions are summarized in this Draft EIR to discuss existing conditions in the City, to address the project's consistency with the General Plan, and to assess potential cumulative impacts.

2.5 PUBLIC REVIEW PROCESS

In compliance with the *State CEQA Guidelines,* Mt. SAC has taken steps to provide opportunities for the public and other public agencies to participate in the environmental review process (as discussed below) and/or to provide input on the proposed 2018 EFMP and scope of this Draft EIR.

2.5.1 NOTICE OF PREPARATION

Mt. SAC distributed a Notice of Preparation (NOP) on September 5, 2018, for a 30-day review to 51 interested agencies, organizations, and individuals. In addition to a letter from the Governor's Office of Planning and Research (OPR) identifying that the NOP was transmitted to State agencies, a total of eight agencies and other interested parties responded to the NOP. The NOP and NOP comments are included in Appendix A and are on file at Mt. SAC's Facilities Planning and Management Department (see address in Section 2.4.3 below). It should also be noted that during the NOP public review period, Mt. SAC received a consultation request pursuant to Assembly Bill (AB) 52 from the Gabrieleño Band of Mission Indians – Kizh Nation. Table 2-1 includes a summary of the NOP comments received. The table also includes a column that identifies which section(s) of this Draft EIR address the individual comments.

TABLE 2-1
NOTICE OF PREPARATION COMMENT LETTERS RECEIVED

Agency	Date	Comments	Addressed in Section(s)
Governor's Office of Planning and Research (OPR)	September 5, 2018	Letter from OPR to State agencies transmitting the Notice of Preparation (NOP) and identifying the official 30-day public review period.	NA
California Department of Transportation (Caltrans)	October 4, 2018	• Caltrans encourages a sufficient allocation of fair share contributions toward multimodal and regional transit improvements and supports measures to increase sustainable mode shares, thereby reducing vehicle miles traveled (VMT). • Reduction of vehicle speed benefits pedestrians and bicycle safety and Caltrans provided examples of methods to accomplish this. • Warnings to motorists that they should expect to see and yield to pedestrians and additional roadway design features are supported by Caltrans. • Use of oversized transport vehicles on State highways during construction requires a Caltrans transportation permit. Caltrans recommends that large size truck trips be limited to off-peak commute hours. • The projects needs to be designed to discharge clean run-off water.	Section 4.9 Section 4.14
California Native American Heritage Commission	September 19, 2018	• An analysis of Tribal Cultural Resources is required as a separate category of cultural resources. • Consultation with California Native American tribes that are traditionally and culturally affiliated with the geographic area of the project is recommended; and a summary of the requirements of Assembly Bill (AB) 52 and Senate Bill (SB) 18, which address Native American tribal consultation, is provided. • Recommendations for cultural resources assessments are provided.	Section 4.4 Section 4.15
Southern California Association of Governments (SCAG)	October 4, 2018	• SCAG requests that the consistency of the proposed project with the 2016 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) goals be addressed, and RTP/SCS strategies provide guidance for considering the project in the context of these goals. • The most recently adopted growth forecasts should be used. • SCAG recommends that the 2016 RTP/SCS Final Program EIR Mitigation Measures be used for guidance, as appropriate.	Section 4.10 Section 4.12
South Coast Air Quality Management District (SCAQMD)	September 26, 2018	• Air quality (construction-related, operation-related, indirect sources) and greenhouse gas (GHG) emission impacts should be addressed and mitigation measures identified for significant impacts.	Section 3.6.2 Section 4.2 Section 4.7

TABLE 2-1
NOTICE OF PREPARATION COMMENT LETTERS RECEIVED

Agency	Date	Comments	Addressed in Section(s)
		• Pursuant to CEQA, alternatives should be considered for significant air quality impacts. • SCAQMD should be identified as a responsible agency if the project requires a permit from SCAQMD. • Sources of information are provided related to the air quality and GHG analyses to be used to meet its requirements and related to mitigation measures to be considered.	Section 4.8 Section 5
County of Los Angeles Fire Department	October 10, 2018	• The project must comply with all applicable code and ordinance requirements for construction, access, water mains, fire flows, and fire hydrants. • Specific requirements regarding access, parking on public fire apparatus access roads, and water system requirements are provided. • Potential impacts related to erosion control, watershed management, rare and endangered species, vegetation, fuel modification for Very High Fire Hazard Severity Zones or Fire Zone 4, archaeological and cultural resources, and the County Oak Tree Ordinance should be addressed.	Section 3.6.2 Section 4.4 Section 4.8 Section 4.13
County Sanitation Districts of Los Angeles County (Districts)	October 2, 2018	• The Districts maintain sewerage facilities within the project area, and approval to construct improvements within a Districts' sewer easement or over or near a Districts' sewer is required. • The wastewater flow from the campus would ultimately flow to the Districts' facilities, and wastewater generation information is provided. • Information regarding connection fees is provided. • The capacities of the Districts' wastewater treatment facilities are based on SCAG's regional growth projections. The Districts intend to provide service up to the levels that are legally permitted.	Section 4.16
City of Irwindale	September 17, 2018	The City has no comments.	NA
City of Walnut	October 3, 2018	• The EIR should describe the authority and responsibilities of Mt. SAC and the City of Walnut in the 2018 Memorandum of Agreement (MOA). The EIR should state the City's grading/draining plan administrative review and permit authority as well as other terms in the MOA regarding notification and consultation of future projects. • Pursuant to the MOA, a copy of the MOA should be included in the EIR and any short-term or long-term alternatives for the West Parcel Site should be included and evaluated in the EIR.	Section 3 Sections 4.1 through 4.16 Section 5

TABLE 2-1
NOTICE OF PREPARATION COMMENT LETTERS RECEIVED

Agency	Date	Comments	Addressed in Section(s)
		• Construction and operation of the Physical Education Complex (PEC) (PEP Phase 2), will overlap with other projects listed in the NOP during 2018-2027 time frame. Construction and operation of the PEC and other projects listed during the 2018-2027 time frame should be evaluated. • Traffic and circulation impacts of construction and operation of Parking Structures R and S should be evaluated with respect to other projects listed during 2018-2027 time frame. Identify any mitigation for significant impacts on Temple Avenue, Bonita Avenue, Grand Avenue, Valley Boulevard, and other City roadways. • Visual impacts of proposed rooftop tennis courts with lighting on Structure R and rooftop solar panels on Structure S should be evaluated. • The impact analysis for the Replacement Communication Tower should include a visual analysis from surrounding vantage points. • The EFMP should consider an Open Space designation for the different areas on campus that are used for open space purposes (e.g., wildlife preserve, buffer, passive and active recreation, West Parcel). • Cumulative impacts analysis should include projects contemplated under Phase 3 of the Long-Range Development Plan (LRDP) (post-2027). • The NOP does not identify any alternatives but Medium and High Growth Scenarios were identified at the NOP Scoping Meeting. The EIR should identify facility requirements, environmental impacts, and mitigation measures for these scenarios.	
Gabrieleño Band of Mission Indians – Kizh Nation	September 12, 2018	• The project area is located in a sensitive area relative to tribal cultural resources. • Potential impacts to tribal cultural resources should specifically be addressed pursuant to CEQA along with mitigation measures developed with tribal input during the AB 52 consultation process. • The Tribe requests consultation with Mt. SAC pursuant to AB 52.	Section 4.15

2.5.2 PUBLIC ENVIRONMENTAL IMPACT REPORT SCOPING MEETING

On September 19, 2018, Mt. SAC held a public scoping meeting at Mt. SAC to describe the proposed Project, answer questions, and seek public input regarding the proposed scope of the Draft EIR analysis. Notice of the scoping meeting was sent to 51 interested agencies, organizations, and individuals along with a copy of the NOP. The meeting was attended by four individuals including representatives from the City of Walnut, the City of Walnut's environmental consultant, and a representative from the United Walnut Taxpayers (UWT). Only the representative from United Walnut Taxpayers spoke at the scoping meeting; the comments received addressing the environmental analysis in the Draft EIR are summarized below; the section of the EIR where each issue is addressed is identified in parentheses, as applicable.

- **Parking.** There is a surplus of parking in the 2018 EFMP. This should be a consideration as the college continues to grow. (Section 3)
- **Traffic.** According to the recently adopted 2018 *City of Walnut General Plan*, the intersections at Temple Avenue and Grand Avenue, Temple Avenue and La Puente, and Temple and Valley Boulevard are all failing with a level of service (LOS) of F. The City is proposing additional housing, which will worsen conditions along Valley Boulevard, and should be a consideration in the Draft EIR. (Section 4.14)
- **Tennis Courts.** It appears that excavation of soil will be required. The Draft EIR should identify where this excavated soil will go. (Section 3)

The following comments were also made but do not address the scope of the environmental analysis in the Draft EIR.

- **Responsible and Trustee Agencies.** UWT would like to be a responsible or trustee agency, or the City of Walnut should be. The commenter indicated that this will allow UWT an opportunity to provide input if the Draft EIR appears insufficient or incorrect. It should be noted that UWT does not meet the definition of a responsible or trustee agency pursuant to Sections 15381 and 15386, respectively, of the State CEQA Guidelines. However, UWT has been included on the proposed Project distribution list and will receive the Notice of Availability of the Draft EIR in order to provide comments, and UWT will receive notice of future public hearings.
- **Statement of Overriding Considerations.** In general, the commenter disagrees with use of overriding considerations. It should be noted that pursuant to Section 15093 of the State CEQA Guidelines, if specific benefits of a proposed Project are found to outweigh the unavoidable adverse environmental effects, these effects may be considered acceptable. The decision-making agency shall bear the responsibility of making this determination.
- **Distribution.** The commenters suggested that the Draft EIR be distributed on flash drives instead of CDs/DVDs. As identified below, the Draft EIR will be distributed on flash drives.

2.5.3 PUBLIC REVIEW PERIOD.

The Draft EIR is being distributed via flash drive to numerous public agencies and other interested parties for review and comment. The Draft EIR is available at the on the Mt. SAC's website:

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

The Draft EIR is also available at the following locations:

Mt. San Antonio College
Library/Learning Technology Center, 2nd Floor, Room 226
1100 North Grand Avenue
Walnut, CA 91789

Walnut Public Library
21155 La Puente Road
Walnut, CA 91789

Pomona Public Library
625 South Garey Avenue
Pomona, CA 91769

Comments from all agencies and individuals on the Draft EIR will be accepted during the 45-day public review period, which opens on April 8, 2019, and closes on May 22, 2019. All comments on this Draft EIR should be sent to the following Mt. SAC contact:

Mikaela Klein, Senior Facilities Planner, Facilities Planning & Management
Facilities Planning & Management
Mt. San Antonio College
1100 North Grand Avenue
Walnut, California 91789-1399
facilitiesplanning@mtsac.edu

Following the close of the review period, Mt. SAC will prepare responses to all comments and will compile these comments and responses into a Final EIR. All responses to comments submitted on the Draft EIR by agencies will be provided to those agencies at least ten days prior to final action on the proposed 2018 EFMP. The Board will make findings regarding the extent and nature of the impacts, as depicted in the Final EIR. The Final EIR will need to be certified as complete by the Board prior to making a decision to approve or deny the proposed 2018 EFMP. Public input is encouraged at all public hearings.

SECTION 3.0
PROJECT DESCRIPTION

3.1 PROJECT LOCATION

The Mt. San Antonio College (Mt. SAC or college) campus is located in the City of Walnut, in Los Angeles County. The campus encompasses 418.44 acres (comprised of 3 parcels[1]) and is located north and south of Temple Avenue east of Grand Avenue, with the "West Parcel" located west of Grand Avenue and south of Amar Road/Temple Avenue. Mountaineer Road and Edinger Way from the northern boundary of the campus and the eastern boundary is consistent with the City of Walnut's eastern boundary. The California State Polytechnic University (Cal Poly) Pomona is located immediately east of the campus. The Mt. SAC campus is approximately 1.8 miles west of State Route (SR)-57, 1.0 mile south of Interstate (I)-10, and 0.9 mile north of SR-60. Exhibit 3-1 depicts the regional and local vicinity of the campus.

3.2 ENVIRONMENTAL SETTING

In conformance with Section 15125(a) of the California Environmental Quality Act (CEQA) Guidelines, an EIR must include a description of the physical environmental conditions from a local and regional perspective in the vicinity of the project, normally as they exist at the time the Notice of Preparation (NOP) is published. The environmental setting will normally constitute the baseline physical conditions by which a lead agency determines whether an impact is significant. This section provides a summary overview of the current regional and local setting of the Project. A detailed description of the environmental setting (baseline conditions), as required by CEQA, is provided in the Impact Analysis of Sections 4.1 through 4.16, which address individual environmental topics.

Planning Considerations

State Planning Context

Regulation of Local Agencies

In accordance with California Government Code (CGC) Section 53094, on September 5, 2018, the City of Walnut Planning Commission adopted PC Resolution No. 18-12 recommending that the City Council adopt Zone Code Amendment (ZCA) No. 2018.01, Zone Change (ZC) No. 2018-02, and Negative Declaration (ND) No. 2018-01 to establish the School and Public Institution Ordinance and Zone(s) for consistency with the adopted Walnut General Plan. Relevant components of the ZCA and ZC are included in the discussion under the City of Walnut. With adoption of the ZCA and ZC, which involves zoning the portion the Mt. SAC campus east of Grand Avenue as Schools and Public Institutional zone, the District would be required comply with established zoning regulations. For educational facilities, the Mt. SAC Board of Trustees may be exempt the District from the City's zoning requirements, pursuant to the provisions of CGC Section 53094(b).

Division of the State Architect

The State of California Department of General Services Division of the State Architect (DSA) issued policy PL 18-01 on November 26, 2018 which provides clarification of the requirements for

[1] Assessor Parcel No. (APN) 8709-023-917 south of Temple Avenue, and APNs 8710-002-900 and 8710-002-905 north of Temple Avenue.

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Local and Regional Vicinity Map

Exhibit 3-1

Mt. SAC 2018 Educational and Facilities Master Plan EIR

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DSA approval of plans and certification of construction for state-owned, state-leased or privately-owned towers and poles used for communication, antenna, and equipment mounted on the towers, poles, and buildings.

Regional Planning Context

As further discussed in Section 4.10, Land Use and Planning, of this Draft EIR, with respect to regional planning, SCAG is the Metropolitan Planning Organization (MPO) for six counties: Los Angeles, Orange, San Bernardino, Riverside, Ventura, and Imperial. The region encompasses a population exceeding 19 million persons in an area of more than 38,000 square miles. As the designated MPO, the federal government mandates SCAG to research and draw up plans for transportation, growth management, hazardous waste management, and air quality. Among other responsibilities, SCAG reviews EIRs for projects of regional significance for consistency with approved regional plans. SCAG uses Section 15206 of the State CEQA Guidelines to determine if a project is regionally significant.

Mt. SAC's service area covers 189 square miles, and approximately 40 percent of students reside outside this service area. Implementation of the proposed 2018 EFMP would lead to 544,195 square feet of additional floor area on campus. The proposed development and campus improvements under the proposed 2018 EFMP have the potential to cause significant effects (e.g., generating traffic or contributing to pollutant emissions) on the environment that could extend beyond the City of Walnut where the project would be located. Thus, the proposed 2018 EFMP is considered regionally significant.

As such, the regional plan that is most relevant to the proposed 2018 EFMP is the 2016–2040 RTP/SCS, approved on April 7, 2016. In addition to meeting federal and State transportation planning requirements, the 2016–2040 RTP/SCS (an update to the 2012 RTP/SCS) includes a chapter to comply with California's Senate Bill (SB) 375 mandate for a regional SCS. Per SB 375, the RTP/SCS must outline growth strategies that better integrate land use and transportation planning and help reduce the State's greenhouse gas emissions from cars and light trucks.

The 2016–2040 RTP/SCS identifies "High Quality Transit Areas" (HQTAs), which are places where people live in compact communities and have ready access to a multitude of safe and convenient transportation alternatives to driving alone—including walking and biking, taking the bus, light rail, commuter rail, the subway, and/or shared mobility options. As shown in Exhibit 4.10-1, Mt. SAC is wholly within a HQTA that extends along Temple Avenue.

The Project site is not located within the boundary of an Airport Land Use Plan or within two miles of a public airport or public use airport (refer to Section 4.8, Hazards and Hazardous Materials).

Local Planning Context

Mt. San Antonio College

2008–2009 Educational Master Plan

Educational Master Plans (EMPs) consider the current space and personnel status for a campus and project future needs in both categories. The current Educational Master Plan (EMP) for Mt. SAC is the 2008-2009 Educational Master Plan, which was developed for the purpose of projecting the college's programs and services needs to the year 2020.

The 2008–2009 EMP serves as the foundation for the District's other planning activities. The EMP looks at the demographic characteristics and economic conditions of the existing and projected population and enrollment. This information is then translated to program changes, service needs, staffing requirements, and space qualifications. Based on these, the EMP makes recommendations on the educational programs and services and facilities needed to meet enrollment and personnel projections, improvements to spaces and facilities (including new facilities, modifications to existing facilities, and maintenance needs), and refinements to the planning and research process. The EMP specifically provides the information on enrollment and personnel projections and program and space needs for use in the District's Facilities Master Plan. The 2008–2009 projected an enrollment (headcount) of 31,984 students by fall 2020 (Mt. SAC. For comparison, Mt. SAC's student enrollment in fall 2017 was 37,864 students.

The 2015 Addendum to the 2008–2009 EMP addresses the Agricultural Sciences Department instructional programs at The Farm. It looks at existing enrollment and projected growth, identifies department facilities and needs, evaluates instructional programs, acknowledges emergent issues in agriculture, and provides recommendations to strengthen the programs and improve facilities.

Facilities Master Plans

As further discussed in Section 4.10, Land Use and Planning, of this Draft EIR, Facilities Master Plans (FMP) were previously prepared for Mt. SAC in 2002, 2005, 2008 and 2012, and each of these FMPs were subject to environmental review pursuant to the California Environmental Quality Act (CEQA). The Mt. San Antonio College 2012 Facilities Master Plan Campus Final Program EIR (SCH 2002041161) was certified by the Board of Trustees in December 2013. Subsequently, the Board of Trustees approved the 2015 Facilities Master Plan Update (FMPU) in October 2016. The 2015 FMPU revised the land plan included in the 2012 FMP, to further define prior projects that had not been constructed, to provide future facilities corresponding to the college enrollment projections prepared by the California Community College Chancellor's Office, and to evaluate several new projects not included in the 2012 FMP (Mt. SAC 2016a, 2016b). The *2015 Facilities Maser Plan Update and Physical Education Project Final Subsequent/Program/Project EIR* (FMPU/PEP 2016 SEIR) evaluated the 2015 FMPU at a program-level, and Phases 1 and 2 of the Physical Education Projects (PEP) at a project-level.

City of Walnut General Plan

The City of Walnut General Plan was subject to a comprehensive update and the new General Plan was adopted on May 9, 2018. The update acknowledged the need for coordination with the District on campus development projects and compatibility with adjacent land uses. The new General Plan establishes a vision for the City and serves as the City's policy framework for decision-making. It reflects the values of residents, business owners, and elected officials and includes a comprehensive strategy to achieve its vision. The General Plan consists of seven chapters that correspond to the elements required by State law.[2]

The Land Use Plan in the General Plan includes a Schools and Public Institutional (SPI) land use designation for public and quasi-public uses such as schools (public and private), colleges, universities, libraries, fire and police stations, water reservoir sites, and the City Hall complex. The campus area occupied by Mt. SAC east of Grand Avenue is designated as SPI and the campus

[2] The seven elements mandated by State law are Land Use, Circulation, Housing, Conservation, Open Space, Noise, and Safety.

area west of Grand Avenue is designated as Very Low Density Residential. Exhibit 4.10-2 shows the land use designations for areas on and near the campus.

City of Walnut Planning and Zoning Ordinance

Chapter 6.08 of Title 6, Planning and Zoning, of the Walnut Municipal Code includes the City's Zoning Provisions, which regulate development in the City. It establishes zones in a zoning map and includes development standards (e.g., building setbacks, building height, yards, vision clearance, lot area), permitted principal, accessory, and conditional uses; parking requirements; sign standards; and reviews, licenses, and permits needed to comply with the applicable zone. Based on the current Zoning Map, the area occupied by Mt. SAC east of Grand Avenue is zoned as Residential Planned Development (RPD)–61,700–0.6 DU with a Civic Center Overlay and the area west of Grand Avenue and south of Temple Avenue is zoned RPD–28,500–1.3 DU. The number after the zone is the minimum lot area and the suffix is the allowable overall net acre density (Walnut 2018b). Chapter 6.24, RPD Residential Planned Development Zone of the Code includes the permitted uses and guidelines for the RPD zone.

Memorandum of Agreement Between the City of Walnut and Mt. SAC

The City of Walnut filed lawsuits related to the environmental documentation and approval of the Mt. SAC Physical Education Project (PEP) and West Parcel Solar Project. In April 2018, Mt. SAC and the City of Walnut entered into a Memorandum of Agreement (MOA) that established mutual understanding of the scope of work for the West Parcel, the Stadium (PEP) Project, parking structures, and future projects at Mt. SAC. The MOA is included in Appendix A of this Draft EIR.

Regional Setting

The Mt. San Antonio College (Mt. SAC or college) campus is located in the southeastern part of Los Angeles County in the City of Walnut. The campus encompasses 418.44 acres (comprised of 3 parcels) and is located north and south of Temple Avenue east of Grand Avenue, with the "West Parcel" located west of Grand Avenue and south of Amar Road/Temple Avenue. Mountaineer Road and Edinger Way form the northern boundary of the campus and the eastern boundary is consistent with the City of Walnut's eastern boundary. The California State Polytechnic University (Cal Poly) Pomona is located immediately east of the campus. The Mt. SAC campus is approximately 1.8 miles west of State Route (SR)-57, 1.0 mile south of Interstate (I)-10, and 0.9 mile north of SR-60. Exhibit 3-1 depicts the regional and local vicinity of the campus. As discussed in Section 4.6, Geology and Soils, of this Draft EIR, the Mt. SAC campus is located in the San Jose Hills along the western edge of the Pomona Valley within the Transverse Ranges geomorphic province of California and along the northern terminus of the Peninsular Ranges Province. The Pomona Valley is located at the junction of the two major convergent fault systems: (1) northwest-trending high angle strike-slip faults of the San Andreas system projecting from the northern terminus of the Peninsular Ranges Province, and (2) east-trending low-angle reverse or reverse-oblique faults bounding the south margin of the Transverse Ranges. The Pomona Valley basin is bound to the north by the San Jose fault and to the southwest by the Chino-Central Avenue fault. These two fault systems do not exhibit significant evidence of surface movement within Holocene time (0-11,700 years before present) and are not considered active based on current geologic information. The San Jose and Chino-Central Avenue faults are considered Late Quaternary age faults, having exhibited displacement and movement within the past approximately 130,000 years.

As discussed in Section 4.9, Hydrology and Water Quality, of this Draft EIR, the Mt. SAC campus is located within the San Gabriel River Watershed, discharging to San Jose Creek prior to

discharging to Reach 3 of the San Gabriel River, and located within the San Gabriel River Watershed Management Area (SGRWMA). Approximately 93 percent of the City of Walnut drains to the south, due to the topography and location of the San Jose Hills and is tributary to the San Jose Creek. Stormwater and non-stormwater runoff is captured by catch basins and carried through a network of storm drains and open channels to multiple outfalls connected to San Jose Creek. San Jose Creek transports runoff approximately 12 miles to its convergence point with San Gabriel River Reach 3, which ultimately drains to the Pacific Ocean

Local Setting

Mt. SAC Campus

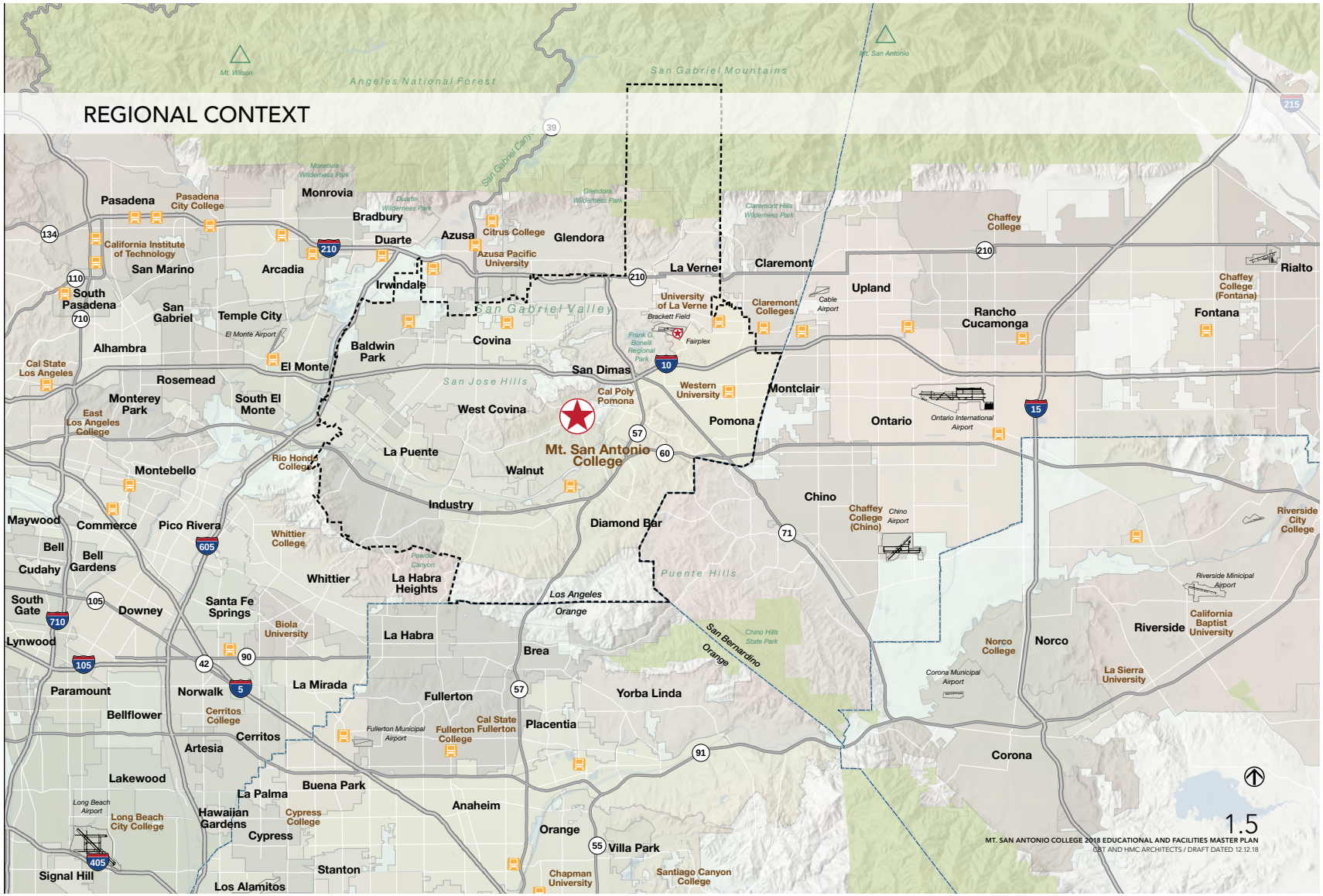
The Mt. SAC campus encompasses 418.44 acres located north and south of Temple Avenue east of Grand Avenue, with the "West Parcel" located west of Grand Avenue and south of Amar Road/Temple Avenue. Mountaineer Road and Edinger Way form the northern boundary of the campus and the eastern boundary is consistent with the City of Walnut's eastern boundary. Exhibit 4.10-3 provides an aerial photograph of the campus and surrounding areas and Exhibit 3-2 depicts the district boundaries.

Exhibit 3-3, depicts the current land use zones at Mt. SAC. With respect to physical development, the campus is currently developed with various educational (e.g., classrooms, class laboratories, athletics facilities) and support uses (offices, library, assembly and meeting rooms, child care, audiovisual, radio and television facilities), as allowed by the 2015 FMPU. Primary educational buildings and uses are located north of Temple Avenue and east of Grand Avenue on approximately 160 acres of gently sloping terrain. Agriculture buildings, facilities, and uses ("The Farm") are located on gently sloping and hilly areas covering approximately 70 acres, at the northeastern section of campus. The 10-acre wildlife sanctuary and an additional 16 acres of open space are located south of Temple Avenue near Grand Avenue, with a surface parking lot and athletic facilities located on a relatively flat 91-acre portion of campus area south of Temple Avenue and east of Grand Avenue. In addition, the southeastern section of campus (approximately 26 acres of hilly terrain) is preserved as a Land Use Management and Grazing Area. The campus areas west of Grand Avenue are undeveloped and include an area preserved as habitat for sensitive plant and animal species.

The existing buildings on campus include classroom buildings, art center, art gallery, performing arts center, gymnasium, café, bookstore, student service center, District offices, science buildings, planetarium, technology center, wellness center, central plant, greenhouses, conservatory, child development complex, barns, swine pens, vivarium, athletics buildings, storage buildings, and other support structures. Existing outdoor facilities include baseball, softball, soccer, and football fields, golf practice facility, amphitheater, wildlife sanctuary, rose garden, cactus pasture, equine pastures, other pastures, and surface parking lots. A network of internal roads and pathways provides access to various campus facilities.

Surrounding Land Uses

As shown on Exhibit 4.10-3, east of Grand Avenue single-family residential uses are adjacent to the campus to the north (Timberline development), south and southwest (Snow Creek). The City of Walnut eastern boundary is also the eastern boundary of the campus. The California Polytechnic University – Pomona (Cal Poly Pomona) is located east of campus, north of Temple Avenue; undeveloped land within Cal Poly Pomona abuts the campus. The closed Spadra Landfill is located east of campus, south of Temple Avenue.



Source: CBT and HMC Architects 2018

District Boundaries

Exhibit 3-2

Mt. SAC 2018 Educational and Facilities Master Plan EIR

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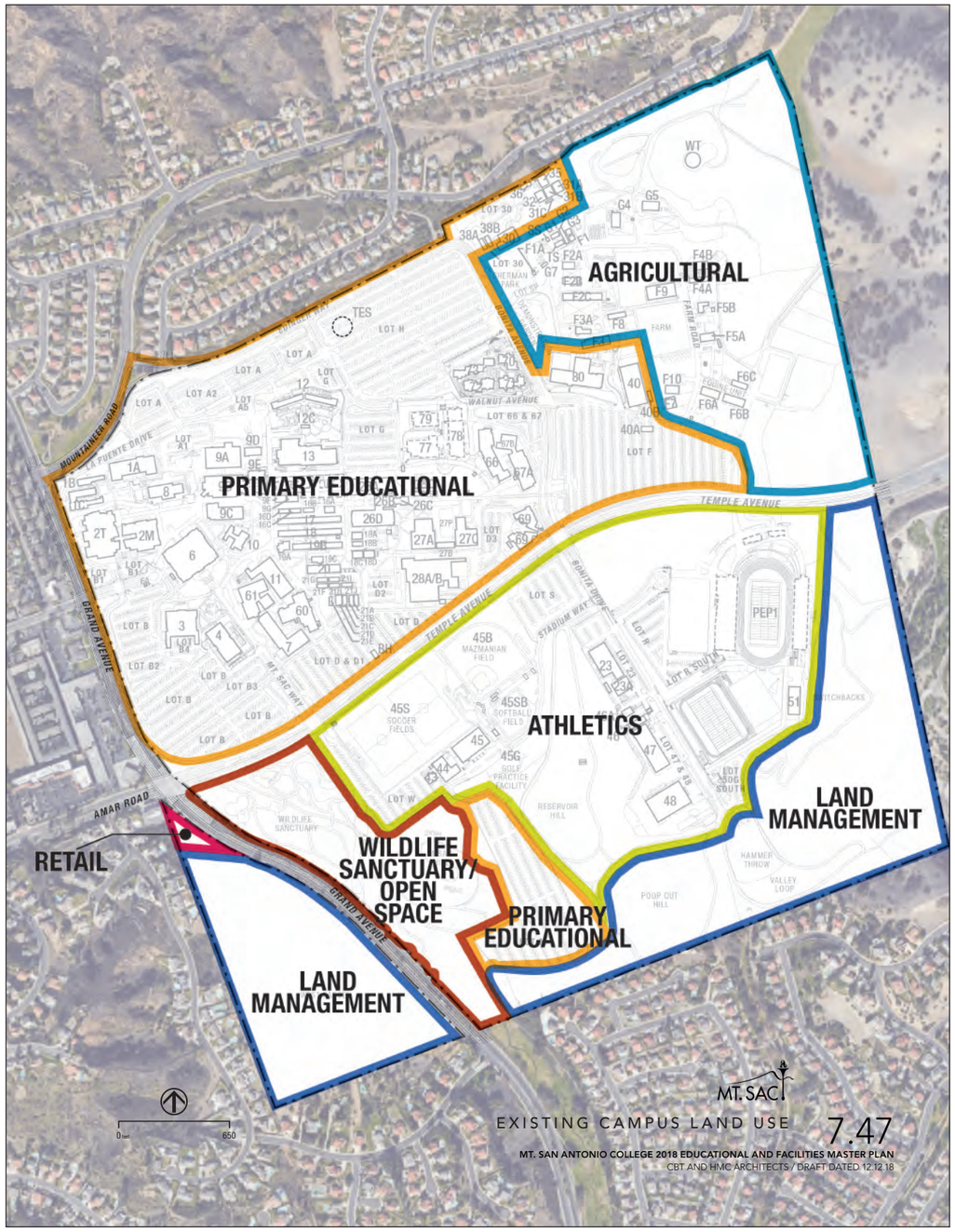
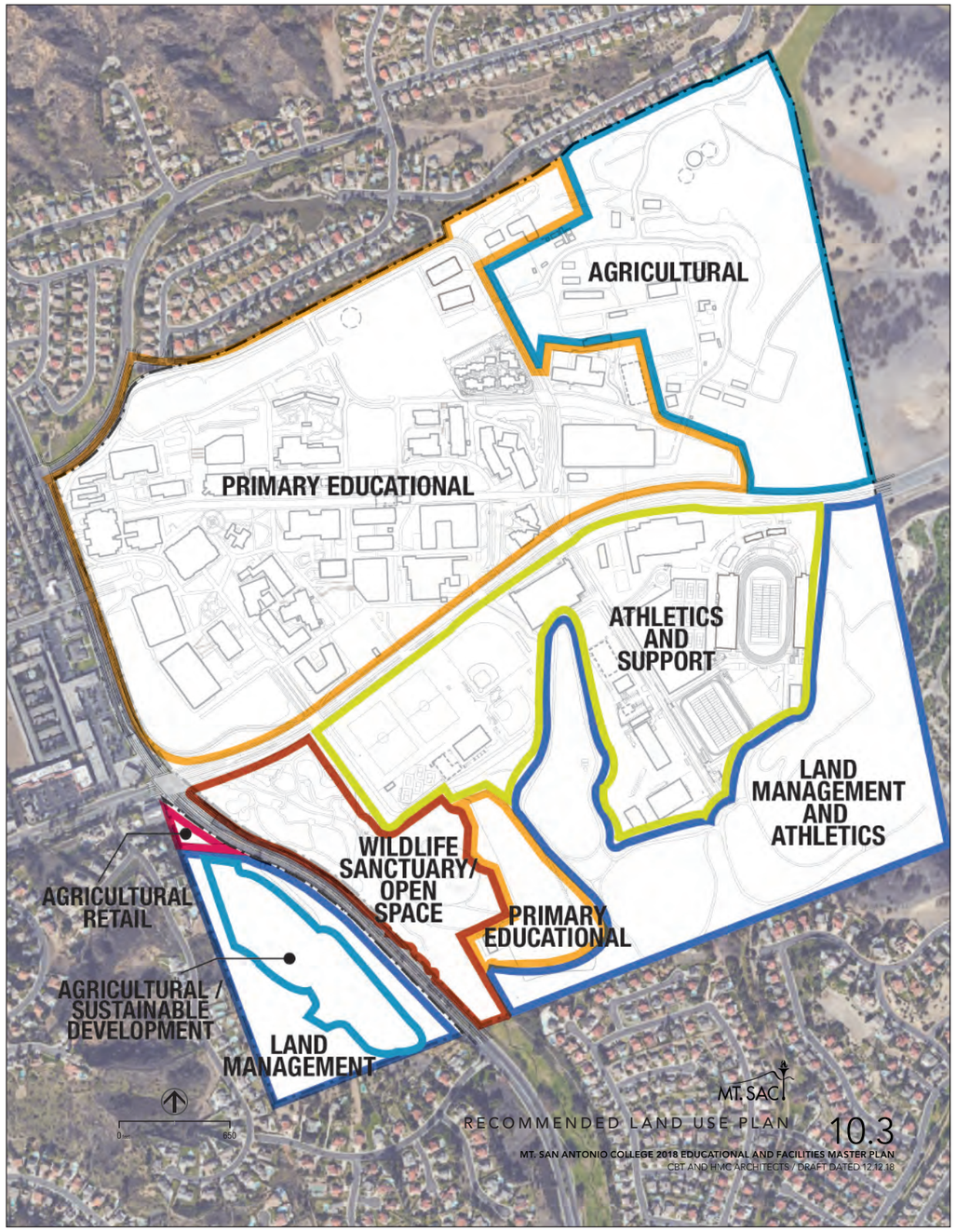


Existing Campus Land Use



Recommended Land Use Plan

Source: CBT and HMC Architects 2018

Campus Land Use Plans

Exhibit 3-3

Mt. SAC 2018 Educational and Facilities Master Plan EIR

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The area west of the campus across Grand Avenue between Temple Avenue and the northwest corner of Temple Avenue and San Jose Hills Road is developed with various commercial, office Single-family detached units within The Willows development are located west of campus, with a two-story office building at the southwest corner of Grand Avenue and Temple Avenue. The Mt. SAC retail center is located west of campus, across Grand Avenue and north of Temple Avenue, and includes a gas station, restaurants, and various retail and service shops. is north of the shopping center, with the DJ Plaza strip mall at the southwest corner and the Campus Corner strip mall at the northwest corner of San Jose Hills and Temple Avenue. Northwest of campus across Temple Avenue and Kem Way are multi-family attached units (triplexes).

Other uses in the general vicinity of the campus include a grocery store, apartments, and single-family homes to the west, the San Jose Hills to the north, agriculture uses and a parking lot at CalPoly Pomona farther east, and commercial uses on Valley Boulevard farther south.

Environmental Resources and Infrastructure

Aesthetic Character

The Mt. SAC campus is currently comprised of 144 buildings. Existing buildings on campus range in age from the oldest building constructed in the 1940s to the newest constructed in 2017. The visual character of the campus is cohesive and defined by one- to three-level buildings located primarily in the northern and western portions of the campus (the Academic Core), roadways and surface parking lots primarily within and along the perimeter of the Academic Core, extensive mature vegetation on the southwest edge of campus, and edges that consist of hills which provide a visual buffer and enhance the visual character of the built environment.

The Wildlife Sanctuary, located on the southeast corner of the Grand Avenue/Temple Avenue intersection, provides the only unique scenic resource on campus and creates a natural buffer between the campus and development to the west. The San Jose Hills are a prominent natural feature located north of and visible from the campus. Additionally, the campus edges to the north, east, and south consist of hilly terrain, including Reservoir Hill and MSAC Hill, which are prominent natural features and act as visual buffers screening campus buildings from adjacent uses.

The views of the campus vary substantially based on where the viewer is in relation to the campus, due to the location of the campus, the varying topography in the area, and the presence of mature vegetation and existing development. However, views into the campus are largely limited to vantage points in the immediate vicinity. Views from distant vantage points are obstructed due to intervening topography, vegetation, and development. Exhibit 4.1-2, Photograph Location Index, in Section 4.1, Aesthetics, provides an index of the vantage points where ground photographs were taken.

Existing sources of lighting on campus primarily include security lighting for buildings, walkways, bikeways, and parking lots; sports field lights used at the soccer fields, softball field, and Mazmanian Field; and light standards along the streets. Ambient lighting also comes from off-campus uses, including residential uses north, west, and south of the campus, commercial uses west of the campus, and street lighting. Campus buildings are finished with materials that do not provide a significant source of daytime glare and landscaping around and between buildings also serves as a visual screen that further reduces glare from the existing buildings. Currently, nighttime glare is primarily associated with vehicle headlights and, to a lesser extent, on-campus lighting.

Air Quality and Greenhouse Gas Emissions

On campus operations currently generate air pollutant and GHG emissions from a variety of sources such as the vehicle trips generated by the students, faculty, staff, visitors, and vendors (mobile); natural gas used for heating and hot water; landscape and building maintenance equipment; and consumer products. Emissions currently generated are further discussed in Section 4.2, Air Quality, and Section 4.7, Greenhouse Gas Emissions, of this Draft EIR.

Biological Resources

As discussed in Section 4.3, Biological Resources, of this Draft EIR, developed and/or disturbed areas dominate the campus; however, portions of the campus contain naturally vegetated areas. These areas include the Mt. SAC Wildlife Sanctuary, the hills that support running and athletic trails, and the hills leading to the adjacent water storage tanks. The proposed project would occur in predominantly developed areas that contain sparse, ornamental vegetation subject to heavily landscaped activities. The portions of the proposed project that will occur in naturally vegetated areas, totaling approximately 105.26 acres, is limited to those areas identified for future development and/or improvements associated with buildout of Phases 1A, 1B and 2 of the proposed 2018 EFMP.

Table 4.3-2 in Section 4.3, Biological Resources, provides a summary of special status plant species reported to occur in the vicinity of the survey area and includes information on their status and potential for occurrence. As identified in Table 4.3-2, one special status plant species was observed during the general survey: southern California black walnut. Table 4.3-3 in Section 4.1, *Biological Resources,* provides a summary of special status wildlife species reported to occur in the vicinity of the survey area and includes information on their status and potential for occurrence. No special status wildlife species were observed during the general survey.

No jurisdictional waters are anticipated to be impacted. Measures to avoid indirect impacts to any adjacent drainages are discussed in Section 4.9, Hydrology and Water Quality, of this Draft EIR.

The campus is expected to support local wildlife movement exclusively, with no potential for regional wildlife movement. Implementation of the project is not expected to further limit local wildlife movement on site due to the lack of any new substantial obstructions resulting from project implementation. Indirect effects on movement such as increased night lighting, increased noise, or other increases associated with increased human activity would be considered negligible and unlikely to further degrade the quality of the open spaces on site and other local travel routes used by wildlife in the campus.

For more information regarding existing biological resources, refer to Section 4.3, Biological Resources, of this Draft EIR.

Cultural Resources

Mt. SAC Buildings

The boundaries of the Mt. SAC Historic District and contributing resources are shown on Exhibit 4.4-1; the buildings that have been previously demolished or that would be demolished to implement the proposed 2018 EFMP are also identified. Table 4.4-3 below provides a summary of the buildings at Mt. SAC that contribute to or previously contributed to the Mt. SAC Historic District and their current status.

According to the South Central Coastal Informational (SCCIC) literature review and records search conducted in 2018, 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 on the campus. Furthermore, the search failed to identify archaeological sites within a half mile of the campus. Based on the records search, literature review, and pedestrian survey conducted and as further discussed in Section 4.4, Cultural Resources, no known archaeological resources are within the campus boundaries, and no archaeological resources were found during the pedestrian survey. None of the buildings on campus were determined eligible for listing in the National Register of Historic Places.

Mt. SAC Historic District

The college served numerous communities and thousands of residents and is today the largest community college in the San Gabriel Valley and one of the largest in California. 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 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.

For more information regarding archaeological and historic resources, refer to Section 4.4, Cultural Resources, of this Draft EIR.

Energy

Electric Power

Mt. SAC is currently served by Southern California Edison (SCE). Primary service is from an existing 12 kilovolt (kV) substation located near Grand Avenue. Service is metered at the substation and distributed to each building on campus through a series of electrical maintenance holes and medium voltage duct banks.

Natural Gas

Natural gas service is provided to Mt. SAC from SCG high-pressure service laterals that lead into the campus. Three main meters are located throughout the campus as the main connection to these laterals. Natural gas currently serves the campus cogeneration system and is distributed directly to campus buildings for heating.

Geology and Soils

As with all of Southern California, the campus is within a seismically active region. There are no major or active faults mapped on campus that could result in surface rupture, nor is the site located in an Alquist-Priolo Fault Rupture Hazard Zone.

Mt. SAC is located within an alluvial basin surrounded by hillsides consisting of sedimentary bedrock of the Monterey (Puente) Formation. The campus is mainly underlain by fill soils (Af) placed during previous site grading operations, natural alluvial soils (Qal), and sedimentary bedrock of the Puente Formation (Tpss). The nearby hillsides have been mapped as (Tmy)-Yorba Shale Member consisting of thinly bedded, diatomaceous, semi-siliceous clay shale, siltstone and minor sandstone, and Sycamore Canyon Formation consisting of light gray sandstone that includes conglomerate and siltstone (Tscs). Exhibit 4.6-2, Geologic Map, in Section 4.6, Geology and Soils, of this Draft EIR, depicts the geologic units underlying Mt. SAC.

Paleontological Resources

As identified in Section 4.6, Geology and Soils, surficial deposits composed of Pleistocene and Holocene alluvial deposits within the Miocene Puente Formation are found in the hills within the APE for the proposed 2018 EFMP. No fossil localities were found during the LACM and PaleoBiology records search that lie within the APE, although many have been documented nearby from similar-aged sediments within the same geologic formations. Therefore, Mt. SAC is moderately sensitive for paleontological resources.

For more information regarding geology and soils, and paleontological resources, refer to Section 4.6, Geology and Soils, of this Draft EIR.

Hazards and Hazardous Materials and Wildfire

As discussed in Section 4.8, Hazards and Hazardous Materials and Wildfire, of this Draft EIR, the Mt. SAC campus is not located on a site which is included on a list of hazardous materials pursuant to Section 65962.5. 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) and is included as Appendix G of the Draft EIR. The EDR Report was prepared for the Mt. SAC Parking and Circulation Master Plan (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.

Based on the CalFire Fire Hazard map, the campus is not located in a Very High Fire Hazard Severity Zone (VHFHSV). The nearest area designated as VHFHSV is located approximately 0.2 mile to the north of the northern campus boundary, north of existing residential uses.

For more information concerning existing hazards and hazardous materials, refer to Section 4.8, Hazards and Hazardous Materials and Wildfire, of this Draft EIR.

Hydrology and Water Quality

As discussed in Section 4.9, Hydrology and Water Quality, of this Draft EIR, the Mt. SAC campus encompasses approximately 418.44 acres of existing development. Implement of the proposed 2018 EFMP (Phases 1A, 1B, and 2) would increase impervious surfaces on site; however, the overall development would be similar in nature to existing conditions and include upgrades and improvements to existing infrastructure.

Surface flows contained within streets are conveyed to surrounding public streets. The existing campus storm drain infrastructure is designed to collect and convey stormwater to the public drainage system. Following the topography, campus infrastructure generally drains southward and conveys stormwater to several public main lines: an 84-inch reinforced concrete pipe (RCP) public main located in Grand Avenue, an 84-inch RCP public main located in Bonita Drive, and a 60-inch RCP storm drain located in Temple Avenue and Mt SAC Way. Existing stormwater runoff is gathered by a network of catch basins, area drains, and storm drains and directed into five main public storm drain lines that ultimately discharge to Snow Creek at the southwest end of campus. The western portions of campus generally drain to Snow Creek in the Wildlife Sanctuary. The

system serving the eastern portions of campus generally drains to an unnamed tributary of Snow Creek that discharges into an existing 60-inch to 81-inch public storm drain pipe.

The City of Walnut, and the Mt. SAC campus, is within the service area of the Walnut Valley Water District (WVWD). 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 and has a long history of producing groundwater for its own use. Some areas of the campus have relatively shallow or perched[3] groundwater, although no springs or perennial stream flow in local drainages was observed based on older topographic maps.

Noise

Sensitive Noise Receptors

The State of California defines noise-sensitive receptors as those land uses that require serenity or are otherwise adversely affected by noise events or conditions. Schools, libraries, churches, hospitals, and residential uses make up the majority of these areas. According to the Mt. SAC 2016 CEQA Thresholds of Significance, noise-sensitive receptors do not include on-campus uses; therefore, the noise-sensitive receptors closest to the campus include residential uses to the north, south, west, and east of the campus.

Existing Noise Levels

As discussed in Section 4.11, Noise, of this Draft EIR, ambient noise surveys to document the existing noise environment at various locations proximate to campus and at sensitive receptors in the vicinity were conducted on September 27, 2018. Noise measurements were taken along the primary roadways bordering the campus which include two locations along North Grand Avenue, Edinger Way and West Temple Avenue. The measurement data are summarized in Table 4.11-5; Appendix I of this Draft EIR includes instrument and measurement output data. The noise sources during these noise monitoring activities were primarily roadway traffic.

For more information regarding existing noise conditions, refer to Section 4.11, Noise, of this Draft EIR.

Public Services and Recreation

The Mt. SAC campus is located within City boundaries. The Los Angeles County Fire Department (LACoFD) Emergency Medical Services (EMS), fire and rescue services and “safe haven” services for unincorporated Los Angeles County, contract with the City of Walnut, and the Mt. SAC campus. The Mt. SAC campus is located within the 1-mile Fire Station Service Area for LACoFD Station No. 146

The Department of Police and Campus Safety Officers and the Los Angeles County Fire Department are first responders to critical incidents on campus. The Mt. SAC campus is located within Los Angeles County Sheriff's Department (LASD) Walnut/Diamond Bar Station service area. The LASD provides law enforcement response and criminal investigations for the entire campus for Part 1 crimes. The LASD has the primary responsibility for providing police protection to the neighborhoods adjacent to the campus. The Mt. SAC Police and Campus Safety, formerly Mt. SAC Public Safety Department, has primary responsibility for the campus.

[3] Isolated from the larger underlying groundwater aquifer by geologic or soil conditions

The Child Development Center operated by Mt. SAC is located on the Mt. SAC Campus. The Center provides full and part-day early care and education services for the children of college students, staff, and the community on campus throughout the year. Ten K-12 school districts are located within the geographic boundaries of Mt. SAC: Baldwin Park Unified School District (USD), Bassett USD, Bonita USD, Charter Oak USD, Covina Valley USD, Hacienda/La Puente USD, Pomona USD, Rowland USD, Walnut Valley USD, and West Covina USD.

The Mt. SAC campus contains existing outdoor athletic facilities on-campus as well as off-campus facilities used for competitive events by Mt. SAC athletics. The City of Walnut and County of Los Angeles provide recreational services in the City of Walnut. Three community parks operated by City of Walnut are located within a 1-mile radius of the campus: Snow Creek Park, Country Hollow Park and Walnut Ranch Park.

The Mt. SAC College Library is located within the Learning Technology Center and provides support services to Mt. SAC students, faculty, and staff.

Additional information regarding existing public services and recreational facilities serving the project area is provided in Section 4.13, Public Services and Recreation, of this Draft EIR.

Transportation/Traffic

Regional vehicular access to Mt. SAC is primarily provided by Grand Avenue and Temple Avenue. There are three signalized intersections along these two roadways that provide direct access onto campus and are considered the main vehicular entrances. The three main intersections are as follows.

(1) Temple Avenue and Bonita Drive

(2) Temple Avenue and Mt. SAC Way

(3) Grand Avenue and San Jose Hills Road

As described in Section 4.14, Transportation and Traffic, of this Draft EIR, Exhibit 4.14-1, Project Location and Study Intersections, shows the locations of roadways relative to the Project site. In addition, Exhibits 4.14-2 and 4.14-3, Existing Traffic Volumes (Intersections 1-8, 22-28), shows the existing conditions at the Project study area intersections. The non-Caltrans signalized intersections were evaluated using the ICU methodology, and the unsignalized intersections and Caltrans signalized intersections were evaluated using the HCM methodology. For existing conditions, the ICU spreadsheets and HCM reports are included in Appendix B of the TIA. Table 4.14-3 in Section 4.14, Transportation and Traffic, of this Draft EIR, shows the resulting LOS for each of the study intersections under existing conditions, with any unacceptable LOS highlighted in red. As indicated in Table 4.14-3, nine signalized intersections currently operate at LOS E or worse in one or both peak hours, including the following:

4. Temple Avenue/Grand Avenue (AM peak hour)
10. Temple Avenue/Campus Drive (AM peak hour)
12. Temple Avenue/Valley Boulevard (AM peak hour)
13. Temple Avenue/Pomona Boulevard (AM and PM peak hours)
18. Holt Avenue/Grand Avenue (AM peak hour)
21. Cameron Avenue/Grand Avenue (AM peak hour)

23. San Jose Hills Road/Grand Avenue (AM peak hour)
24. La Puente Road/Grand Avenue (AM peak hour)
25. Valley Boulevard/Grand Avenue (AM peak hour)

In addition, the worst minor-street (stop controlled) movement at the intersection of Cortez Street and Grand Avenue (intersection 19) operates at LOS E or worse in both peak hours as well as at the intersection of Cameron Avenue and Barranca Street (intersection 20) in the AM peak hour. Recall that for two-way stop-controlled intersections (such as Cortez Street/Grand Avenue and Cameron Avenue/Barranca Street), there is no defined intersection LOS. In addition to the study intersections, two study Caltrans segments were evaluated for existing conditions:

- I-10, Citrus Street to Holt Avenue
    - 1,857 passenger cars per hour per lane (pc/hr/ln), LOS D
- SR-57, Grand Avenue to SR-60
    - 792 pc/hr/ln, LOS B

Pedestrian routes exist throughout the academic core and are composed of varying widths and materials and pedestrian routes through parking lots are primarily undefined. Existing sidewalks along the campus perimeter provide minimal connectivity to the surrounding neighborhoods to the north and to Cal Poly Pomona to the east.

Current campus policy does not allow cyclists on campus sidewalks or service roads, and no designated bike lanes or paths within the interior of the College campus are currently defined. Bicycle circulation and infrastructure on campus remain minimal and no distinct bike paths exist separate from pedestrian or vehicular circulation. Class II lanes, off-campus bike lanes are striped and segregated from the vehicular travel lanes. Existing bike lanes are located on Grand Avenue that continue beyond College property. The bike lanes on Temple Avenue are fragmented, and the separation for cyclists on Grand Avenue ends as the lanes approach the intersection with Temple Avenue

The Mt. SAC campus is currently served by five Foothill Transit routes, all of which travel along Temple Avenue from Grand Avenue to the east. Routes 190 and 480 travel to/from the north along Grand Avenue, route 486 travels to/from the west on Amar Road, and routes 194 and 289 travel to/from the south along Grand Avenue. Exhibit 4.14-1 shows the existing routes as of December 2018 in a regional context and along the Mt. SAC frontage.

Additional information regarding existing traffic conditions is provided in Section 4.14, Transportation and Traffic, of this Draft EIR.

<u>Tribal Cultural Resources</u>

As discussed in Section 4.4, of this Draft EIR, a cultural resources record search and literature review was conducted at the California Historical Resources Information System (CHRIS), which maintains records and literature regarding cultural resources within California. The South Central Coastal Informational Center (SCCIC) is a designated branch of the CHRIS and houses records recorded in San Bernardino, Los Angeles, Orange, and Ventura Counties. The CHRIS office for Los Angeles County is located at the SCCIC at California State University, Fullerton California. Although the literature review at the SCCIC revealed that 15 cultural resources studies have been undertaken within ½-mile of Mt. SAC, none of these studies included a portion of the Mt. SAC

campus. No known archaeological resources, including prehistoric archaeological sites, are located on the campus or within ½-mile of the project area. As identified in Section 4.4.4, three additional reports regarding historical resources have been prepared for Mt. SAC but also did not identify any archaeological resources at the campus.

Section 4.15, Tribal Cultural Resources, of this Draft EIR also discussed the ethnographic history of the site, including the historic presence of the Gabrieliño who arrived in the Los Angeles Basin probably before 500 BCE (Before Common Era).

Utilities and Service Systems

As further discussed in Section 4.16, Utilities and Service Systems, the following conditions exist regarding the various utilities that serve the Mt. SAC campus.

Water (Potable and Non-Potable)

Potable water service is currently provided to the campus by Three Valleys Municipal Water District (TVMWD) through an existing water transmission main line. Mt. SAC currently uses potable water to satisfy its domestic, fire protection, and landscape irrigation needs. Mt. SAC's existing master meter and point of connection to the main line is located east of the Mt. SAC campus on the property of Cal Poly Pomona. From this connection point, water is supplied to an existing 12-inch water main in Temple Avenue that serves the entire Mt. SAC campus. The southern portion of campus is served directly from this 12-inch main. The northern portion of the campus is served by a 1,000,000-gallon storage tank and four 25,000-gallon supplemental storage tanks located in the northeastern portion of campus. TVMWD offers reclaimed water for non-potable uses and Mt. SAC has committed to evaluating the demand for, and drafting a plan for, reclaimed water.

As discussed in Section 4.16, Utilities and Service Systems, the campus consumed approximately 115,929,359 mgd/yr (2014), 84,890,437 mgd/yr (2015), and 104,025,000 mgd/yr (2016) of potable water. However, because Mt. SAC uses potable water for irrigation needs, a large portion (67 percent in 2014, 64 percent in 2015 and 65 percent in 2016) was used for irrigation use over building consumption.

Water Supply

As discussed in Section 4.16, Utilities and Service Systems, two sources of water supply available to TVWMD include groundwater (pumped by two TVMWD wells) and imported water that TVMWD purchase from the Metropolitan Water District of Southern California (MWD); it is imported from the Colorado River via the Colorado River Aqueduct and from the State Water Project via the California Aqueduct. Approximately 55 percent of TVMWD water is imported from MWD. The remaining 45 percent of the water supply has historically been met with local sources (groundwater, surface water and recycled water).

The TVMWD service area overlies several groundwater basins, is adjacent to foothill areas that provide local surface supplies, includes water reclamation plants that deliver recycled water. The TVMWD operates two water treatment plants (Weymouth Water Treatment Plant [WWTP] and the Miramar Water Treatment Plant [MWTP]) that process and deliver imported water for potable use.

Wastewater

As discussed in Section 4.16, Utilities and Service Systems, wastewater from Mt. SAC is treated at the Los Angeles County Sanitation Districts (LACSD) San Jose Creek Water Reclamation Plant (WRP) located in the City of Industry. The 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). The LACSD provides sanitary sewer service to Mt. SAC through on campus sanitary sewer lines which connect to a 15-inch vitrified clay pipe (VCP) trunk line in Temple Avenue. The 15-inch diameter public VCP main line continues through the campus area south of the Wildlife Sanctuary within a public easement in Campus Way and continues south in Grand Avenue. The campus recently installed a new sanitary sewer main, designed and constructed to serve the site and facilities of the Athletics Complex East and Physical Education Complex, that runs from Bonita Avenue along Stadium Way to the northern edge of the Wildlife Sanctuary connecting to the County's public sewer main.

Storm Drain

The existing campus storm drain infrastructure is designed to collect and convey stormwater to the public drainage system. Following the topography, campus infrastructure generally drains southward and conveys stormwater to several public main lines: an 84-inch reinforced concrete pipe (RCP) public main located in Grand Avenue, an 84-inch RCP public main located in Bonita Drive, and a 60-inch RCP storm drain located in Temple Avenue and Mt SAC Way. 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.

Electric Power

Mt. SAC is currently served by Southern California Edison (SCE). Primary service is from an existing 12 kilovolt (kV) substation located near Grand Avenue. Service is metered at the substation and distributed to each building on campus through a series of electrical maintenance holes and medium voltage duct banks.

Natural Gas

Natural gas service is provided to Mt. SAC from Southern California Gas Company's (SCG) high-pressure service laterals that lead into the campus. Three main meters are located throughout the campus as the main connection to these laterals. Natural gas currently serves the campus cogeneration system and is distributed directly to campus buildings for heating.

Telecommunications

Verizon provides communication services to the campus. Mt. SAC uses an existing underground system of conduits to distribute all fiber and copper cables to its buildings.

Solid Waste

Mt. SAC contracts with Athens Services (Athens), a local waste management company, who provides solid waste service to the campus. On a weekly basis, Athens hauls its three-ton bins from the campus. These bins contain commingled solid waste that is taken to an offsite recycling center and sorted into recyclable and landfill waste; landfill waste is sent to the County Sanitation Districts of Los Angeles County (LACSD) landfill system.

3.3 STATEMENT OF OBJECTIVES

Section 15124(b) of the California Environmental Quality Act (CEQA) Guidelines indicates that an Draft EIR must include "a statement of objectives sought by the proposed Project". Following are the objectives established for the proposed 2018 EFMP:

1. Provide an affordable local alternative to four-year universities for local students and returning veterans.
2. Implement the facilities, site improvement, and infrastructure needed to support the growth projected for instructional programs and support services at Mt. SAC.
3. Maximize functional space and eliminate non-functional space on campus, including by removing and replacing temporary facilities with permanent facilities in a timely manner, and renovating or replacing aged and outdated facilities.
4. Improve the utilization of space on campus by replacing small single-story buildings with multi-story buildings and consolidating open space into usable-sized portions.
5. Improve the efficiency of space on campus by aligning the classroom inventory with class sizes, and building flexible, multi-use/multi-purpose spaces, and spaces that can be readily reconfigured by occupants.
6. Ensure safety of faculty, staff, and students by upgrading or replacing aging, seismically unsafe buildings and facilities.
7. Promote sustainable facilities design, construction, and operations.
8. Improve pedestrian and vehicular access and circulation on campus.
9. Upgrade classroom and laboratory spaces to provide students with up-to-date skills and modern technology.
10. Upgrade school security to keep students safe by installing emergency mass notification beacons and marquees, outdoor lighting, and up-to-date security measures including improved security and emergency communication systems and infrastructure.

3.4 PROJECT BACKGROUND

Mt. SAC, which opened in the fall 1946, serves twenty communities in the eastern part of Los Angeles County with a combined population of over a million people; the Mt. San Antonio Community College District boundaries are shown on Exhibit 3-2. Mt. SAC is the largest single campus community college district in California with an annual total credit and noncredit student headcount of 66,266 students in 2017–2018 (CCCCO 2018). Eight unified high school districts are within Mt. SAC's boundaries. Mt. SAC is adjacent to four other community college districts: Citrus to the north; Chaffey to the east; North Orange County to the south; and Rio Hondo to the west. Given the proximity of these four community college districts, there is extensive free flow of students across the respective district boundaries. In fall 2015, 42 percent of Mt. SAC's students lived outside of Mt. SAC's geographic district boundaries.

Education Master Plans (EMPs) consider the current space and personnel status for a campus and project future needs in both categories. The current EMP for Mt. SAC is the 2008–2009 Educational Master Plan (EMP), which was developed for the purpose of projecting the college's programs and services needs to the year 2020. The 2015 Addendum to the 2008–2009 EMP addressed the Agricultural Sciences Department instructional programs at The Farm.

A Facilities Master Plan (FMP) provides a "roadmap" for facilities development in order to support the goals and strategies of the EMP. Most recently, FMPs were previously prepared for Mt. SAC in 2002, 2005, 2008 and 2012, and each of these FMPs were subject to environmental review pursuant to CEQA. The *Mt. San Antonio College 2012 Facilities Master Plan Campus Final Program EIR* (SCH 2002041161) was certified by the Board of Trustees in December 2013. Subsequent to preparation of the 2012 FMP, the Board of Trustees has approved and updated the 2012 FMP and individual projects, subject to additional CEQA documents, as described below.

- **2015 Facilities Master Plan Update (FMPU).** The 2015 FMPU revised the land use plan included in the 2012 FMP, to further define prior projects that had not been constructed, to provide future facilities corresponding to the college enrollment projections prepared by the California Community College Chancellor's Office, and to evaluate several new projects not included in the 2012 FMP. The 2015 FMPU anticipated that the campus would have 1,552,072 assignable square feet (asf) and approximately 2.0 million gross square feet (gsf) by the projected buildout year of 2025. The *2015 Facilities Maser Plan Update and Physical Education Project Final Subsequent/Program/Project EIR* (2015 FMPU/PEP 2016 SEIR) evaluated the 2015 FMPU at a program-level, and Phases 1 and 2 of the Physical Education Project (PEP) at a project level. The 2015 FMPU and PEP was approved and the Final EIR was certified in October 2016. Although certain components of the approved 2015 FMPU have been carried forward in the proposed 2018 EFMP, this Draft EIR is comprehensively addressing the currently proposed 2018 EFMP at a program level and not relying on the previous program-level environmental analysis.

- **Physical Education Project (Phases 1, 2) (PEP).** Further analysis of the PEP was provided in the *Physical Education Project (Phase 1, 2) Final Subsequent Project EIR to 2015 Facilities Maser Plan Update and Physical Education Project Final Program/Project EIR,* which was certified in August 2017 (2017 PEP SEIR). The analysis in the 2017 PEP SEIR focused on geology and soils, biological resources, aesthetics, and a structural assessment of the existing stadium.

  The PEP involves development on the former Hilmer Lodge Stadium (HLS) and adjacent surface parking lots site as a complete athletics precinct south of Temple Avenue

  Phase 1 of the PEP, often referred to as the Athletics Complex East (ACE), is under construction and involves a 9-lane 400- meter track, 10,912 permanent seat stadium, scoreboard, lighting standards, two pedestrian bridges, five athletic fields, and approximately 6.9 acres of landscaping and support facilities (i.e. concessions, ticketing, restrooms, etc.), and approximately 91,727 gsf of new building space (this includes Heritage Hall which will be built as part of Phase 2). The track and field lanes will comply with the International Association of Athletic Federations (IAAF) Compliant Track and Field, Competition Category 1 standards. The new HLS design is open to the north, and additional temporary bleachers may be installed in this area for 8,840 additional seats (a total capacity of 19,752 seats). The temporary bleachers will occupy three locations: 1) the turf seating area, 2) the hill east of the Stadium, and 3) the area immediately south of the Stadium.

  Phase 2 of the PEP, referred to in the proposed 2018 EFMP as the Physical Education Complex (PEC), involves the construction of a state-of-the-art kinesiology (physical education), wellness, and aquatics facility, including a 50-meter pool and a diving pool, in Mt. SAC's Athletics Land-use Zone. This project includes two new structures: a gymnasium/wellness center and an aquatics center and construction of the South Bonita

Pedestrian Bridge, which will connect these facilities to Parking Structure S. Not including the bridge, these facilities total approximately 144,511 gsf and provide 2,800 upper level bleacher seats for viewing of aquatics events. The PEC will house the basketball, volleyball, weight training, adaptive physical education and core training programs, and the Wellness Center. Additionally, Heritage Hall will be constructed at the same time in association with the plaza that connects the PEC to Heritage Hall and the new HLS facilities.

- **West Parcel Solar Project.** In November 2017, subsequent to approval of the 2015 FMPU and PEP, the Mt. SAC Board of Trustees approved the West Parcel Solar Project, a ground-mounted solar system, on the West Parcel and certified the *West Parcel Solar Project Tiered Project Draft EIR to 2012 Facilities Master Plan Program EIR* (2017 Solar EIR). As evaluated in the EIR, this project primarily involved the grading of approximately 17.25 acres to create a 9.9-acre pad for a ground mounted solar panel system, and installation of an access road from Grand Avenue. Approximately 139,000 cubic yards (cy) of soils would be imported from the stadium area. The project resulted in the removal of coastal sage scrub and riparian habitat; therefore, preservation and/or restoration of these habitats was included as part of the project. Replacement and restoration of coastal sage scrub habitat would occur on site and east of Grand Avenue, and restoration of riparian habitat would occur along Snow Creek on southeast side of campus.

On April 12, 2018, Mt. SAC and the City of Walnut, through their respective governing bodies, reached a conditional settlement agreement [the "Memorandum of Agreement" (MOA)] of the following Los Angeles County Superior Court actions filed by the City of Walnut against Mt. SAC: Case No. BS166152, Case No. BS170683 and Case BS171818 (collectively the "City Legal Actions"), that established mutual understanding of the scope of work for parking structures, the West Parcel, the Stadium (PEP) Project, and future projects at Mt. SAC The MOA was fully executed and approved by the governing bodies of both Mt. SAC and the City. Furthermore, the City agreed to dismiss its pending lawsuits against Mt. SAC. Final settlement and dismissal of the City Legal Actions are subject to the governing bodies of Mt. SAC and the City of Walnut entering into a formal settlement agreement; the City Council of the City of Walnut approving the earthwork and grading plans; and Mt. SAC recording a restrictive covenant. These actions have not occurred as of the date of publication of this Draft EIR.

Notably, the MOA establishes that the City will support ongoing construction and will exercise best efforts to complete review of grading and drainage plans submitted by Mt. SAC for the stadium project at the earliest possible time. Mt. SAC also committed to stabilizing the West Parcel site and agreed to not build the solar project or any similar energy project, but rather look for better and more efficient uses once the site is stabilized.

The MOA stipulates that Mt. SAC will not "construct, build or install ground-mount solar panels" on the West Parcel. Rather, Mt. SAC may construct any stand-alone energy project or facility with exposed energy-generating components provided that such energy projects are subject to reasonable standards. Additionally, Mt. SAC will proceed with earthwork and hauling operations related to any project on the West Parcel that is consistent with the applicable requirements of the Walnut Municipal Code and construction of any access road.

Mt. SAC is currently proceeding with the West Parcel Site Improvements project as described in Section 4.0, Introduction to the Environmental Analyses, of this Draft EIR. The proposed multi-level parking structure in Parking Lot A was eliminated from the proposed 2018 EFMP, but the MOA allows Mt. SAC to consider alternate parking facilities near the proposed Transit Center and along Temple Avenue. Currently proposed parking structures are discussed in Section 3.4.4,

Vehicular Circulation and Parking, of this Draft EIR. Consistency of the proposed 2018 EFMP with the MOA is further discussed in Section 4.9, Land Use and Planning, of this Draft EIR.

Because the PEP and West Parcel Site Improvements have been evaluated in previous project-level environmental documents pursuant to CEQA, and do not require further approval from the Mt. San Antonio Community College District Board of Trustees, they are not being addressed as part of the recommended projects associated with the proposed 2018 EFMP in this Draft EIR. Rather, they are considered cumulative projects for purposes of analysis in this Draft EIR. Additionally, the Transit Center identified in the proposed 2018 EFMP is a separate project being completed in coordination with Foothill Transit. The Mt. San Antonio Community College Board of Trustees approved the Transit Center and adopted an Initial Study/Negative Declaration on December 12, 2018. The Transit Center is also addressed as a cumulative project in this Draft EIR. The assumptions for these and other cumulative projects are discussed in Section 4.0, Introduction to the Environmental Analyses, of this Draft EIR.

On March 4, 2019 the United Walnut Taxpayers (UWT) and the Mt. San Antonio Community College District entered into a Mutual Release and Settlement Agreement regarding the Physical Education Project (PEP) legal action (Los Angeles County Superior Court No. BC 639908) as well as various actions taken by the Mt. San Antonio Community College District Board of Trustees concerning the West Parcel.

The settlement with UWT stipulates that Mt. SAC will not deposit 140,000 cubic yards of earth on the West Parcel in connection with the construction of the PEP. Mt. SAC further agrees that any future earthwork or grading operations at the West Parcel shall require official action of the Mt. SAC Board taken at a duly noticed meeting in compliance with all laws.

As presented in Table 3-1, below, under existing conditions, there is approximately 1.71 million square feet (msf) of existing building development on campus (144 buildings). There are also athletic facilities, a Wildlife Sanctuary, the Farm Precinct, and surface parking lots.

The 2012 FMP was prepared to accommodate a student enrollment of 33,433 (credit and non-credit annual full-time-equivalent students) in 2020 and the current 2015 FMPU accommodates a student enrollment of 39,731. The student enrollment at Mt. SAC in the fall 2017 was 37,864 students.

The proposed 2018 EFMP, described below, is Mt. SAC's long-range development plan and also serves as the foundation for other components of Mt. SAC's integrated planning process. Among other purposes, the proposed 2018 EFMP projects Mt. SAC's overall growth and the growth of programs and services during the planning horizon and develops recommendations for site and facilities improvements that are informed by education planning.

3.5 PROJECT DESCRIPTION

3.5.1 OVERVIEW

Following is an overview description of the facilities and site and infrastructure improvements anticipated to occur with implementation of the proposed 2018 EFMP during the 10-year horizon period (Phases 1A, 1B, and 2).[4] This is followed by a more detailed description of the following proposed Project components:

- Buildings/Facilities
- Vehicular Circulation and Parking
- Bicycle and Pedestrian Circulation
- Open Space, Public Art, Wayfinding/Signage, Lighting
- Natural Habitat and Urban Forest
- Sustainable Practices/Energy
- Utility Infrastructure
- Construction Activities

The proposed 2018 EFMP identifies the framework for the uses and development of land on campus necessary to accommodate an identified level of enrollment and physical development. However, enrollment decisions and the actual implementation of specific capital projects are influenced by multiple factors, including funding decisions, demographics, and other factors external to the proposed 2018 EFMP process. Thus, while the proposed 2018 EFMP identifies the physical resources necessary to meet Mt. SAC's mission and its long-range development plans, it makes no commitments regarding the timing for achieving identified enrollment projections or implementing physical development.

Assumptions regarding the rate of growth and potential phasing of the proposed physical development are presented in Section 3.4.2, below, for planning and analysis purposes. In summary, the proposed 2018 EFMP generally has a planning horizon of approximately 10 years (through 2027) and anticipates an increase in the unduplicated student headcount from 37,864 students in fall 2017 to between 40,802 and 42,745 students in fall 2027 (based on estimated medium and high growth rates). For analysis purposes, the following phases and timeframes are assumed:

- Phase 1A – 2019 to 2021
- Phase 1B – 2022 to 2025
- Phase 2 – 2025 to 2027

Mt. SAC's Campus Land Use Plan is intended to organize programs and functions in a logical manner that promotes collaboration, efficient operation, wayfinding and access. It pairs land uses with land areas to make the best and highest use of the campus. The current and proposed Mt. SAC Land Use Plans are shown on Exhibit 3-3. As shown, the proposed 2018 EFMP Land Use Plan anticipates future development in eight zones on campus: Primary Educational Zone, Athletics and Support Zone, Agricultural Zone, Wildlife Sanctuary/Open Space Zone, Land

[4] The proposed Mt. SAC 2018 Educational and Facilities Master Plan is provided at https://www.mtsac.edu/efmp/Draft_EFMP.html.

Management and Athletics Zone, Agricultural/Sustainable Development Zone, Land Management Zone, Agricultural Retail Zone. These zones are further described in Section 4.10, Land Use and Planning, of this Draft EIR.

As identified in Table 3-1, with implementation of the proposed 2018 EFMP: 33 aged and/or temporary facilities (approximately 207,805 gsf of building space) would be removed/demolished; 13 new buildings (approximately 752,000 gsf), including 10 major buildings would be constructed; up to four parking structures would be constructed; and 9 buildings (405,023 gsf) would be renovated. Therefore, should the proposed 2018 EFMP be fully implemented, there would be approximately 2,474,053 gsf of building space on campus (including the previously approved Physical Education Project [PEP]). This represents a net increase of approximately 766,925 gsf compared to existing conditions when taking into consideration the PEP, and a net increase of approximately 544,195 gsf when considering the recommended development under Phases 1A, 1B and 2 of the proposed 2018 EFMP. The proposed 2018 Facilities Master Plan is presented in Exhibit 3-4.

TABLE 3-1
2018 EDUCATIONAL AND FACILITIES MASTER PLAN STATISTICAL SUMMARY
(PHASES 1A, 1B AND 2)

Building No.	Building/Facility Name	Year Built	Existing and Approved GSF	New Building Construction GSF	Building GSF to be Demolished	Renovation GSF
Existing and Approved Development						
Existing Development (144 Buildings)			1,707,128			
Physical Education Project (PEP) • Phase 1 (Under Construction) – Athletics Complex East • Phase 2 (Approved) – Physical Education Complex (including aquatic center, Heritage Hall, and South Bonita Pedestrian Bridge)			95,730 127,000			
West Parcel Site Improvements (Approved)			NA			
Transit Center (Approved)			NA			
		Total	**1,929,858**			
Phase 1A (2019–2021)						
	Student Center & Central Campus Infrastructure			105,000		
16A	Express Stop Modular	1997			(2,144)	
16BC	Modular Buildings	2002			(2,800)	
16D	Math Success Lab Modular	2002			(1,400)	
17	Building	1949[b]			(12,025)	
18	Building	1953[b]			(11,814)	
18AB[a]	Modular Buildings	2006			(3,840)	
19A	Building	1952[b]			(2,243)	
19B	Building	1952[b]			(9,579)	
19C	Mountie Grill	1959			(1,692)	
20	Building	1948[b]			(9,742)	
21A–J	Modular Buildings	2002–2013			(15,571)	
	Sand Volleyball Courts & Parking Lot W Reconstruction			2,000		
43	Modular Building	1999			(2,833)	

TABLE 3-1
2018 EDUCATIONAL AND FACILITIES MASTER PLAN STATISTICAL SUMMARY
(PHASES 1A, 1B AND 2)

Building No.	Building/Facility Name	Year Built	Existing and Approved GSF	New Building Construction GSF	Building GSF to be Demolished	Renovation GSF
	Parking Structure R & Tennis Courts			NA		
	Parking Structure S and West Temple Avenue Pedestrian Bridge			NA		
	Subtotal Phase 1A			***107,000***	***(75,683)***	
Phase 1B (2022–2025)[c]						
9C	Student Life Center	1953[b]			(16,366)	
	Science			65,000		
	Bookstore			45,000		
	Makerspace			40,000		
	Library/Learning Resources			85,000		
	Replacement Communication Tower			NA		
	Subtotal Phase 1B			***235,000***	***(16,366)***	
Phase 2 (2026–2027)						
	Student Services North			75,000		
9A	Bookstore	1969[b]			(21,311)	
9D	Modular	1977			(3,599)	
9FG	Modular	2017			(4,280)	
	Auditorium			75,000		
3	Gymnasium	1950[b]			(43,904)	
	Technical Education			160,000		
27A	Exercise Science/Wellness Center	1962[b]			(20,116)	
27B	Pool building	1970[b]			(3,000)	
27C	PE Center	1960[b]			(17,337)	
	Pool			NA		
	Campus Safety			15,000		
	School of Continuing Education			40,000		
7	**Science South– Renovation**	1960[b]				41,661
60	**Science Labs– Renovation**	2006				63,761
6	**College Services – Renovation**	1963[b]				101,652
26ABD	**Humanities and Social Sciences– Renovation**	1967[b]				140,797
	Parking Structure B			NA		
	Farm Precinct Infrastructure					
F3A	Old Dairy Unit	1971[b]			(2,209)	
	Parking Structure F (including North Bonita Pedestrian Bridge and East Temple Pedestrian Bridge)			NA		
	Fire Training			20,000		
	Reuse Depot			25,000		

TABLE 3-1
2018 EDUCATIONAL AND FACILITIES MASTER PLAN STATISTICAL SUMMARY
(PHASES 1A, 1B AND 2)

Building No.	Building/Facility Name	Year Built	Existing and Approved GSF	New Building Construction GSF	Building GSF to be Demolished	Renovation GSF
47	**M&O Building – Renovation**	1968[b]				21,061
48	**Receiving Transport – Renovation**	1968[b]				36,091
2T	**Studio Theater – Renovation**	1996				NA
	Subtotal Phase 2			***410,000***	***(115,756)***	***405,023***
	Total		**1,929,858**	**752,000**	**(207,805)**	**405,023**
Educational and Facilities Master Plan Buildout (Phases 1A, 1B and 2)						**GSF**
Total GSF on Campus with Existing, Previously Approved and Proposed Development						2,474,053
Net Increase in GSF on Campus with Proposed and Previously Approved Development						766,925
Net Increase in GSF on Campus with Proposed Development						544,195

GSF: gross square feet (represents outside gross square footage, which includes gross area of the building with covered unenclosed space counts at 50 percent); NA: Not Applicable;

[a] Modulars 18CD would be relocated to another site on campus
[b] Building is a contributor to the Mt. SAC Historic District

The proposed 2018 EFMP identifies vehicular circulation, parking, and non-vehicular circulation improvements for the campus. The recommended approach for additional parking includes improving existing surface parking lots to increase capacity and circulation flow and building up to four new parking structures. The recommended approach to on-campus vehicular circulation keeps vehicles on the outer portions of campus, thus helping to separate pedestrian and vehicular circulation and reserve the academic core of campus for pedestrians. Improvements to campus vehicular circulation, emergency/service access, campus parking (surface and parking structures), bicycle circulation, and pedestrian circulation (including pedestrian bridges) are described in Sections 3.4.4 and 3.4.5, below.

In addition to the demolition and renovation of existing buildings, construction of new buildings, and parking and circulation components, implementation of the proposed 2018 EFMP would include athletic facilities, enhanced open space areas and public art, implementation of an Urban Forest Initiative, infrastructure improvements, and utility infrastructure and roadway improvements at the Farm Precinct. Campus-wide sustainable building practices, construction assumptions, and growth projections are also described below.

As discussed in Section 2, Introduction, this Draft EIR addresses the impacts resulting from construction and operation of the proposed 2018 EFMP as a long-range planning and development plan at a "program level" (Phases 1A, 1B and 2), including components that were included in previous Facilities Master Plans but not yet implemented. It is not anticipated that Phase 3 components of the proposed 2018 EFMP would be built during the 10 year horizon period; therefore, they are not being evaluated in the Draft EIR. Implementation of Phase 3 components of the proposed 2018 EFMP would be subject to separate environmental review pursuant to CEQA; however, they are considered in the cumulative impacts analysis in this Draft EIR and are described in Section 4.0, Introduction to the Environmental Analyses, of this Draft EIR.

BUILDING KEY

ID No.	BUILDING NAME
1B/C	Art Center / Gallery
2T/M	Performing Arts Center
4	Administration
6	College Services
6A	Information Kiosk
7	Science South
8	Mountie Café
9B	Student Services
9E	Student Success Center
10	Founders Hall
11	Science North
12	Building 12
12C	Elevator Tower
13	Design Technology
23	College Services
23A	Data Center
26A	Humanities/Social Sciences North
26B	Humanities/Social Sciences East
26C	Planetarium
26D	Humanities/Social Sciences South
28A/B	General Instructional Space
29	Central Plant
40	Building 40
44	Athletics Modular
45	Kinesiology/Athletics/ Dance
46	Emergency Operations Center
47	Facilities Planning + Management / Maintenance + Operations
48	Receiving/Transportation
51	Athletics Storage

ID No.	BUILDING NAME
60	Science Laboratories
61	Math and Science
66	Language Center
67A	Health Careers Center
67B	Health Careers Center
69	Welding, Heating/Air Conditioning
70–73	Child Development Complex
77–79	Business and Computer Technology
80	Agricultural Science
BF	Brackett Field (Off Campus)
AE	Adult Education
AUD	Auditorium
BH	Block House
BK	Bookstore
CS	Campus Safety
CT	Communications Tower
DL	Dry Lot Shade Structure
EHB	Equine Hay Barn
F1	Horticulture Unit
F1A	Sherman Park Restrooms
F2A	Farm Offices
F2B	Horticulture Storage
F2C	Irrigation + Landscape Construction
F3	Equipment Barn
F4A	Swine Market Pens
F4B	Swine Farrowing House
F5A	Vivarium
F5B	Small Animal Care Unit
F6A	Equine Breeding Barn
F6B	Equine Mare Motel
F6C	Equine Hay Barn
F7	Farm Storage
F8	Hay Barn

ID No.	BUILDING NAME
F9	Livestock Pavilion
F10	Building F10
FA	Fine Arts
G1	Greenhouse
G2	Greenhouse
G4	Greenhouse
G5	Greenhouse
G7	Greenhouse/The Conservatory
HH	Heritage Hall
LLR	Library/Learning Resources
MS	Makerspace
NC	Nature Center
PEC	Physical Education Complex
PEP1	Physical Education Projects: Phase 1
PS-B	Parking Structure B
PS-F	Parking Structure F
PS-R	Parking Structure R
PS-S	Parking Structure S
RD	Reuse Depot
SC	Student Center
SCE	School of Continuing Education
SCI	Science
SS	Storage Shed
SSN	Student Services North
TC	Transit Center
TE	Technical Education
TES	Thermal Energy Storage System
TS	Tool Shed
WT	Water Tank

LEGEND

- PROPERTY LINE
- EXISTING PERMANENT FACILITIES
- EXISTING TEMPORARY FACILITIES
- NEW MAJOR BUILDINGS
- PARKING STRUCTURES
- MAJOR RENOVATIONS
- MINOR PROJECTS
- EXISTING UTILITIES INFRASTRUCTURE (UNDERGROUND)
- NEW UTILITIES INFRASTRUCTURE (UNDERGROUND)

Source: CBT and HMC Architects 2018

Proposed 2018 Facilities Master Plan

Exhibit 3-4

Mt. SAC 2018 Educational and Facilities Master Plan EIR

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Certain projects in Phases 1A and 1B are being evaluated at a "project- specific level" in this Draft EIR. The descriptions of these projects provided in this section are more detailed to allow for a project-specific analysis. Projects being evaluated at a project-specific level in this Draft EIR include:

Phase 1A

- Student Center and Central Campus Infrastructure
- Parking Structure R and Tennis Courts
- Parking Structure S and West Temple Avenue Pedestrian Bridge (including associated South Temple Avenue Green Corridor Improvements)
- Sand Volleyball Courts and Parking Lot W Reconstruction

Phase 1B

- Bookstore

3.5.2 GROWTH PROJECTIONS

A college's enrollment is most often described with the following two types of data.

- **Unduplicated Student Headcount.** The total of unique individuals who enrolled in the college in a given period. Each student is counted once; the number of units in which they are enrolled is not relevant to this count. Headcount data is for the entire year and should not be interpreted as the number of students on campus at any one time or day because the schedule of classes and extracurricular activities vary throughout an academic year.
- **Full-Time Equivalent Student (FTES).** The total hours attended by one or more students, divided by 525. One FTES is equal to one student taking a course load of 15 units for two semesters.

The student data portfolio presented in the proposed 2018 EFMP (Chapter 2) culminates in a projection of Mt. SAC's growth. Mt. SAC's vision for expanding and improving its facilities in the coming decade are informed in part by this long-range growth forecast. Considering these data, Mt. SAC projects that its annual growth rate will range between 0.18 and 1.22 percent, with a mid-point of 0.75 percent. Table 3-2 presents the projected increases in FTES and student headcount between 2018 and 2027 based on the medium and high growth rates. For reference, the total number of FTES in fall 2017 was 13,185, and the fall headcount was 37,864 students.

TABLE 3-2
MT. SAC GROWTH FORECASTS (FALL SEMESTERS)

Fall	Full-time Equivalent Students (FTES) Projections		Unduplicated Student Headcount Projections	
	Medium Growth Rate 0.75%	High Growth Rate 1.22%	Medium Growth Rate 0.75%	High Growth Rate 1.22%
2018	13,311	13,498	38,148	38,326
2019	13,411	13,663	38,434	38,794
2020	13,511	13,830	38,722	39,267
2021	13,613	13,999	39,013	39,746
2022	13,715	14,170	39,305	40,231
2023	13,818	14,343	39,600	40,722
2024	13,921	14,518	39,897	41,218
2025	14,026	14,695	40,196	41,721
2026	14,131	14,874	40,498	42,230
2027	14,237	15,055	40,802	42,745

In summary, the FTES is projected to increase from 13,185 during the fall semester of 2017 to between 14,237 FTES (assuming a medium growth rate) and 15,055 students (assuming a high growth rate) in the fall semester of 2027. The unduplicated headcount is projected to increase from 37,864 students (during the fall semester of 2017) to between 40,802 students (assuming a medium growth rate) and 42,745 students (assuming a high growth rate) in the fall semester of 2027.

3.5.3 BUILDINGS/FACILITIES

As identified on Table 3-1, and further outlined in Section 10, Facilities Recommendations, of the proposed 2018 EFMP, the proposed Project involves the construction of new major buildings, major renovations to existing buildings, and minor new construction and renovation projects. These project components are described below. The descriptions are divided by the anticipated phase of implementation as identified in the proposed 2018 EFMP; however, this does not preclude implementation in a different sequence. Removal/demolition of existing buildings would be required to accommodate the new buildings; building removal/demolition is further discussed in Section 3.4.10, Construction Activities. Proposed parking facilities are described under Section 3.5.4, Vehicular Circulation and Parking.

New Major Buildings

The proposed 2018 EFMP identifies the following new major buildings to be constructed on campus. These projects would construct additional space that would support Mt. SAC's projected enrollment, organize its programs and functions in accordance with the Recommended Land Use Plan (shown on Exhibit 3-4), and better utilize the college's land by building multi-story facilities and setting aside room for open space.

Phase 1A

- **Student Center and Central Campus Infrastructure.** The proposed 3-level, approximately 105,000 gsf Student Center building would be located in the central portion of the Primary Educational zone of the campus, north of Temple Avenue, and is being evaluated at a project-specific level in this Draft EIR. As identified in Table 3-1, implementation of the proposed Student Center and Central Campus Infrastructure would require demolition of various existing buildings (approximately 72,580 gsf of existing building space). Additionally, modular buildings 18C and D would be relocated to another site on campus.

  The Student Center would provide space for students to study, gather/interact, and participate in student organizations and student government. The conceptual site plan for the Student Center is provided on Exhibit 3-5; conceptual building elevations are provided on Exhibits 3-6a-b; conceptual exterior perspectives are provided on Exhibit 3-7; and conceptual landscape plan is provided in Exhibit 3-8.

  The Student Center would also provide much needed indoor and outdoor event space and offices for Mt. SAC Events Services. Notably, the Student Center and Central Campus Infrastructure project would involve completion or enhancement of adjacent outdoor open spaces and pedestrian pathways, including the adjacent Miracle Mile. Exhibit 3-8 depicts the conceptual open space/landscape plan for the Student Center.

  The Central Campus Infrastructure project and site-specific utilities necessary to serve the Student Center are discussed in Section 3.5.9, Utility Infrastructure, below.

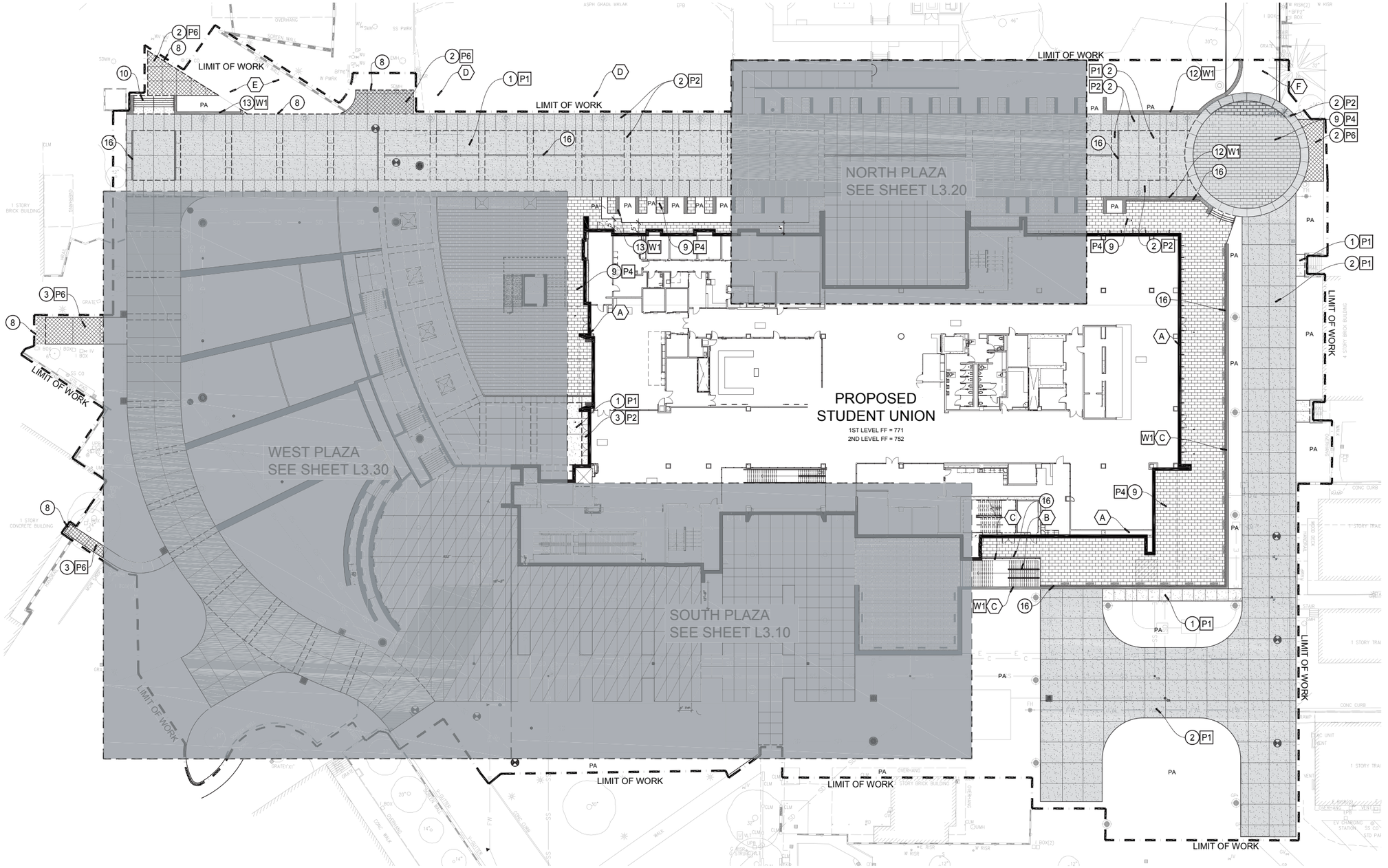
Phase 1B

- **Bookstore**. The proposed Bookstore would be a maximum of 3-levels and a maximum size of 45,000 gsf, and would also be located in the central portion of the Primary Educational zone of the campus, south of the proposed Student Center (refer to Exhibit 3-9). The Bookstore is also being evaluated at a project-specific level in this Draft EIR. The Bookstore would replace the existing 9A Bookstore (21,211 gsf), which would ultimately be demolished during Phase 2 to accommodate construction of the Student Services North facility.

  The new Bookstore would sell new and used textbooks, college merchandise, and school supplies; rent textbooks; and issue student ID cards. On the second level, flexible space for the growth of programs and services (e.g., offices for programs and services) would be provided.

  The Student Center and Central Campus Infrastructure project and site-specific utilities necessary to serve the Bookstore are discussed in Section 3.5.9, Utility Infrastructure, below.

- **Library/Learning Resources.** The Library/Learning Resources facility is expected to be a 2- to 3-level, approximately 85,000 gsf building located in the central portion of the Primary Educational zone. The new Library/Learning Resources facility would be the central place for students, faculty, staff, and community members to access and use information and information technologies. Space would be provided for expanded collections, course offerings, and both collaborative and independent work. The facility would house the central management for Mt. SAC's decentralized network of learning



COLOR AND FINISH SCHEDULE

	SYMBOL	KEY	DESCRIPTION	CONCRETE MIX DESIGN	COLOR	FINISH	COMMENTS
PAVING		P1	CONCRETE PAVING TYPE 1	55% PEA GRAVEL & 50% SAND; PED: 3000 PSI VEH: 4200 PSI	NATURAL GRAY	MED. BROOM BRUSH PERPENDICULAR TO DIRECTION OF TRAVEL	JOINTS: SAWCUT AND DOWELED CONSTRUCTION
		P2	CONCRETE PAVING TYPE 2	55% PEA GRAVEL & 50% SAND; PED: 3000 PSI VEH: 4200 PSI	DAVIS COLOR: #0834 OMAHA TAN	MEDIUM SAND (BLAST FINISH)	JOINTS: SAWCUT AND DOWELED CONSTRUCTION
		P3	CONCRETE PAVING TYPE 3	55% PEA GRAVEL & 50% SAND; PED: 3000 PSI VEH: 4200 PSI	DAVIS COLOR: #0834 OMAHA TAN	GRACE TOP-CAST #03 (ACID WASH FINISH)	JOINTS: SAWCUT AND DOWELED CONSTRUCTION
		P4	CONCRETE PAVERS	PAVER SIZE: 8"X16" PATTERN: RUNNING BOND	TO BE DETERMINED	STANDARD FINISH WITH CHAMFER	- POLYMERIC SAND FILLED JOINTS AT PEDESTRIAN AREAS - 50 CM AT VEHICULAR AREAS
		P5	STABILIZED DECOMPOSED GRANITE PAVING	SOUTHWEST BOULDER & STONE (760) 486-3377	CALIFORNIA GOLD FINES	STABILIZED	INSTALL IN LIFTS AND COMPACT PER D.G. SUPPLIER'S RECOMMENDATIONS
		P6	CONCRETE PAVING TO BE DETERMINED	MATCH EXISTING PED: 3000 PSI VEH: 4200 PSI	MATCH EXISTING	MATCH EXISTING	JOINTS: TO MATCH ADJACENT EXISTING PAVING
WALLS	SYMBOL	KEY	DESCRIPTION	MANUFACTURER	COLOR	FINISH	COMMENTS
		W1	P.T. CONCRETE LOW WALL	DAVIS CONCRETE COLORS	OMAHA TAN 5084	SMOOTH HARD TROWEL FINISH	JOINTS: VERTICAL CONTRACTION

REFERENCE KEYNOTES

SYMBOL	DESCRIPTION
A	BUILDING - PER ARCHITECT'S PLANS
B	STAIRCASE - PER ARCHITECT'S PLANS
C	SITE RETAINING WALL - PER STRUCTURAL ENGINEER'S PLAN
D	EXISTING MODULAR BUILDINGS - PROTECT IN PLACE
E	EXISTING CONCRETE PAVING - PROTECT IN PLACE
F	ASPHALT - PER ARCHITECT'S PLANS

HARDSCAPE KEYNOTES

SYMBOL	DESCRIPTION	DETAIL REF.
1	CONSTRUCT PEDESTRIAN RATED CONCRETE PAVING	A, L4.10
2	CONSTRUCT VEHICULAR RATED CONCRETE PAVING	A, L4.10
3	CONSTRUCT CONCRETE PAVING TO MATCH EXISTING	
4	CONSTRUCT SAWCUT CONTRACTION JOINT	B, L4.10
5	CONSTRUCT SAWCUT DOWELED CONSTRUCTION JOINT	B, L4.10
6	CONSTRUCT ISOLATION JOINT	B, L4.10
7	CONSTRUCT CONCRETE PAVING AT CURB CONNECTION	C, L4.10
8	CONSTRUCT NEW TO EXISTING PAVING CONNECTION	B, L4.10
9	FURNISH AND INSTALL PRE-CAST CONCRETE PAVERS	E, L4.10
10	CONSTRUCT P.I.P. CONCRETE STEPS AND HANDRAIL	--
11	CONSTRUCT P.I.P. CONCRETE RAMP WITH HANDRAILS	--
12	CONSTRUCT P.I.P. CONCRETE LOW RETAINING WALL	--
13	CONSTRUCT P.I.P. CONCRETE FREESTANDING LOW WALL	--
14	CONSTRUCT P.I.P. CONCRETE MOW CURB	F, L4.10
15	FURNISH AND INSTALL AREA DRAIN WITH DECORATIVE COVER	
16	FURNISH AND INSTALL SLOT / TRENCH DRAIN	
17	FURNISH AND INSTALL STABILIZED DECOMPOSED GRANITE PAVING WITH METAL EDGING	

Source: HPI Architecture 2019

Student Center - Conceptual Site Plan

Exhibit 3-5

Mt. SAC 2018 Educational and Facilities Master Plan EIR

N W E S

0 20 40 80 Feet

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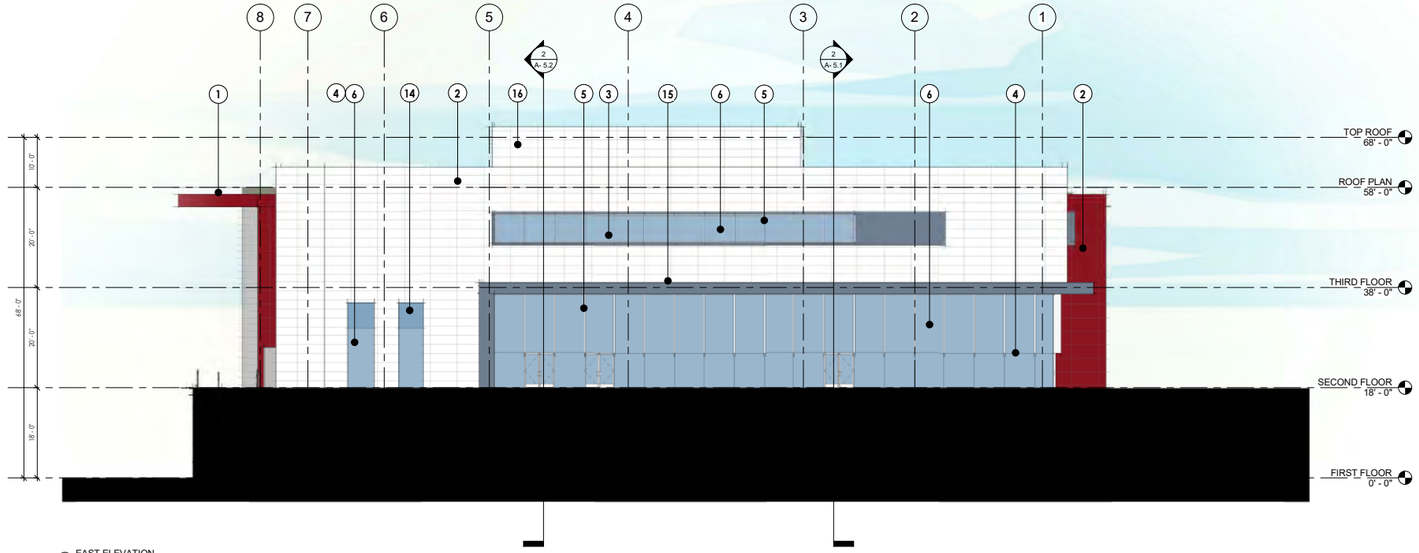
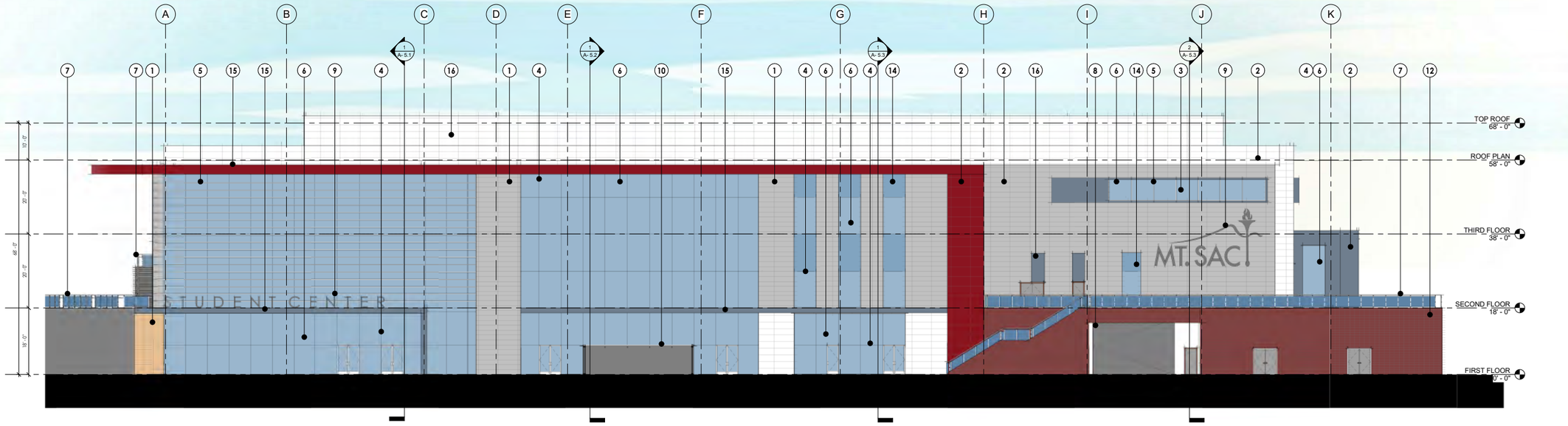


1 EAST ELEVATION
3/32" = 1'-0"

EXTERIOR ELEVATION KEYNOTES

1. FIBER CEMENT PANEL CLADDING
2. ALUMINUM COMPOSITE PANELS
3. ALUMINUM STOREFRONT SYSTEM
4. ALUMINUM CURTAIN WALL SYSTEM
5. ALUMINUM SUNSHADE SYSTEM
6. LOW-E INSULATING GLASS
7. TEMPERED GLASS GUARDRAIL SYSTEM
8. ROLL UP DOOR
9. PIN-MOUNTED STAINLESS STEEL SIGNAGE
10. GLAZED HORIZONTAL OPERABLE WALL
11. ELECTROCHROMIC GLASS
12. RED BRICK VENEER
13. NOT USED
14. SPANDRAL GLAZING
15. METAL CLAD CANOPY W/FIBER CEMENT PANEL UNDERSIDE
16. METAL CLADDING SCREEN



2 SOUTH ELEVATION
3/32" = 1'-0"

Source: HPI Architecture 2018

Student Center – Conceptual Building Elevations

Exhibit 3-6a

Mt. SAC 2018 Educational and Facilities Master Plan EIR

Map not to scale

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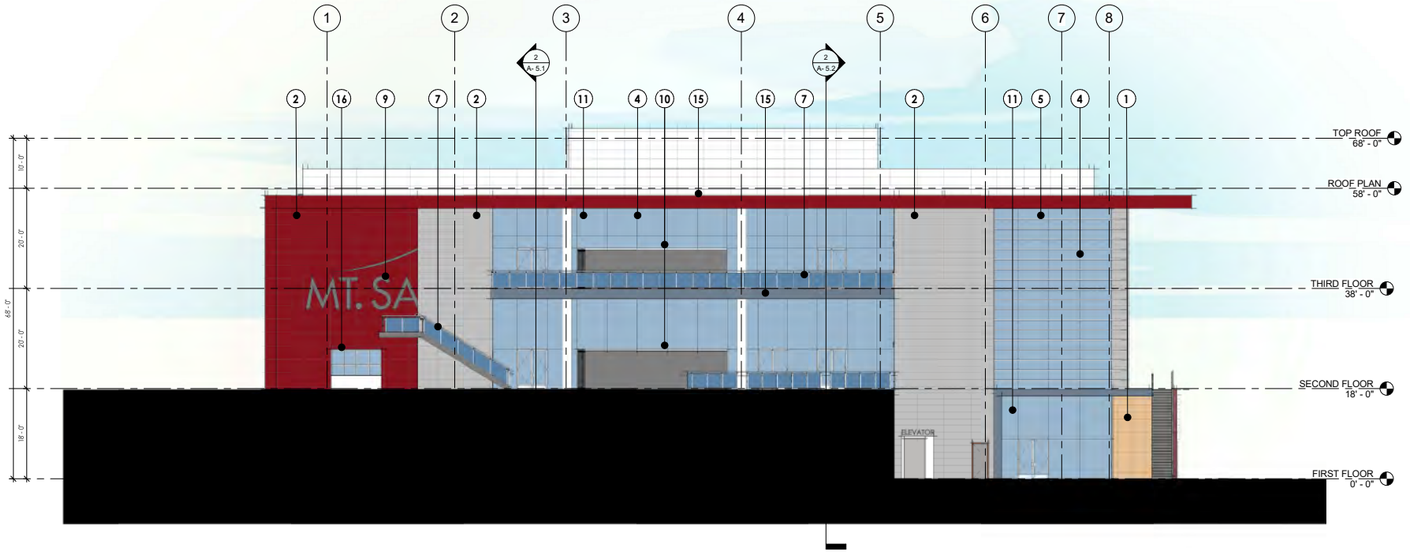
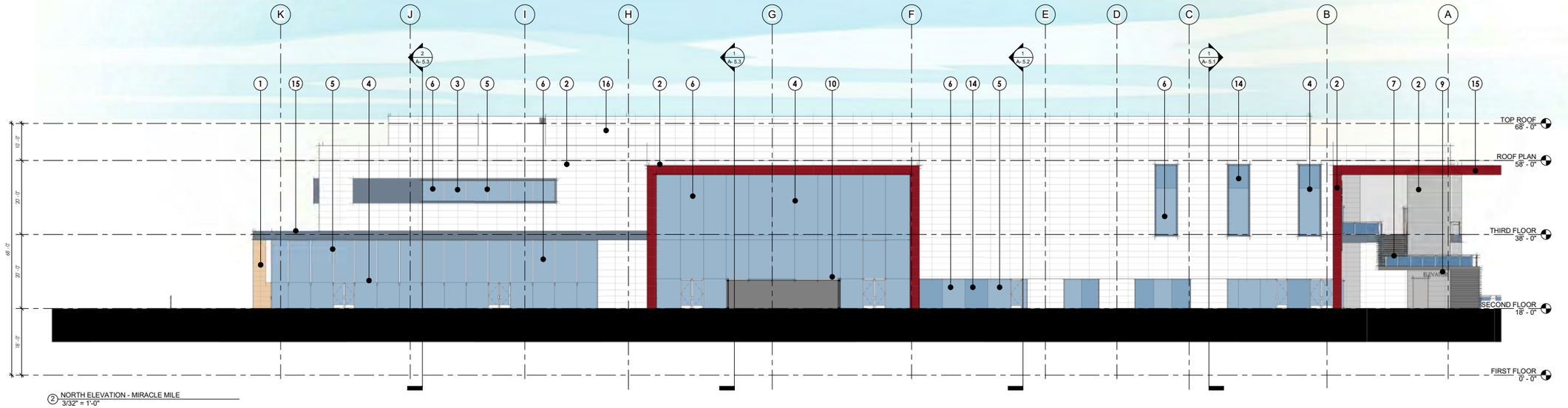


1 WEST ELEVATION
3/32" = 1'-0"

EXTERIOR ELEVATION KEYNOTES

1. FIBER CEMENT PANEL CLADDING
2. ALUMINUM COMPOSITE PANELS
3. ALUMINUM STOREFRONT SYSTEM
4. ALUMINUM CURTAIN WALL SYSTEM
5. ALUMINUM SUNSHADE SYSTEM
6. LOW-E INSULATING GLASS
7. TEMPERED GLASS GUARDRAIL SYSTEM
8. ROLL UP DOOR
9. PIN-MOUNTED STAINLESS STEEL SIGNAGE
10. GLAZED HORIZONTAL OPERABLE WALL
11. ELECTROCHROMIC GLASS
12. RED BRICK VENEER
13. NOT USED
14. SPANDRAL GLAZING
15. METAL CLAD CANOPY W/FIBER CEMENT PANEL UNDERSIDE
16. METAL CLADDING SCREEN



2 NORTH ELEVATION - MIRACLE MILE
3/32" = 1'-0"

Source: HPI Architecture 2018

Student Center – Conceptual Building Elevations

Exhibit 3-6b

Mt. SAC 2018 Educational and Facilities Master Plan EIR

Map not to scale

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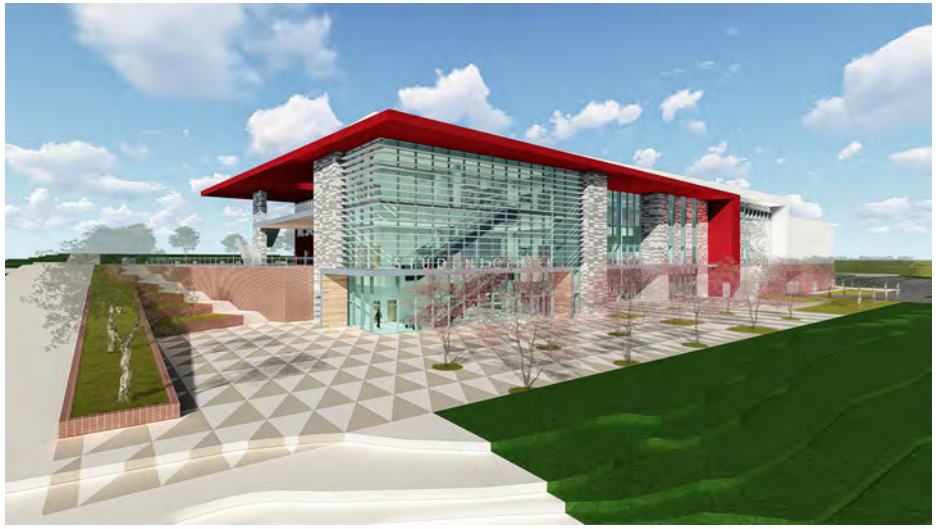
Northeast

Northwest



Southwest

Southeast

Source: HPI Architecture 2018

Student Center – Conceptual Exterior Perspectives

Exhibit 3-7

Mt. SAC 2018 Educational and Facilities Master Plan EIR

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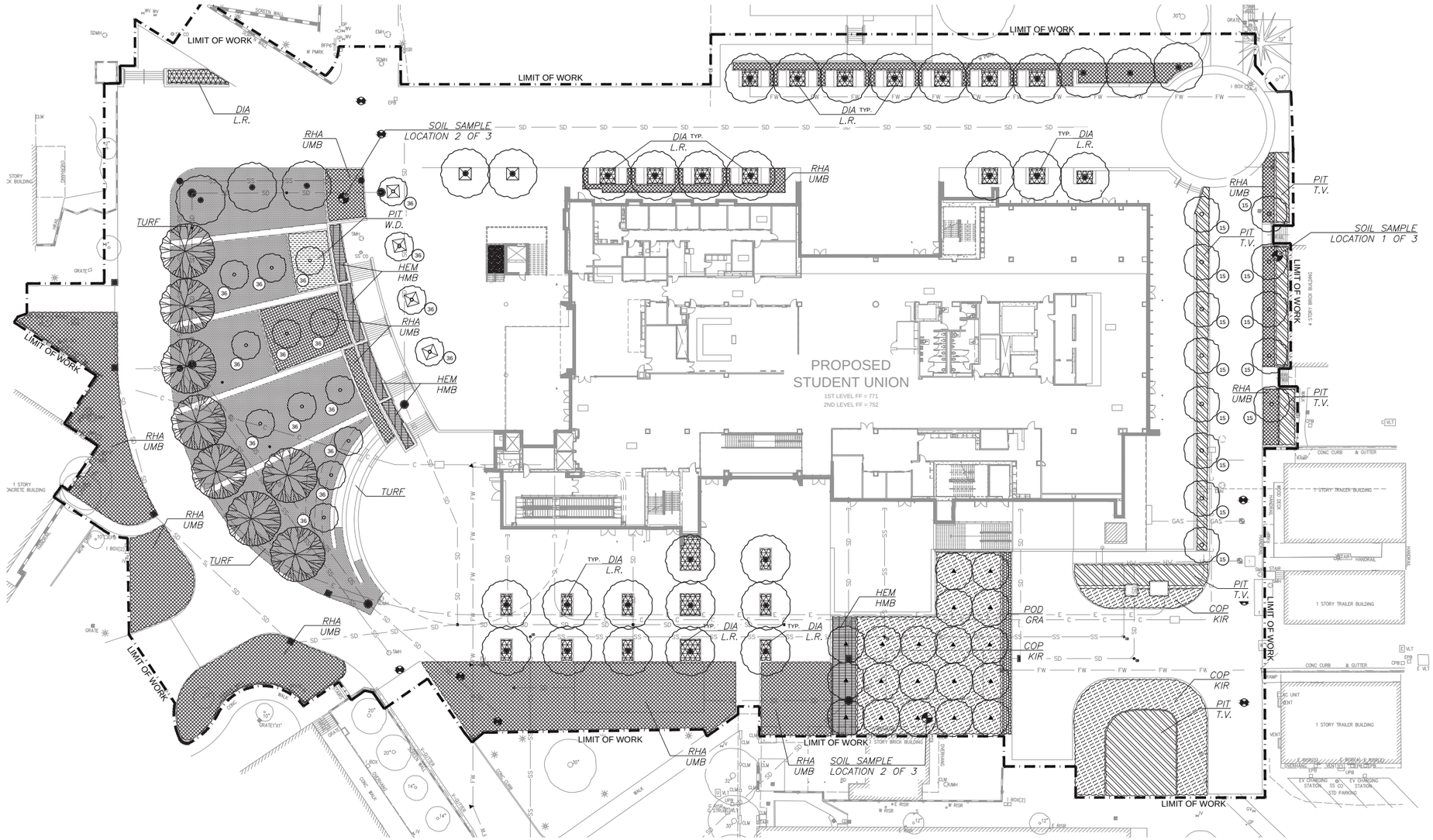

SHRUB & GROUNDCOVER SCHEDULE

SYMBOL	ABBR.	BOTANICAL NAME	COMMON NAME	SIZE	SPACING	WATER USE	QTY.	DETAILS
SHRUBS								
	DIA L.R.	DIANELLA 'LITTLE REVOLUTA'	LITTLE REV DIANELLA	1 GAL.	30" O.C.	LOW	302	A-C, L10.10
	HEM HYB	HEMEROCALLIS HYBRID 'YELLOW'	YELLOW DAYLILY	1 GAL.	24" O.C.	MOD	353	A-C, L10.10
	PIT T.V.	PITTOSPORUM TOBIRA 'VARIEGATA'	VARIEGATED MOCK ORANGE	5 GAL.	42" O.C.	MOD	363	A-C, L10.10
	PIT W.D.	PITTOSPORUM T. 'WHEELER'S DWARF'	DWARF MOCK ORANGE	5 GAL.	36" O.C.	MOD	69	A-C, L10.10
	POD GRA	PODOCARPUS GRACILIOR	FERN PINE	15 GAL.	42" O.C.	MOD	37	A-C, L10.10
	RHA UMB	RHAPHIOLEPIS 'UMBELLATA MINOR'	DWARF INDIAN HAWTHORN	5 GAL.	30" O.C.	MOD	2975	A-C, L10.10
GROUNDCOVERS								
	COP KIR	COPROSMA X KIRKII	CREEPING COPROSMA	1 GAL.	48" O.C.	MOD	559	A-C, L10.10
	TURF	MARATHON iie	SODDED TURF	SOD	--	HIGH	12,850 S.F.	A-C, L10.10

TREE SCHEDULE

SYMBOL	BOTANICAL NAME	COMMON NAME	SIZE	FORM	WATER USE	QTY.	DETAILS
TREES							
	LAGERSTROEMIA INDICA 'NATCHEZ'	CRAPE MYRTLE	48" BOX	STD.	MOD	11	D&E, L10.10
	LOPHOSTEMON CONFERTUS	BRISBANE BOX	15 GAL	STD.	MOD	13	F, L10.10
			36" BOX			16	
	CINNAMOMUM CAMPHORA	CAMPHOR TREE	48" BOX	STD.	MOD	34	D&E, L10.10
	PINUS ELDARICA	AFGHAN PINE	36" BOX	STD.	LOW	3	D&E, L10.10
	PLATANUS RACEMOSA	CALIFORNIA SYCAMORE	36" BOX	STD.	MOD	8	D&E, L10.10

DENOTES SOIL SAMPLE LOCATION - REFER TO PLANTING NOTE #9 FOR ADDITIONAL INFORMATION.
FOR PLANTING NOTES, SEE SHEET L10.10.

Source: HPI Architecture 2018

Student Center – Conceptual Landscape Plan

Mt. SAC 2018 Educational and Facilities Master Plan EIR

Exhibit 3-8

N W E S

0 20 40 80 Feet

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Source: HMC Architects 2019

Bookstore – Conceptual Rendering

Exhibit 3-9

Mt. SAC 2018 Educational and Facilities Master Plan EIR

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centers, which would support the coordination and integration of services offered by the individual learning centers. The facility would also house the campus-wide hubs for professional development and support for initiatives such as distance learning.

- **Makerspace.** The Makerspace facility is expected to be a 2- to 3-level, approximately 40,000 gsf building located in the central portion of the Primary Educational zone near other facilities, such as the Student Center and the Library/Learning Resources facility, that serve students across every instructional division. The Makerspace facility would house a variety of indoor and outdoor spaces that support hands-on, project-based, and collaborative learning. The spaces would be tailored and equipped to support a variety of learning activities and their use would be shared among Mt. SAC's instructional divisions, as well as with local businesses, other educational institutions, and community organizations. This facility would house spaces that are tailored to a variety of learning activities, such as a business-focused computer-based hackerspace; a high-bay STEM, technical education, and health-focused project space, including laboratory space; as well as a library/learning resources-focused collaboration space.

- **Science**. The Science facility is expected to be a 2- to 3-level, approximately 65,000 gsf building located in the west portion of existing Parking Lot D in the Primary Educational zone. The Science facility would provide additional instructional, office, and study space for the Natural Sciences Programs. Space for tutoring and independent study would take place in a technology-rich, expanded STEM Learning Center and Computer Technology Lab that would accommodate students in all science disciplines. The new building and repurposed science facilities (Buildings 7 and 60, discussed under Major Renovations) would simplify the implementation of Mt. SAC's Laboratory Safety and Chemical Hygiene Plan by including up-to-date storage and handling facilities.

Phase 2

- **Auditorium.** The Auditorium is expected to be a tiered, high-bay, approximately 75,000 gsf building (with a balcony and stagecraft area) located in the southwest portion of the Primary Educational zone on a portion Parking Lot B. The new Auditorium would be a 1,200- to 1,500-seat multi-use facility and would be used to host large meetings, ceremonies, and performances. The Auditorium would also be available to the community for events and gatherings. This facility would include a modern and universally accessible space for Mt. SAC's Art Gallery.

- **Campus Safety.** The Campus Safety facility is expected to be a 1-level, approximately 15,000 gsf building located in the east portion of the Primary Educational zone, south of and adjacent to proposed Parking Structure F. The new Campus Safety facility would be the central base for the Mt. SAC Police and Campus Safety Department. It would house staff workrooms and offices, a customer service area, security monitoring systems, secure storage, and secure covered parking for department vehicles and equipment.

- **School of Continuing Education.** The School of Continuing Education facility is expected to be a 1- to 2-level, approximately 40,000 gsf building located in the northeast portion of the Primary Educational zone, in what is currently parking Lot H. This facility would house classrooms, class laboratories, division and faculty offices, student services, tutoring, and study space. The buildings would be situated around inviting outdoor courtyards. The School of Continuing Education is currently housed in a number of separate facilities, many of which are temporary. In addition, the School's recent growth has overtaken the capacity of its facilities. The proposed facility would help to align Mt.

SAC with community needs by providing expanded and improved instructional space that would allow the college to develop more programs to serve working and/or older adults.

- **Student Services North.** The Student Services North facility is expected to be a 2- to 3-level, approximately 75,000 gsf building located in the east portion of the Primary Educational zone. This facility would house Mt. SAC's Counseling Center, Career and Transfer Center, and other related General Support Services that provide ongoing assistance to every Mt. SAC student. Currently, many of the Student Services departments are housed in temporary buildings. In addition, it would be designed with the capacity and flexibility to accommodate future growth and new programs.

- **Technical Education.** The Technical Education facility is expected to be a 4-level, approximately 160,000 gsf building located in the northwest portion of the Primary Educational zone. This instructional facility would be for health careers and technical education, providing state-of-the-art learning environments for programs that support the local economy (e.g., Aeronautics, Electronics and Computer Engineering Technology, Industrial Design Engineering, Manufacturing Technology, and Nursing). This facility would house classrooms, offices, and specialized class laboratories, and provide permanent facilities for the Technical Education Resource Center (TERC), which offers group and individual tutoring and open access to computers. The existing Technology Center (Buildings 28A and 28B), which opened in 1971, is in poor condition and does not have the space or flexibility to be adapted to current and future technologies and pedagogies. Following opening of the Technical Education facility, modular units 18CD installed in 2015 would be relocated to a previously developed/disturbed site on campus.

Major Renovations

The proposed 2018 EFMP includes capital improvement projects listed below that would renovate and repurpose existing facilities to extend their lifespans for many more decades. These projects would yield spaces that are better aligned with educational priorities and support the use of advanced pedagogies and learning technologies. The location of major renovations projects are identified on Exhibit 3-4.

Phase 2

- **College Services Building (6)**. This project would renovate and repurpose the entirety of Mt. SAC's existing Library/Learning Technology Center Building 6 following the opening of its new Library/Learning Resources facility. Building 6 is 2-levels, approximately 101,650 gsf, and was originally constructed in 1963 and partially renovated in 1999. The repurposing of space in Building 6 would be an opportunity to relocate programs and services that are widely accessed by the college community to a central location that is more convenient for students, faculty, and staff.

- **Humanities and Social Science (26ABD).** This project would renovate and/or repurpose instructional, office, and study space in the Humanities and Social Sciences Buildings 26 ABD. These buildings are 2- and 3-level with approximately 140,800 gsf of building space, were originally constructed in 1967, and were partially renovated in 2008. The Humanities and Social Sciences Buildings house a significant portion of Mt. SAC's classroom inventory and this renovation would be an opportunity to better align Mt. SAC's inventory of classrooms with class sizes in the college's course offerings and improve classroom space utilization. To reduce the obstruction of the circulation route by the ground-level

portion of Building 26B, the adjacent portion of the Miracle Mile project would be coordinated with this renovation project.

- **Science (7 and 60).** This project would renovate and repurpose instructional, office, and study space in Science South Building 7 and Science Laboratories Building 60 as part of the rezoning of Mt. SAC's Natural Sciences Complex, following the construction of the new Science facility. Science South Building 7 is 2-levels and approximately 41,660 gsf, was constructed in 1960 and partially renovated in 2008, and is the oldest instructional building in the Natural Sciences Complex. Science Laboratories Building 60 is 3-levels and approximately 63,760 gsf. The building was constructed in 2006 and is in good condition; therefore, the focus of this project would be to repurpose specific spaces within it. The renovation would provide the opportunity to embed tutoring and counseling services close to classrooms and class laboratories, and to zone and design these facilities with space and adjacencies that promote interaction and collaboration among students, faculty, and staff. The repurposed facilities would simplify the implementation of Mt. SAC's Laboratory Safety and Chemical Hygiene Plan by including up-to-date storage and handling facilities.

Minor Projects

Minor Projects, though small in scope, are necessary to provide needed space for instruction, offices, and storage, as well as workspace for the staff members that maintain every part of the campus and oversee its operations. The Minor Projects category also identifies the need to allocate resources for other small projects that are not yet defined and provides Mt. SAC with flexibility to address needs that could not be anticipated during the preparation of the proposed 2018 EFMP.

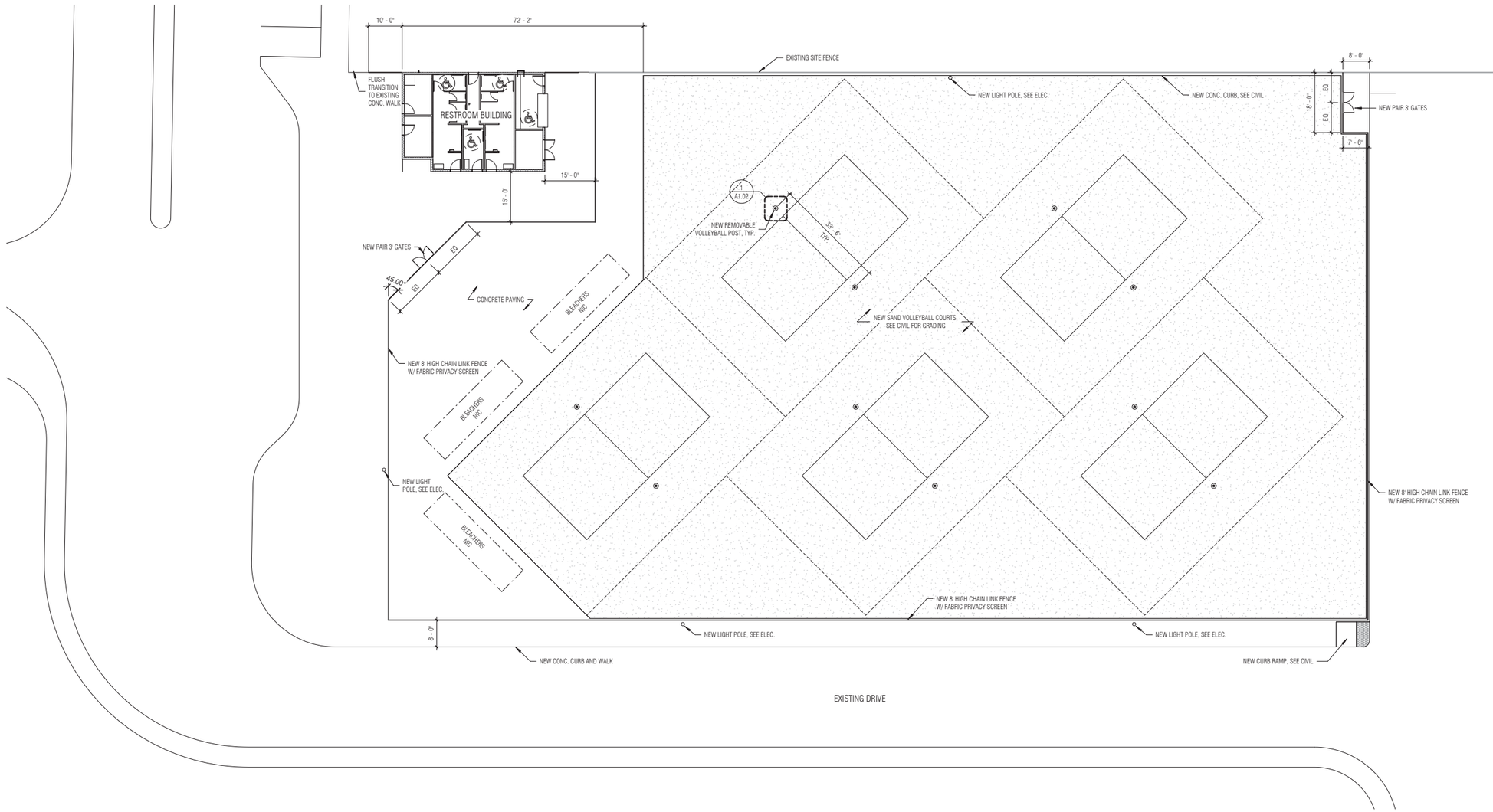
Phase 1A

- **Sand Volleyball Courts and Parking Lot W Reconstruction.** This facility would be located within the Athletics Zone south of Temple Avenue, adjacent to the existing soccer fields, and is being evaluated at a project-specific level in this Draft EIR. A Conceptual Site Plan is shown on Exhibit 3-10. This facility would include five sand volleyball courts and a restroom building in the northwest corner. The toilet facilities would also be available to spectators at the adjacent soccer fields, as well as visitors to the Wildlife Sanctuary.

  As part of this project, the portion of Parking Lot W south of the soccer fields would be removed to accommodate the sand volleyball courts. The remainder of Lot W would be redesigned to accommodate bus parking for the Wildlife Sanctuary and efficient roadway and pedestrian access to Lot M. Drive aisles would be widened and parking reconfigured. Implementation of this project would also require removal of modular Building 43.

Phase 2

- **Fire Training.** This project would involve the construction of an on-campus training facility (estimated to be approximately 20,000 gsf) in the Primary Education zone south of Reservoir Hill on the southeast portion of Parking Lot M. The Fire Training facility would support Mt. SAC's Fire Technology Program that would supplement the use of off-campus training facilities and burn towers. The facility would include indoor storage for the program's fire engines and equipment, and a secure outdoor multi-purpose training area.



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Source: Marlene Imirzian & Associates Architects, Ltd. 2018

Sand Volleyball Courts and Parking Lot W Reconstruction – Conceptual Site Plan

Exhibit 3-10

Mt. SAC 2018 Educational and Facilities Master Plan EIR

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- **Maintenance and Operation (M&O) Building 47 Renovation.** This project would complete the renovation of M&O Building 47 located in the Athletics zone, which was constructed in 1968 and partially renovated in 2013. This renovation would repair and upgrade the building's workshops and outdoor work areas to improve safety and efficiency. It would modernize workspaces to support the operation of a sustainable, state-of-the-art campus.

- **Receiving/Transportation Building 48 Renovation.** This project would repair and replace specific elements of Mt. SAC's shipping/receiving and warehousing facility and garage/transportation support office (Building 48), located in the Athletics zone. It would renovate and reorganize the facility's outdoor work areas and build covered storage for service vehicles and equipment.

- **Reuse Depot.** This project would construct a new building next to the existing Receiving/Transportation Building 48 and would improve and reconfigure the surrounding site. The building would provide secure, climate-controlled warehouse space to store furniture, equipment, and materials for reuse on the campus. This facility would include offices and space that is outfitted to support the reuse, recycling, and diversion of waste from landfills. This resource could be shared with community members during outreach events that promote the benefits of waste diversion.

- **Studio Theater 2T Renovation.** This project would renovate the Studio Theater in Building 2T of Mt. SAC's Performing Arts Center located in the northwest portion of the Primary Educational zone. The renovation would improve the functionality of the 100-seat black box theater as a performance venue and as a laboratory for technical theater instruction, by upgrading its lobby, sound/support booth, and stage-lighting support grid.

3.5.4 VEHICULAR CIRCULATION AND PARKING

The majority of Mt. SAC students drive alone to the campus. The vehicular circulation and parking improvements presented in Section 11, Site and Infrastructure Improvements, of the proposed 2018 EFMP, are aimed at providing welcoming, efficient, and equitable access to the campus for individuals accessing the campus via a motor vehicle (i.e., single-drivers, individuals being dropped off or picked up, buses, and ride-sharing services). Proposed improvements address existing issues and respond to input from students and community members about the need to improve wayfinding, safety, and to improve the flow of vehicles within the campus and on the adjacent public roadways. The proposed 2018 EFMP's vehicular circulation and parking recommendations are built upon the analyses and recommendations of 2017 Parking and Circulation Master Plan (2017 PCMP), which based its planning on Mt. SAC's 2015 FMPU. The proposed 2018 EFMP provides additional layers of planning based on its recommended facilities projects and open space concept. Its recommendations focus on three elements: main entrances from public roadways, campus circulation facilities, and campus parking facilities, as described below.

In addition to the circulation improvements described below, Mt. SAC is currently working with Foothill Transit to construct a new Transit Center on campus, which is shown on the proposed 2018 Facilities Master Plan presented in Exhibit 3-4. As previously identified, the Transit Center was approved the Mt. SAC Board of Trustees in December 2018 and was evaluated in a project-specific Initial Study/Negative Declaration pursuant to CEQA; it is being addressed as a cumulative project in this Draft EIR, as described in Section 4.0, Introduction to the Environmental Analysis.

The required traffic mitigation measures and circulation improvements associated with the previously approved PEP will be implemented consistent with the provisions outlined in the respective Mitigation Monitoring and Reporting Programs (MMRPs). As appropriate, the traffic analysis presented in Section 4.14 of this Draft EIR assumes implementation of these previously identified/required traffic mitigation measures and circulation improvements.

Main Entrances and Campus Circulation

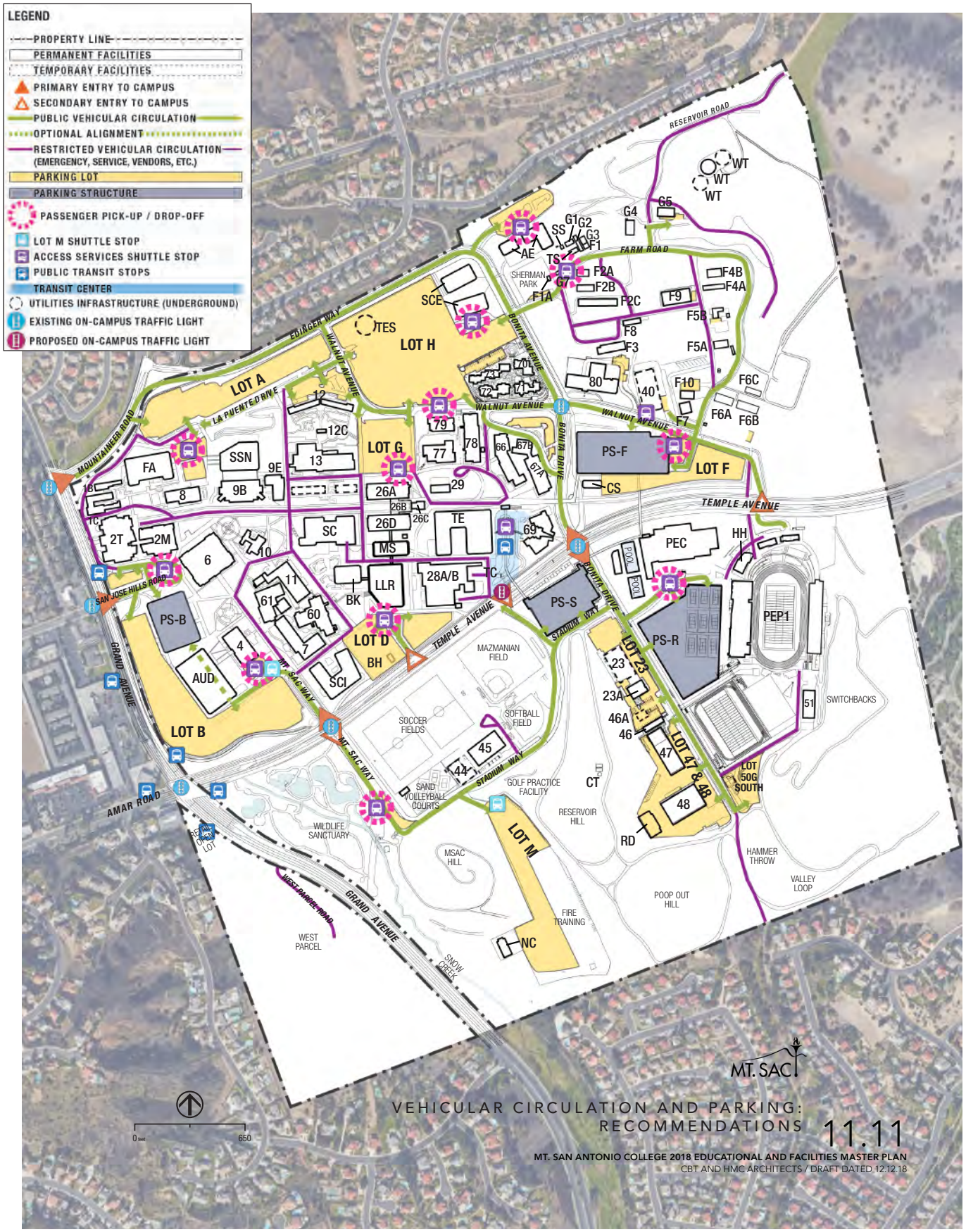
The proposed vehicular circulation system is depicted on Exhibit 3-11. Direct vehicular access would continue to be provided primarily from the signalized intersections under the jurisdiction of the City of Walnut: Grand Avenue/Mountaineer Avenue, Grand Avenue/San Jose Hills Road, Temple Avenue/Mt. SAC Way, and Temple Avenue/Bonita Drive. These intersection and related circulation improvements require approval from the City. The following on-campus circulation improvements are proposed:

- **Temple Avenue/Bonita Drive and Parking Structure S and West Temple Avenue Pedestrian Bridge (Phase 1A).** The following intersection and roadway improvements are proposed at Temple Avenue/Bonita Drive and to accommodate access to Parking Structure S, and would be installed with Parking Structure S and West Temple Avenue Pedestrian Bridge (refer to Exhibit 3-11):

    - Eastbound right-turn pocket into Parking Structure S
    - Eastbound right-turn pocket from Temple Avenue onto southbound Bonita Drive
    - Westbound right turn pocket from Temple Avenue onto northbound Bonita Drive
    - Extended westbound left-turn lane onto southbound Bonita Drive to alleviate vehicle stacking

- **Temple Avenue/Mt. SAC Way (Phase 1B).** The Temple Avenue/Mt. SAC Way entrance provides access to surface Lot B to the north, and Lot W to the south. Improvements to this entrance and to the circulation within the parking lots, as discussed below, would improve the flow of traffic, including along Temple Avenue and at the Grand Avenue/Temple Avenue intersection. To increase the rate of traffic flow to parking and pick-up/drop-off zones, the vehicle stacking space on campus would be increased and vehicle crossing points along the campus roadways that accommodate in-bound traffic from this entrance would be eliminated. Passenger pick-up/drop-off would be accommodated with a dedicated vehicle and shuttle loading zone at Administration Building 4. Access to Lot D from Mt. SAC Way would be used for emergency vehicles only. Mt. SAC Way would continue to function as a primary public vehicular entrance to the campus, on both the north and south sides of Temple Avenue. Potential options for redesign of Mt. SAC Way circulation (internal to the campus) are presented in Figure 32 of the 2017 PCMP included in Appendix A of the proposed 2018 EFMP.

- **Grand Avenue/San Jose Hills Road (Phase 2).** San Jose Hills Road would continue to serve as a main entry to campus for drivers, pedestrians, and cyclists. As discussed in Section 4.14, Transportation/Traffic, this entry would be reconfigured to accommodate optimal vehicular, pedestrian, and cyclist circulation patterns for the proposed Parking Structure B project, and to facilitate the flow of vehicles into the campus from Grand Avenue. Vehicle stacking space on campus would be increased and vehicle crossing points along the campus roadways that accommodate in-bound traffic from this entrance would be eliminated. This redesign would also include an improved pick-up/drop-off. Potential options for redesign of San Jose Hills Road circulation (internal to the campus)



Source: CBT and HMC Architects 2018

Vehicular Circulation and Parking: Recommendations

Exhibit 3-11

Mt. SAC 2018 Educational and Facilities Master Plan EIR

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are presented in Figure 31 of the 2017 PCMP included in Appendix A of the proposed 2018 EFMP.

The following roadway improvements are proposed on campus and are expected to be implemented as part of Phase 2:

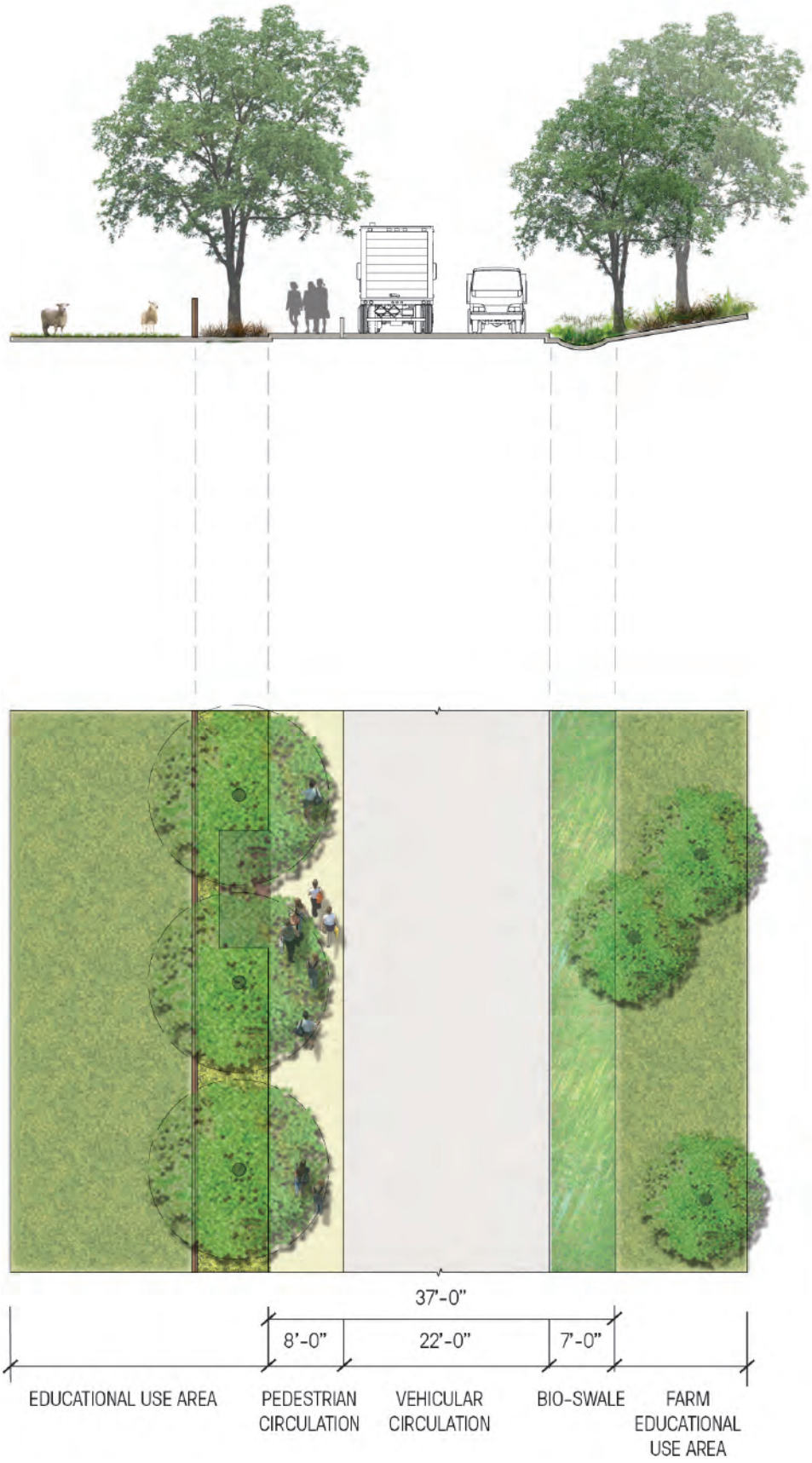
- **Le Puente Drive.** The segment of La Puente Drive from San Jose Hills Road to Lot A would be designated for service and emergency vehicle access only. No physical roadway improvements would be required; however, appropriate signage would be added.

- **Grand Avenue/Mountaineer Way.** A "slip ramp" from Mountaineer Road, between Grand Avenue and Edinger Way, would be provided to accommodate direct access into Lot A and the accessible parking and passenger drop-off/pick-up associated with the Student Services North project.

- **Farm Precinct.** Farm Road, Reservoir Road, and internal service roads would be upgraded and/or realigned to improve the function of these facilities in relation to Farm Precinct operations. Exhibit 3-11 depicts the proposed Farm Road circulation improvements. Notably, Farm Road would be realigned to the east of Buildings F4AB and F5AB to provide better separation between public and service traffic, and a combined "complete streets" approach that addresses stormwater and the needs of all users (vehicular, pedestrian, and animal) would be used. A conceptual roadway section is provided on Exhibit 3-12. Additionally, Building F3A would be removed to accommodate improved parking.

The routes through the academic core of the campus that are recommended for restricted vehicular access for emergency vehicles, service vehicles, vendors, etc. are also shown on Exhibit 3-11. These routes would have controlled access to prevent unauthorized vehicles from driving through the campus on these routes. Additionally, a new emergency access route connecting Bonita Drive to the southern campus boundary is proposed:

- **Bonita Drive Emergency Access.** This project would involve installation of an access route from the southern end of Bonita Drive southward to the boundary of the campus property at the Snow Creek residential neighborhood to allow emergency access for first responders into the campus. A manual swing gate with knox box would likely be installed. The access route would meet the design standards for fire access routes of the Los Angeles County Fire Department.



Source: CBT and HMC Architects 2018

Farm Road: Conceptual Roadway Section

Exhibit 3-12

Mt. SAC 2018 Educational and Facilities Master Plan EIR

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Campus Parking

The 2017 PCMP estimates the number of on-campus parking spaces that would be needed in each academic year through 2025–2026[5]. The recommended approach to providing the additional parking employs two strategies: (1) to build four new parking structures located in proximity to the Transit Center and along Temple and Grand Avenues, and (2) to improve existing surface parking lots. Proposed parking facilities are shown on Exhibit 3-11. Consistent with the MOA between the City of Walnut and Mt. SAC, no parking structure is proposed in Parking Lot A; proposed parking structures would be more than 400 feet from the nearest single family residential property line; and parking structures in proximity to the Transit Center and along Temple Avenue have been prioritized.

Following is the description of proposed parking facilities as presented in the proposed 2018 EFMP. Parking Structures R and S are included as part of Phase 1A, and the proposed Project assumes that Parking Structures B and F would be developed as part of Phase 2. Ultimately, the timing of development of Parking Structures B and F and the number of spaces to be provided would be based on parking demand on campus, which will be influenced by the Transit Center and implementation of pedestrian and bicycle facilities.

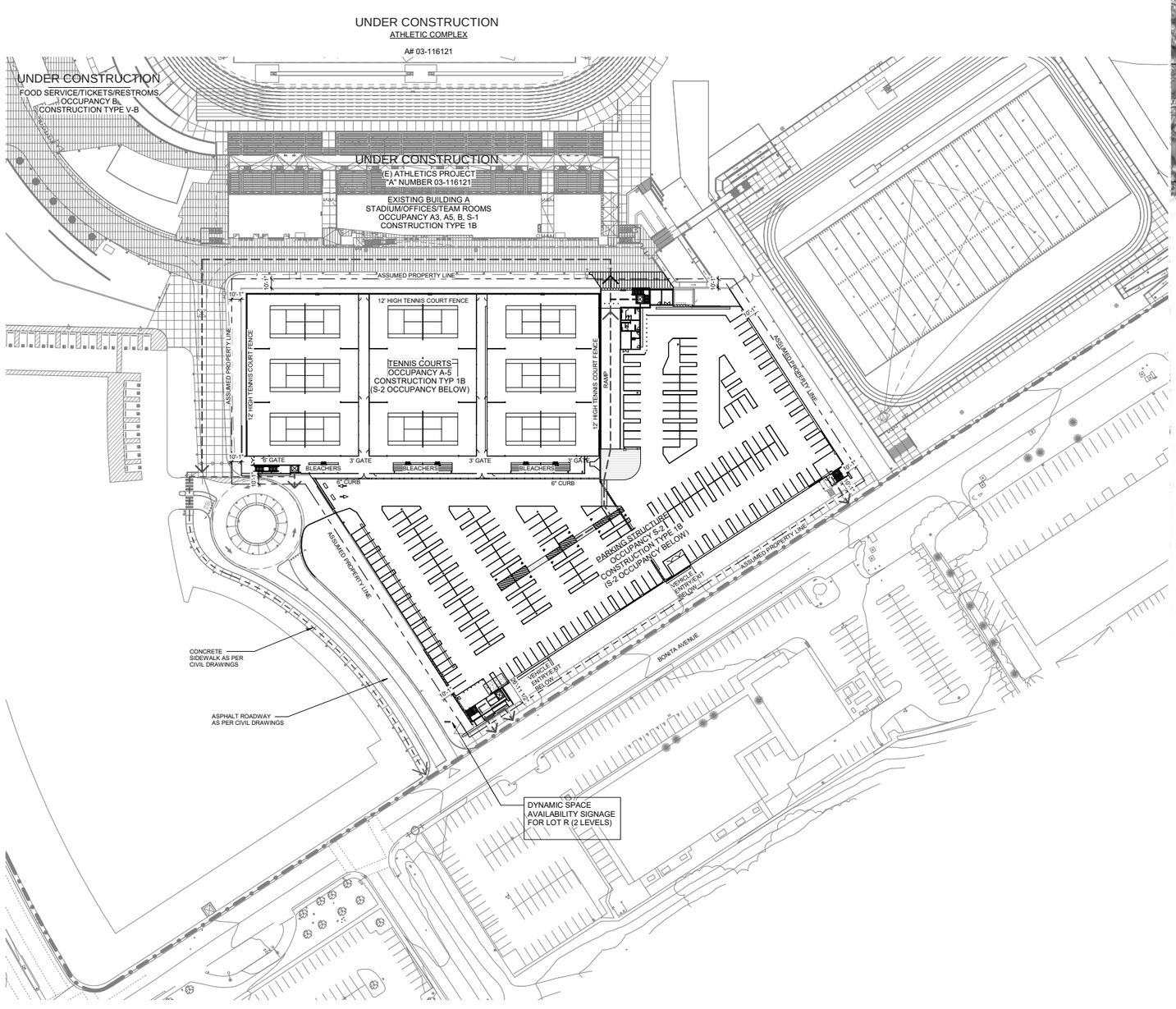
Phase 1A

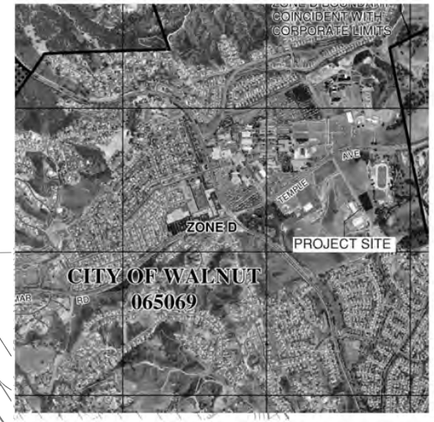
- **Parking Structure R and Tennis Courts.** As previously identified, Parking Structure R and Tennis Courts would be constructed as part of Phase 1A and is being evaluated at a project-level in this Draft EIR. The proposed Parking Structure R and Tennis Courts project would be located generally on existing Student Parking Lot R located south of Temple Avenue, east of Bonita Drive, and west of the Fieldhouse currently under construction as part of the Athletics Complex East.

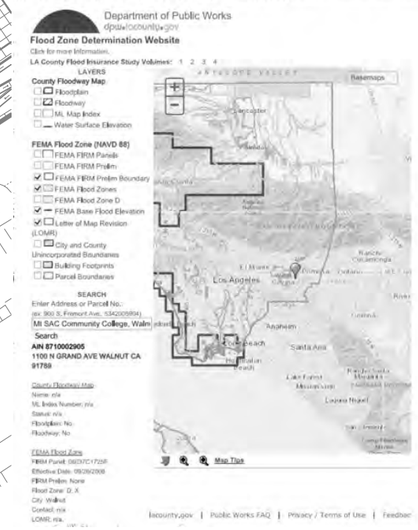
  The conceptual site plan for Parking Structure R and Tennis Courts is provided on Exhibit 3-13 and conceptual elevations are provided on Exhibits 3-14a–b. Conceptual renderings are provided on Exhibit 3-15. The conceptual landscape plan is presented in Exhibit 3-16a–d. As shown, the parking structure would be 2 levels (ground level plus one level above the ground level). The tennis courts would be on the upper level with a surrounding fence 30 feet tall and 32-foot stair/elevator enclosure and 26-foot high bleacher roof and would have a building footprint of approximately 199,920 sf. The proposed parking structure would accommodate approximately 700 parking spaces. In addition to parking, the top deck of the parking structure would accommodate 9 tennis courts.

  The second level “support building” would serve as one of the structure’s four vertical circulation points, providing access between levels via stairs and a pair of elevators. It also would contain two restrooms and a storage room supporting the tennis program, a

[5] The estimated parking demand was established based on a parking survey of usage and demand in March 2017. The projections assume that demand would grow annually by 0.75 percent (the medium enrollment growth rate). To be conservative and to account for campus conditions in the generally busier first three weeks of each semester, the projected need for parking spaces was increased by 5 percent to arrive at the PCMP’s recommended parking capacity for each year. The relationship between student enrollment and parking demand may not remain static and, in fact, Mt. SAC is actively encouraging the use of alternatives to single-driver commuting (as further discussed below). One of the most desirable benefits that result from increased use of alternative transportation is a reduced need for parking facilities and the investment of land and funds that they entail. Mt. SAC intends to survey its parking demand periodically to keep apprised of any trends that may indicate a changing transportation profile. Additional information about parking demand is presented in the 2017 PCMP included in the proposed 2018 EFMP.







FLOOD ZONE INFORMATION

KEYNOTES

1. SEE CIVIL DRAWINGS FOR SITE IMPROVEMENT PLANS
2. SEE LANDSCAPE DRAWINGS FOR LANDSCAPE INFORMATION
3. SEE SHEET A-011 FOR FIRE HYDRANT LOCATIONS
4. SEE A-100 SERIES, A-400 SERIES SHEETS, AND FIRE PROTECTION PLANS FOR STANDPIPE LOCATIONS.
5. SEE SHEET A-402 FOR ENLARGED RESTROOM PLAN.
6. SEE SHEET A-403 FOR ENLARGED VEHICLE ENTRY/EXIT PLANS.
7. SEE SHEETS A-404 AND A-405 FOR ENLARGED TENNIS COURT PLANS AND BLEACHER PLANS.
8. SEE AG-101 AND AG-102 FOR STRIPING PLANS
9. SEE AG-800 SERIES FOR ACCESSIBLE PARKING DETAILS.
10. SEE SHEET A-030 FOR PARKING REQUIREMENTS AND PARKING TABULATION.

LEGEND

SYMBOL	
- - - - - - -	ADA PATH OF TRAVEL
——— - - ———	PROJECT BOUNDARY

Source: HMC Architects 2018

Parking Structure R and Tennis Courts – Conceptual Site Plan

Exhibit 3-13

Mt. SAC 2018 Educational and Facilities Master Plan EIR

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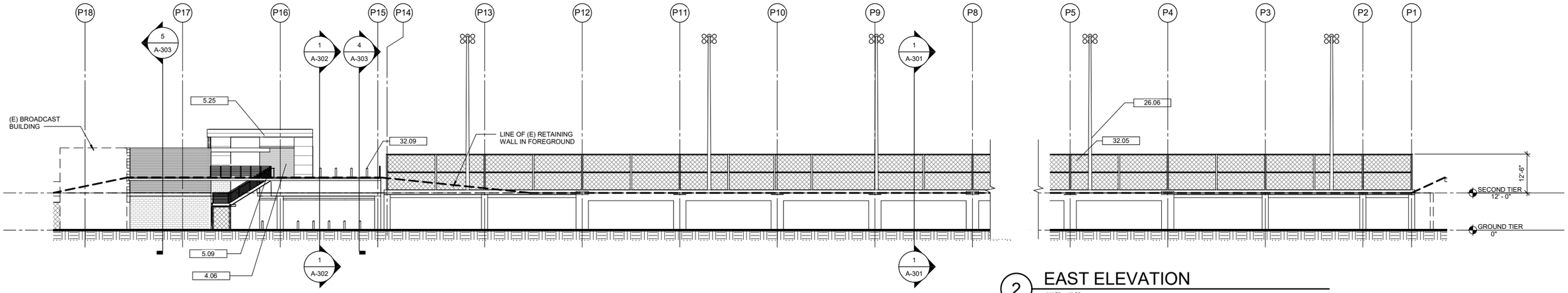
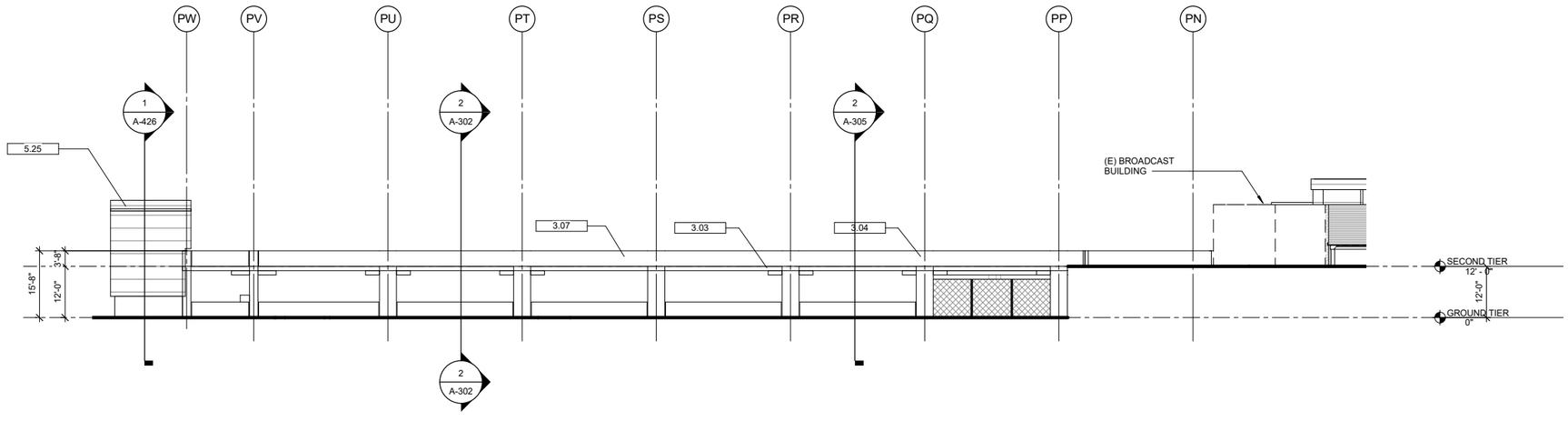


2 EAST ELEVATION

1/16" = 1'-0"

KEYNOTES

3.03	C.I.P CONCRETE P.T. SUPPORTED SLAB . SEE STRUCTURAL DRAWINGS
3.04	C.I.P. CONCRETE COLUMN . SEE STRUCTURAL DRAWINGS
3.07	C.I.P. CONCRETE MOMENT FRAME UPTURNED BEAM . SEE STRUCTURAL DRAWINGS
3.08	C.I.P. CONCRETE BUMPER WALL.
3.11	C.I.P. CONCRETE WALL.
4.06	BRICK VENEER MASONRY
5.09	GUARDRAIL SYSTEM
5.25	COMPOSITE METAL PANEL ROOF
7.18	CORRUGATED METAL PANEL WALL.
7.19	FLAT METAL WALL PANEL.
26.06	TENNIS COURT LIGHTING
32.05	TENNIS COURT FENCE
32.09	FOLD-DOWN BOLLARDS "MAXIFORCE MCSP_SS1-U



1 SOUTH ELEVATION

1/16" = 1'-0"

Source: HMC Architects 2018

Parking Structure R and Tennis Courts – Conceptual Elevations

Exhibit 3-14a

Mt. SAC 2018 Educational and Facilities Master Plan EIR

Map not to scale

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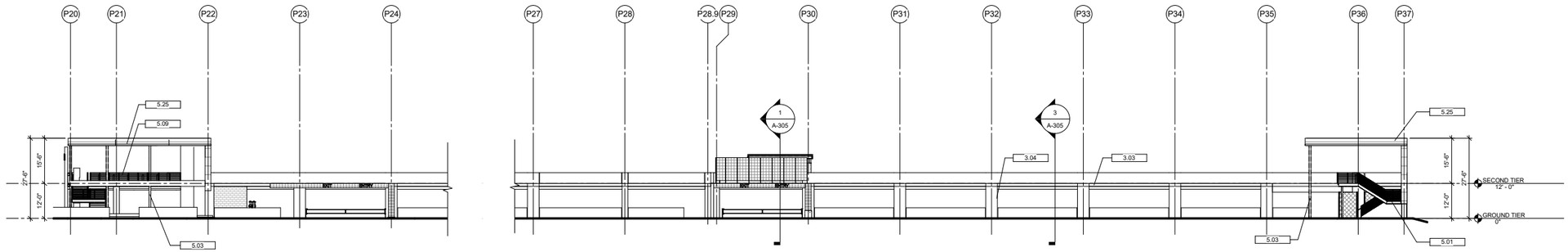
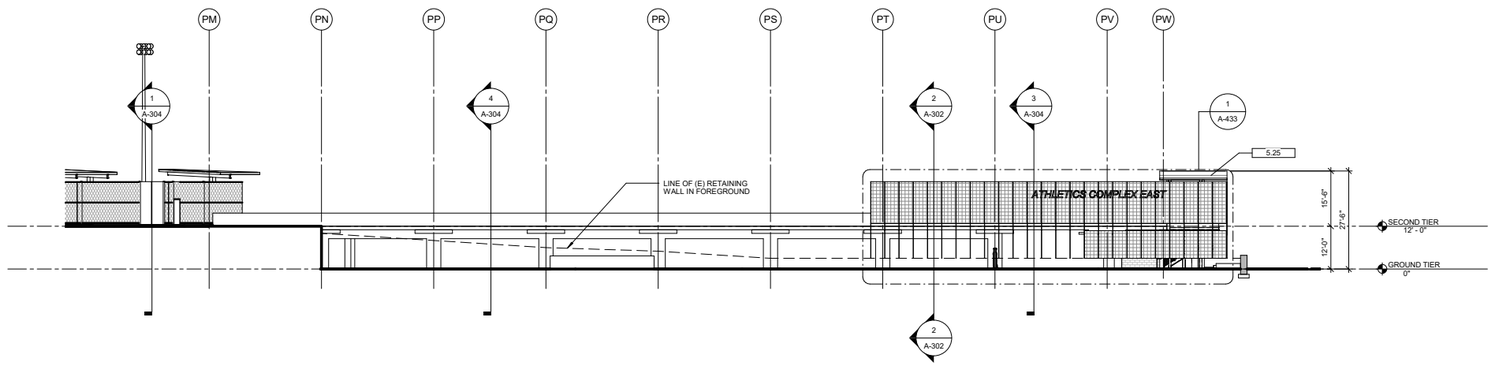
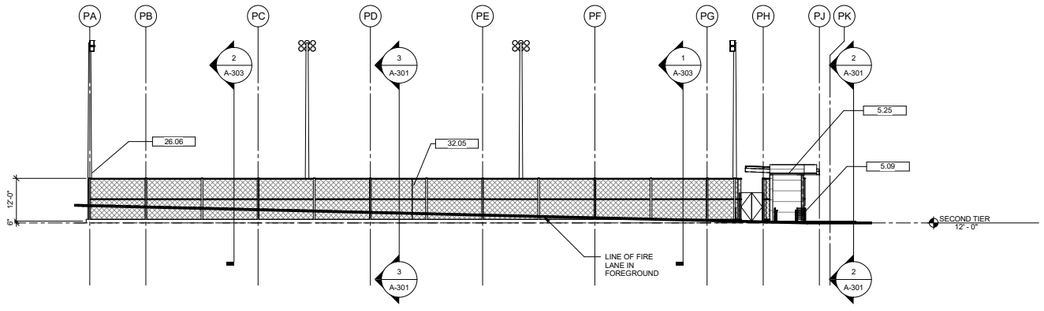


3 WEST ELEVATION
1/16" = 1'-0"



2 NORTH ELEVATION
1/16" = 1'-0"



1 NORTH ELEVATION- TENNIS COURT
1/16" = 1'-0"

KEYNOTES

3.03	C.I.P CONCRETE P.T. SUPPORTED SLAB . SEE STRUCTURAL DRAWINGS
3.04	C.I.P. CONCRETE COLUMN . SEE STRUCTURAL DRAWINGS
3.11	C.I.P. CONCRETE WALL.
5.01	CONCRETE FILLED METAL PAN STAIR
5.03	STEEL COLUMN
5.09	GUARDRAIL SYSTEM
5.25	COMPOSITE METAL PANEL ROOF
7.19	FLAT METAL WALL PANEL.
26.06	TENNIS COURT LIGHTING
32.05	TENNIS COURT FENCE

Source: HMC Architects 2018

Parking Structure R and Tennis Courts - Conceptual Elevations

Exhibit 3-14b

Mt. SAC 2018 Educational and Facilities Master Plan EIR

Map not to scale

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Parking Structure R and Tennis Courts – Conceptual Exterior Perspectives — Exhibit 3-15

Mt. SAC 2018 Educational and Facilities Master Plan EIR

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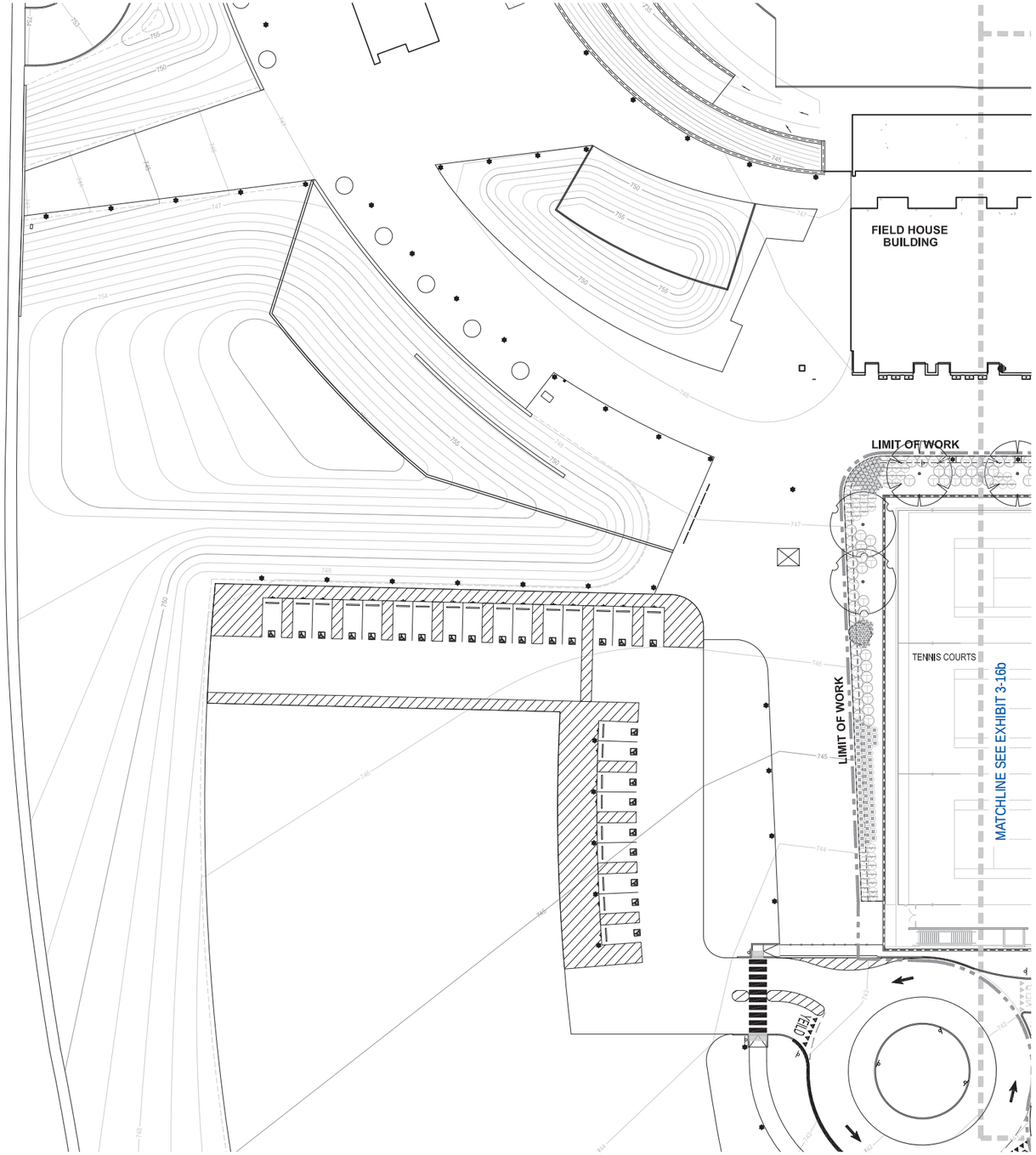

PLANTING LEGEND: Trees, See Details D, E / L3.30

SYMBOL	NAME	WATER REQ.	SIZE	QTY	FORM
	CERCIS OCCIDENTALIS WESTERN REDBUD	LOW	24" BOX	18	LOW BRANCHING
	EUCALYPTUS SIDEROXYLON RED IRONBARK	LOW	24" BOX	9	STANDARD
	LYONOTHAMNUS FLO. SSP. ASPLENIFOLIUS CATALINA IRONWOOD	LOW	24" BOX	8	STANDARD
	PLATANUS RACEMOSA CALIFORNIA SYCAMORE	MOD	36" BOX	20	50% STD, 50% MULTI
	QUERCUS AGRIFOLIA COAST LIVE OAK 24" BOX UNLESS OTHERWISE NOTED	LOW	24" BOX	4	STANDARD
			48" BOX	1	
	ROOT BARRIER	SEE DETAIL B/L3.10			

PLANTING LEGEND: Shrubs / Groundcover, See Details A, B, C, / L3.30

SYMBOL	NAME	WATER REQ.	SIZE	QTY
	AGAVE ATTENUATA FOX TAIL AGAVE	LOW	5 GAL	339
	AGAVE WEBERI WEBER'S AGAVE	LOW	15 GAL	3
	ARCTOSTAPHYLOS DENSIFLORA 'HOWARD MCMINN' HOWARD MCMINN MANZANITA	LOW	15 GAL	5
	ARCTOSTAPHYLOS 'PACIFIC MIST' PACIFIC MIST MANZANITA	LOW	1 GAL	1,350
	CAREX DIVULSA BERKELEY SEDGE	LOW	1 GAL @ 18" O.C.	1,389
	DODONAEA VISCOSA 'PURPUREA' PURPLE-LEAFED HOP-BUSH	MOD	15 GAL	26
	ELAEGNUS PUNGENS 'FRUITLANDII' FRUITLAND SILVERBERRY	LOW	15 GAL	118
	JUNCUS PATENS CALIFORNIA GRAY RUSH	LOW	1 GAL @ 18" O.C.	581
	LONICERA JAPONICA 'HALLIANA' HALLIANA JAPANESE HONEYSUCKLE	LOW	15 GAL	170
	MUHLENBERGIA CAPILLARIS 'LENCA' REGAL MIST PINK MUHLY	LOW	1 GAL @ 30" O.C.	858
	MUHLENBERGIA RIGENS DEER GRASS	MOD	1 GAL	765
	PENNISETUM SETACEUM 'RUBRUM' PURPLE FOUNTAIN GRASS	LOW	1 GAL	485
	1.5" PEWTER GRAY CRUSHED AGGREGATE SOUTHWEST BOULDER AND STONE - SEE DETAIL I / L3.30	-	-	1210 SF

PLANTING LEGEND: Landscape Boulders

SYMBOL	NAME	SIZE	QTY	DETAIL
4'	BLASTED GRANITE BOULDERS AVAILABLE THROUGH SOUTHWEST BOULDER PHONE # (877)792-7625	4'	1	J/L3.30
3'		3'	2	J/L3.30
2'		2'	2	J/L3.30

PLANTING NOTES

1. ALL TREES STANDARD FORM UNLESS OTHERWISE NOTED.
2. VERIFY LOCATION AND DEPTH OF ALL UNDERGROUND UTILITIES PRIOR TO START OF WORK.
3. INSTALL 'DEEP ROOT' (OR APPROVED EQUAL) TREE ROOT BARRIERS ON ALL TREES WITHIN 5'-0" OF SIDEWALKS OR HARD SURFACES. CHECK MANUFACTURERS CALCULATOR CHART FOR NUMBER OF PANELS FOR EACH SIZE TREE. AVAILABLE FROM; DEEP ROOT PARTNERS, LP, 345 LORTON AVENUE, SUITE 305 BURLINGAME, CA. 94010 (800)LV-ROOTS, (415) 344-1464.
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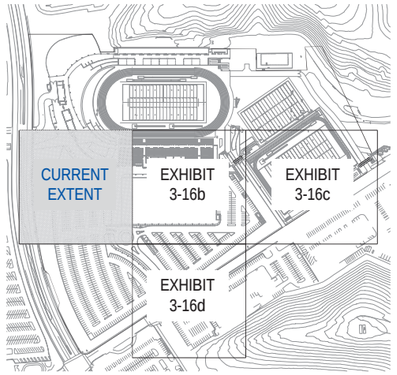
9. AT 4' WIDE BASE OF BIOSWALE (SEE CIVIL DRAWINGS FOR EXTENTS) PROVIDE 3" MINIMUM LAYER OF STONE MULCH: 1.5" PEWTER GRAY CRUSHED AGGREGATE BY SOUTHWEST BOULDER AND STONE. CLEAR AROUND PLANTS. DO NOT APPLY BARK MULCH.



MAP INDEX

Source: HMC Architects, EPT Design 2018

Parking Structure R and Tennis Courts - Conceptual Planting Plan

Exhibit 3-16a

Mt. SAC 2018 Educational and Facilities Master Plan EIR

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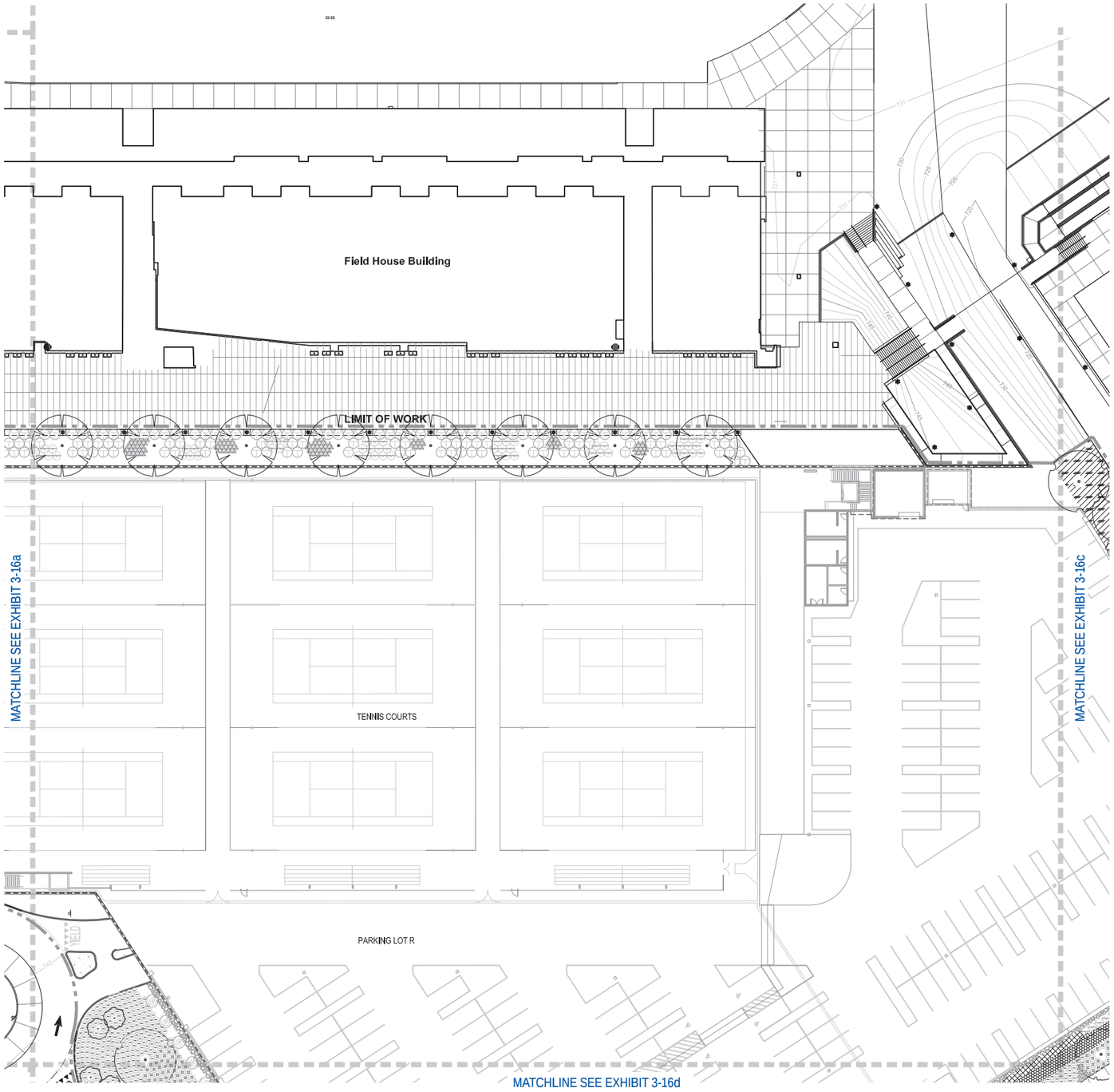

PLANTING LEGEND: Trees, See Details D, E / L3.30

SYMBOL	NAME	WATER REQ.	SIZE	QTY	FORM
	CERCIS OCCIDENTALIS WESTERN REDBUD	LOW	24" BOX	18	LOW BRANCHING
	EUCALYPTUS SIDEROXYLON RED IRONBARK	LOW	24" BOX	9	STANDARD
	LYONOTHAMNUS FLO. SSP. ASPLENIFOLIUS CATALINA IRONWOOD	LOW	24" BOX	8	STANDARD
	PLATANUS RACEMOSA CALIFORNIA SYCAMORE	MOD	36" BOX	20	50% STD, 50% MULTI
	QUERCUS AGRIFOLIA COAST LIVE OAK 24" BOX UNLESS OTHERWISE NOTED	LOW	24" BOX	4	STANDARD
			48" BOX	1	
	ROOT BARRIER	SEE DETAIL B/L3.10			

PLANTING LEGEND: Shrubs / Groundcover, See Details A, B, C, / L3.30

SYMBOL	NAME	WATER REQ.	SIZE	QTY
	AGAVE ATTENUATA FOX TAIL AGAVE	LOW	5 GAL	339
	AGAVE WEBERI WEBER'S AGAVE	LOW	15 GAL	3
	ARCTOSTAPHYLOS DENSIFLORA 'HOWARD MCMINN' HOWARD MCMINN MANZANITA	LOW	15 GAL	5
	ARCTOSTAPHYLOS 'PACIFIC MIST' PACIFIC MIST MANZANITA	LOW	1 GAL	1,350
	CAREX DIVULSA BERKELEY SEDGE	LOW	1 GAL @ 18" O.C.	1,389
	DODONAEA VISCOSA 'PURPUREA' PURPLE-LEAFED HOP-BUSH	MOD	15 GAL	26
	ELAEGNUS PUNGENS 'FRUITLANDII' FRUITLAND SILVERBERRY	LOW	15 GAL	118
	JUNCUS PATENS CALIFORNIA GRAY RUSH	LOW	1 GAL @ 18" O.C.	581
	LONICERA JAPONICA 'HALLIANA' HALLIANA JAPANESE HONEYSUCKLE	LOW	15 GAL	170
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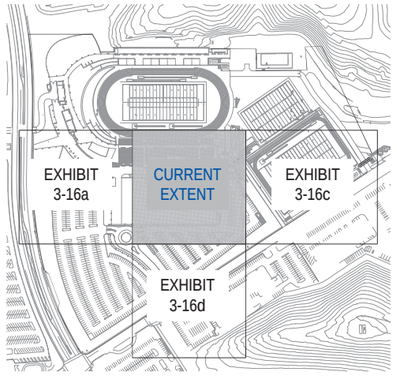

MAP INDEX

Source: HMC Architects, EPT Design 2018

Parking Structure R and Tennis Courts - Conceptual Planting Plan

Exhibit 3-16b

Mt. SAC 2018 Educational and Facilities Master Plan EIR

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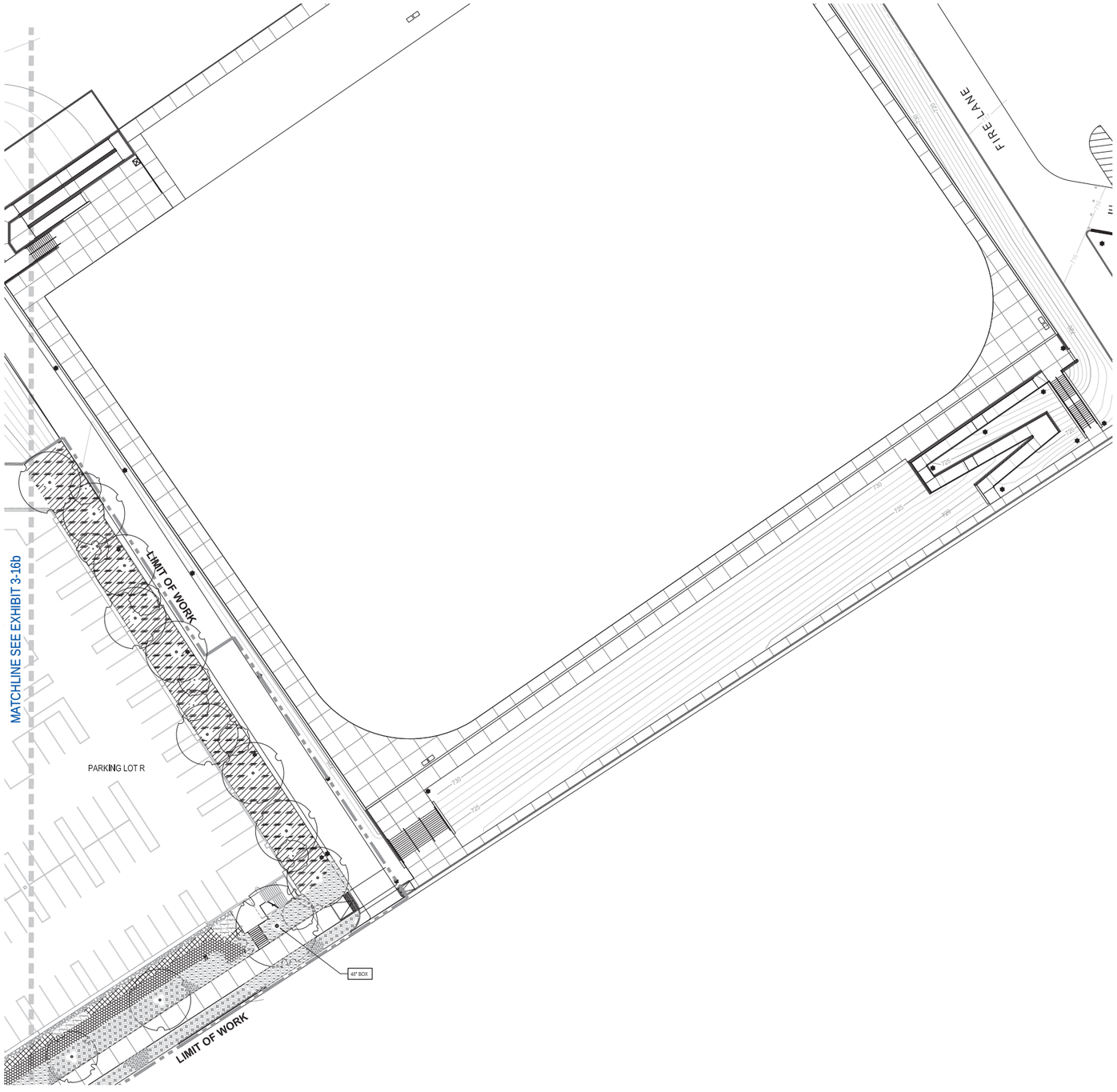

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			48" BOX	1	
	ROOT BARRIER	SEE DETAIL B/L3.10			

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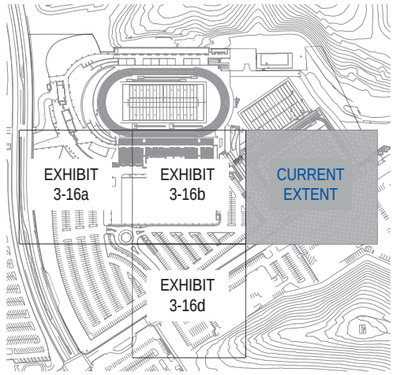

MAP INDEX

Source: HMC Architects, EPT Design 2018

Parking Structure R and Tennis Courts – Conceptual Planting Plan

Exhibit 3-16c

Mt. SAC 2018 Educational and Facilities Master Plan EIR

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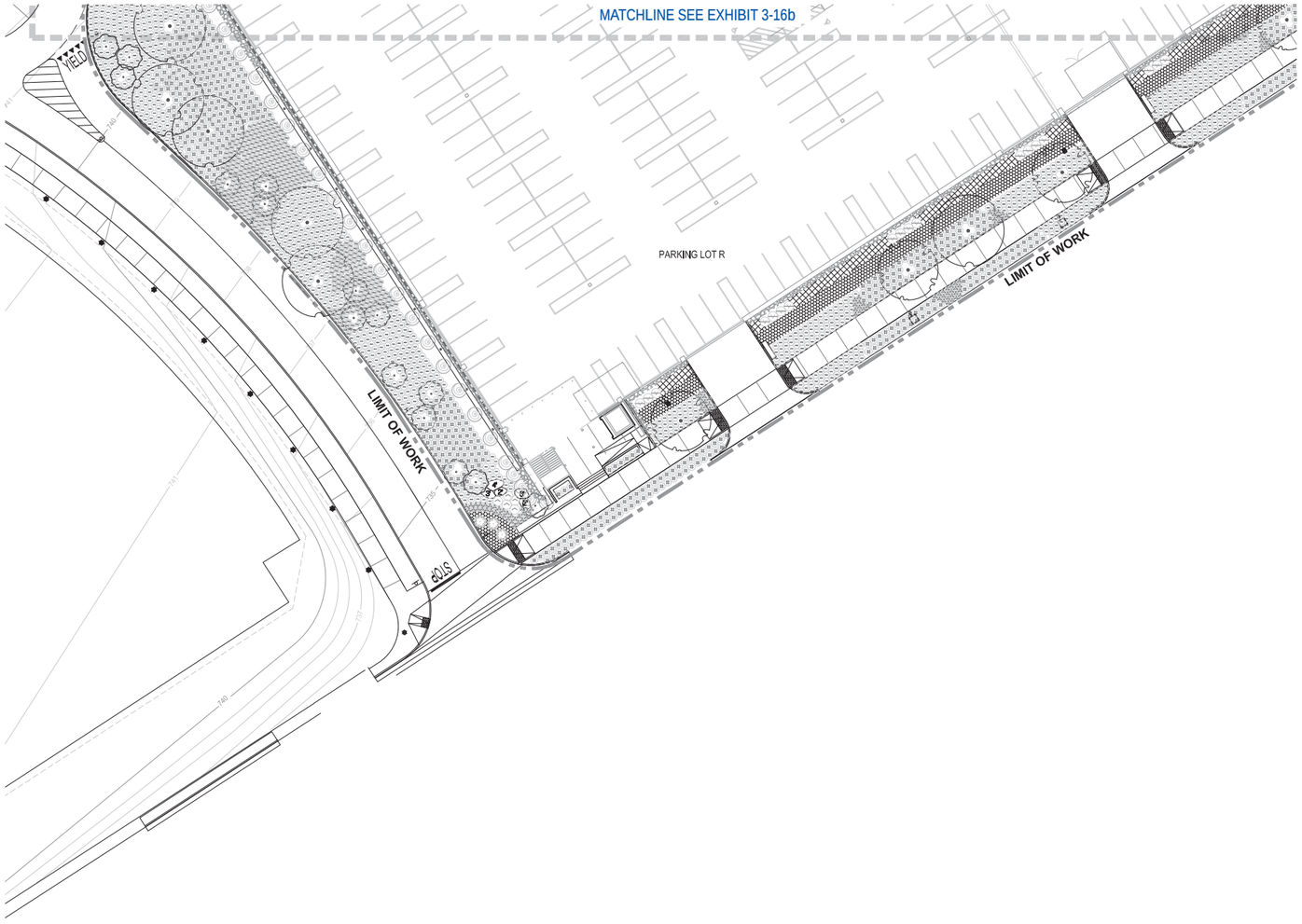

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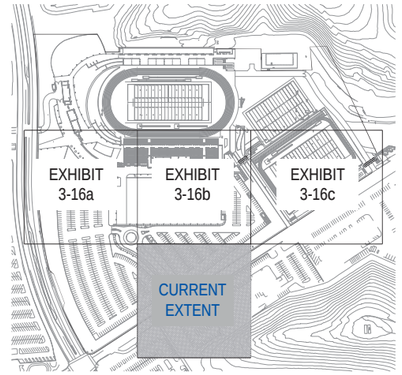

Source: HMC Architects, EPT Design 2018

Parking Structure R and Tennis Courts - Conceptual Planting Plan

Mt. SAC 2018 Educational and Facilities Master Plan EIR

Exhibit 3-16d

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broadcast room for event support and an electrical yard enclosure that supports the Athletics Complex East.

The proposed tennis courts would be on the second level at the eastern portion of the parking structure near the athletic facilities. There would be viewing areas with bleacher seating and shade structures along the west edge accommodating approximately 450 spectators, as well as a sloped lawn seating area along the east edge of tennis courts. Athletic facility lighting would be installed at each of the tennis courts to comply with requirements established by the National Collegiate Athletic Association (NCAA). Twenty-four 50-foot light poles would be installed at the tennis courts (refer to Exhibit 3-17). Tennis court fencing (12-feet high) would be installed around the tennis courts.

Vehicular entry/exit locations would be provided at two locations along Bonita Drive and one location along the north side of the parking structure, from a new access road that would terminate at a round-about at the northwest access point. A sloped walkway along the south side of the tennis courts would provide a pedestrian circulation connection between the south portion of the structure and the higher adjacent grade along its east edge (approximately 5-feet higher). The path would also preserve the fire access lane off Bonita Avenue which would loop around the proposed tennis courts. When needed, the tennis and parking areas may function as event support space, with the lower level providing additional event staging area, and its upper level having infrastructure and the ability to support expo events and to act as a staging area for on-site media vehicles during large events.

- **Parking Structure S and West Temple Avenue Pedestrian Bridge.** Parking Structure S and West Temple Avenue Pedestrian Bridge would also be constructed as part of Phase 1A and are being evaluated at a project-level in this Draft EIR. Parking Structure S would be constructed on existing Student Parking Lot S at the southwest corner of Temple Avenue and Bonita Drive. The proposed parking structure would accommodate approximately 800 parking spaces and would serve as day to day parking for the campus as well as event parking for surrounding athletic facilities.

  The conceptual site plan for Parking Structure S and West Temple Avenue Pedestrian Bridge is provided on Exhibits 3-18a–b, with architectural renderings provided on Exhibit 3-18c. Conceptual elevations are provided on Exhibits 3-19a–b, with the conceptual model provided on Exhibit 3-19c. The conceptual planting plans (trees and shrubs) are provided on Exhibits 3-20 and 3-21. As shown in the conceptual elevations, Parking Structure S would be 4-levels (ground level plus 3 levels above the ground level) and would have a building footprint of approximately 89,820 sf. This parking structure would also potentially accommodate future rooftop solar panels. The height of Parking Structure S would be a maximum of 34’-0” feet at the roof level and 44’-0” at the stair enclosure.

  As shown on Exhibit 3-18a–c, vehicular entry/exit location would be provided at two locations; one on Stadium Way and the other on a new access road that would be constructed along the west side of the parking structure adjacent to the existing baseball fields. The new access road would connect to both Stadium Way and Temple Avenue. The lower parking level would be accessed directly off Stadium Way along the center of the structure, while access to upper levels would be provided via a speed ramp off the south west corner of the new connector road. The new turn lanes and intersection with Temple Avenue, described above, would serve to minimize traffic congestion and would coordinate with the proposed Transit Center on the north side of Temple Avenue.

EQUIPMENT LAYOUT

INCLUDES:

· Center Tennis 1-3
· North Tennis 1-3
· South Tennis 1-3

Electrical System Requirements: Refer to Amperage Draw Chart and/or the **"Musco Control System Summary"** for electrical sizing.

Installation Requirements: Results assume ± 3% nominal voltage at line side of the driver and structures located within 3 feet (1m) of design locations.

EQUIPMENT LIST FOR AREAS SHOWN

Pole				Luminaires		
QTY	LOCATION	SIZE	GRADE ELEVATION	MOUNTING HEIGHT	LUMINAIRE TYPE	QTY / POLE
12	T1, T4-T5 T12-T13 T16-T17 T20-T21 T24 T8-T9	50'	-	50'	TLC-LED-1150	2
12	T10-T11 T14-T15 T18-T19 T2-T3 T22-T23 T6-T7	50'	-	50'	TLC-LED-1150	4
24	TOTALS					72

SINGLE LUMINAIRE AMPERAGE DRAW CHART

Ballast Specifications (.90 min power factor)	Line Amperage Per Luminaire (max draw)						
Single Phase Voltage	208 (60)	220 (60)	240 (60)	277 (60)	347 (60)	380 (60)	480 (60)
TLC-LED-1150	6.8	6.5	5.9	5.1	4.1	3.7	3.0

Source: Musco Lighting 2018

Tennis Courts – Lighting Plan

Exhibit 3-17

Mt. SAC 2018 Educational and Facilities Master Plan EIR

0 40 80 160 Feet

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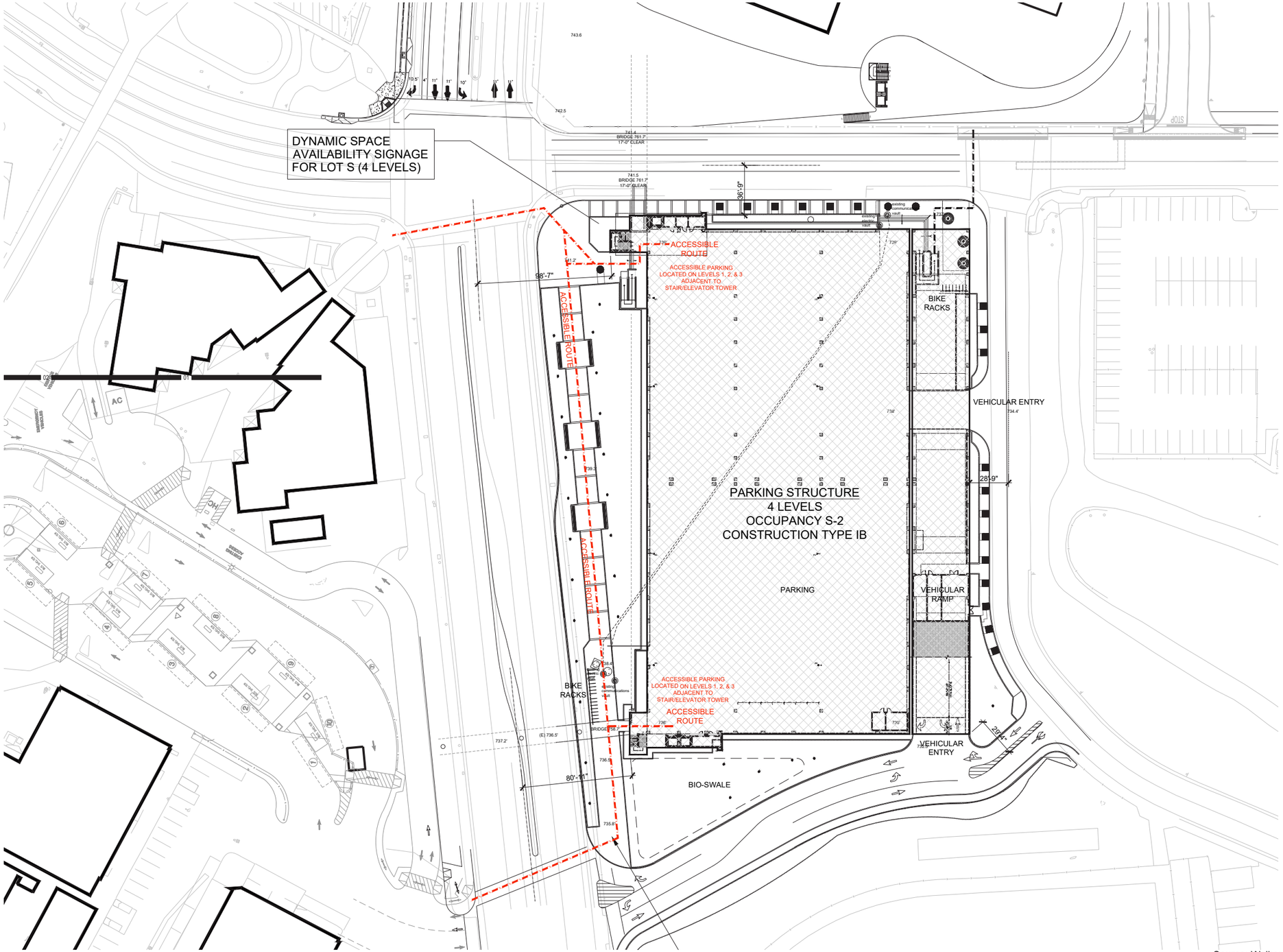

Source: Walker Parking Consultants, HPI Architecture 2019

Parking Structure S and West Temple Avenue Pedestrian Bridge – Architectural Site Plan

Exhibit 3-18a

Mt. SAC 2018 Educational and Facilities Master Plan EIR

PSOMAS

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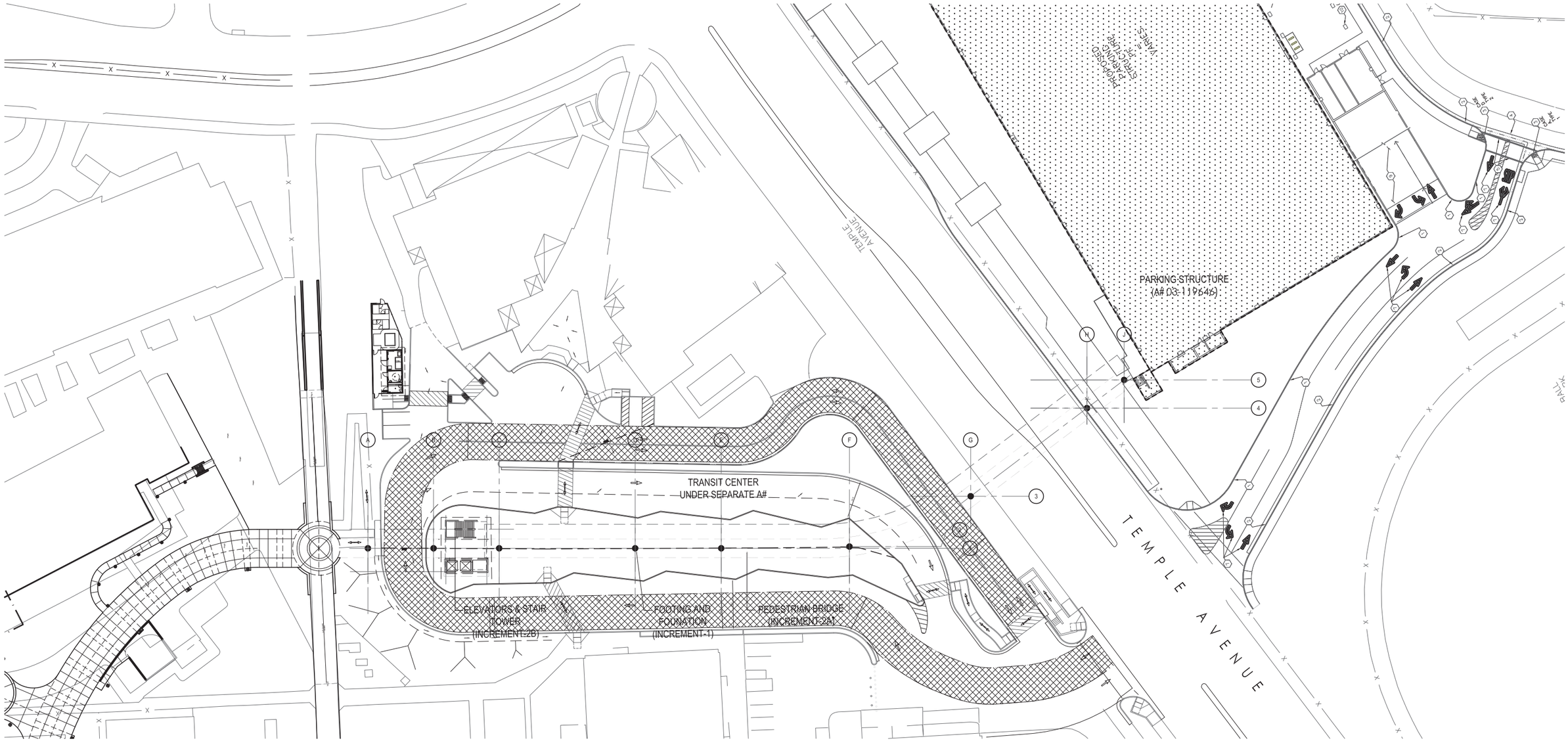

SITE PLAN LEGEND

PARKING STRUCTURE (A# 03-119646)

TRANSIT CENTER (PART OF SEPARATE A#)

Source: HPI Architecture 2019

Parking Structure S and West Temple Avenue Pedestrian Bridge – Architectural Site Plan

Exhibit 3-18b

Mt. SAC 2018 Educational and Facilities Master Plan EIR

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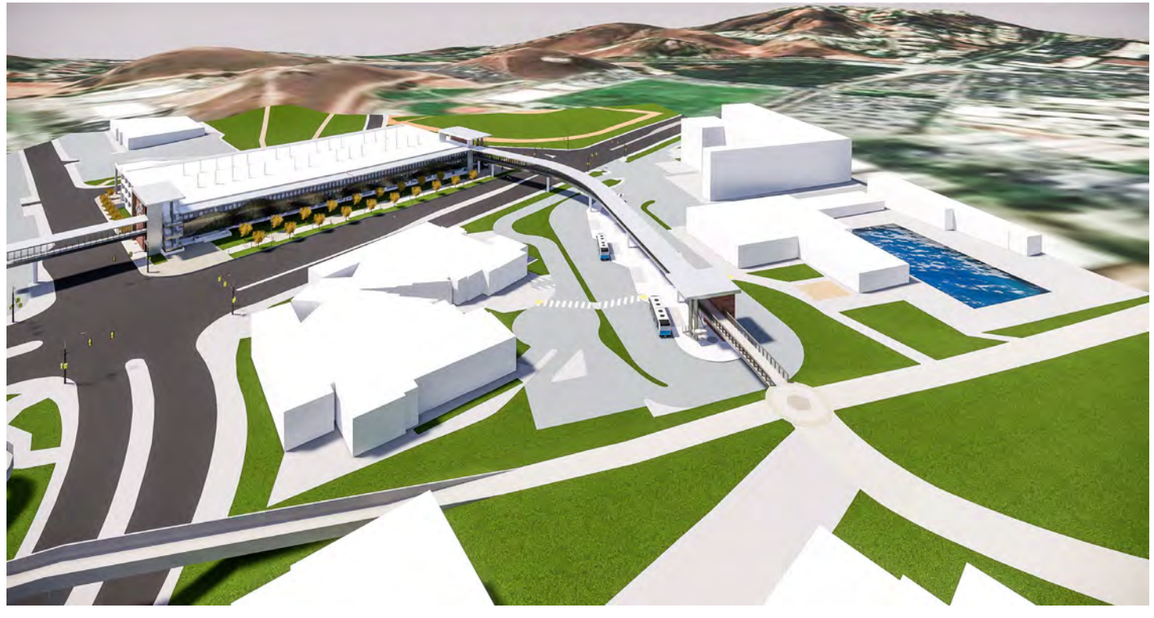

Source: HPI Architecture 2019

Parking Structure S and West Temple Avenue Pedestrian Bridge – Architectural Renderings

Exhibit 3-18c

Mt. SAC 2018 Educational and Facilities Master Plan EIR

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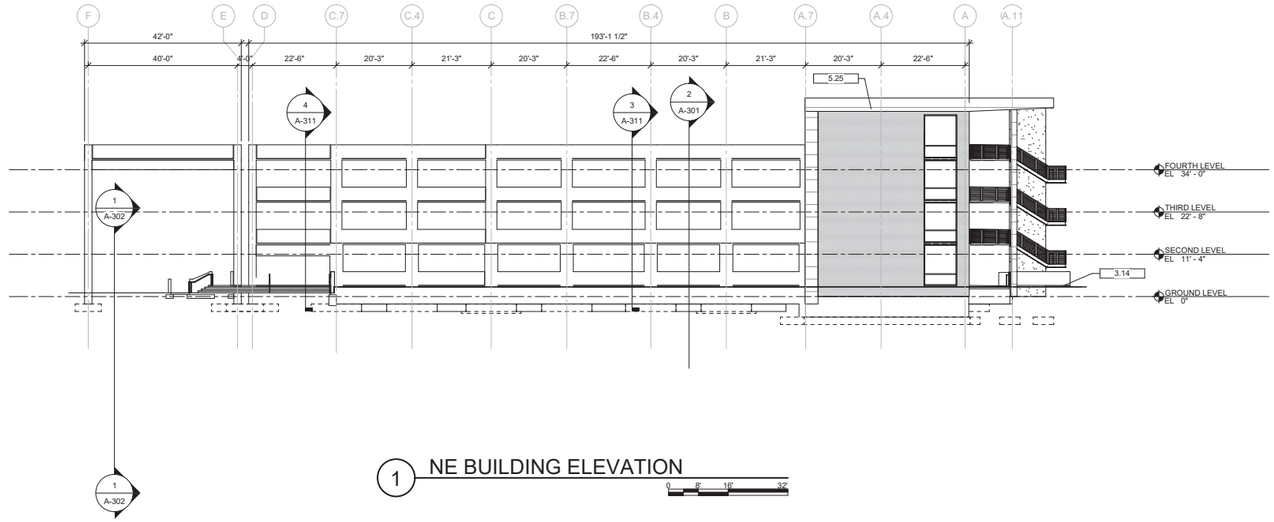
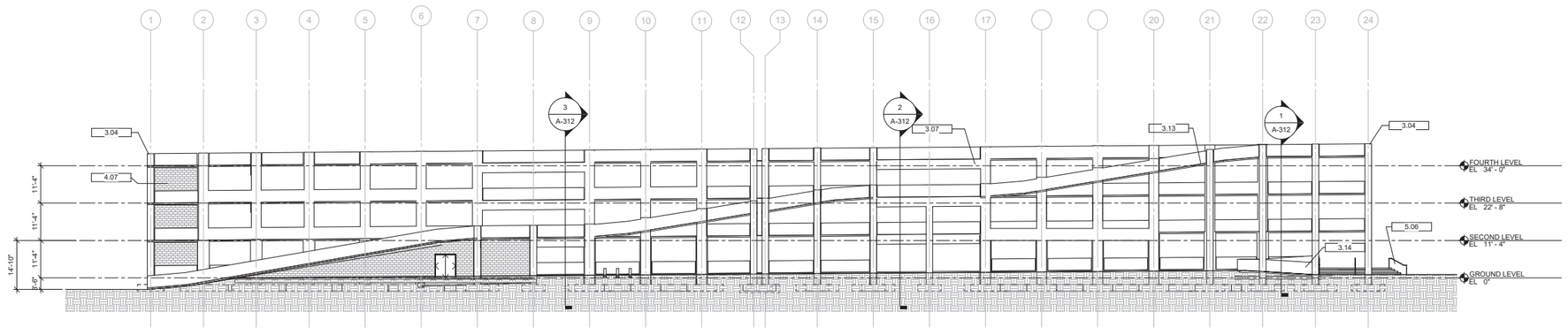


1 NE BUILDING ELEVATION

0 8' 16' 32'



2 SE BUILDING ELEVATION

0 8' 16' 32'

Source: Walker Parking Consultants, HPI Architecture 2019

Parking Structure S and West Temple Avenue Pedestrian Bridge – Conceptual Elevations

Exhibit 3-19a

Mt. SAC 2018 Educational and Facilities Master Plan EIR

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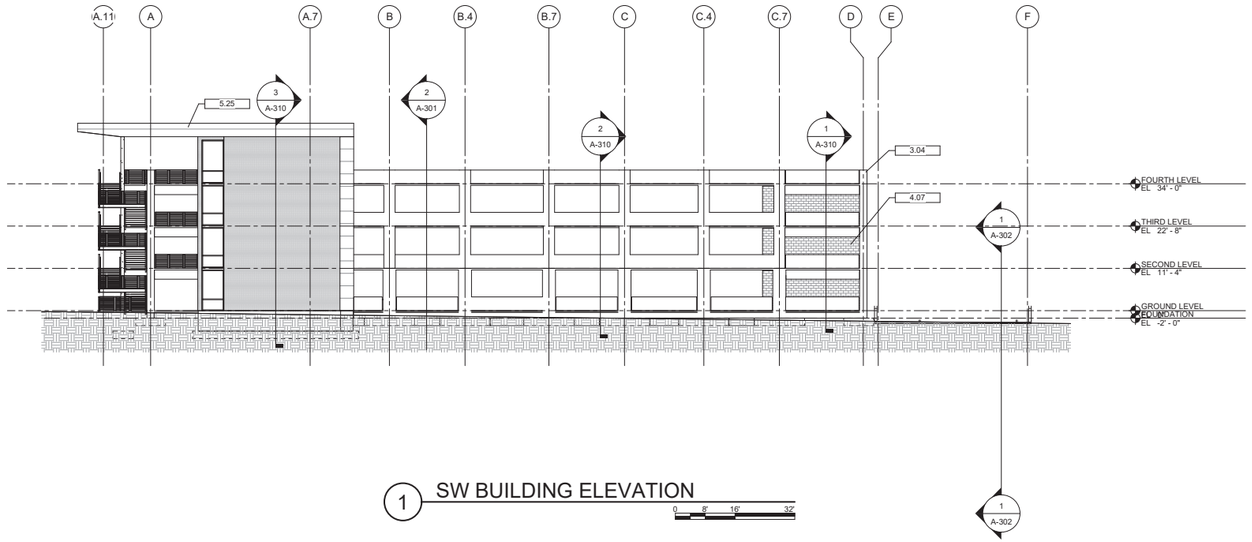
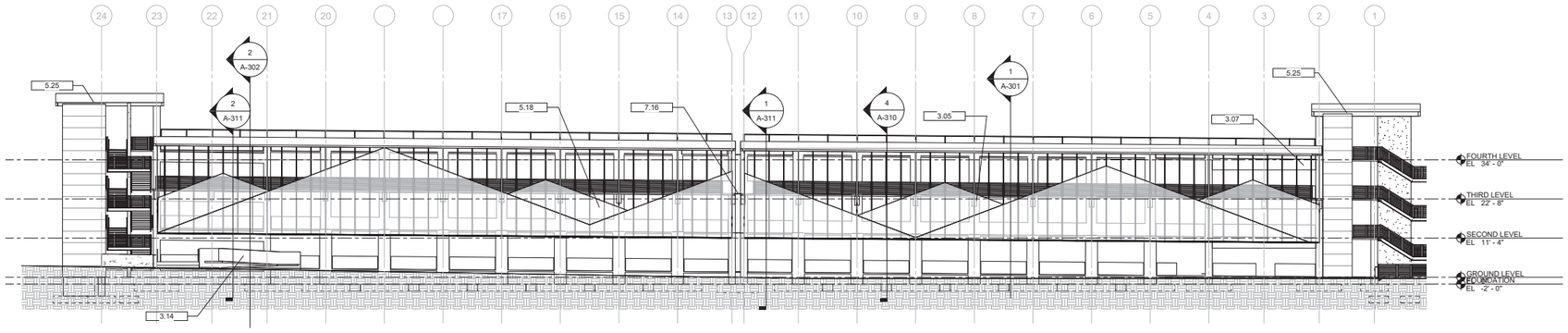


1 SW BUILDING ELEVATION

0 8' 16' 32'



2 NW BUILDING ELEVATION

0 8' 16' 32'

Source: Walker Parking Consultants, HPI Architecture 2019

Parking Structure S and West Temple Avenue Pedestrian Bridge – Conceptual Elevations

Exhibit 3-19b

Mt. SAC 2018 Educational and Facilities Master Plan EIR

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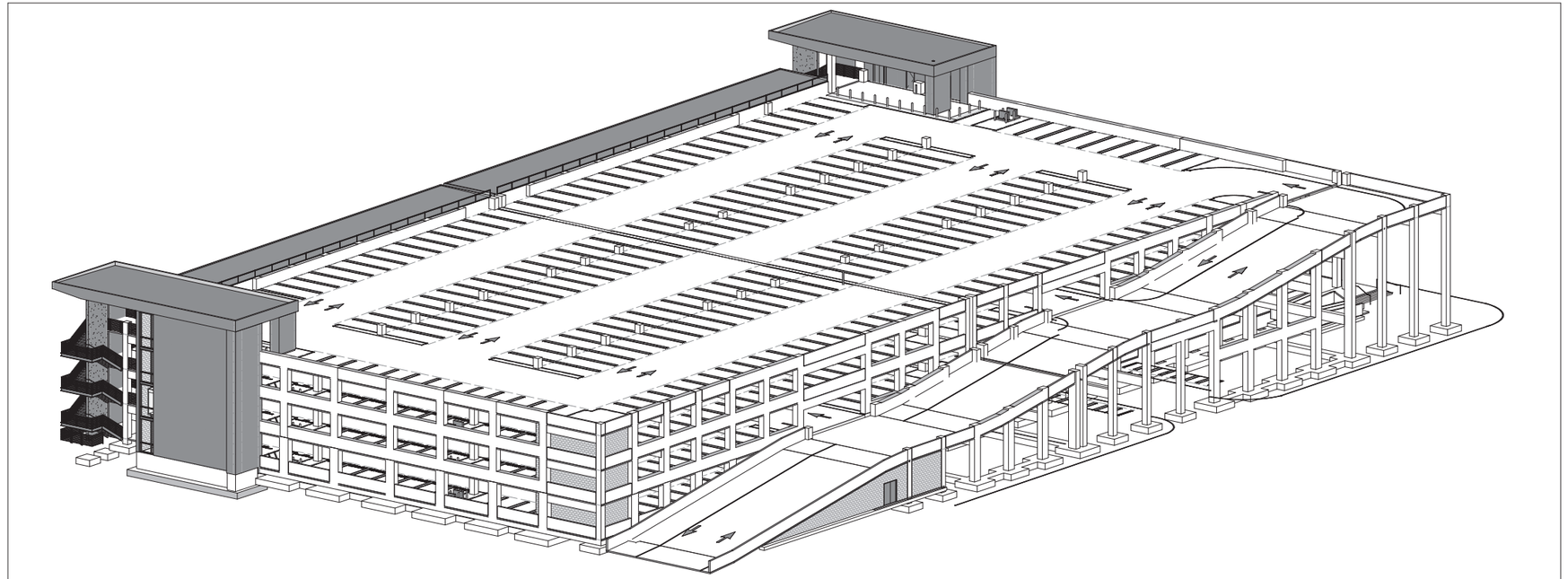

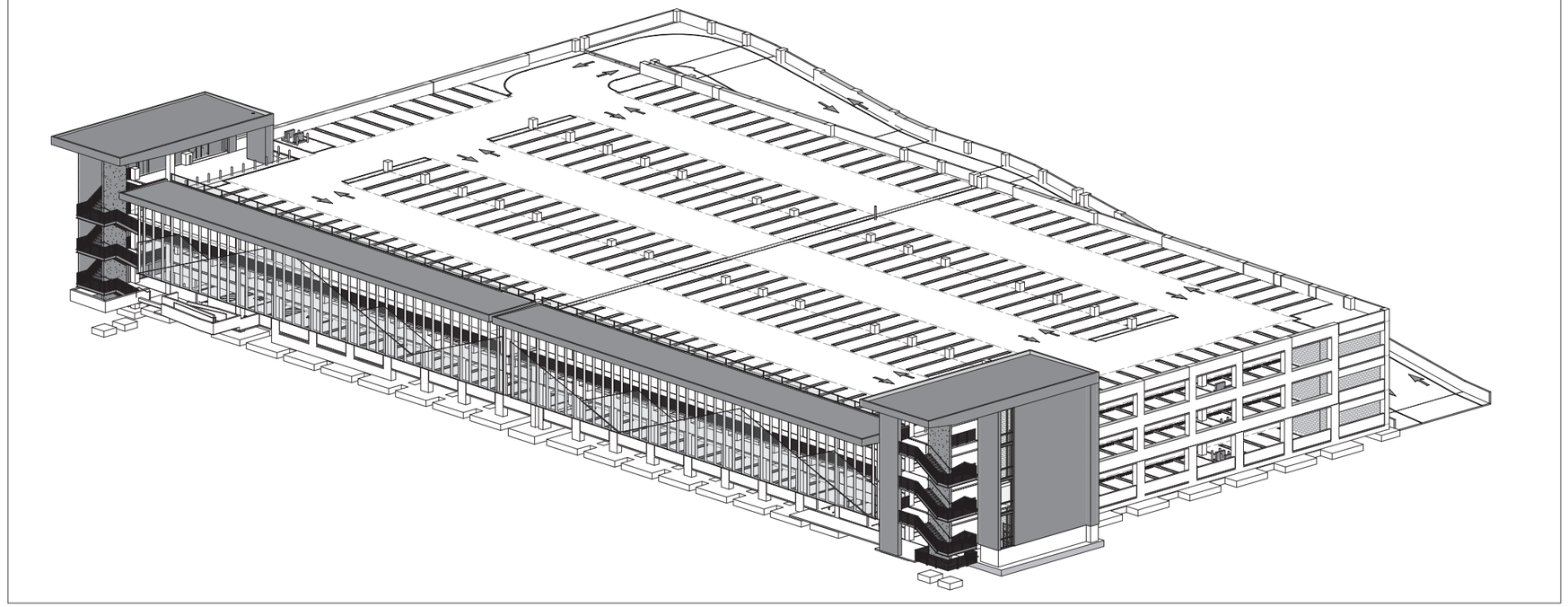

Source: Walker Parking Consultants, HPI Architecture 2019

Parking Structure S and West Temple Avenue Pedestrian Bridge – Conceptual Model

Exhibit 3-19c

Mt. SAC 2018 Educational and Facilities Master Plan EIR

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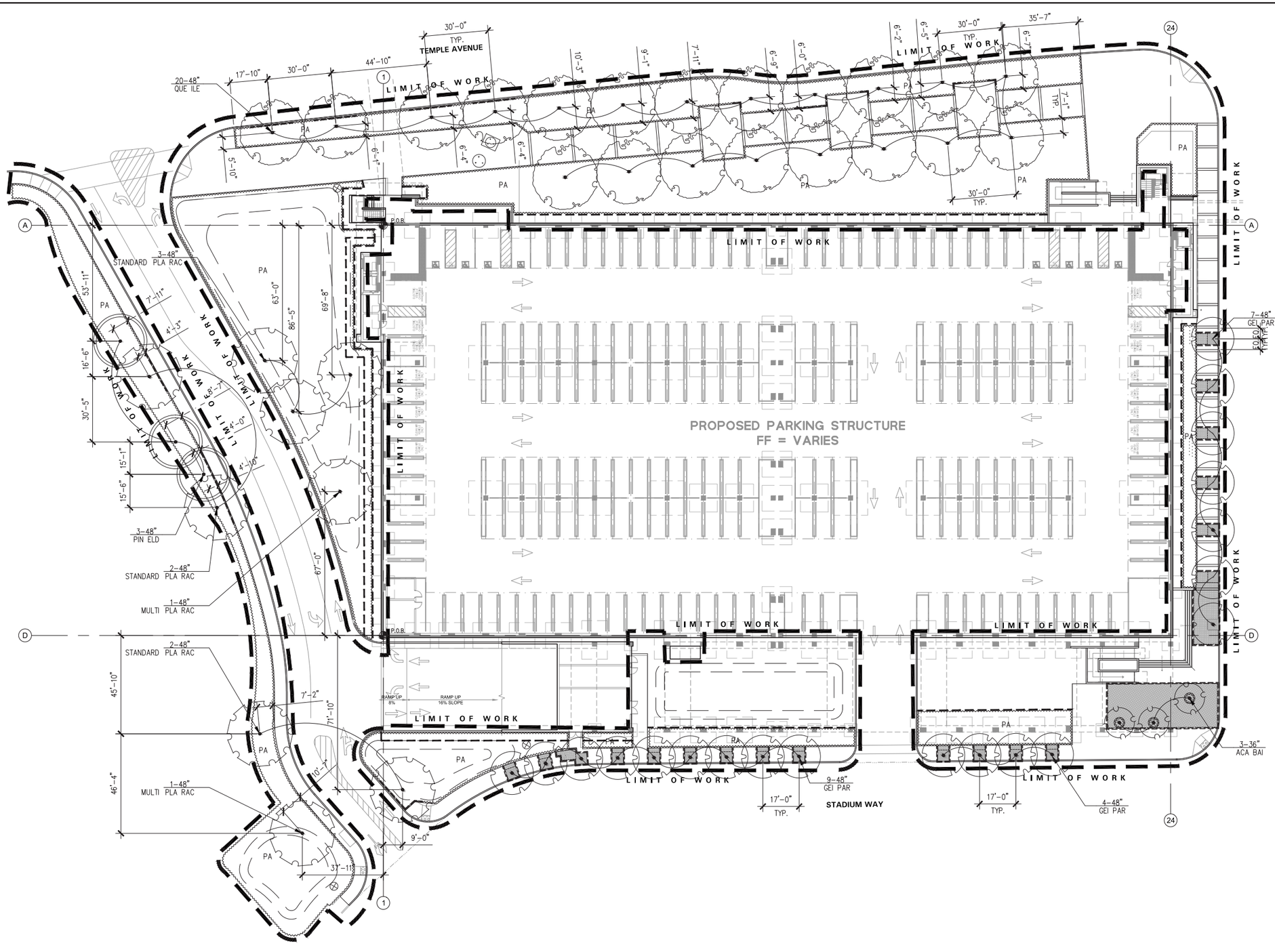

LAYOUT LEGEND

SYMBOL	DESCRIPTION
	LIMIT OF WORK
	STEEL HEADER
*	TREE TRUNK
P.O.B.	POINT OF BEGINNING
ALIGN	ALIGN
PA	PLANTING AREA
	SOIL STRUCTURE SYSTEM PRODUCT: STRATAVAULT, STRATACELL, OR SILVACELL

NOTE:
SOIL STRUCTURE SYSTEM DEPTH TO BE 36", WIDTH AND LENGTH PER PLANS. REFER TO SPECIFICATIONS (SECTION 329113) FOR SOIL PREPARATION INFORMATION.

PLANTING LEGEND

SYMBOL	ABBREVIATION	BOTANICAL NAME	COMMON NAME	SIZE	SPACING	DETAIL	REMARKS/COMMENTS
TREES							
	ACA BAI	ACACIA BAILEYANA	BAILEY ACACIA	36" BOX	PER PLAN	G / L6.01 A, G / L6.03	FULL, DENSE, SYMMETRICAL, WELL-ROOTED, SPECIMEN QUALITY; ALTERNATE (TO BE CONFIRMED BY COLLEGE): CERCIS CANADENSIS 'FORESTPANSY' STANDARD
	GEI PAR	GELIERA PARVIFLORA	AUSTRALIAN WILLOW	48" BOX	PER PLAN	G / L6.01 A, G / L6.03	FULL, DENSE, SYMMETRICAL, WELL-ROOTED, SPECIMEN QUALITY; STANDARD
	PIN ELD	PINUS ELDARICA	ELDARICA PINE	48" BOX	PER PLAN	A, C, J / L6.03	FULL, DENSE, SYMMETRICAL, WELL-ROOTED, SPECIMEN QUALITY; STANDARD
	QUE ILE	QUERCUS ILEX	HOLLY OAK	48" BOX	PER PLAN	A, C / L6.03	FULL, DENSE, SYMMETRICAL, WELL-ROOTED, SPECIMEN QUALITY; STANDARD
	PLA RAC	PLATANUS RACEMOSA	WESTERN SYCAMORE	48" BOX	PER PLAN	A, C, J / L6.03	FULL, DENSE, SYMMETRICAL, WELL-ROOTED, SPECIMEN QUALITY; STANDARD OR MULTI-TRUNK, PER PLAN.

SYMBOL	ITEM	DETAIL
	ROOT CONTROL BARRIER	F / L6.03

Source: HPI Architecture, SWA Group 2019

Parking Structure S and West Temple Avenue Pedestrian Bridge – Conceptual Tree Planting Plan

Exhibit 3-20

Mt. SAC 2018 Educational and Facilities Master Plan EIR

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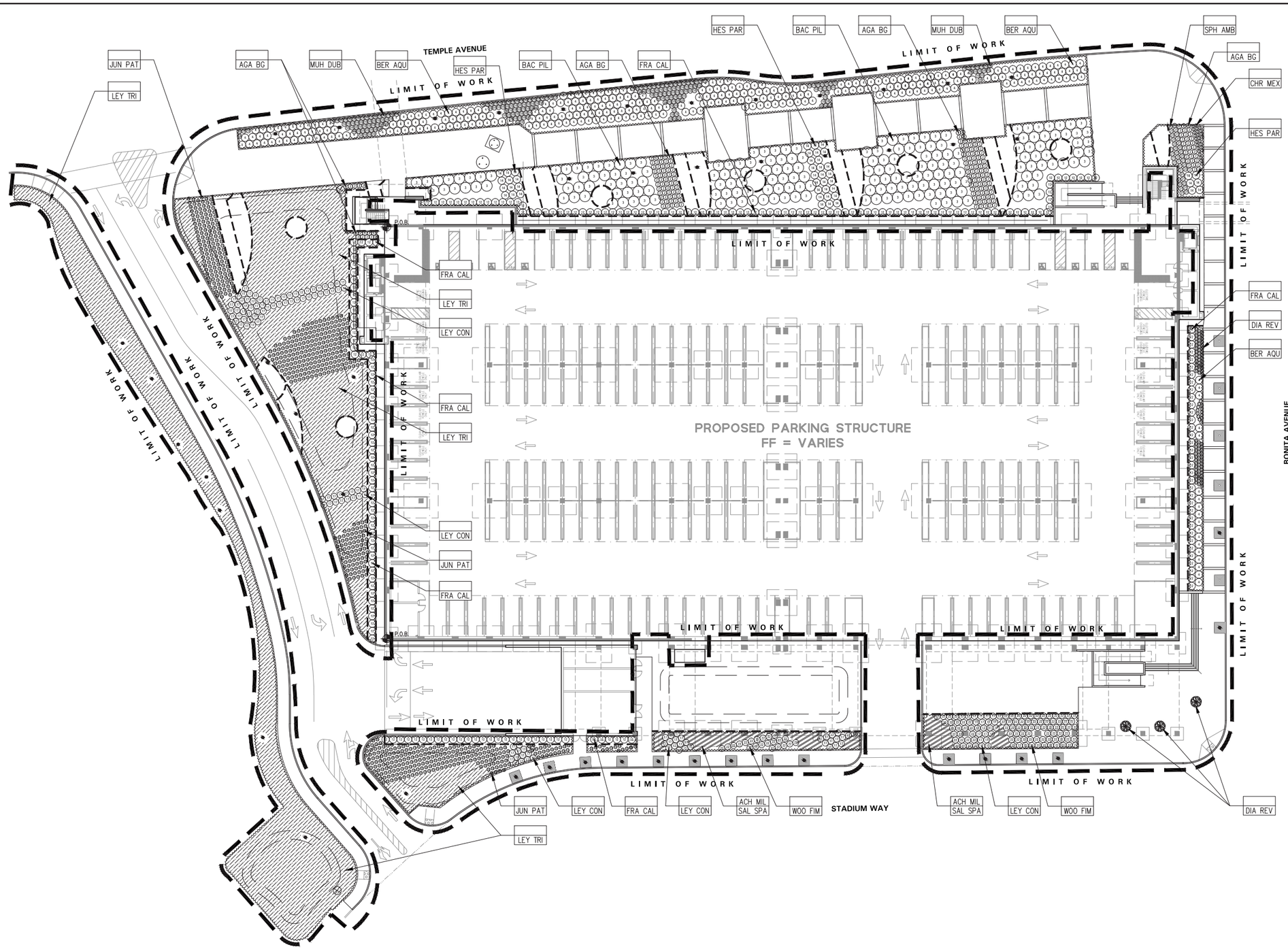

LAYOUT LEGEND

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
	LIMIT OF WORK	P.O.B.	POINT OF BEGINNING
	STEEL HEADER	ALIGN	ALIGN
	TREE TRUNK	PA	PLANTING AREA

NOTE: DO NOT PLANT WITHIN 5' DIAMETER OF TREE TRUNK. PROVIDE MULCH OR CRUSHED STONE PER PLAN AND SPECIFICATIONS.

PLANTING LEGEND

SYMBOL	ABBREVIATION	BOTANICAL NAME	COMMON NAME	SIZE	SPACING	DETAIL	REMARKS/COMMENTS
	SPH AMB	SPHAERALCEA AMBIGUA	APRICOT MALLOW	5 GAL	25" O.C.	19, E / L6.03	FULL DENSE, SYMMETRICAL, WELL-ROOTED.
	WOO FIM	WOODWARDIA FIMBRIATA	GIANT CHAIN FERN	5 GAL	34" O.C.	19, E / L6.03	FULL DENSE, SYMMETRICAL, WELL-ROOTED.
	ACH MIL / SAL SPA	ACHILEA MILLEFOLIUM & SALVIA SPATHACEA	YARROW & HUMMINGBIRD SAGE (CORK-SCREW MIX)	1 GAL	18" O.C.	19, E / L6.03	FULL DENSE, SYMMETRICAL, WELL-ROOTED.
GRASSES							
	JUN PAT	JUNCUS PATENS	CALIFORNIA GREY RUSH	1 GAL	18" O.C.	E, H, K / L6.03	FULL DENSE, SYMMETRICAL, WELL-ROOTED.
	LEY CON	LEYMUS CONDENSATUS 'CANYON PRINCE'	CANYON PRINCE WILD RYE	5 GAL	34" O.C.	E, H, K / L6.03	FULL DENSE, SYMMETRICAL, WELL-ROOTED.
	LEY TRI	LEYMUS TRITICOIDES 'UDACHTA'	UDACHTA CREEPING WILD RYE	PLUGS	12" O.C.	E, H, K / L6.03	FULL DENSE, SYMMETRICAL, WELL-ROOTED.
	MUH DUB	MUHLENBERGIA DUBIA	MEXICAN MUHLY	5 GAL	25" O.C.	E, H / L6.03	FULL DENSE, SYMMETRICAL, WELL-ROOTED.

PLANTING LEGEND

SYMBOL	ABBREVIATION	BOTANICAL NAME	COMMON NAME	SIZE	SPACING	DETAIL	REMARKS/COMMENTS
SHRUBS							
	AGA BG	AGAVE 'BLUE GLOW'	BLUE GLOW AGAVE	5 GAL	25" O.C.	B, E / L6.03	FULL DENSE, SYMMETRICAL, WELL-ROOTED.
	BAC PIL	BACCHARIS PILULARIS 'PIGEON POINT'	PIGEON POINT DWARF COYOTE BRUSH	5 GAL	60" O.C.	B, E / L6.03	FULL DENSE, SYMMETRICAL, WELL-ROOTED.
	BER AQU	BERBERIS AQUIFOLIUM 'COMPACTA'	CREEPING BARBERRY	5 GAL	42" O.C.	B, E / L6.03	FULL DENSE, SYMMETRICAL, WELL-ROOTED.
	CHR MEX	CHRYSACTINIA MEXICANA	DAMIANITA DAISY	5 GAL	18" O.C.	B, E / L6.03	FULL DENSE, SYMMETRICAL, WELL-ROOTED.
	DIA REV	DIANELLA REVOLUTA 'LITTLE REV'	LITTLE REV FLAX LILY	5 GAL	18" O.C.	B, E / L6.03	FULL DENSE, SYMMETRICAL, WELL-ROOTED.
	FRA CAL	FRANGULA (RHAMNUS) CALIFORNICA 'EVE CASE'	EVE CASE CALIFORNIA COFFEEBERRY	15 GAL	42" O.C.	B, D / L6.03	FULL DENSE, SYMMETRICAL, WELL-ROOTED.
	HES PAR	HESPERALOE PARVIFLORA	RED YUCCA	5 GAL	42" O.C.	B, E / L6.03	FULL DENSE, SYMMETRICAL, WELL-ROOTED.

Source: HPI Architecture, SWA Group 2019

Parking Structure S and West Temple Avenue Pedestrian Bridge – Conceptual Shrub Planting Plan

Exhibit 3-21

Mt. SAC 2018 Educational and Facilities Master Plan EIR

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The locations of the parking structure's two circulation towers on the northeast and northwest corners are situated for optimal pedestrian traffic flow while tying into proposed pedestrian bridges crossing Temple Avenue (connecting to the proposed Transit Center and Miracle Mile) and Bonita Avenue (connecting to the PEC to the east), as discussed below under Pedestrian Circulation.

Phase 1B

- **Lot D Improvements.** Lot D would be altered by the proposed Science and Library/Learning Resources projects. Lot D would be redesigned to include a pick-up/drop-off area adjacent to the Library/Learning Resources facility and would be easily utilized for event parking, to support the Student Center in particular. A portion could be considered for visitor pay parking, for short-term parking for visitors and students going to the Student Center and Library/Learning Resources facilities. Vehicular access to Lot D would continue to be provided form Temple Avenue; however, vehicular access between Lot D and the proposed Transit Center would be removed and replaced with pedestrian and bicycle access to and from the Temple Avenue Green Corridor.

Phase 2

- **Lot A Improvements and Mountaineer Road Entry.** In addition to improved access from a proposed slip ramp from Mountaineer Road, the configuration and layout of Lot A would be modified to provide more efficient vehicular circulation and increased parking stall count (an increase of approximately 108 stalls). A conceptual parking lot layout is provided in Figure 16 of the 2017 PCMP included in Appendix A of the proposed 2018 EFMP. Interior lot barriers, which currently provide separation between types of parking spaces (i.e., staff, student, visitor/pay) would be removed. Additionally, to improve universal access between Lot A and the campus, the western end of Lot A would be re-graded to the same elevation as the upper level of the Student Services North building entrance.

- **Lot B and Parking Structure B.** Lot B would be reconfigured to accommodate surface parking and the proposed Parking Structure B, discussed above. Similar to Lot A, Lot B would be modified to provide more efficient vehicular circulation and increased parking stall count (an increase of approximately 361 stalls before construction of Parking Structure B), including through the removal of internal lot barriers. Demolition of the existing Gymnasium Building 3 would provide an opportunity to redesign Lot B to support the proposed development of Parking Structure B and the Auditorium. One means of public access to Lot B would be provided from Mt. SAC Way and through Parking Structure B. In addition, access for service and emergency vehicles only would be provided from San Jose Hills Road. The Lot B layout would accommodate special event and visitor pay parking, general student and staff parking, service loading and parking to support the Auditorium, and accessible parking with a drop-off area to support Administration Building 4. Additionally, the surface parking lot may include installation of solar panels.

  Parking Structure B would be located at the northern portion of existing Parking Lot B, southeast of the intersection of Grand Avenue/San Jose Hills Road (refer to Exhibit 3-4). The proposed parking structure would be 3 levels (ground level plus 2 levels above the ground level), would have a building footprint of approximately 64,750 sf, and would accommodate approximately 600 parking spaces. It is expected that vehicular circulation would be from the west of the parking structure to allow the east side to remain an open space with pedestrian connections to the campus. However, vehicular access could also be provided from Mt. SAC way beneath the Auditorium building. Lower level parking

and/or service beneath the Auditorium, which would be connected to Parking Structure B, may also be considered. Lot B circulation options are presented in Figure 33 of the 2017 PCMP included in Appendix A of the proposed 2018 EFMP.

- **Lot F and Parking Structure F and North Bonita Pedestrian Bridge Replacement and East Temple Pedestrian Bridge.** Lot F would be altered by the construction of the new Campus Safety and Parking Structure F and bridge facilities, extension of Miracle Mile and renovation of the pedestrian tunnel under Temple Avenue, the reconstruction of the pedestrian bridge over Bonita Avenue, and the implementation of pasture along the lot's Temple Avenue frontage. The redesign of Lot F in conjunction with these projects would optimize parking and circulation while balancing the goals of the other projects. Safe and efficient circulation for large service vehicles would be provided on Walnut Avenue through Lot F, between Temple Avenue and Farm Road.

  Parking Structure F would be located at the northern portion of existing Parking Lot F, northeast of the intersection of Temple Avenue and Bonita Drive (refer to Exhibit 3-4). The proposed parking structure would be 4 levels (ground level plus 3 levels above the ground level), would have a building footprint of approximately 120,000 sf, and would accommodate approximately 1,498 parking spaces. There would be a net increase of approximately 720 parking spaces at Lot F (including Parking Structure F). It is expected that events at the Farm and athletic facilities would attract visitors to this parking facility. Two vehicle entrances to Parking Structure F, one each from Temple Avenue and Bonita Drive. A Bonita Drive entrance to the west side of Parking Structure F would be designed to address potential pedestrian circulation conflicts and ensure safe pedestrian crossings by employing a grade separation or other effective means. As an alternative, vehicular access could be provided on the north and east sides of the structure. The Parking Structure F project is linked to the North Bonita Pedestrian Bridge Replacement and construction of the new East Temple Pedestrian Bridge that connects Parking Structure F to the Physical Education Complex and Aquatics Center.

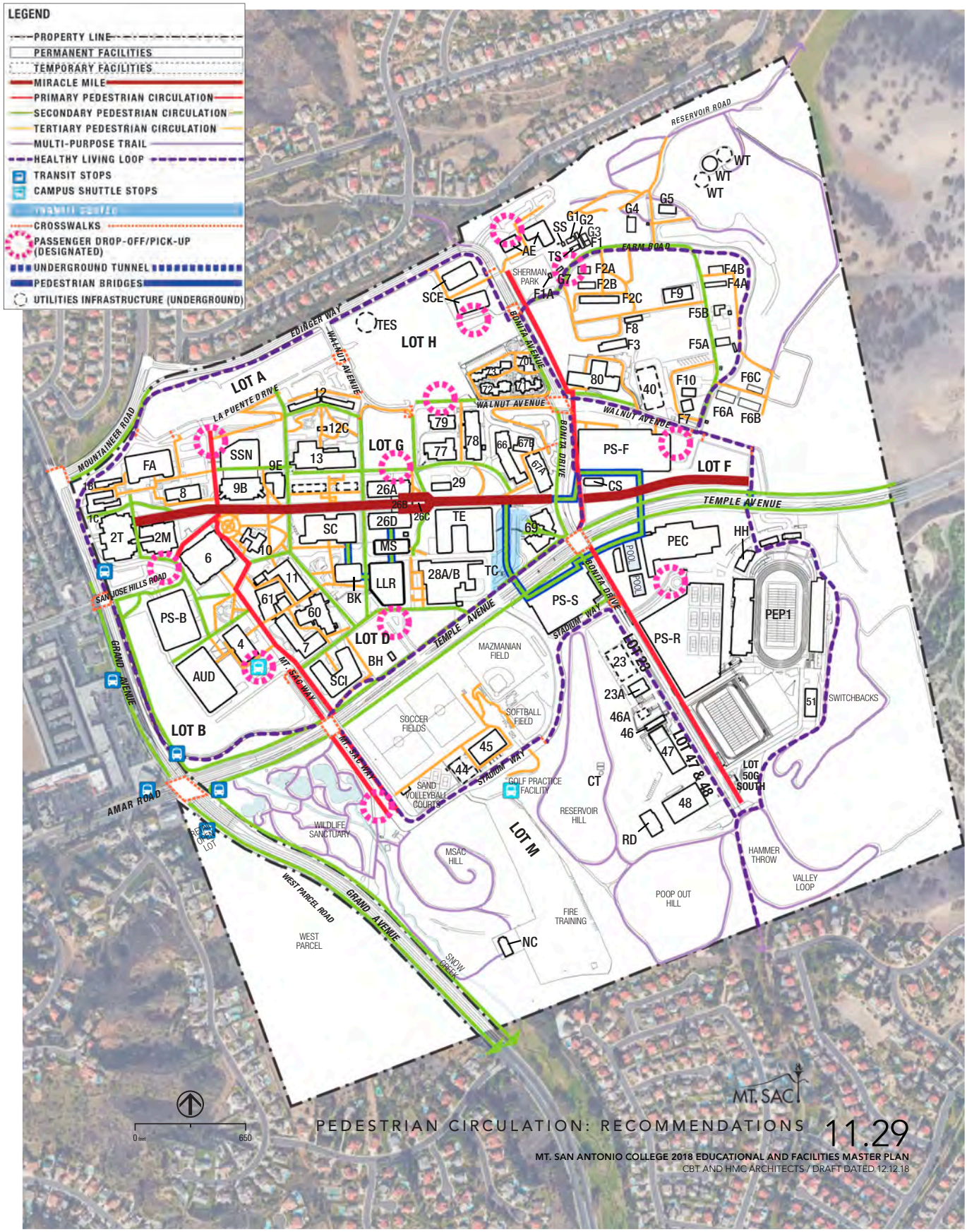
3.5.5 PEDESTRIAN AND BICYCLE CIRCULATION

In addition to vehicular circulation and parking, the proposed 2018 EFMP (Chapter 11, Site and Infrastructure Improvements) evaluates the needs of pedestrians and cyclists and provides recommendations to improve the safety and experience for all. The proposed pedestrian and bicycle circulation improvements are described below.

Pedestrian Circulation

The proposed 2018 EFMP recommends that pedestrian access on campus be completed, connecting all points of arrival and departure with campus destinations, and linking to the residential communities and businesses beyond Mt. SAC's campus, as shown on Exhibit 3-22. Pedestrian circulation routes would also be made universally accessible, to the greatest extent feasible. Furthermore, the design of pedestrian routes would establish a cohesive hierarchy that facilitates wayfinding, appropriately accommodates pedestrian and service/emergency vehicle traffic, and contributes to the campus landscape character.

Exhibit 3-23 depicts the general structure for the pedestrian circulation hierarchy. Primary and secondary routes would be generally connective, linking campus destinations through the most efficient path. Primary pedestrian pathways would be a minimum width of 20 feet and secondary pedestrian pathways would be a minimum width of 15 feet. Tertiary routes would typically provide circulation within a particular site and would be a minimum width of 6 feet. The pedestrian pathway



Source: CBT and HMC Architects 2018

Pedestrian Circulation: Recommendations

Exhibit 3-22

Mt. SAC 2018 Educational and Facilities Master Plan EIR

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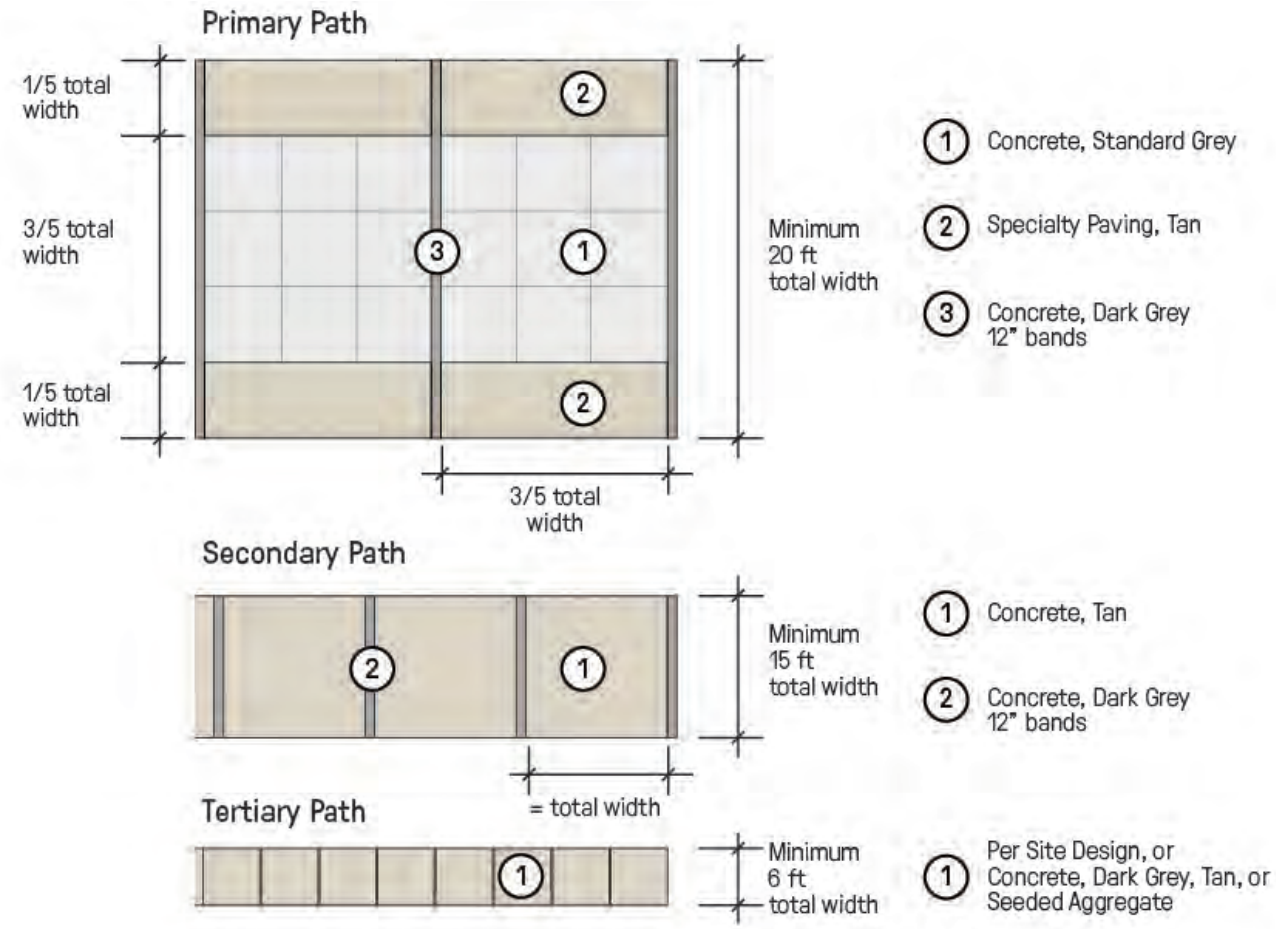

Image of similar spaces at other colleges:

Source: 2018 EFMP Page 11.39; CBT and HMC Architects

Pedestrian Circulation Hierarchy: Recommendations

Exhibit 3-23

Mt. SAC 2018 Educational and Facilities Master Plan EIR

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hierarchy would be further defined by the color, width, and type of concrete or other paving as further described in the Site Enhancement Concept: Pedestrian Circulation Hierarchy in Chapter 11 of the proposed 2018 EFMP and shown on Exhibit 3-23.

Following are descriptions of the proposed pedestrian circulation site improvement projects.

- **Miracle Mile.** The Miracle Mile already exists as a well-known and prominent pedestrian corridor on campus, but currently its design is inconsistent and incomplete. As the primary east-west corridor through the center of the academic core, Miracle Mile presents an opportunity to create a linear landmark that provides a universally accessible route that spans across the campus, from the Arts Precinct on the west side of the campus to the Farm Precinct on the northeast side and the Athletics Precinct on the northwest side. Consistent paving materials and design, shade trees, and site amenities would be used for the entire length of Miracle Mile. It would also have a paved width of 40 feet, as conditions allow (refer to Exhibit 3-24). The Miracle Mile project would primarily be implemented with adjacent projects.

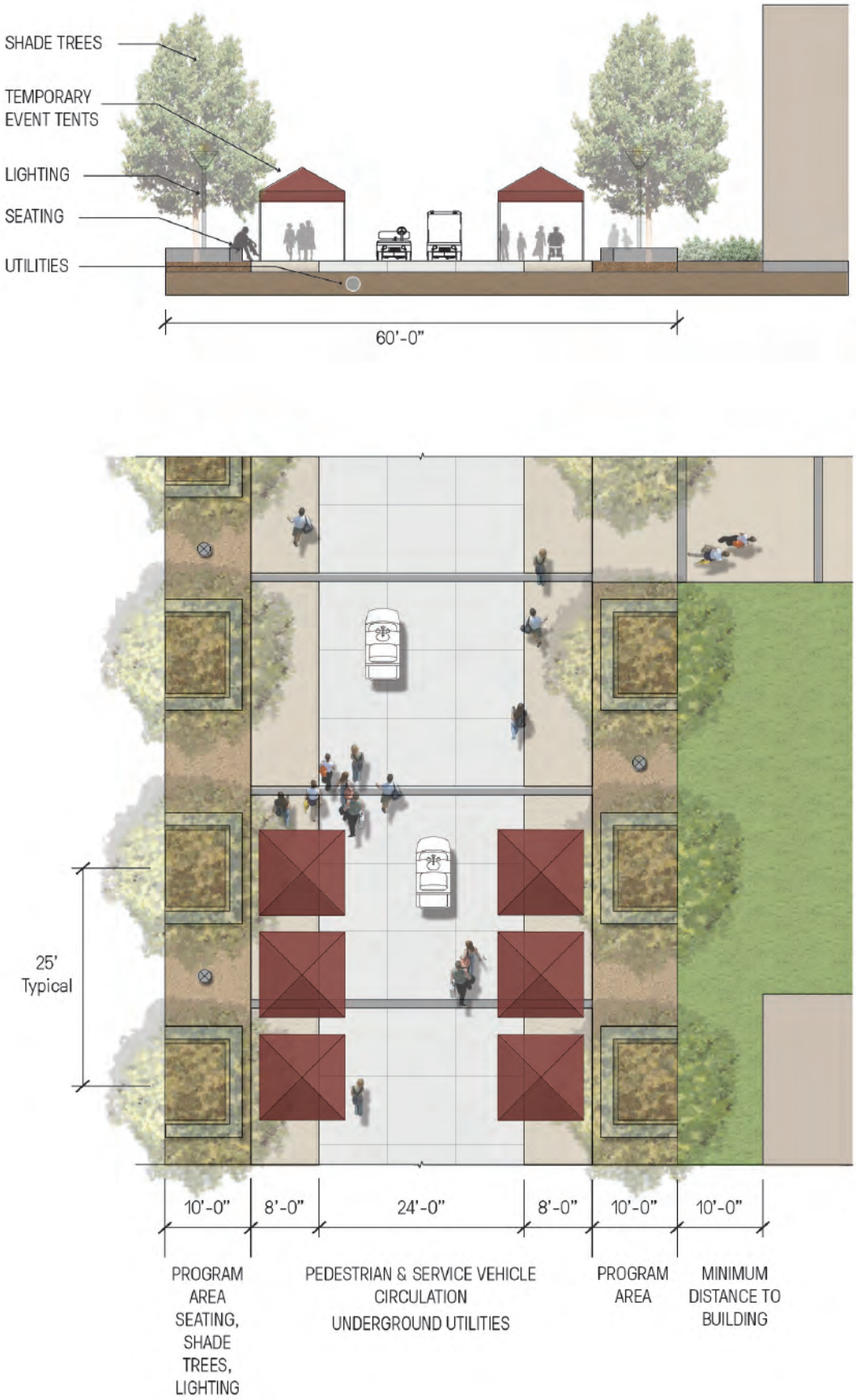
  The design of Miracle Mile would follow the primary pedestrian pathway concept but would also include program areas on either side of the walkway, as space and activity patterns allow. These program areas would be 10 feet wide, and follow the length of Miracle Mile to the greatest extent feasible. The program areas are intended to provide space for shade trees, seating, site lighting, signage, and use during events for pop-up tents and tables (refer to Exhibit 3-24). Due to site constraints, they may not be included along the full length of Miracle Mile.

- **Mt. SAC Way and Bonita Drive Promenades.** Enhanced pedestrian facilities would be provided along Mt. SAC Way, north and south of Temple Avenue, and Bonita Drive. These corridors would be designed as wide pedestrian promenades, featuring shade trees and site amenities (seating, lighting, waste receptacles, and electrical outlets).

- **Pedestrian Bridges/Tunnel.** The proposed 2018 EFMP includes the construction of new pedestrian bridges and improvements to the existing pedestrian tunnel under Temple Avenue, as described below. The planned pedestrian bridge between the PEC and Parking Structure S over Bonita Drive is also included as part of the PEC project, which was previously approved and is further discussed in Section 4.0, Introduction to the Environmental Analysis.

  - Parking Structure S and West Temple Avenue Pedestrian Bridge (Phase 1A)**.** Parking Structure S would include the construction of the West Temple Avenue Pedestrian Bridge spanning Temple Avenue and connecting to the future Transit Center and the Miracle Mile pedestrian corridor (refer to Exhibit 3-4). Stairs/elevators would be provided in the northwest corner of Parking Structure S and the northern portion of the Transit Center, and a ramp/stairs would be provided at the northern end of the West Temple Avenue Pedestrian Bridge where it connects with the elevated Miracle Mile pedestrian corridor.

  - Parking Structure F and North Bonita Drive Pedestrian Bridge Replacement and East Temple Pedestrian Bridge (Phase 2). The replacement of the North Bonita Drive Pedestrian Bridge would occur with the Parking Lot F/Parking Structure F project. The bridge would be designed as a continuation of the Miracle Mile. It would include a connection to Parking Structure F. The East Temple Pedestrian Bridge extending from Parking Structure F to the Physical Education Complex



Source: 2018 EFMP Page 11.37; CBT and HMC Architects

Miracle Mile: Recommendations

Exhibit 3-24

Mt. SAC 2018 Educational and Facilities Master Plan EIR

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would also be installed as part of the Parking Structure F project, which would ultimately connect with the South Bonita Pedestrian Bridge that will span over Bonita Drive to Parking Structure S. These pedestrian facilities are depicted on Exhibit 3-4. As shown, stairs/elevators would be provided for access.

- South Bonita Pedestrian Bridge. This bridge would occur with the Physical Education Complex and would cross over Bonita Drive and extend to Parking Structure S. This bridge would overlook the aquatics facility.

- Temple Avenue Pedestrian Tunnel Improvements (Phase 2). In conjunction with the Parking Structure F and North Bonita Drive Pedestrian Bridge Replacement and East Temple Pedestrian Bridge project, improvements to the grading and drainage in the vicinity of the Temple Avenue Pedestrian Tunnel would be completed to address flooding that occurs during large storm events.

- **Healthy Living Loop.** The proposed concept for a "Healthy Living Loop" provides a publicly-accessible route around campus that would encourage walking, jogging, and bicycling, and would support healthy living educational experiences. It would be accessible by City of Walnut community members, although access through the Farm and physical education facilities may need to be restricted at times. Therefore, alternate routes would be provided, which would also provide variety in loop distance and experience. Where space allows, the Healthy Living Loop would include separate paths for cyclists and pedestrians. Where space is limited, cyclists would possibly need to be accommodated on adjacent roadways. At points where the Healthy Living Loop crosses vehicular traffic, the appropriate infrastructure would be provided to facilitate safety and to alert all parties of the crossing condition. Circuit stations, exercise equipment, and interpretive signage could be located along the Healthy Living Loop; and rest areas with shaded seating and water fountains or bottle filling stations could be located at appropriate intervals. Implementation of the Healthy Living Loop would occur in stages, primarily in conjunction with adjacent building projects. The segment of the Healthy Living Loop that passes through the Farm would be coordinated with the Agricultural Literacy Trail.

- **Temple Avenue Green Corridor.** The Temple Avenue Green Corridor would be a multi-benefit project that includes enhancements for pedestrian circulation. As part of this project, sidewalks would be provided on both sides of Temple Avenue for the full length of Mt. SAC's property. These sidewalks would be considered secondary pathways in the pedestrian circulation hierarchy because of their connective function; however, it is expected that an 8- to 10-foot width would be sufficient, as opposed to 15-feet identified secondary pathways. Where the Healthy Living Loop follows the Temple Avenue sidewalk, an increased width would be appropriate. Other than the width, the design of the Temple Avenue Green Corridor sidewalks would reflect the recommendations for secondary routes.

  The Temple Avenue Green Corridor improvements on the south side of Temple Avenue from Mt. SAC Way to Mt. SAC's eastern property limits would be implemented as part of the Parking Structure S and West Temple Avenue Pedestrian Bridge project (Phase 1A), while the improvements on the north side of Temple Avenue would be implemented in conjunction with the Parking Lot B and Parking Lot F projects (Phase 2).

- **Grand Avenue Sidewalk Completion.** Under existing conditions, a sidewalk connection along the east side of Grand Avenue from San Jose Hills Road and extending north to Mountaineer Road and to the City of Walnut Timberline residential neighborhood is

missing. Mt. SAC would work in coordination with the City of Walnut to complete this sidewalk as a joint benefit to both the community and the campus. This extension is not analyzed as part of this document.

Additionally, Exhibit 3-25 depicts the proposed network of accessible routes throughout campus. The proposed 2018 EFMP indicates that, to the greatest extent feasible, universally-designed routes would be provided to connect destinations on campus. Where changes in elevation are too severe to allow access with walkways or ramps, the use of exterior elevators would be utilized to increase accessibility. Mt. SAC will develop a Campus-wide Universal Design Plan to complete the implementation of Mt. SAC's Americans with Disabilities Act Transitional Access Plan, and to create design standards and a plan for the incorporation of Universal Design principles in existing and new building and site improvements.

Bicycle Circulation

Students and other commuters often travel through multiple jurisdictions on their way to the campus; as a result, developing bicycle improvements within a regional context is increasingly important. The focus of proposed bicycle circulation improvements at Mt. SAC is to support bicycle commuters by providing safe access to the campus, as well as secure and convenient bicycle storage. For safety purposes, riding bicycles on campus sidewalks and service roads is not allowed. Proposed bicycle circulation improvements are shown on Exhibit 3-26 and described below.

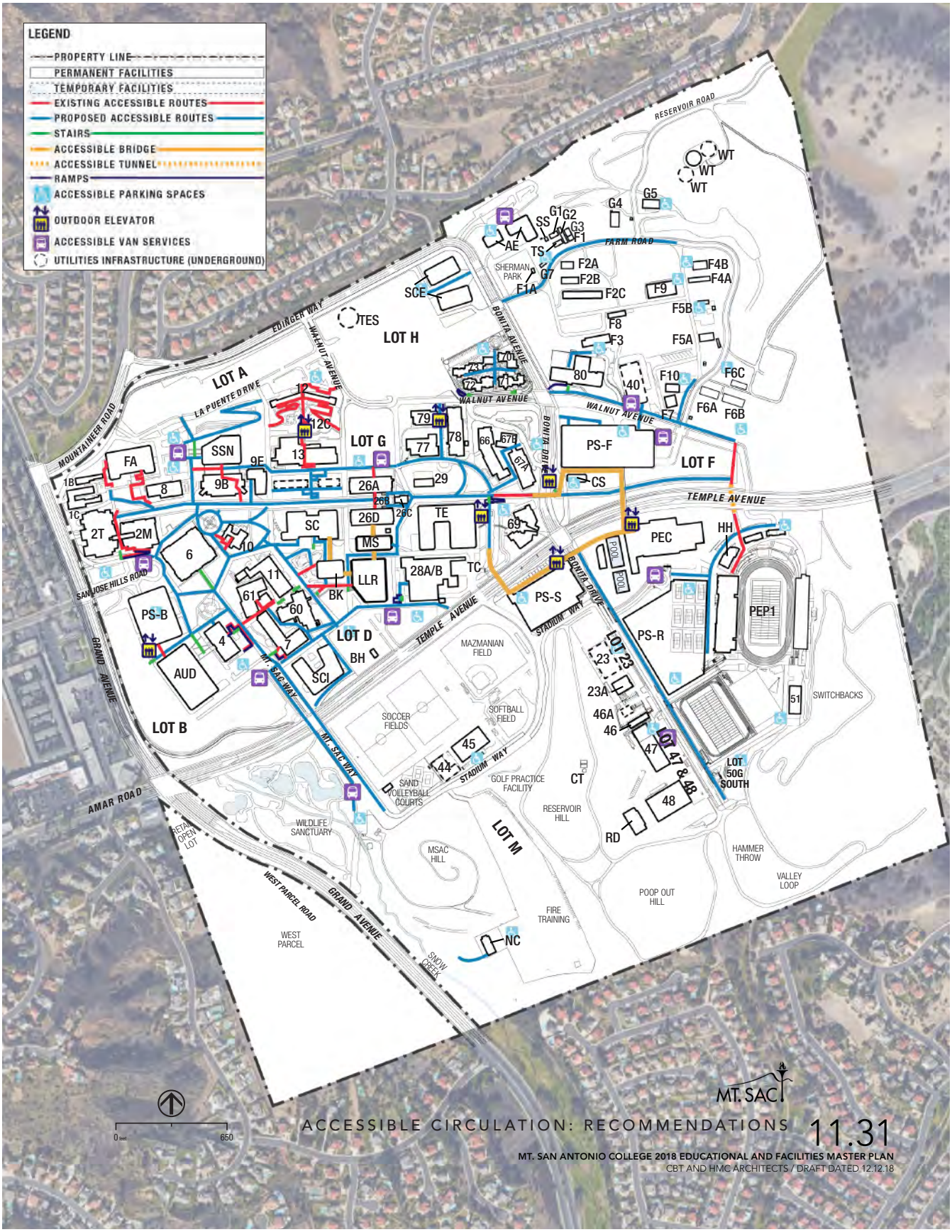
- **Healthy Living Loop.** Design of the Healthy Living Loop would provide separate paths of travel for bicyclists and pedestrians, where space allows. Some areas may require bicyclists to travel in a bicycle lane on an adjacent street, where space would not accommodate a separate bicycle path.

- **Temple Avenue Bicycle Lane Extension (Temple Avenue Green Corridor).** Providing continuous, protected bike lanes along Temple Avenue would provide a direct connection between Mt. SAC and a potential Class I greenway path along San Jose Creek, stretching from Claremont to South El Monte.

  As shown on Exhibit 3-26, Mt. SAC proposes to construct protected/buffered bicycle lanes along Temple Avenue from Bonita Drive to the east (where existing on-street striped bicycle lanes terminate) to Grand Avenue to the west (to connect to future bicycle lanes planned by the City). This would be accommodated by the removal of on-street parallel parking and would support the Temple Avenue Green Corridor project. Bicycle lanes on Temple Avenue would be implemented in coordination between Mt. SAC and the City of Walnut.

  Components of the Temple Avenue Green Corridor bicycle lanes would be implemented as part of the Parking Structure S. Notably, all parallel parking on the south side of Temple Avenue would be removed, and the south side of Temple Avenue would be restriped from Grand Avenue to Mt. SAC's eastern property limits to accommodate a buffered bicycle lane. The bicycle lane would connect to the existing bicycle lane that terminates at the eastern property limits.

- **Grand Avenue Bicycle Lane Extension.** Providing continuous, protected bike lanes along Grand Avenue would provide a direct connection between Mt. SAC and a potential Class I greenway path along Walnut Creek through Covina and West Covina.



MT. SAC

ACCESSIBLE CIRCULATION: RECOMMENDATIONS 11.31

MT. SAN ANTONIO COLLEGE 2018 EDUCATIONAL AND FACILITIES MASTER PLAN

CBT AND HMC ARCHITECTS / DRAFT DATED 12.12.18

Source: CBT and HMC Architects 2018

Accessible Circulation: Recommendations

Exhibit 3-25

Mt. SAC 2018 Educational and Facilities Master Plan EIR

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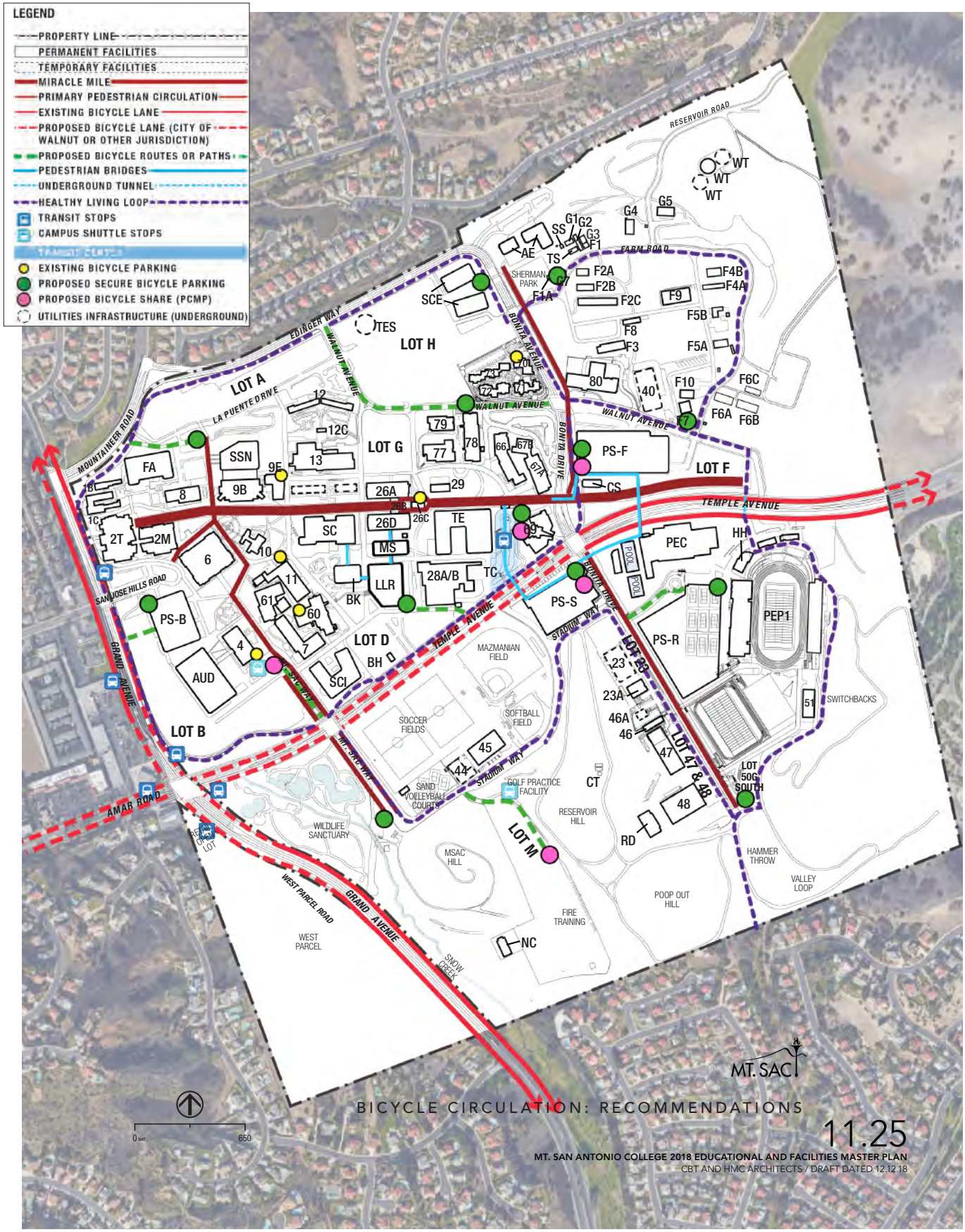

Source: CBT and HMC Architects 2018

Bicycle Circulation: Recommendations

Exhibit 3-26

Mt. SAC 2018 Educational and Facilities Master Plan EIR

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Bicycle storage facilities would be secure and convenient and would be located in areas that facilitate arrival to campus by bicycle, with a connection to the campus pedestrian circulation network so that students and employees can easily walk to their destination once they have parked their bike. Bicycle storage would be provided as part of the parking structure projects, which provide easy access to and from the bicycle lanes on Temple and Grand Avenues, as well as to the campus pedestrian circulation network. Additional secure bike parking facilities would be located at other key campus destinations, which are accessible by streets (Exhibit 3-26 depicts potential bicycle parking locations). These facilities would have adequate lighting and visibility, to discourage bicycle theft.

Bicycle share services are recommended in the 2017 PCMP. The potential bicycle share stations shown on Exhibit 3-26, are intended to encourage the use of parking lots that are located farther from the campus core. Students could park their cars, then ride a bike to a share station located closer to their destination. The bike share could also encourage use of the Healthy Living Loop, allowing visitors who do not have bicycles to check one out for a recreational ride around campus.

3.5.6 OPEN SPACE, PUBLIC ART, WAYFINDING/SIGNAGE, LIGHTING

Open space, public art, wayfinding/signage and lighting are components of the Site and Infrastructure Improvements outlined in Section 11 of the proposed 2018 EFMP that would primarily be implemented in conjunction with proposed facilities and other projects on campus and are described below. The development of these new site and infrastructure improvements would be guided by Mt. SAC's Landscape Guidelines (found in the Appendix to the proposed 2018 EFMP), 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.

Conceptual landscape plans for the Student Center and Central Campus Infrastructure, Bookstore, Parking Structures R and Tennis Courts, and Parking Structure S and West Temple Avenue Pedestrian Bridge, which are being evaluated at a project-level in this Draft EIR were previously presented in the descriptions of these respective projects.

Open Space

The open space concept presented in the proposed 2018 EFMP responds to the themes articulated in Chapter 6: Master Plan Themes, of the proposed 2018 EFMP, which express the need for outdoor instructional space, universal design that ensures access, and large outdoor assembly spaces for flexible use by the campus and wider community. It also responds to student input, to have usable open space to study and gather. Open spaces throughout the campus would be programmed and designed to serve as outdoor instructional, demonstration, and/or performance spaces, where appropriate. Outdoor spaces would be designed for flexibility of use and universal access. The Landscape Guidelines (included in the Appendix to the proposed 2018 EFMP) recommends design strategies for gardens and lawns that are lush and green, while being sustainable and practical to maintain. It contains guidance on the selection of plant species that require little or no irrigation, on the use of water-efficient irrigation when it is needed, and on maintenance procedures such as composting and mulching.

The proposed open space concept for the campus is provided on Exhibit 3-27. The proposed open space programming is presented in Exhibit 3-28 and indicates the indicates the significant open spaces that would be preserved or developed as facility and infrastructure projects are implemented on the campus. Site Enhancement Concepts have been developed to guide the

development of key areas of the campus and are described below, followed by descriptions of proposed open space projects.

Site Enhancement Concepts

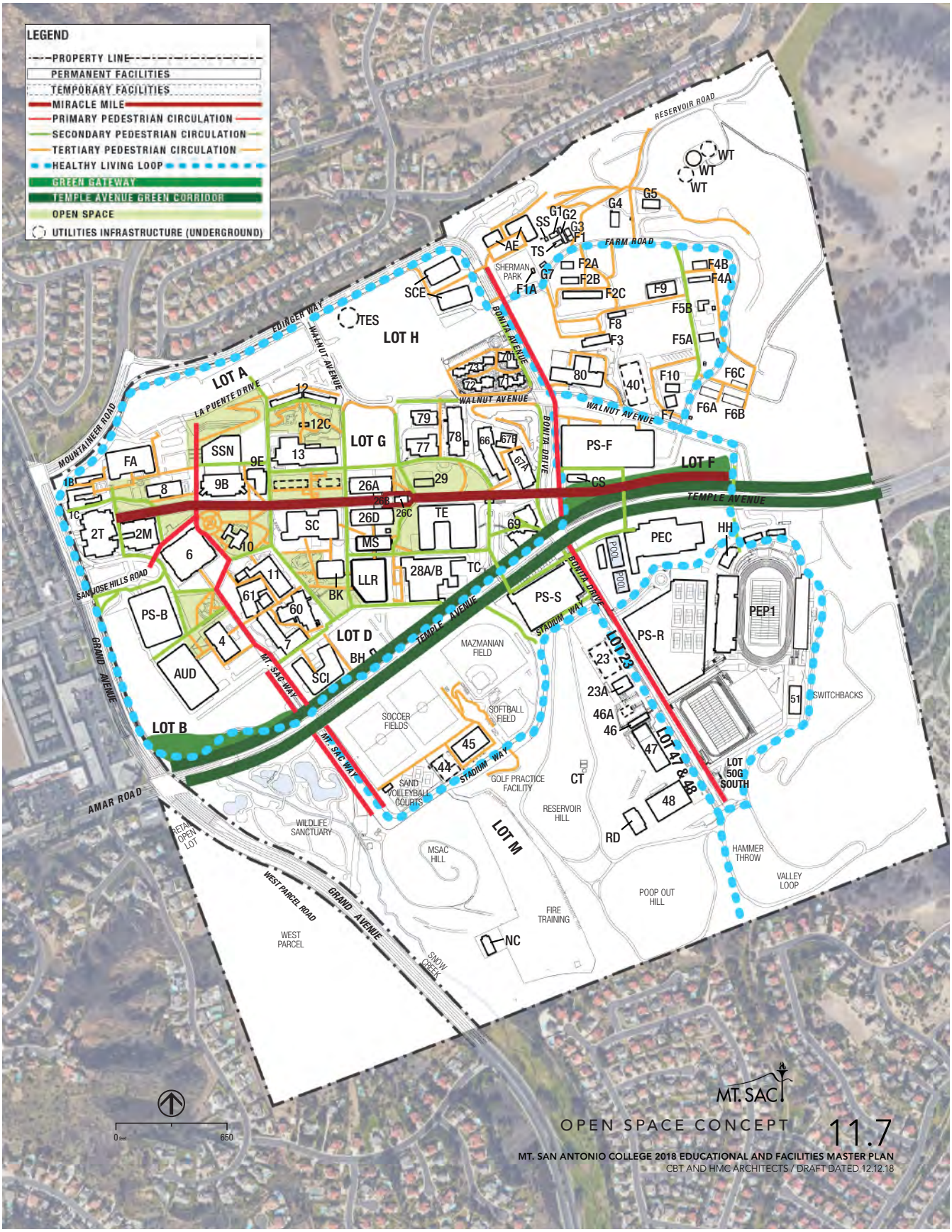
- **Central.** This site concept describes the development of the open space and pedestrian circulation associated with the recommended Student Center and Central Campus Infrastructure, Bookstore, and Library/Learning Resources facilities (Phases 1A and 1B). The Central Site Enhancement Concept is conceptually depicted on Exhibit 3-29.

  This area would include a series of outdoor rooms nestled among garden plantings, with a sunken lawn framed by seating steps. The site would serve as an entrance to the college from Parking Lot D and provide a new designated pick-up/drop-off zone in Parking Lot D. A universally-designed secondary pathway would lead from Parking Lot D to the lower level of the Student Center and connect to a universally-designed pathway within Founders Green to Miracle Mile. A plaza at the pick-up/drop-off zone would support ingress/egress of visitors to the first-level lobby of the Library/Learning Resources facility. A series of outdoor steps would connect to an upper plaza at the second-level lobby of the Library/Learning Resources facility and the first level of the Bookstore. The upper plaza would be connected to the first level of the Student Center by a universally-designed path.

- **West.** This site concept describes the development of open space and pedestrian circulation associated with the Auditorium and Parking Structure B facilities (Phase 2) and is presented in Exhibit 3-30. It would include an open plaza space between the two buildings to support outdoor events and ingress/egress of visitors. This project would provide a relatively level area between the Auditorium, proposed Parking Structure B, the Rose Garden, and the Mt. SAC Way Promenade (described above). It would also include an open, sloping lawn between the Rose Garden and Parking Structure B.

  The lobbies of both facilities would open directly onto the Events Plaza. Grade changes between the Events Plaza and Parking Lot B would be navigated by outdoor stairs and elevators within Parking Structure B and the Auditorium. The plaza would terrace down to integrate the change in grade between it and the west side of Administration Building 4. A large service area to support the Auditorium and Administration Building 4, as well as an expansion of the accessible parking lot at the south end of Administration Building 4 would be provided. Secondary pedestrian paths would connect the Auditorium, Parking Structure B, and Events Plaza to the Fine Arts Complex and vehicular pick-up/drop-off to the north, as well as the Rose Garden and Mt. SAC Way Promenade to the east.

- **North.** This site concept describes the development of the open space associated with the Student Services North facility (Phase 2) to transform the “back door” of the Student Services area into a new front door entry experience (refer to Exhibit 3-31). It would include universal pedestrian circulation from Parking Lot A, a new pick-up/drop-off area, and an accessible parking lot. The existing slope north of Student Services North would be developed into the Incline Garden with opportunities for site-specific art installations. A large open plaza would be provided between the terraced garden and Student Services North building, and a courtyard with an overhead canopy would bridge the two Student Services buildings at a lower level.



Source: CBT and HMC Architects 2018

Open Space Concept

Exhibit 3-27

Mt. SAC 2018 Educational and Facilities Master Plan EIR

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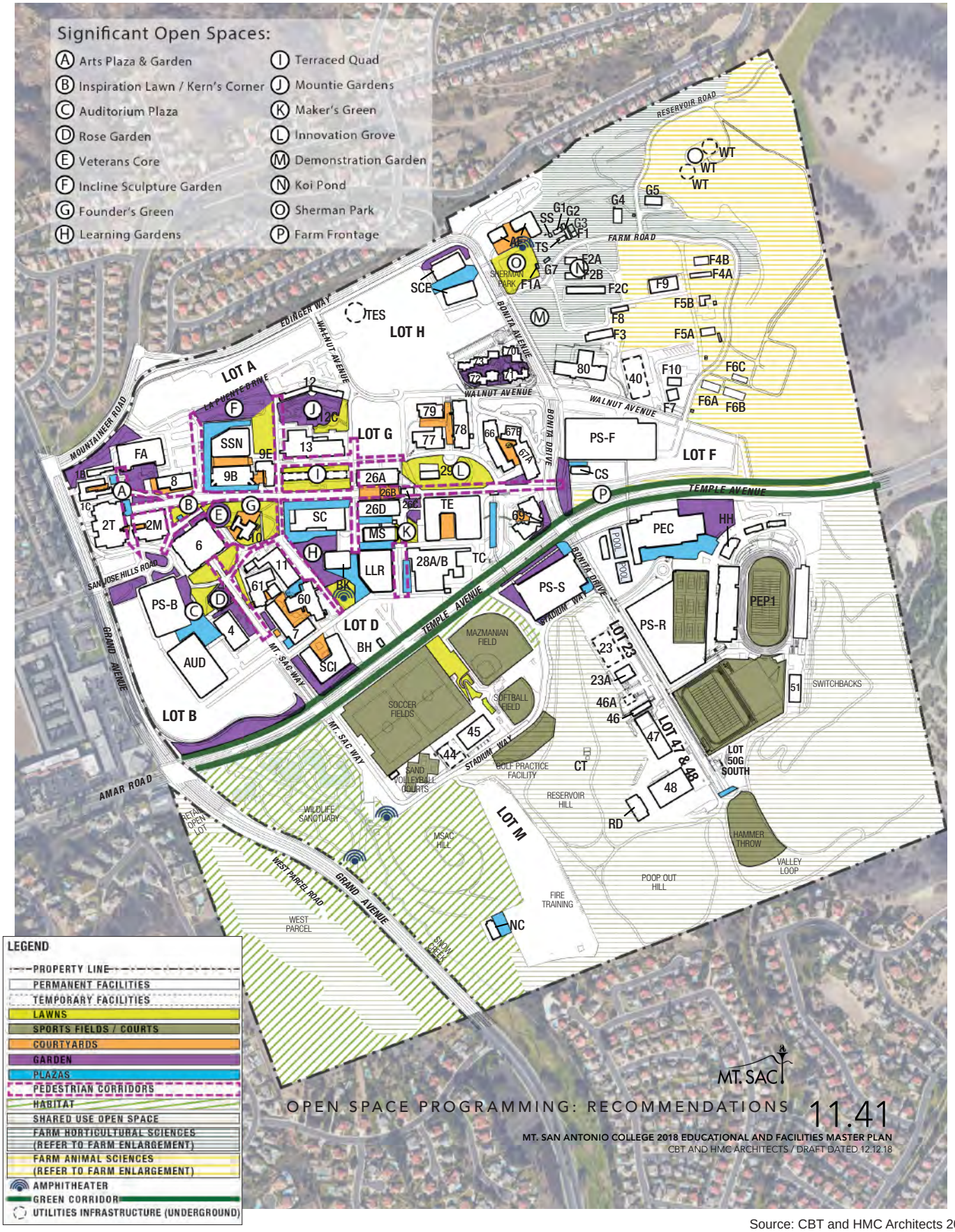

Source: CBT and HMC Architects 2018

Open Space Programming: Recommendations

Exhibit 3-28

Mt. SAC 2018 Educational and Facilities Master Plan EIR

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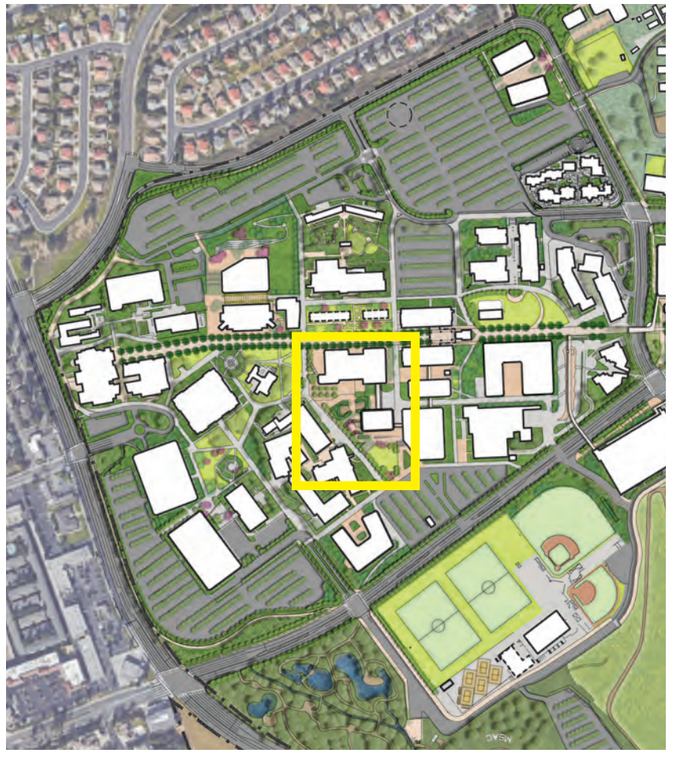
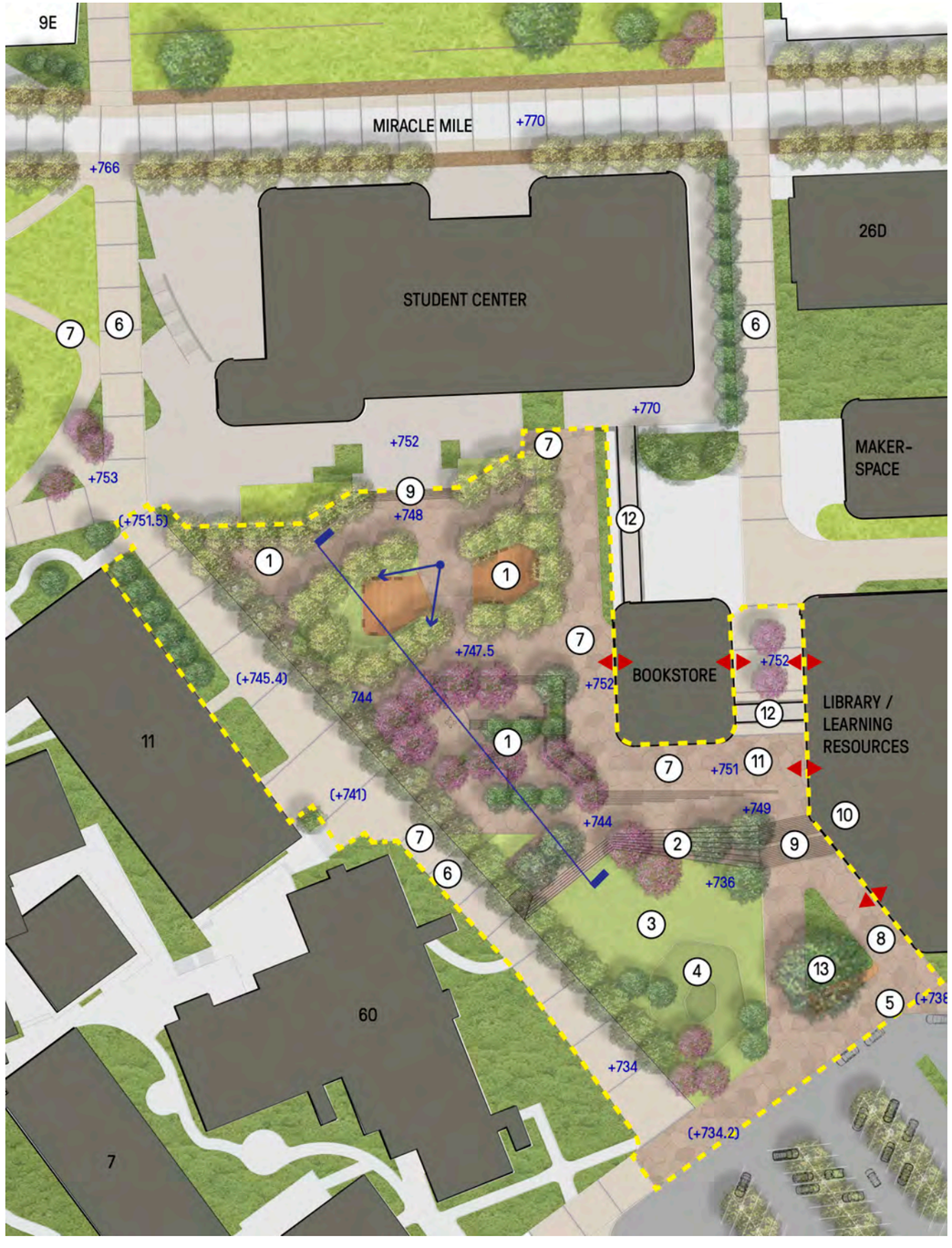
Images of similar spaces at other colleges:



KEY

1. Outdoor Garden Rooms
2. Seating Steps
3. Sunken Lawn
4. Stormwater Detention
5. Passenger Loading
6. Secondary Path
7. Accessible Path
8. Lower Lobby Plaza
9. Stairs
10. Elevator
11. Upper Lobby Plaza
12. Pedestrian Bridge
13. Specimen Tree or Public Sculpture



Source: 2018 EFMP Page 11.57; CBT and HMC Architects

Site Enhancement Concept: Central

Exhibit 3-29

Mt. SAC 2018 Educational and Facilities Master Plan EIR

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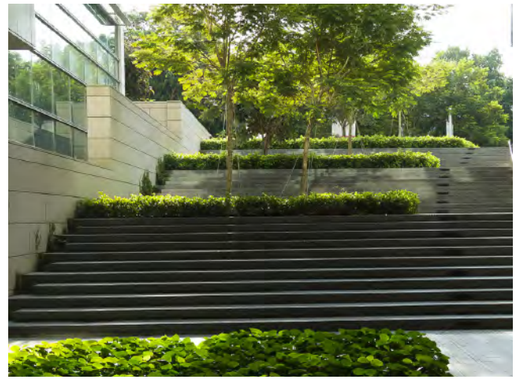
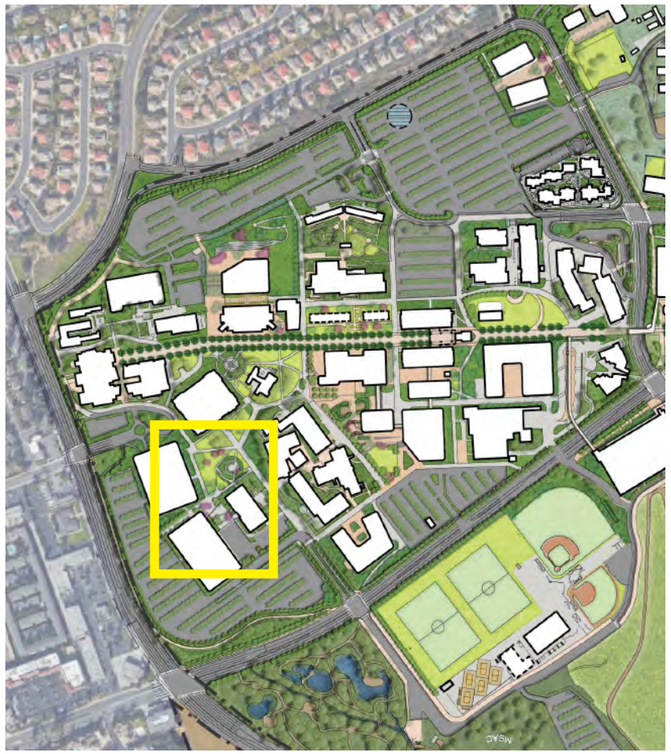
Images of similar spaces at other colleges:





KEY

1. Events Plaza
2. Sloped Lawn
3. Rose Garden
4. Elevator
5. Stairs
6. Stepped Plaza
7. Service Area
8. Accessible Parking and Passenger Loading
9. Mt. SAC Way Promenade
10. Secondary Paths
11. San Jose Hills Passenger Loading

Source: 2018 EFMP Page 11.49; CBT and HMC Architects

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Site Enhancement Concept: West

Exhibit 3-30

Mt. SAC 2018 Educational and Facilities Master Plan EIR

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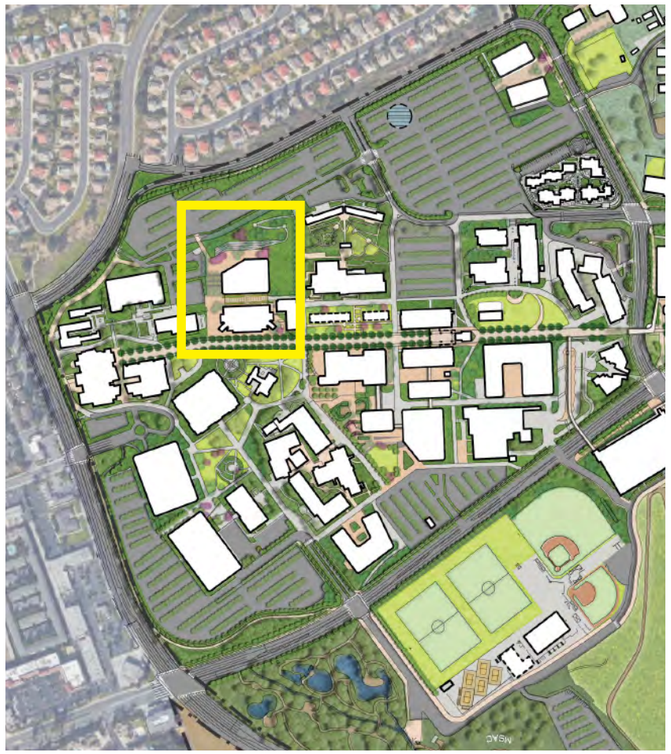
Images of similar spaces at other colleges:



KEY

1. Accessible Primary Path
2. Passenger Loading
3. Accessible Parking
4. Incline Garden
5. Open Plaza
6. Covered Courtyard
7. Bicycle Parking
8. Viewing Steps
9. Elevator
10. Lawn / Potential Future Building Site
11. Secondary Paths
12. Founders Green
13. Terraced Quad

Source: 2018 EFMP Page 11.53; CBT and HMC Architects

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Site Enhancement Concept: North

Exhibit 3-31

Mt. SAC 2018 Educational and Facilities Master Plan EIR

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Open Space Projects

In addition to the Auditorium Plaza and Rose Garden, Incline Garden, and Library Gardens described above as part of larger Site Enhancement Concepts, the following open space projects are proposed. It is assumed that these open space projects would be implemented during the 10-year horizon for the proposed 2018 EFMP, primarily in conjunction with adjacent building development projects, as applicable:

- **Founder's Green.** After the removal of Building 9C (Phase 1B), this site would be preserved as open lawn and plaza space that expands upon the existing lawn spaces to the east and west. This project would provide an open setting to reinforce Founders Hall as a landmark on campus and provide a student-oriented flexible open space in close proximity to the Student Center.

- **Arts Garden Plaza.** The Arts Garden Plaza is located at the western terminus of Miracle Mile. This project would renovate the existing outdoor space in front of the Sophia B. Clarke Theater to enhance its character as a focal point and destination. The Arts Garden Plaza would continue to support functions associated with the Performing Arts Center, as well as being a casual Campus-wide gathering space. Redesign would take into consideration its function during special events and everyday use to evaluate the most appropriate selection and layout of site furnishings, as well as the appropriate proportion of hardscape versus planted areas. Lawn areas that do not function as activity spaces would be converted to lower maintenance, less water-intensive plantings.

- **Inspiration Lawn/Kern's Corner.** This space is the existing lawn located to the east of the Feddersen Recital Hall. The natural slope of the lawn and its location near the Performing Arts Center, Student Services, and Mountie Café make it a potential location for a small, informal performance platform/amphitheater and additional seating for outdoor dining.

- **Sherman Park.** Sherman Park is an existing open space within the Farm Precinct. It would be maintained and improved as needed to continue its function for educational demonstration, events and scheduled activities, and casual recreational use. Additionally, a small amphitheater would be installed within the slope at the northern corner of this area to accommodate class demonstrations and other group events.

- **Farm Frontage.** This project would provide an extension of open space between Temple Avenue and Parking Lot F, to be utilized as pasture by the Agricultural Sciences Program. It extends the pastoral setting of the Farm along a portion of the college's public frontage, buffering the parking lot from public view and enhancing the visibility of the Farm. The Farm Frontage would also provide a unique experience for pedestrians as they walk along the eastern portion of Miracle Mile, which would be adjacent to the pasture.

Additionally, the following open space areas would be maintained and/or improved, as needed, to supports their current functions: (1) existing open space to the north of the Design Technology Center (Mountie Gardens), (2) existing lawn west of the proposed Technical Education Center and east of the proposed Makerspace facility would be maintained (Makers Green), (3) Demonstration Garden in the Farm Precinct, and (4) Koi Pond in the Farm Precinct.

Public Art

Public art can be a unifying element across aesthetically diverse campus environments, as well as a way to distinguish them and aid wayfinding. Public art is currently located throughout the Mt. SAC campus and the Campus-wide Public Art project would build on this tradition of support for the arts and support the local and regional creative community. A Public Arts Plan would be incorporated into Mt. SAC's Design Guidelines and Landscape Master Plan and works of art would be added to new and renovated buildings and outdoor spaces. The proposed Public Art plan is presented in Exhibit 3-32.

Wayfinding/Signage

The Campus-wide Wayfinding[6] project would involve development of a Wayfinding Signage Plan to identify strategic locations for directional signage and campus maps within campus and around its periphery that serve people using every mode of circulation and transportation. The Wayfinding Signage Plan would primarily: (1) identify equitable access throughout the campus in conjunction with the Campus-wide Universal Design project; (2) identify standards for campus wayfinding and site signage, to ensure that the aesthetic character of all campus signage is consistent with and contributes to overall campus branding and character; and (3) support Mt. SAC's proposed new building numbering system, which establishes campus "neighborhoods" and simplifies navigation to buildings.

The Wayfinding Signage Plan would be implemented through dedicated signage projects as well as individual facilities and site improvement projects. As directed by the Plan, Mt. SAC's site signage design standards would inform the programming and design of each new building project, major renovation project, and site improvement project.

Lighting

Consistent with the Landscape Guidelines included in the Appendix to the proposed 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. Additionally, as discussed previously, athletic lighting would be provided at the proposed tennis courts.

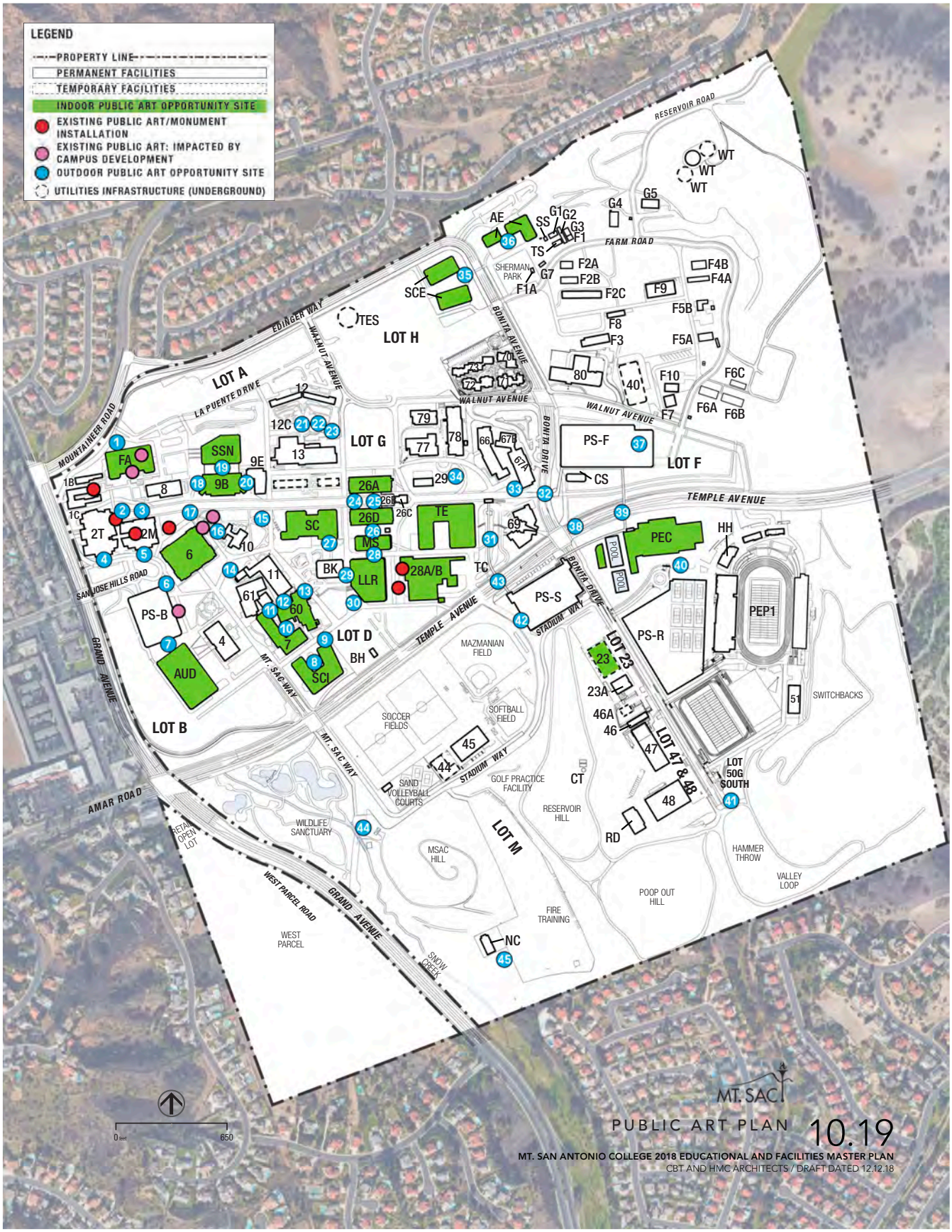
Lighting on campus and associated with athletic facilities would be installed so that all direct rays are confined to the site and would not spillover (i.e., glare) to adjacent properties (off campus).

3.5.7 NATURAL HABITAT AND URBAN FOREST INITIATIVE

Natural Habitat

The natural habitat areas of Mt. SAC's campus are an educational resource for the college and students in the region, and they provide ecological performance to improve air quality, micro-climate, stormwater quality, and wildlife habitat. The natural habitat areas shown on Exhibit 3-33, which include areas south of Temple Avenue (including the Wildlife Sanctuary and West Parcel) and the Farm Precinct (north of Temple Avenue and east of Bonita Avenue), would continue to

[6] Wayfinding refers to how people understand their location within a physical environment and are able to orient and navigate themselves to their desired destinations. Wayfinding may be facilitated through information systems, such as maps and signage, as well as identifiable landmarks and other physical design cues.



Source: CBT and HMC Architects 2018

Public Art: Recommendations

Exhibit 3-32

Mt. SAC 2018 Educational and Facilities Master Plan EIR

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be maintained in a manner that supports and balances ecologically healthy plant and wildlife communities with educational objectives.

The Wildlife Sanctuary is a unique educational resource for both the college and the wider communities. In order to support the Wildlife Sanctuary's goals, improvements are needed to both secure the site and improve access to it. The majority of these improvements are being implemented as part of the South Campus Site Improvements East project and would be in compliance with the Restricted Covenant for the Wildlife Sanctuary. Further, continued operation and maintenance of the Wildlife Sanctuary will continue in compliance with existing requirements/agreements.

The Wildlife Sanctuary's function as habitat is supported by the portion of natural grazing land located along the college's southern boundary. This land acts as a corridor, connecting the habitat of the Wildlife Sanctuary with the habitat of Cal Poly's former Spadra Landfill site adjacent to Mt. SAC. The proposed 2018 EFMP does not proposed any changes to the use/function of the Natural Habitat/Livestock Management area south of Temple Avenue.

Audio/visual capabilities would be installed at the Petersen Amphitheater in the Wildlife Sanctuary. Amplified sound at this amphitheater currently occurs a couple of a times a year (for lectures or music events). It is proposed that lectures and music events and occasional showing of movies would occur approximately once per month. The amplified sound would not be any louder than previous events, and would not occur past 10:00 p.m.

Improvements in the Farm Precinct during the planning horizon of the proposed 2018 EFMP are limited to roadway, parking and infrastructure improvements (e.g., drainage, irrigation, lighting) necessary to provide the level of services available in the academic core and to prepare for future development in this area. Currently proposed improvements are discussed in Section 3.4.4, Vehicular and Parking, above, and Section 3.4.10, Utilities and Infrastructure, below.

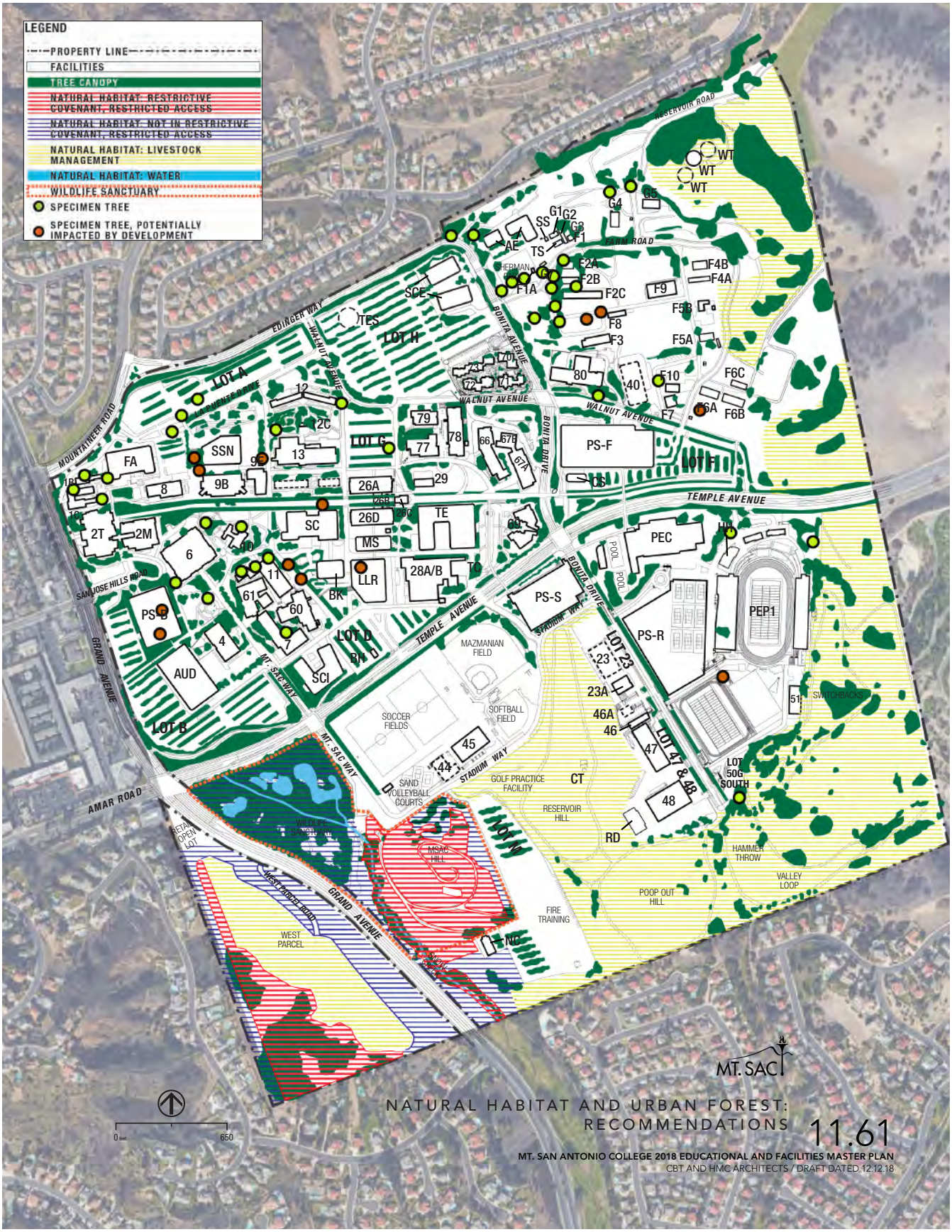
Urban Forest Initiative

Mt. SAC's Facilities Planning & Management department has set a goal of planting 4,000 new trees on the campus within the next ten years. Campus trees provide a multitude of benefits, including shade, heat island mitigation, improved air quality, reduced stormwater runoff, enhanced visual character, slope stabilization, natural habitat, and educational opportunities. To the greatest extent feasible, primary and secondary walkways through campus would be lined with trees, and open spaces would also include trees that would provide shade, support educational objectives, and support the campus landscape character.

The Natural Habitat and Urban Forest graphic on Exhibit 3-33 shows the approximate coverage of the campus urban forest based on the proposed 2018 EFMP recommendations. It also indicates the existing specimen trees that are likely to be impacted by development projects. These trees would be protected or relocated, as determined by an arborist and in keeping with the project's resources and requirements. The status of tree removal and planting would be determined during the design stage for individual development projects.

3.5.8 SUSTAINABLE PRACTICES/ENERGY

In June 2018, the Mt. SAC Board of Trustees adopted the 2018 Climate Action Plan (2018 CAP) to prepare Mt. SAC for the coming environmental and regulatory challenges of the 21st century, to guide the campus towards becoming a more sustainable institution, and to prepare students to engage in finding solutions to the college's environmental challenges (Mt. SAC 2018). The 2018



Source: CBT and HMC Architects 2018

Natural Habitat and Urban Forest: Recommendations

Exhibit 3-33

Mt. SAC 2018 Educational and Facilities Master Plan EIR

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CAP articulates the vision, goals, and strategies which will move Mt. SAC to become a sustainable campus with net-zero carbon emissions and has been developed in coordination with campus stakeholders to ensure that it meets the various needs of the campus.

Table 3-3 below identifies the key areas of sustainability addressed in the 2018 CAP and the established goal.

TABLE 3-3
2018 CLIMATE ACTION PLAN AREAS OF SUSTAINABILITY

Area of Sustainability	Established Goal
Greenhouse Gas Reduction	Reduce energy consumption from the 2014 baseline by 20 percent by the end of 2025, 50 percent by 2035, and 100 percent by 2050.
Green Building Standard	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.
Water Use Reduction	Reduce water use per student from the 2014 baseline by 50 percent by 2030.
Waste Diversion and Management	Achieve Net-Zero Waste by 2050.
Institutionalization	Hire a full-time Sustainability Director by the end of 2018. Secure faculty 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 percent of students by 2025, and 100 percent 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 by 2020.
Research and Community Outreach	Publicize campus sustainability efforts to surrounding community annually, starting in 2019.

The success of the 2018 CAP depends upon the institutionalization of the implementation work into Mt. SAC's established organizational structure, planning, and operations. Most relevant to the analysis in this Draft EIR, the 2018 CAP addresses: purchased electricity, stationary emissions, building practices, and reduction strategies (Section 6); transportation, commuting, campus fleet, and travel (Section 7); solid waste (Section 8); and water, wastewater and sustainable landscaping (Section 9). Mt. SAC would implement the 2018 CAP to the fullest extent possible, consistent with budgetary constraints and regulatory and programmatic requirements.

Mt. SAC has also committed to evaluate use of solar panels on a project-by-project basis for installation of rooftop solar on all new buildings and parking structures. Further, Mt. SAC has committed to evaluate the feasibility of installation of ground-mounted solar panels on all surface parking lots, which would also function to provide shade and reduce the potential for heat islands.

Notably, in addition to compliance with applicable goals set forth in the 2018 CAP, Mt. SAC has committed to the following sustainable strategies/practices during the 10-year planning period for the proposed 2018 EFMP. This is not inclusive of all sustainable strategies/practices in the 2018 CAP.

- **Reduction of Stationary Emissions (2018–2025)**
    - Implement interior lighting upgrades/retrofits
    - Upgrade heating, ventilation, and air conditioning (HVAC) and building automation controls
    - Implement plug load management
    - Implement exterior lighting upgrades/retrofits
    - Undertake retro-commissioning (RCx)7
    - Install BioPCM8
    - Monitor electric and natural gas utilities
    - Construct photovoltaic (PV) systems on parking structure and building roofs and at surface parking lots9
    - Purchase renewable energy credits
- **On-site Generation and Renewable Energy Strategies**
    - Evaluate clean cogeneration and renewable energy generation
    - Evaluate load-shifting technologies, including the existing thermal energy storage [TES] chilled water system
    - Evaluate participation in Community Choice Aggregation (CCA)10
- **Sustainable Building Practices**
    - Design new construction to United States Green Building Council's (USGBC's) Leadership in Energy and Environmental Design (LEED) 11 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

7 Retro-commissioning is the process employed to improve the efficiency of existing building equipment and systems.

8 BioPCM is a phase change material that acts to increase the thermal mass of a building.

9 The 2018 CAP specifically addresses the provision of a PV system on Parking Structure S as Part of Phase 1 (2018–2025) of the emission reduction strategies for stationary sources; however, Phase 2 (2025–2035), which overlaps with the planning horizon for the proposed 2018 EFMP, includes the construction of PV systems on building rooftops, parking structures, and surface parking lots.

10 CCA is an alternative to the investor-owned utility energy supply system in which local entities aggregate the buying power of individual customers within a defined jurisdiction in order to secure alternate energy supply contracts.

11 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.

- Including 10 percent recycled content in building materials, where feasible
- Including 10 percent regional content in building materials, where feasible
- Installing 30–40 percent more efficient water saving sinks
- Installing 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
- Specification of No-VOC (emit no volatile organic compounds) interior finishes
- Ensuring 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
- Specification of light colored paving materials to prevent heat island effect
- Specification of stormwater saving strategies, where feasible
- Continued use of native and drought-tolerant landscaping
- Commissioning, enhanced commissioning, and retro-commissioning of buildings

- **Transportation Emissions Reduction Strategies**
  - Increase access to alternative modes of transportation (e.g., including construction of the Transit Center, accommodations for electric vehicles, incentives for carpools, educational materials, bicycle and pedestrian facilities
  - Mass transit education and incentives

- **Solid Waste Reduction Strategies**
  - Implement sustainable food purchasing
  - Improve recycling and waste receptacles on campus
  - Install bottle filling stations throughout campus
  - End on-site use of styrofoam and plastics (straws, place settings, bottles)
  - Paperless processes
  - Implementation of recycle programs

- **Water Conservation Strategies**
  - Reduce stormwater, sewer discharge and water pollution
  - Sustainable landscaping practices
  - Improved irrigation systems

3.5.9 UTILITY INFRASTRUCTURE

As described below, backbone wet and dry utility infrastructure is currently installed within or in the vicinity of the campus. As identified in the proposed 2018 EFMP, an update to Mt. SAC's Campus Utilities Infrastructure Plan will be prepared and improvements described below, referred to as the Central Campus Infrastructure project, are proposed to ensure that essential services

and systems would have enough capacity and would be available in time for the new facilities that will depend on them.

Implementation of the proposed 2018 EFMP would involve removal of existing utility infrastructure on campus, and construction of new utility infrastructure, as necessary to serve the proposed facilities and site improvements. These utilities would be connected to existing infrastructure on campus and in the roadways adjacent to the campus (e.g., Grand Avenue and Temple Avenue); the final sizing and design of on-site facilities would occur during final building and facility design. The physical impact area for utility connections would be within the impact area identified for the proposed 2018 EFMP and would occur in existing roadway, pathways, or otherwise previously disturbed areas. Additionally, the anticipated physical impact area for the proposed water tanks and communications tower are included in the physical impact areas addressed in this Draft EIR (refer to construction impact map provided on Exhibit 3-34). If off campus utility upgrades are needed in the future it is expected that these would occur in the public right-of-way adjacent to the campus and would be implemented in coordination with the City of Walnut.

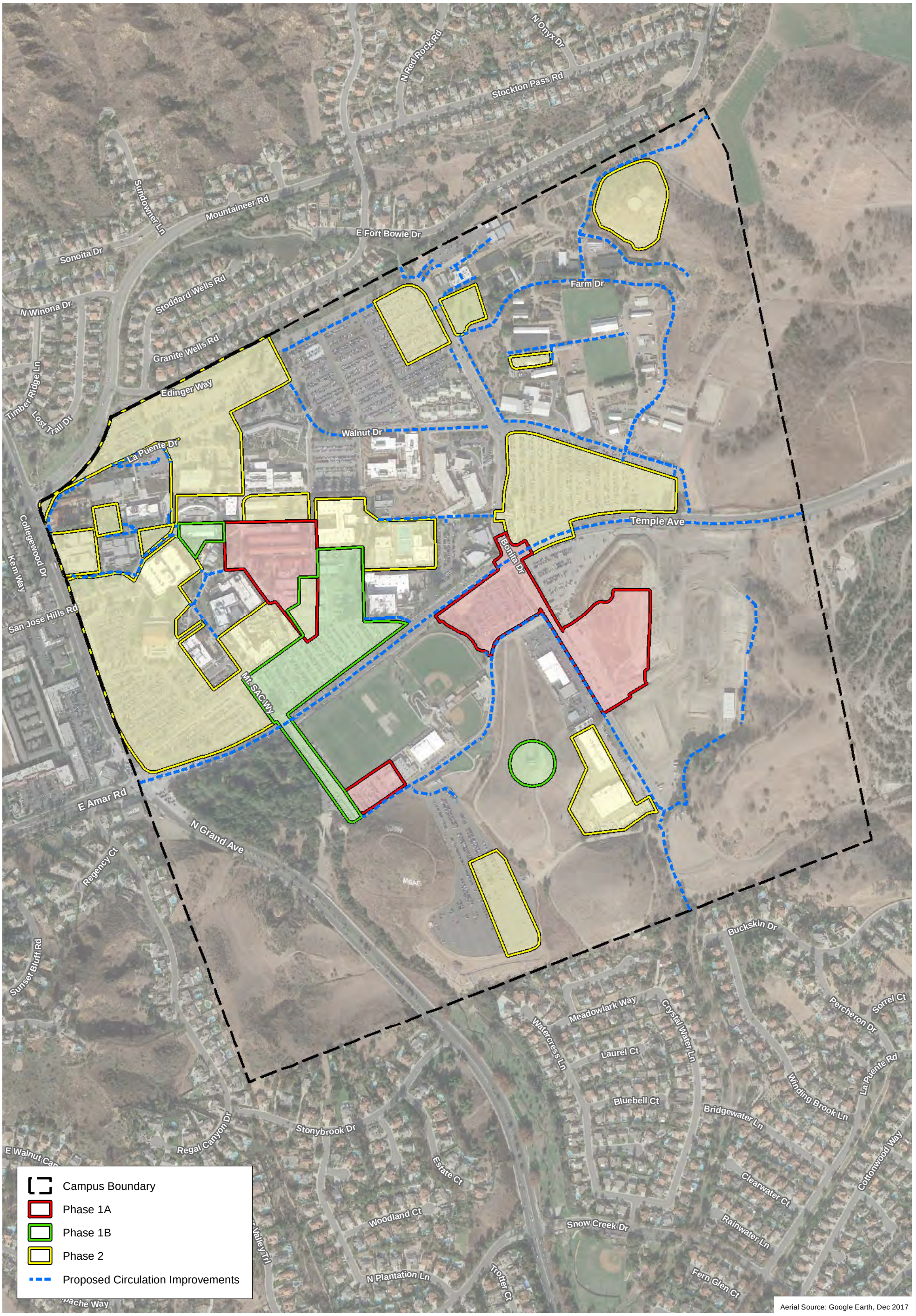
Following is a description of existing and proposed infrastructure at a program-level.

- **Water (potable and non-potable).** The Mt SAC campus is currently served by the Three Valleys Municipal Water District (TVMWD) through an existing transmission main line. Mt. SAC currently uses potable water to satisfy its domestic, fire protection and landscape irrigation needs. Mt. SAC's existing master meter and point of connection to the main line is located east of the Mt. SAC campus on the property of Cal Poly Pomona. From this connection point, water is supplied to an existing 12-inch water main in Temple Avenue that serves the entire Mt. SAC campus. The southern portion of campus is served directly from this 12-inch main. The northern portion of campus is served by a one-million-gallon storage tank and four 25,000-gallon supplemental storage tanks located in the northeastern portion of campus (within the Farm Precinct). Water from the 12-inch main is supplied to these tanks using a series of pumps, and then distributed to the campus through a college-owned water distribution system that is pressurized by the elevation of the main tank. The existing potable water system is depicted on Exhibit 3-35.

  To meet the needs of new facilities and renovations in the proposed 2018 EFMP, it would be necessary to increase Mt. SAC's potable water storage capacity and upgrade and extend the campus water distribution system. As shown on Exhibit 3-4, installation of two new water tanks in the Farm Precinct (adjacent to the existing water tank) is proposed. To provide adequate flow and pressure to new facilities, it may be necessary to increase the size of certain existing water distribution mains within the academic core of the campus.

  Some of the distribution main lines and many of the water service connections to older buildings, especially in the southern portion of campus, consist of transite piping, an outdated material that contains asbestos. The college is in the process of replacing the existing transite piping with polyvinyl chloride (PVC) piping. As new building projects have been completed, the college has been replacing transite pipe; the college would continue this program with implementation of the proposed facilities and site improvements.

  The outdated irrigation infrastructure in the Farm Precinct would be replaced with a centralized system on a single water source, separated from potable water. The improvements would increase overall water efficiency and economy, provide better control for fertilizer injections, and provide the ability to add reclaimed water when the main lines are extended to the Farm Precinct.



Aerial Source: Google Earth, Dec 2017

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Construction Impact Areas

Exhibit 3-34

Mt. SAC 2018 Educational and Facilities Master Plan EIR

N W E S

550 275 0 550

Feet

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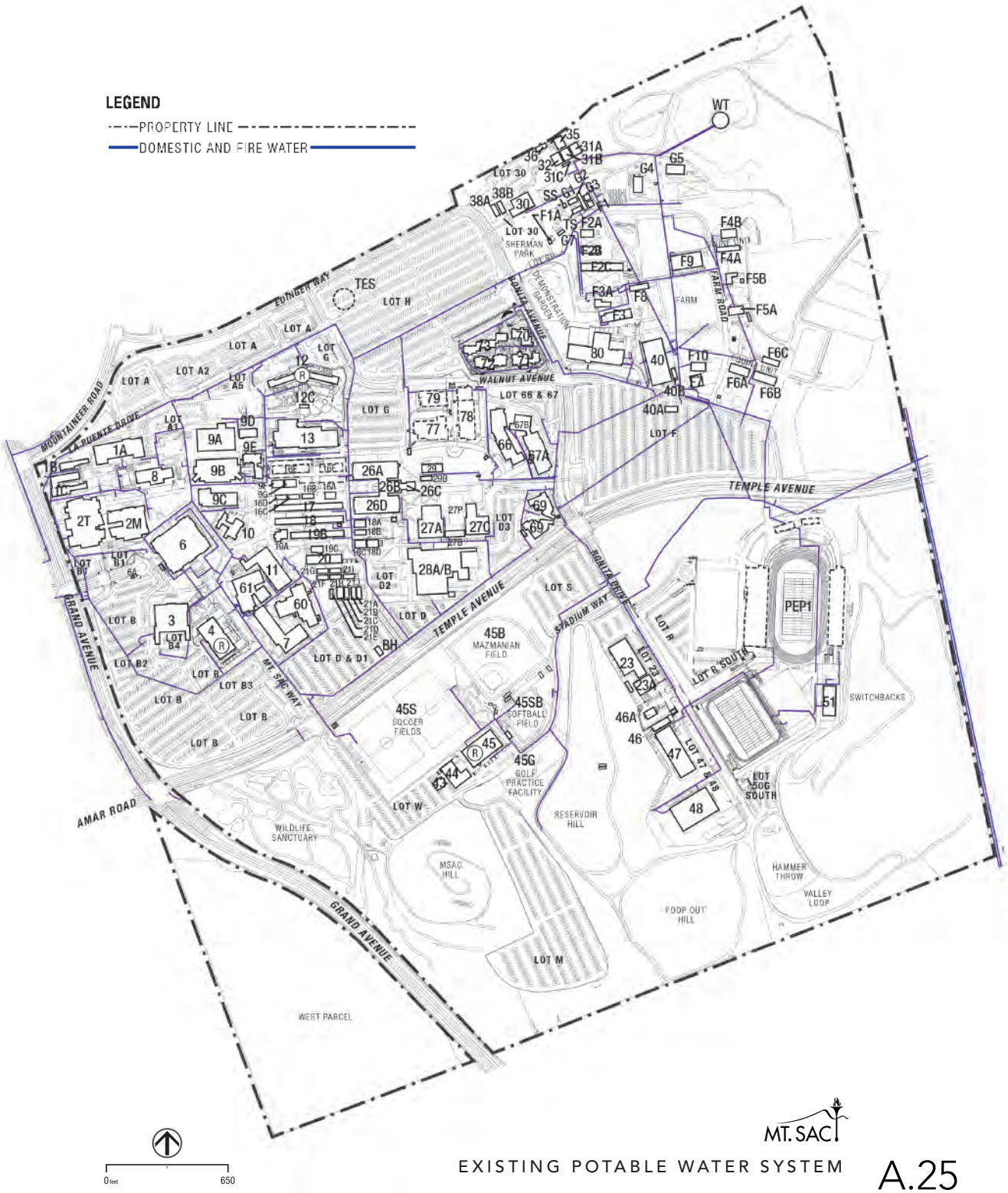

MT. SAC

EXISTING POTABLE WATER SYSTEM

A.25

MT. SAN ANTONIO COLLEGE 2018 EDUCATIONAL AND FACILITIES MASTER PLAN

CBT AND HMC ARCHITECTS / DRAFT DATED 12.12.18

Source: CBT and HMC Architects 2018

Existing Potable Water System

Exhibit 3-35

Mt. SAC 2018 Educational and Facilities Master Plan EIR

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- **Sanitary Sewer.** Sanitary sewer service is provided to the campus by the Los Angeles County Sanitation District; on campus sanitary sewer lines connect to a 15-inch vitrified clay pipe (VCP) trunk line in Temple Avenue (refer to Exhibit 3-36). The 15-inch diameter public VCP main line continues through the campus area south of the Wildlife Sanctuary within a public easement in Campus Way and continues south in Grand Avenue. The campus recently installed a new sanitary sewer main that runs from Bonita Avenue along Stadium Way to the northern edge of the Wildlife Sanctuary where it connects to the County's public sewer main. This new service line was designed and constructed to serve the site and facilities of the Athletics Complex East and Physical Education Complex.

- **Chilled and Heating Hot Water Systems**. The campus chilled water needs are currently met by a central plant located in the academic core of the campus (Building 29). The central plant houses two 640-ton centrifugal chillers, an 820-ton centrifugal chiller, and a 500-ton absorption chiller driven by waste heat from a 1.5 megawatt cogeneration system. A 20,000 ton-hour chilled water thermal energy storage (TES) tank located below-grade in the northeast portion of Parking Lot H provides chilled water storage and allows chillers to run at night when the electricity rates are lower and outside temperatures are favorable, resulting in reduced operational costs. The chilled water is distributed through a system of pre-insulated chilled water lines to each major building on campus (refer to Exhibit 3-37). A few campus buildings have stand-alone systems and utilize package systems/dedicated chiller systems to provide cooling. Two 250-ton chillers at the existing Performing Arts Center 2 are connected to the chilled water distribution system and, therefore, supplement the existing chilled water system capacity.

  The main central plant and TES is adequately sized to support the previously planned campus building development. However, the distribution piping would need to be upgraded to support the cooling needs of the currently proposed 2018 EFMP, which includes facilities not previously anticipated. As part of implementation of the proposed 2018 EFMP, the existing cogeneration facility would be phased out at the end of its life cycle, and additional facilities would be constructed. This could involve a second cooling plant or additional chillers on campus. The need for additional capacity would be evaluated as new facilities are developed; however, it is expected that additional capacity would be needed to support anticipated development in Phase 1B (e.g., Library/Learning Resources). It is expected the second cooling plant may be located near the Library/Learning Resources building, and would be constructed concurrent with this building, as part of Phase 1B.

  The majority of the campus hot water needs are currently met by stand-alone boiler systems housed in individual buildings. The heating hot water needs of a few buildings are met by centralized boilers housed in the central plant facility. Stand-alone boilers would be installed for proposed new facilities rather than an expansion of the existing centralized heating hot water system.

- **Stormwater System and Water Quality Management.** The existing campus storm drain infrastructure is designed to collect and convey stormwater to the public drainage system. Following the topography, campus infrastructure generally drains southward and conveys stormwater to several public main lines: an 84-inch reinforced concrete pipe (RCP) public main located in Grand Avenue, an 84-inch RCP public main located in Bonita Drive, and a 60-inch RCP storm drain located in Temple Avenue and Mt SAC Way. 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. Mt. SAC is in the process of improving its stormwater management system (refer to

MT. SAC

EXISTING SANITARY SEWER SYSTEM

A.29

MT. SAN ANTONIO COLLEGE 2018 EDUCATIONAL AND FACILITIES MASTER PLAN
CBT AND HMC ARCHITECTS / DRAFT DATED 12.12.18

Source: CBT and HMC Architects 2018

Existing Sanitary Sewer System

Exhibit 3-36

Mt. SAC 2018 Educational and Facilities Master Plan EIR

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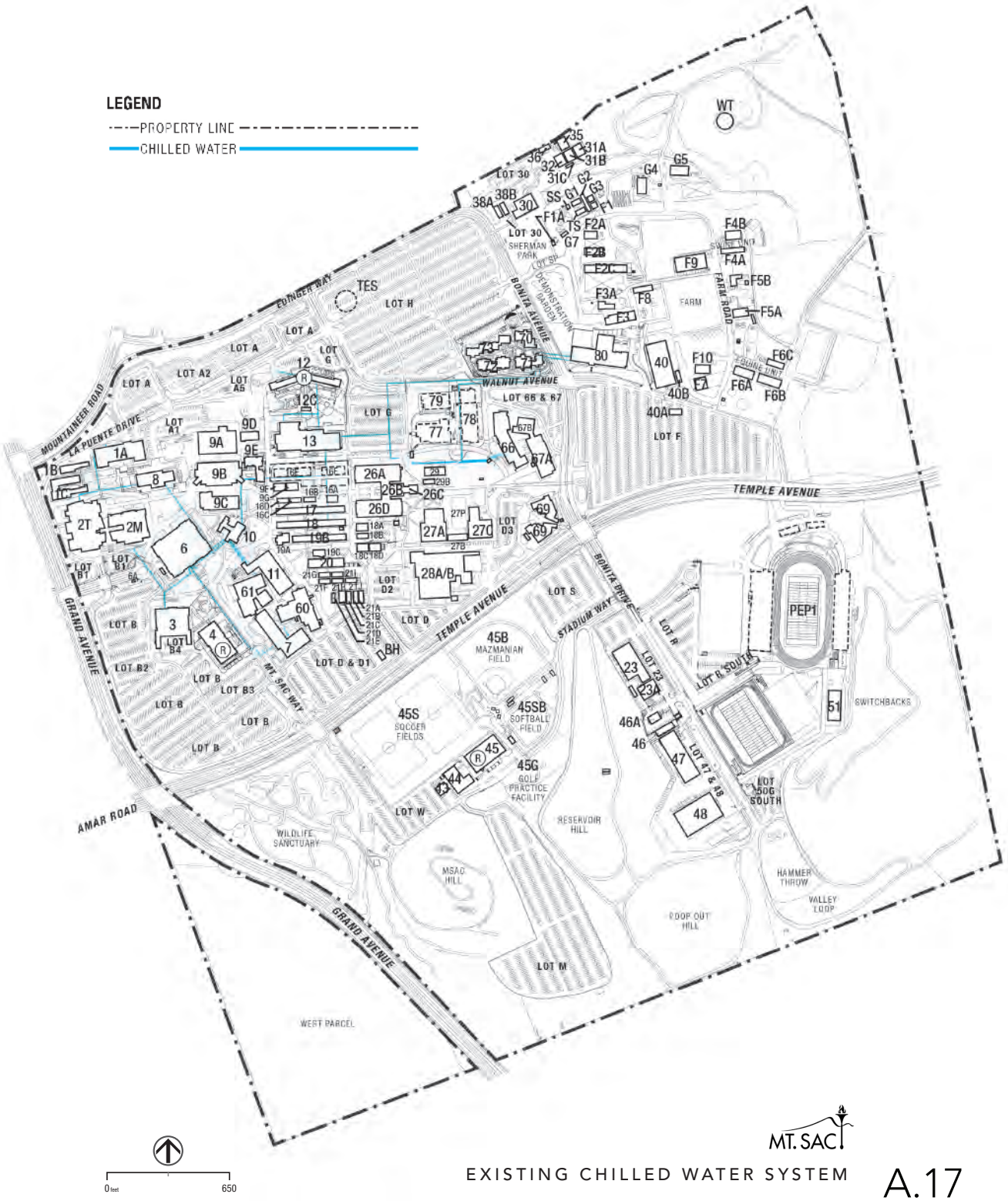

MT. SAC

EXISTING CHILLED WATER SYSTEM

A.17

MT. SAN ANTONIO COLLEGE 2018 EDUCATIONAL AND FACILITIES MASTER PLAN
CBT AND HMC ARCHITECTS / DRAFT DATED 12.12.18

Source: CBT and HMC Architects 2018

Existing Chilled Water System

Exhibit 3-37

Mt. SAC 2018 Educational and Facilities Master Plan EIR

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Exhibit 3-38). Storm drain 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.

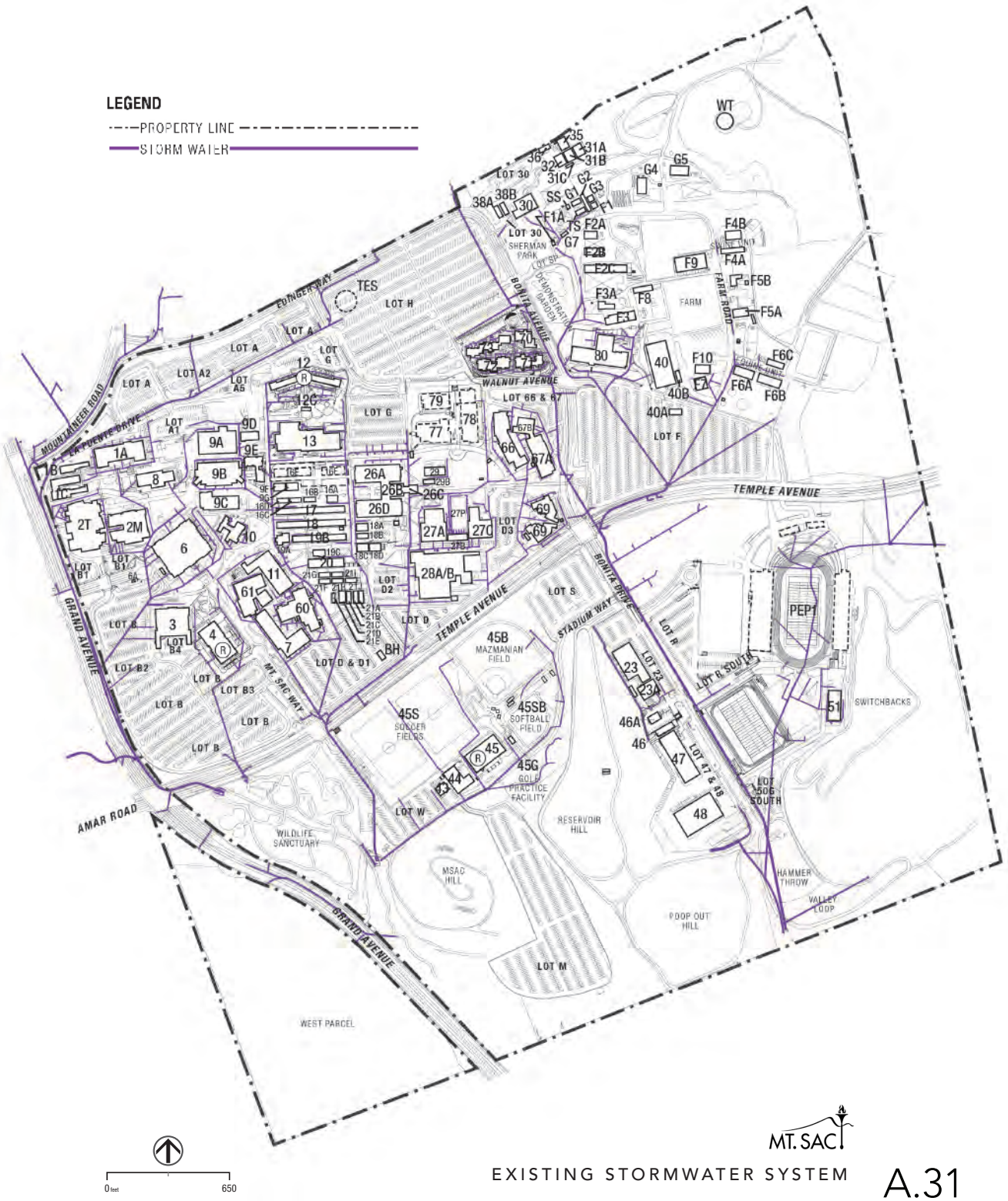
A hydrology analysis would be required for each new building and site project to determine the pre-development runoff and to identify design strategies that would minimize the post-development runoff. The design of new site improvement and building projects would comply with the Los Angeles County stormwater 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. Program-level and Project-specific hydrology analysis is discussed in Section 4.9, Hydrology and Water Quality, of this Draft EIR.

- **Electricity.** Southern California Edison (SCE) provides electricity to the campus. The college's 12kV (medium-voltage) electrical distribution system distributes power from the utility to each building on campus (refer to Exhibit 3-39). To meet the needs of new facilities and renovations that are being recommended for the first time in the proposed 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.

- **Natural Gas.** Southern California Gas (SCG) provides natural gas to the campus. The campus is currently supplied from SCG's high-pressure system. The north- and south-of-Temple Avenue campus areas are each supplied through a single high-pressure line with a single meter assembly. These high-pressure lines feed individual medium-pressure lines that step down to 10 pounds per square inch, gage distribution systems; Exhibit 3-40 depicts the medium-pressure lines. To meet the needs of new facilities and renovations that are being recommended for the first time in the proposed 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:

  - 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.



MT. SAC

EXISTING STORMWATER SYSTEM

A.31

MT. SAN ANTONIO COLLEGE 2018 EDUCATIONAL AND FACILITIES MASTER PLAN
CBT AND HMC ARCHITECTS / DRAFT DATED 12.12.18

Source: CBT and HMC Architects 2018

Existing Stormwater System

Exhibit 3-38

Mt. SAC 2018 Educational and Facilities Master Plan EIR

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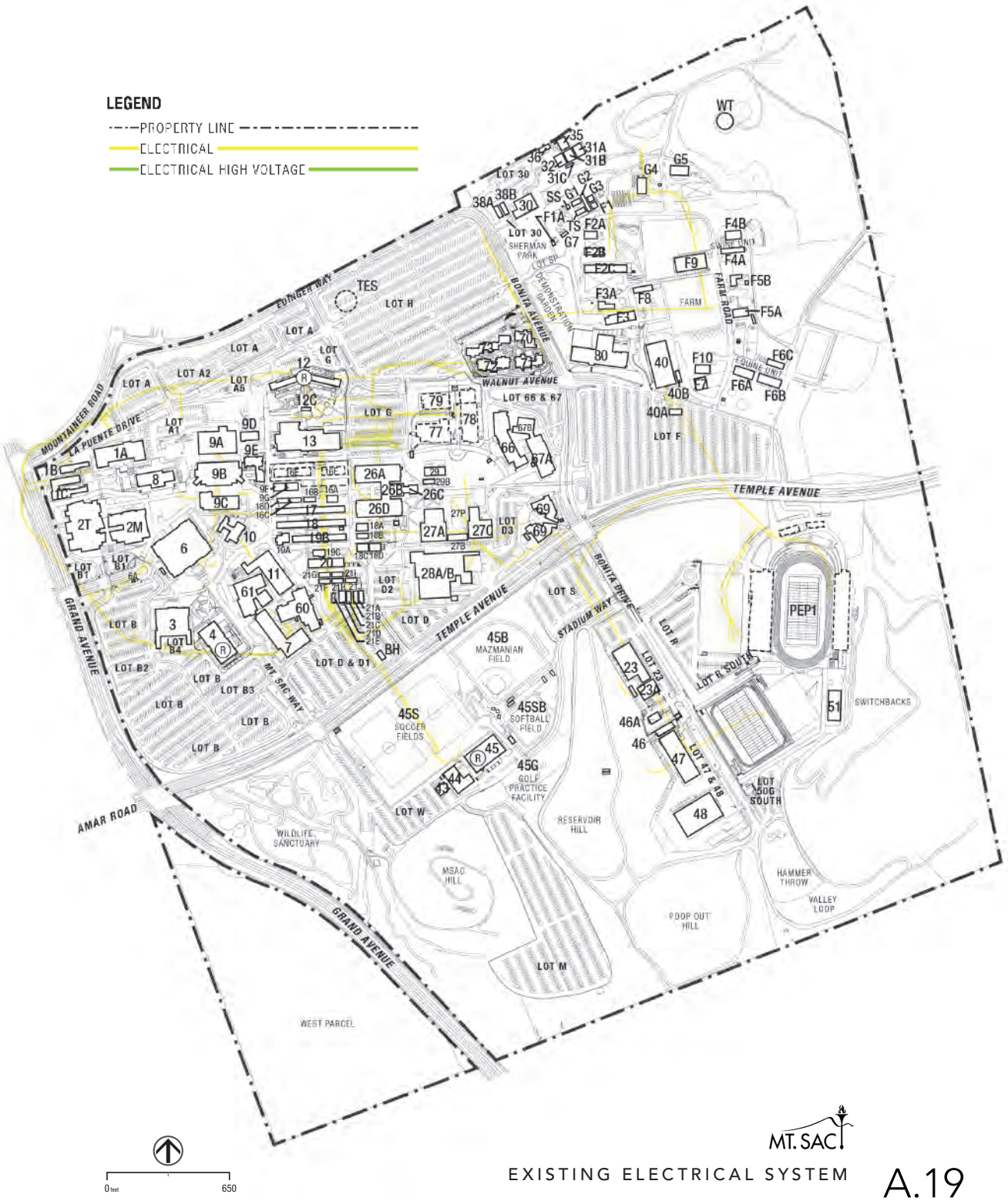

MT. SAC

EXISTING ELECTRICAL SYSTEM

A.19

MT. SAN ANTONIO COLLEGE 2018 EDUCATIONAL AND FACILITIES MASTER PLAN

CBT AND HMC ARCHITECTS / DRAFT DATED 12.12.18

Source: CBT and HMC Architects 2018

Existing Electrical System

Exhibit 3-39

Mt. SAC 2018 Educational and Facilities Master Plan EIR

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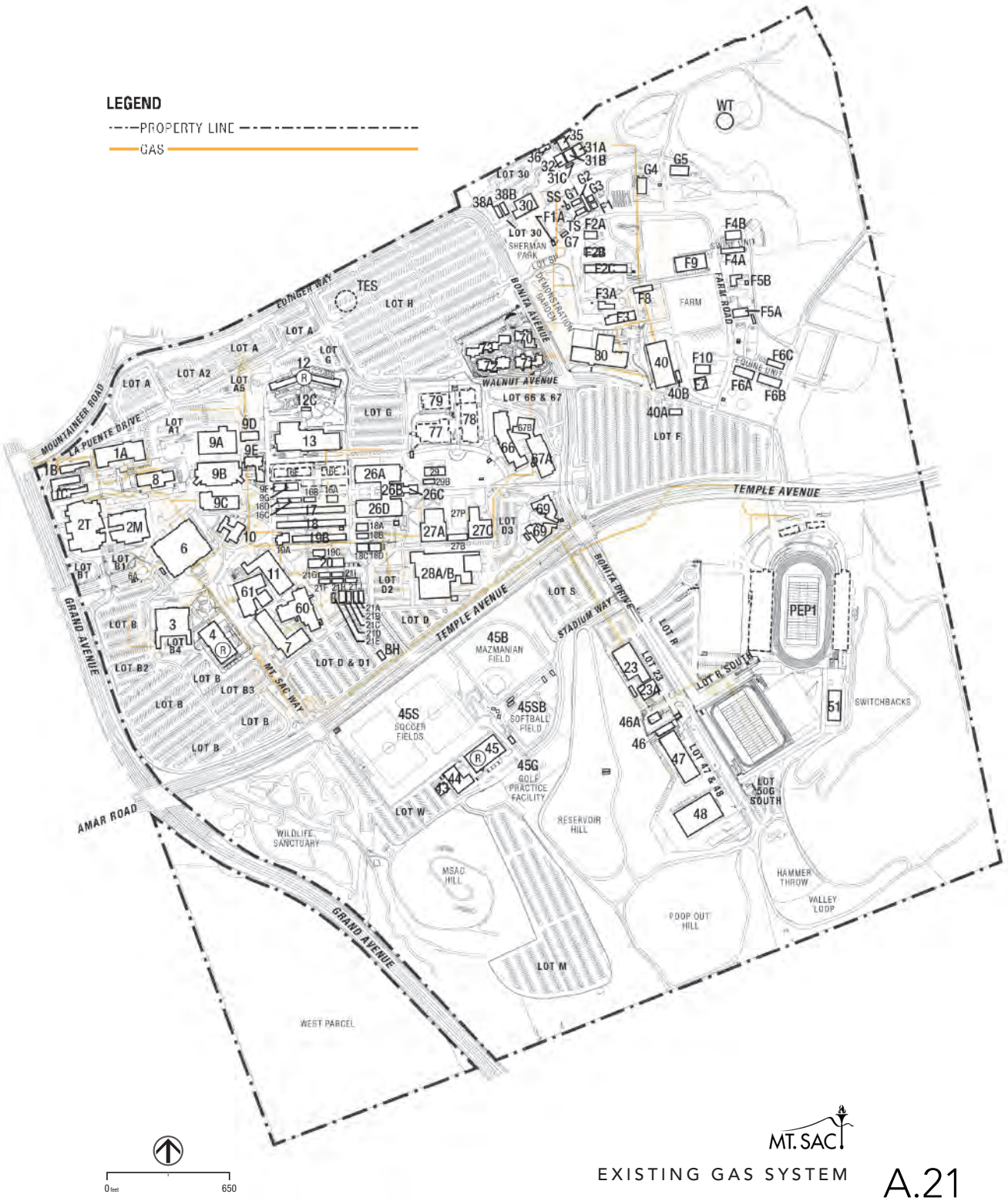

MT. SAC

EXISTING GAS SYSTEM

A.21

MT. SAN ANTONIO COLLEGE 2018 EDUCATIONAL AND FACILITIES MASTER PLAN
CBT AND HMC ARCHITECTS / DRAFT DATED 12.12.18

Source: CBT and HMC Architects 2018

Existing Gas System

Exhibit 3-40

Mt. SAC 2018 Educational and Facilities Master Plan EIR

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- **Communications.** Verizon is the local exchange carrier (LEC) for communication services. Mt. SAC uses an underground system of conduits to distribute all fiber and copper cables to its buildings (refer to Exhibit 3-41). Mt. SAC would provide redundant data and voice services to all proposed 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 (VoIP) services would be provided over fiber. Each facility would require limited copper cable connections for elevator phones, alarms, modems, and fax lines.

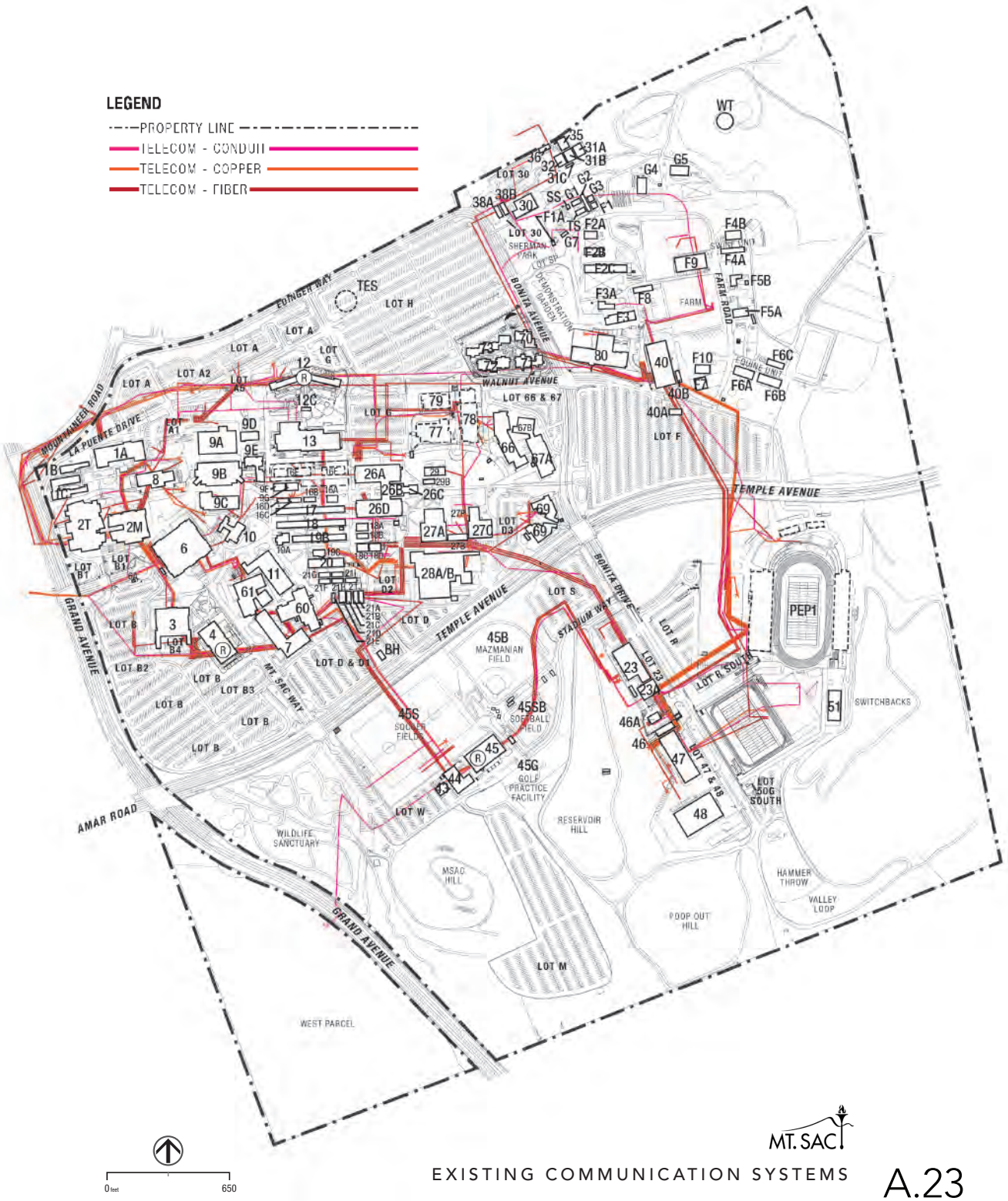
  Additionally, the following improvements to the on-campus natural gas system would be implemented:

  - Communications equipment rooms in all buildings would provide grounding and bonding of all cable to meet ANSI/EIA/TIA 607 Commercial Building Grounding and Bonding requirements.
  - The renovation of existing communications equipment rooms to meet ANSI/EIA/TIA requirements, potentially requiring the upgrade of the electrical and HVAC systems that serve these rooms

- **Replacement Communications Tower.** The proposed Replacement Communications Tower would replace the existing facility on Reservoir Hill, at a location slightly to the southwest of the existing tower which is located generally southwest of buildings 46A, 46, and 47. The existing tower is approximately 40-feet high and would be replaced with an adjacent equipment cabinet intended to support 2-way communication for the campus associated with the Emergency Operations Center (EOC), Alertus (campus mass notification system), and the campus radio station (90.1 FM Mt Rock transmitter). The Replacement Communications Tower would be subject to a separate environmental document in the future once design plans are available.

The required utility infrastructure for each project implementing the proposed 2018 EFMP would be determined during the design of each project. As identified above, projects being evaluated at a project-specific level do not require upgrades or expansion of existing or planned backbone utility infrastructure. However, installation of project-specific utility infrastructure to serve the proposed buildings/facilities is required, and existing utility infrastructure would be removed/replaced, as necessary. Available project-specific utility plans are presented in Exhibit 3-42 (Student Center), 3-43a through 3-43c (Parking Structure R and Tennis Courts), and 3-44 (Parking Structure S).

To accommodate the Student Center and other facilities in the central campus area (e.g., Bookstore, Library, and Makerspace), existing infrastructure would be removed and new infrastructure installed to accommodate the proposed development in this area and to support campus growth overall. The Student Center and Central Campus Infrastructure project includes the replacement of storm drain, domestic/fire water, chilled water (including the proposed location of a new central plant), high voltage electric loops, electrical distribution, sanitary sewer, natural gas, telecommunications conduits and copper.



MT. SAC

EXISTING COMMUNICATION SYSTEMS

A.23

MT. SAN ANTONIO COLLEGE 2018 EDUCATIONAL AND FACILITIES MASTER PLAN

CBT AND HMC ARCHITECTS / DRAFT DATED 12.12.18

Source: CBT and HMC Architects 2018

Existing Communications Systems

Exhibit 3-41

Mt. SAC 2018 Educational and Facilities Master Plan EIR

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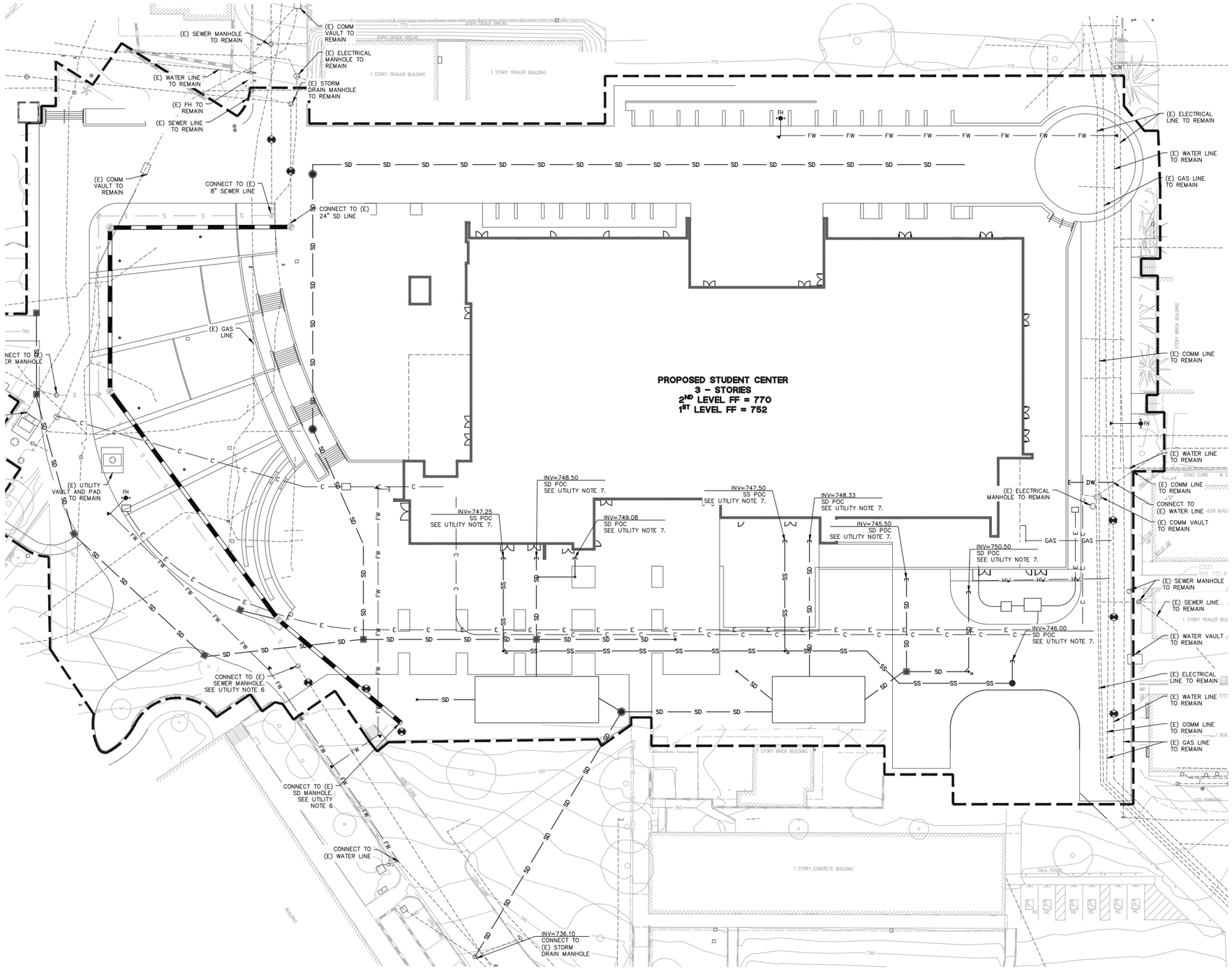

UTILITY LEGEND:

SD	SDR 35 PVC STORM DRAIN PIPE (UNLESS OTHERWISE NOTED)
SS	PVC SANITARY SEWER
FW	C900 PVC FIRE WATER
DW	C900 PVC DOMESTIC WATER
	24"x24" CATCH BASIN WITH INLET GRATE PER DETAIL 5, SEE SHEET C6.0
	24"x24" CATCH BASIN WITH SOLID COVER PER DETAIL 5, SEE SHEET C6.0
CO	SD/SS CLEANOUT PER DETAIL 9, SEE SHEET C6.0
	ATRIUM AREA DRAIN PER DETAIL _/C_
	AREA DRAIN W/ SQUARE GRATE PER DETAIL 10, SEE SHEET C6.0
FDC	FIRE DEPARTMENT CONNECTION (FDC) PER DETAIL _/C_
PIV	POST INDICATOR VALVE (PIV) PER DETAIL _/C_
FH	FIRE HYDRANT PER DETAIL 12/C6.0
E	ELECTRICAL LINE (SHOWN AS REFERENCE, SEE MEP PLANS)
C	COMMUNICATION LINE (SHOWN AS REFERENCE, SEE MEP PLANS)
GAS	GAS LINE (SHOWN AS REFERENCE, SEE MEP PLANS)
HW	HYDRONICS LINE (SHOWN AS REFERENCE, SEE MEP PLANS)
	STORM DRAIN LINE PER SEPARATE PERMIT (SHOWN AS REFERENCE)
S	SEWER LINE PER SEPARATE PERMIT (SHOWN AS REFERENCE)
	GREASE INTERCEPTOR PER PLUMBING PLANS
▲	THRUST BLOCK PER DETAIL 8 ON SHEET C6.0
AD	AREA DRAIN
ATD	ATRIUM AREA DRAIN
COMM	COMMUNICATION
(E)	EXISTING
FH	FIRE HYDRANT
INV	INVERT
POC	POINT OF CONNECTION
S	SLOPE
SS	SANITARY SEWER
SD	STORM DRAIN

Source: BKF, HPI Architecture 2019

Student Center - Utility Plan

Mt. SAC 2018 Educational and Facilities Master Plan EIR

Exhibit 3-42

N W E S

0 20 40 80 Feet

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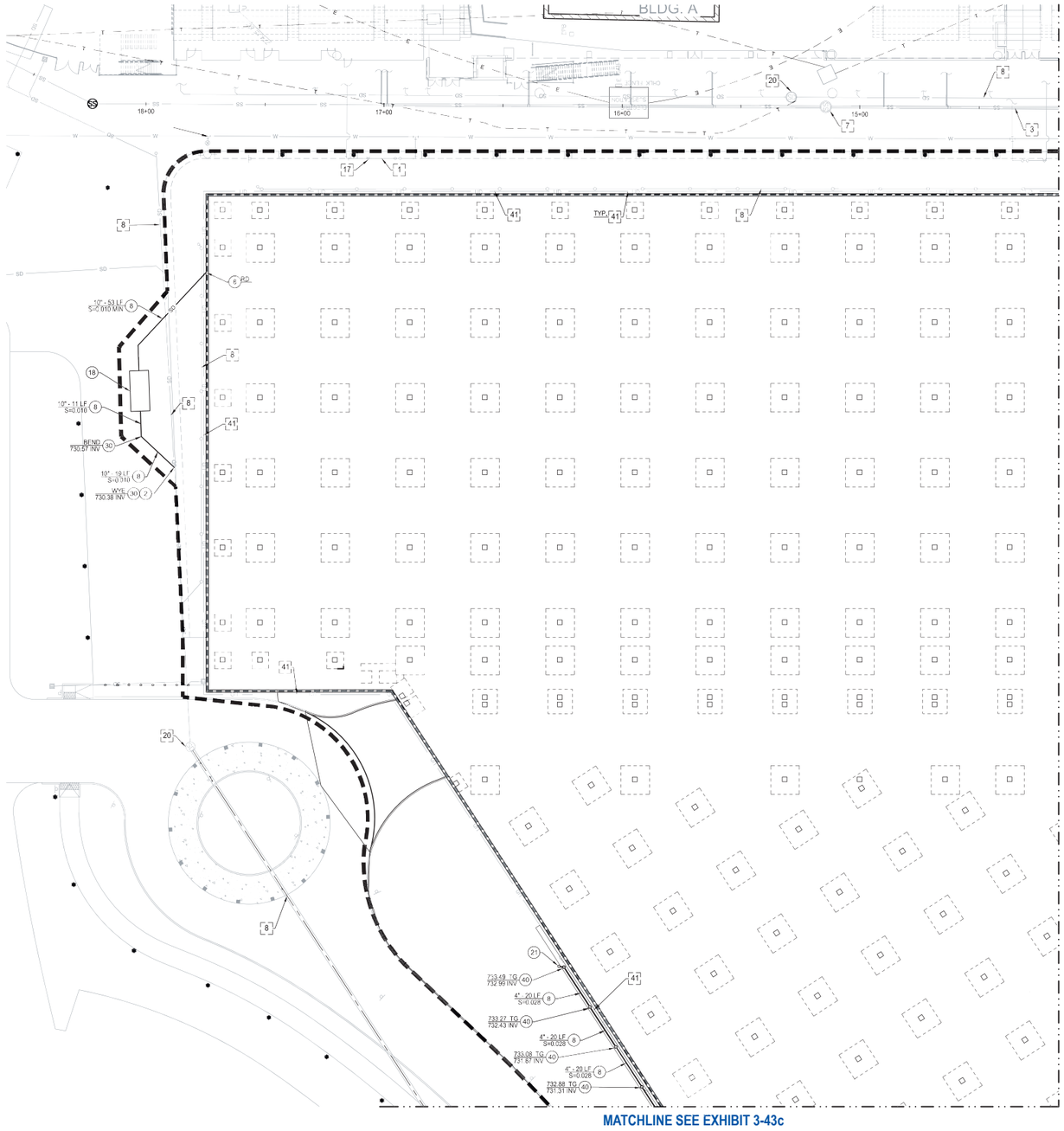
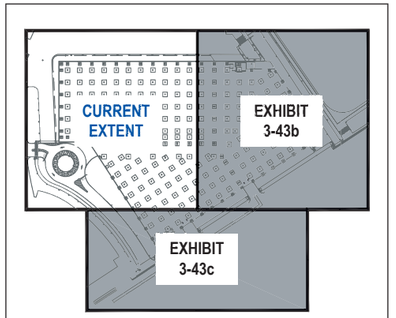


CONSTRUCTION NOTES:

CONSTRUCT
EXISTING TO REMAIN -PROTECT IN PLACE
EXISTING TO REMOVE
REMOVE & RELOCATE
ADJUST TO GRADE
PER SEPARATE CONTRACT

1. WATER LINE - PVC C-900 (CL 200), SIZE AND LENGTH PER PLAN. PIPE BEDDING AND TRENCH PER DETAIL 1 / SHEET C6.1. CONSTRUCT CONCRETE THRUST BLOCK PER DETAIL 11 / SHEET C6.1
2. CONNECT TO EXISTING
3. SANITARY SEWER LINE - PVC (SDR 35) PIPE SIZE, LENGTH AND SLOPE PER PLAN. PIPE BEDDING AND TRENCH PER DETAIL 1 / SHEET C6.1
4. GATE VALVE AND COVER PER DETAIL 5 / SHEET C6.1. SIZE PER ADJOINING PIPE
5. FIRE HYDRANT
6. STUB OUT FOR PLUMBING CONNECTION. REFER TO PLUMBING PLANS FOR SIZE
7. SANITARY SEWER MANHOLE
8. STORM DRAIN LINE - HDPE (DR 17), SIZE, LENGTH AND SLOPE PER PLAN
9. CAP UTILITY
10. RIP RAP PAD PER DETAIL 11 / SHEET C6.1
11. ROOF DRAIN DAYLIGHT PER PLUMBING PLANS
12. RCP STORM DRAIN LINE, SIZE, LENGTH AND SLOPE PER PLAN
13. SEWER CLEAN OUT PER SPPWC STD. PLAN 204-2
14. 24" x 24" CATCH BASIN. BROOKS PRODUCT MODEL 2424CB WITH PEDESTRIAN RATED STEEL GRATE, OR APPROVED EQUAL
15. FIRE WATER SERVICE LINE. (PVC C-900, CL 200) PIPE SIZE PER PLAN. REFER TO PLUMBING PLANS FOR DETAILS. CONSTRUCT CONCRETE THRUST BLOCK PER DETAIL 11 / SHEET C6.1
16. BACKFLOW PREVENTER. AMES MODEL LF4500 DOUBLE CHECK ASSEMBLY (OR APPROVED EQUAL). TAMPER SWITCH SHALL BE INSTALLED ON OS&Y GATE VALVE. TAMPER SWITCH CONNECTION PER ELECTRICAL PLANS
17. FIRE DEPARTMENT CONNECTION (FDC): 2-1/2" x 4" FIRE DEPARTMENT INLET CONNECTION PER POTTER ROEMER MODEL 5721 (OR APPROVED EQUAL)
18. STORM DRAIN INTERCEPTOR PER PLUMBING PLAN P-101.
19. 12" WIDE TRENCH DRAIN WITH STAINLESS STEEL GRATE. GRATE TO BE RATED FOR HS-20 LOADING.
20. STORM DRAIN MANHOLE
21. STORM DRAIN CLEANOUT PER SPPWC STD. PLAN 204-2
22. UTILITY CROSSING PER DETAIL 2 / SHEET C6.1
23. JUNCTION STRUCTURE - PIPE TO PIPE (INLET ID > 24" OR OD > ½" MAIN LINE ID) PER SPPWC STD 331-3
25. 4" PERFORATED PVC PIPE PER SPPWC SECTION 208. CENTER IN 12" X 12" GRAVEL TRENCH WITH 3/4" WASHED ROCK. WRAP WITH FILTER FABRIC. SEE DETAIL 9 / SHEET C6.2
27. CONNECT PERFORATED PIPE TO INLET OR STORM DRAIN
30. FITTING, TYPE PER PLAN. SIZE & MATERIAL PER ADJOINING PIPE
36. NOT USED
39. JOIN EXISTING MANHOLE PER SPPWC STD. 206-2
40. 4" DIAMETER RETAINING WALL GUTTER DRAIN PER SPPWC STD. PLAN 617-3.
41. 4" PERFORATED PVC BACK OF WALL DRAIN PIPE PER SPPWC SECTION 208. LOCATION PER STRUCTURAL PLANS. CENTER IN 12" X 12" GRAVEL TRENCH WITH 3/4" WASHED ROCK. WRAP WITH FILTER FABRIC. SEE DETAIL 9 / SHEET C6.2



MAP INDEX

LEGEND:

LIMIT OF CIVIL WORK
SAWCUT LINE
235 PROPOSED CONTOUR LINE
280 EXISTING CONTOUR LINE
PROPOSED RETAINING WALL
EXISTING RETAINING WALL
EXISTING BUILDING
EXISTING UTILITY TO BE REMOVED
EXISTING STORM DRAIN LINE (≥18")
SD EXISTING STORM DRAIN LINE (<18")
SS EXISTING SANITARY SEWER LINE
W EXISTING WATER LINE
FW EXISTING FIRE WATER LINE
E EXISTING ELECTRICAL LINE
G EXISTING GAS LINE
T EXISTING COMMUNICATIONS LINE
IRR EXISTING IRRIGATION LINE
CHWR EXISTING CHILLED WATER RETURN
CHWS EXISTING CHILLED WATER SUPPLY
NEW STORM DRAIN LINE (≥18")
SD NEW STORM DRAIN LINE (<18")
SS NEW SANITARY SEWER LINE
W NEW WATER LINE
CHW NEW CHILLED HOT WATER LINE PER MEP PLANS
UD NEW UNDERDRAIN
NEW FLATDRAIN
EXISTING FIRE HYDRANT
FDC EXISTING FIRE DEPARTMENT CONNECTION
EXISTING CLEAN OUT
EXISTING WATER VALVE
EXISTING LIGHT POLE AND FIXTURE
EXISTING SIGN
NEW CATCH BASIN
RD ROOF DRAIN
NEW SANITARY SEWER MANHOLE
ELECTRICAL PULL BOX

Source: HMC Architects 2018

Parking Structure R and Tennis Courts – Utility Plan

Exhibit 3-43a

Mt. SAC 2018 Educational and Facilities Master Plan EIR

N E S W

0 20 40 80 Feet

PSOMAS

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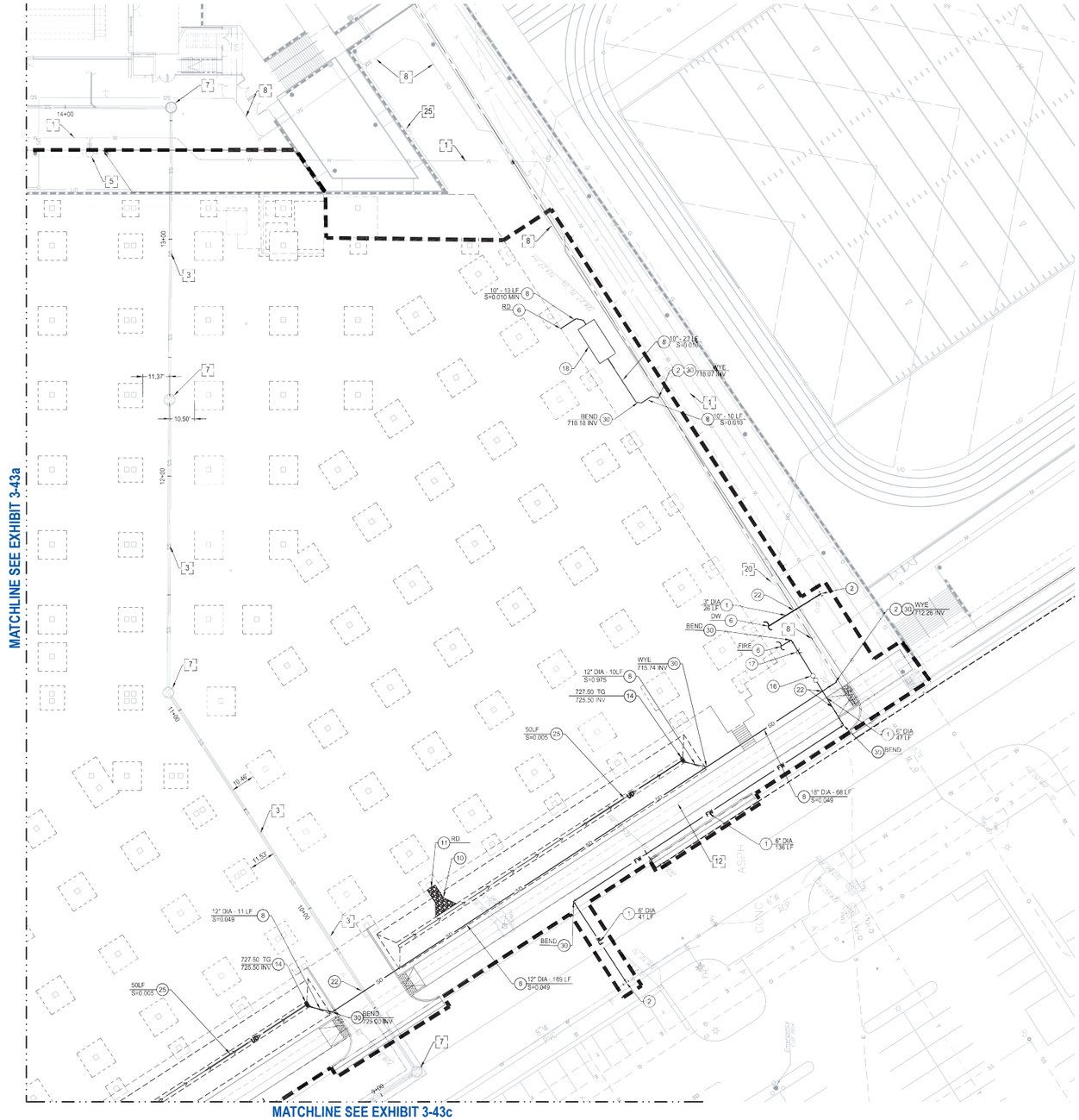

CONSTRUCTION NOTES:

- CONSTRUCT
- EXISTING TO REMAIN -PROTECT IN PLACE
- EXISTING TO REMOVE
- REMOVE & RELOCATE
- ADJUST TO GRADE
- PER SEPARATE CONTRACT

1. WATER LINE - PVC C-900 (CL 200), SIZE AND LENGTH PER PLAN, PIPE BEDDING AND TRENCH PER DETAIL 1 / SHEET C6.1. CONSTRUCT CONCRETE THRUST BLOCK PER DETAIL 11 / SHEET C6.1
2. CONNECT TO EXISTING
3. SANITARY SEWER LINE - PVC (SDR 35), PIPE SIZE, LENGTH AND SLOPE PER PLAN. PIPE BEDDING AND TRENCH PER DETAIL 1 / SHEET C6.1
4. GATE VALVE AND COVER PER DETAIL 5 / SHEET C6.1. SIZE PER ADJOINING PIPE
5. FIRE HYDRANT
6. STUB OUT FOR PLUMBING CONNECTION. REFER TO PLUMBING PLANS FOR SIZE
7. SANITARY SEWER MANHOLE
8. STORM DRAIN LINE - HDPE (DR 17), SIZE, LENGTH AND SLOPE PER PLAN
9. CAP UTILITY
10. RIP RAP PAD PER DETAIL 11 / SHEET C6.1
11. ROOF DRAIN DAYLIGHT PER PLUMBING PLANS
12. RCP STORM DRAIN LINE, SIZE, LENGTH AND SLOPE PER PLAN
13. SEWER CLEAN OUT PER SPPWC STD. PLAN 204-2
14. 24" x 24" CATCH BASIN. BROOKS PRODUCT MODEL 2424CB WITH PEDESTRIAN RATED STEEL GRATE, OR APPROVED EQUAL
15. FIRE WATER SERVICE LINE. (PVC C-900, CL 200) PIPE SIZE PER PLAN. REFER TO PLUMBING PLANS FOR DETAILS. CONSTRUCT CONCRETE THRUST BLOCK PER DETAIL 11 / SHEET C6.1
16. BACKFLOW PREVENTER. AMES MODEL LF4500 DOUBLE CHECK ASSEMBLY (OR APPROVED EQUAL). TAMPER SWITCH SHALL BE INSTALLED ON OS&Y GATE VALVE. TAMPER SWITCH CONNECTION PER ELECTRICAL PLANS
17. FIRE DEPARTMENT CONNECTION (FDC): 2-1/2" x 4" FIRE DEPARTMENT INLET CONNECTION PER POTTER ROEMER MODEL 5721 (OR APPROVED EQUAL)
18. STORM DRAIN INTERCEPTOR PER PLUMBING PLAN P-101.
19. 12" WIDE TRENCH DRAIN WITH STAINLESS STEEL GRATE. GRATE TO BE RATED FOR HS-20 LOADING.
20. STORM DRAIN MANHOLE
21. STORM DRAIN CLEANOUT PER SPPWC STD. PLAN 204-2
22. UTILITY CROSSING PER DETAIL 2 / SHEET C6.1
23. JUNCTION STRUCTURE - PIPE TO PIPE (INLET ID > 24" OR OD > ½" MAIN LINE ID) PER SPPWC STD 331-3
25. 4" PERFORATED PVC PIPE PER SPPWC SECTION 208. CENTER IN 12" X 12" GRAVEL TRENCH WITH 3/4" WASHED ROCK. WRAP WITH FILTER FABRIC, SEE DETAIL 9 / SHEET C6.2
27. CONNECT PERFORATED PIPE TO INLET OR STORM DRAIN
30. FITTING, TYPE PER PLAN, SIZE & MATERIAL PER ADJOINING PIPE
36. NOT USED
39. JOIN EXISTING MANHOLE PER SPPWC STD. 206-2
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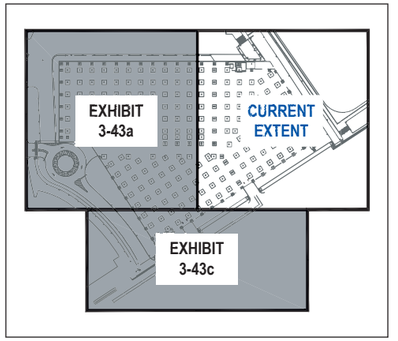

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LEGEND:

- LIMIT OF CIVIL WORK
- SAWCUT LINE
- 235 PROPOSED CONTOUR LINE
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- PROPOSED RETAINING WALL
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- EXISTING STORM DRAIN LINE (>18")
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- UD NEW UNDERDRAIN
- NEW FLATDRAIN
- EXISTING FIRE HYDRANT
- FDC EXISTING FIRE DEPARTMENT CONNECTION
- CO EXISTING CLEAN OUT
- EXISTING WATER VALVE
- EXISTING LIGHT POLE AND FIXTURE
- EXISTING SIGN
- NEW CATCH BASIN
- RD ROOF DRAIN
- NEW SANITARY SEWER MANHOLE
- ELECTRICAL PULL BOX

Source: HMC Architects 2018

Parking Structure R and Tennis Courts – Utility Plan

Exhibit 3-43b

Mt. SAC 2018 Educational and Facilities Master Plan EIR

N E S W

0 20 40 80 Feet

PSOMAS

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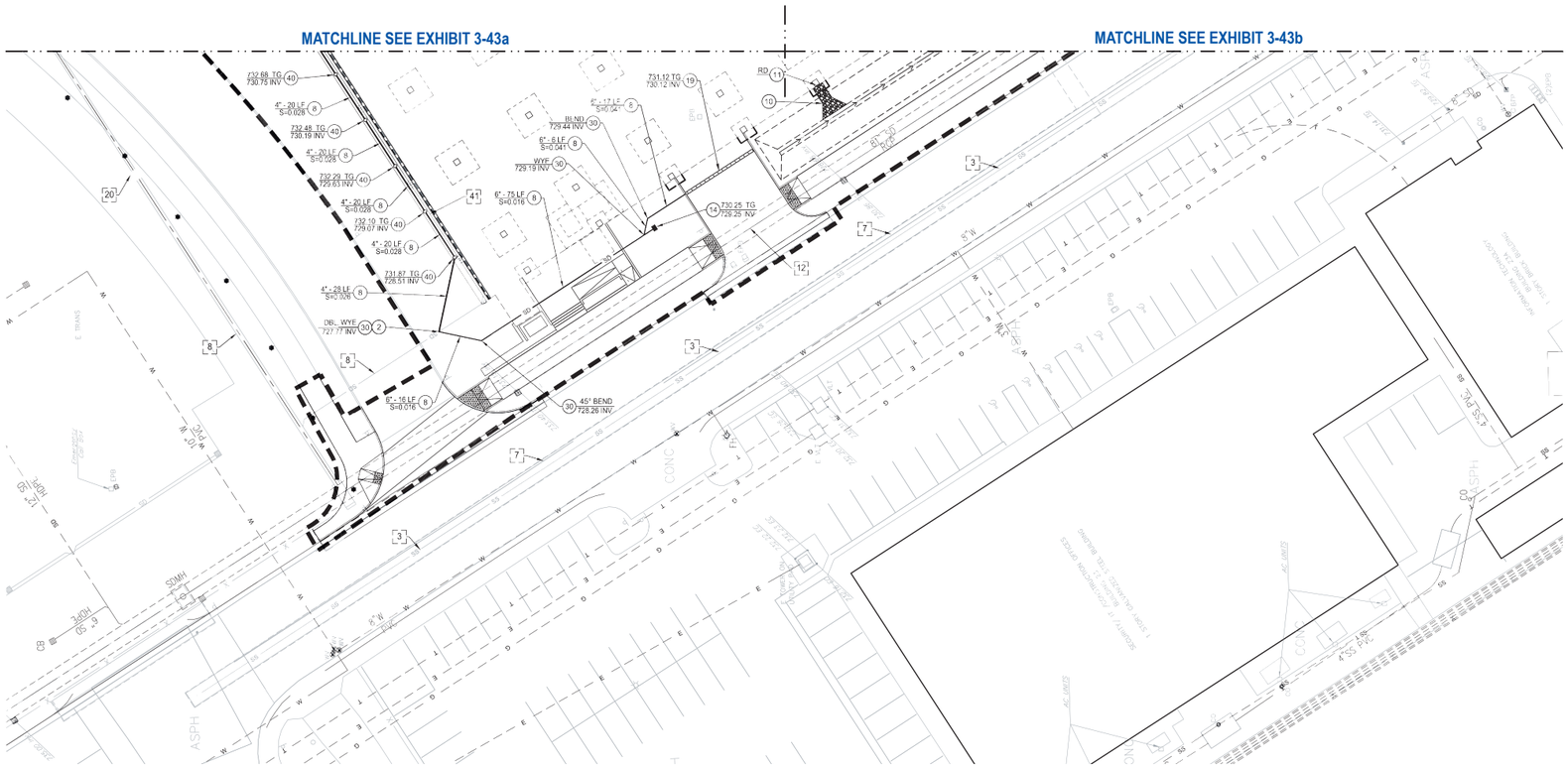

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30. FITTING, TYPE PER PLAN, SIZE & MATERIAL PER ADJOINING PIPE
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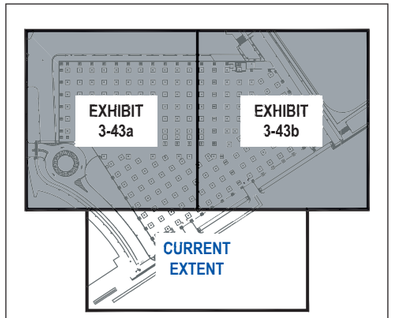

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- SAWCUT LINE
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- EXISTING BUILDING
- EXISTING UTILITY TO BE REMOVED
- EXISTING STORM DRAIN LINE (≥18"; SD
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- W — EXISTING WATER LINE
- FW — EXISTING FIRE WATER LINE
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- CHW — NEW CHILLED HOT WATER LINE PER MEP PLANS
- UD — NEW UNDERDRAIN
- NEW FLATDRAIN
- CI — EXISTING FIRE HYDRANT
- FDC — EXISTING FIRE DEPARTMENT CONNECTION
- CO — EXISTING CLEAN OUT
- EXISTING WATER VALVE
- EXISTING LIGHT POLE AND FIXTURE
- EXISTING SIGN
- NEW CATCH BASIN
- RD — ROOF DRAIN
- NEW SANITARY SEWER MANHOLE
- ELECTRICAL PULL BOX

Source: HMC Architects 2018

Parking Structure R and Tennis Courts – Utility Plan

Exhibit 3-43c

Mt. SAC 2018 Educational and Facilities Master Plan EIR

N E S W

0 20 40 80 Feet

PSOMAS

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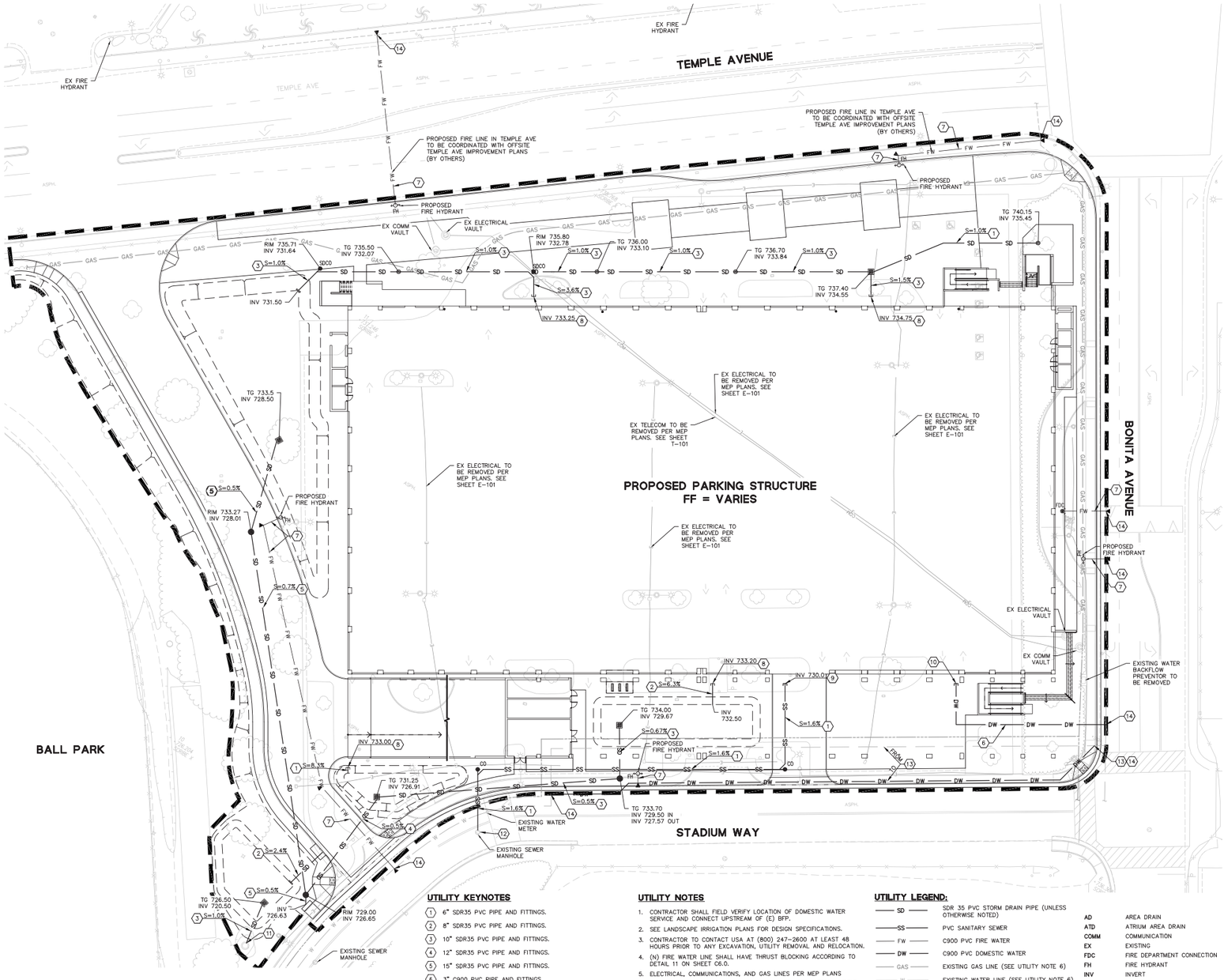

UTILITY KEYNOTES

1. 6" SDR35 PVC PIPE AND FITTINGS.
2. 8" SDR35 PVC PIPE AND FITTINGS.
3. 10" SDR35 PVC PIPE AND FITTINGS.
4. 12" SDR35 PVC PIPE AND FITTINGS.
5. 15" SDR35 PVC PIPE AND FITTINGS.
6. 3" C900 PVC PIPE AND FITTINGS.
7. 6" DR14 C900 PVC PIPE AND FITTINGS.
8. STORM DRAIN POC. SEE MEP PLANS FOR CONTINUATION.
9. SEWER POC. SEE MEP PLANS FOR CONTINUATION.
10. CHILLED WATER POC. SEE MEP PLANS FOR CONTINUATION.
11. CONNECT TO EXISTING STORM DRAIN INLET
12. CONNECT TO EXISTING SEWER MANHOLE. VERIFY IN FIELD
13. RELOCATE EXISTING 8" PVC C-900 WATER LINE. FURNISH AND INSTALL WATER LINE. SEE UTILITY NOTE 7 & 10
14. CONNECT TO EXISTING WATER LINE. CONTRACTOR TO VERIFY IN FIELD LOCATION OF WATER LINE AND COORDINATE CONNECTION WITH COLLEGE.

UTILITY NOTES

1. CONTRACTOR SHALL FIELD VERIFY LOCATION OF DOMESTIC WATER SERVICE AND CONNECT UPSTREAM OF (E) BFP.
2. SEE LANDSCAPE IRRIGATION PLANS FOR DESIGN SPECIFICATIONS.
3. CONTRACTOR TO CONTACT USA AT (800) 247-2600 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION, UTILITY REMOVAL AND RELOCATION.
4. (N) FIRE WATER LINE SHALL HAVE THRUST BLOCKING ACCORDING TO DETAIL 11 ON SHEET C6.0.
5. ELECTRICAL, COMMUNICATIONS, AND GAS LINES PER MEP PLANS
6. EXISTING GAS AND WATER LINES WERE LOCATED PER SITESCAN FIELD INVESTIGATION, DATED 01/29/2019, AND AS-BUILTS PROVIDED BY THE COLLEGE. CONTRACTOR SHALL FIELD VERIFY LOCATIONS PRIOR TO DEMOLITION.
7. EXISTING GAS AND WATER LINES SHOWN AS REFERENCE. LOCATION OF EXISTING LINES PER AS-BUILTS PROVIDED BY COLLEGE. CONTRACTOR SHALL FIELD VERIFY LOCATIONS PRIOR TO DEMOLITION.
8. PROPOSED FIRE HYDRANT LOCATIONS PENDING APPROVAL BY LOS ANGELES COUNTY FIRE DEPARTMENT.
9. THE SEWER CONSTRUCTION SHALL START AT THE CONNECTION OF THE EXISTING SEWER FACILITY AND PROCEED UPGRADE.
10. ALL TRENCHING REPAIR SHALL BE PER LOS COUNTY PUBLIC WORKS DEPARTMENT STANDARDS AND SPECIFICATIONS.
11. FIRE WATER LINES TRENCHING PER DETAIL 12, SHEET 6.0

UTILITY LEGEND:

SD	SDR 35 PVC STORM DRAIN PIPE (UNLESS OTHERWISE NOTED)	AD	AREA DRAIN
SS	PVC SANITARY SEWER	ATD	ATRIUM AREA DRAIN
FW	C900 PVC FIRE WATER	COMM	COMMUNICATION
DW	C900 PVC DOMESTIC WATER	EX	EXISTING
GAS	EXISTING GAS LINE (SEE UTILITY NOTE 6)	FDC	FIRE DEPARTMENT CONNECTION
W	EXISTING WATER LINE (SEE UTILITY NOTE 6)	FH	FIRE HYDRANT
	EXISTING GAS LINE (SEE UTILITY NOTE 7)	INV	INVERT
	EXISTING WATER LINE (SEE UTILITY NOTE 7)	S	SLOPE
FH	6"x4"X2 ½" FH PER AWWA STANDARD C503	TG	TOP OF GRATE
CO	SEWER CLEANOUT PER DETAIL 8, SHEET C6.0	WV	WATER VALVE
▲	THRUST BLOCK PER DETAIL 11, SHEET C6.0		
FDC	4-WAY FDC PER DETAIL 13, SHEET C6.0		

Source: BKF, HPI Architecture 2019

Parking Structure S and West Temple Avenue Pedestrian Bridge – Utility Plan

Exhibit 3-44

Mt. SAC 2018 Educational and Facilities Master Plan EIR

0 20 40 80 Feet

PSOMAS

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3.5.10 CONSTRUCTION ACTIVITIES

For purposes of analysis in this Draft EIR, it is assumed that Phases 1A, 1B and 2 of the proposed 2018 EFMP would be implemented over an approximately 10-year timeframe (through 2027). However, full buildout is ultimately dependent on funding and other factors and may not be accomplished in the 10-year timeframe. Other facilities and site improvements identified in the proposed 2018 EFMP, including projects identified for implementation in Phase 3, are expected to occur past the assumed 10-year horizon timeframe (refer to the discussion in Section 4.0, Introduction to the Environmental Analyses, of this Draft EIR).

The potential physical construction impact area in each phase as analyzed in this Draft EIR is depicted in Exhibit 3-34. The construction schedules and impact areas identified take into consideration adjacent open space area and installation of utility infrastructure, etc. to the extent they can be defined based on available information. The location of vehicular and non-vehicular circulation improvements is also identified.

The anticipated construction impact area primarily includes areas within the Mt. SAC campus boundary. Off-campus impact areas are limited to areas within the City of Walnut public roadway right-of-way, which would be temporarily disturbed for utility infrastructure extensions/connections and circulation improvements along Temple Avenue and Grand Avenue.

The description of construction activities and construction assumptions provided below focus on proposed buildings, facilities, and site improvement projects included in Phases 1A and Phase 1B (through 2025) that are being evaluated at a project-specific level in this Draft EIR, and where construction timeframes are known or can be reasonably estimated. Construction information for other facilities to be constructed as part of Phase 1B (i.e., Science, Makerspace, Library/Learning Resources, Heritage Hall), and for Phase 2 facilities and site improvements (to be implemented between 2026 and 2027) is not available. However, it can be assumed that because the phases of construction would be similar (demolition, site preparation/grading, building construction and utility infrastructure installation, paving and architectural coating) and the extent of construction on campus during a peak construction day would be similar, the construction-related impacts for future project implementing the proposed 2018 EFMP would be similar to those identified for the project-specific analysis conducted for this Draft EIR.

For purposes of analysis in this Draft EIR, the estimated construction schedules for the facilities and site improvements being evaluated at a project-specific level in this Draft EIR are described below. The construction schedules are also shown in Table 3-4 to demonstrate the overlap in construction. Even if there are ultimately refinements/modifications to these schedules, the environmental impacts would be expected to be the same as analyzed in this Draft EIR because the physical impact areas would remain the same, and the analysis assumptions presented below conservatively estimate the amount of construction on a peak construction day.

TABLE 3-4
ESTIMATED CONSTRUCTION SCHEDULES

	Mar 2018	April–Aug 2018	Sep 2018–Feb 2019	Mar 2019–Apr 2019	May 2019	Jun 2019	Jul 2019	Aug 201 – Dec 2019	Jan 2020–Mar 2020	Apr 2020–Jun 2020	Jul 2020–Sep 2020	Oct 2020–Dec 2020	Jan 2021–Oct 2021	Nov 2021–Jun 2022	July 2022
PHASE 1A: 2019–2021															
Parking Structure R and Tennis Courts					■	■	■	■	■	■					
Parking Structure S and West Temple Avenue Pedestrian Bridge								■	■	■	■				
Student Center and Central Campus Infrastructure						■	■	■	■	■	■	■	■		
Sand Volleyball Courts and Parking Lot W Reconstruction						■	■	■							
PHASE 1B: 2022–2025															
Demolition of 9C and Veterans Core and Miracle Mile							■	■							
Bookstore													■	■	
Approved On-Campus Cumulative Projects															
Athletics Complex East	■	■	■	■	■	■	■	■							
West Parcel Site Improvements			■												
Transit Center					■	■	■	■	■						
Physical Education Complex and Aquatics Center											■	■	■	■	

■ Represents total construction period

Phase 1A (Estimated 2019 to 2021)

- **Parking Structure R and Tennis Courts** – Construction is estimated to occur over approximately 14 months (May 2019 through June 2020). The demolition plan is provided on Exhibit 3-45a through 3-45c and the grading plan is provided in Exhibit 3-46a through 3-46c. Mass grading activities for this facility were completed with grading for the PEP.

- **Sand Volleyball Courts and Parking Lot W Reconstruction** – Construction is estimated to occur over approximately 7 months (June 2019 through December 2019). Construction of the sand volleyball courts would require demolition of the existing modular Building 43 (2,833 sf) and the southern portion of Parking Lot W.

- **Parking Structure S and West Temple Avenue Pedestrian Bridge (including associated South Temple Avenue Green Corridor Improvements)** – Construction is estimated to occur over approximately 14 months (August 2019 through September 2020). The demolition plan is provided in Exhibit 3-47 and the grading/drainage plan is provided on Exhibit 3-48. As shown, construction of Parking Structure S would involve demolition of existing Parking Lot S.

- **Student Center and Central Campus Infrastructure** – Construction is estimated to occur over approximately 29 months (between June 2019 and October 2021). The Central Campus Infrastructure improvements would be initiated first (June 2019) to prepare for the building development. Demolition of buildings 16A-D, 17, 18, 18AB, 19ABC, and 20 (totaling 57,279 sf) is expected to occur between August 2019 and December 2019, prior to construction of the Student Center, which is expected to be initiated in January 2020 and be completed in October 2021. Demolition of modular buildings 21 A-J (15,571 sf) is expected to occur between January and May 2021. The demolition plan for the Student Center is provided in Exhibit 3-49 and the grading and drainage plan is provided in Exhibit 3-50a–d. The South Temple Stormwater Plan is depicted in Exhibit 3-51 and the Central Campus Utility Plan is depicted in Exhibit 3-52.

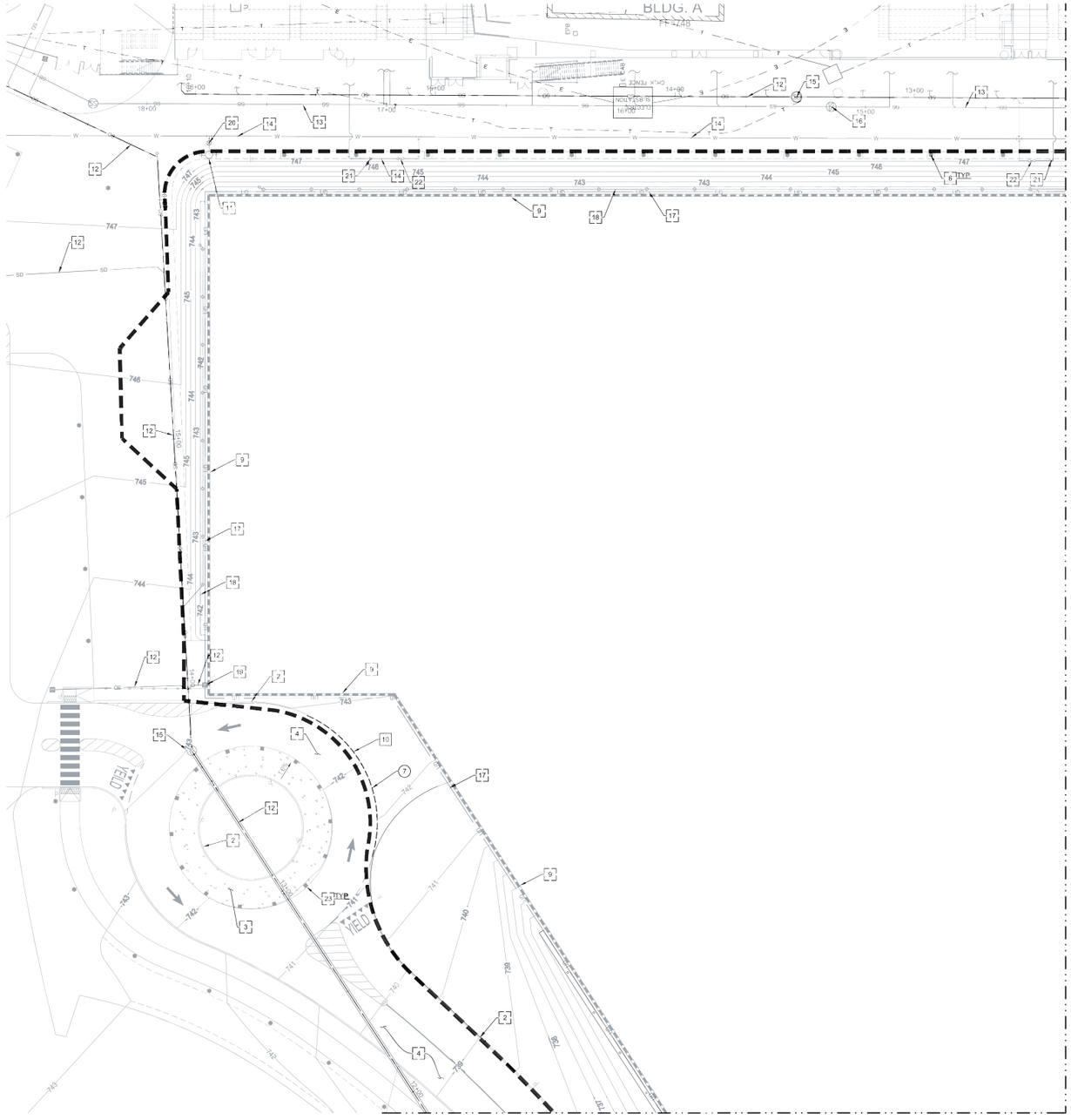
Phase 1B (Estimated 2022 to 2025)

- **Bookstore** – Approximately 18 months (estimated to occur between January 2021and June 22

- **Demolition of Building 9C and Construction of Veterans Core and Miracle Mile Improvements** – Approximately 6 months (estimated to occur between July 2019 and December 2022).

Because of the overlap in construction activities that would be occurring on campus, the combined construction impacts of the projects implementing the proposed 2018 EFMP must be considered. Construction activities on campus would vary on a daily basis; therefore, for purposes of analysis, a reasonable peak day construction scenario has been developed. This construction scenario anticipates the various types of construction activities and amount of construction equipment that may occur on any given construction day based on available construction information.

A construction traffic route would be designated for each construction site to efficiently move construction vehicles to avoid traffic from any other on-campus projects under construction at the same time to the extent feasible. Truck haul routes are prepared for each project and generally limit truck movement on Temple Avenue east toward Pomona Drive to avoid the intersection of



DEMOLITION NOTES:

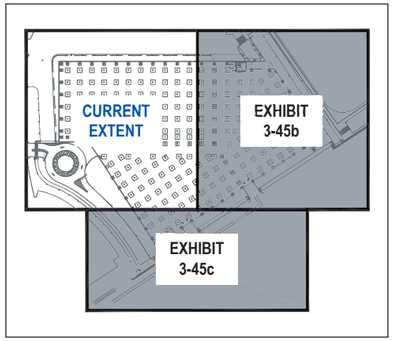
CONSTRUCT
EXISTING TO REMAIN - PROTECT IN PLACE
EXISTING TO REMOVE
REMOVE & RELOCATE
ADJUST TO GRADE
PER SEPARATE CONTRACT

1. BUILDING
2. CONCRETE CURB OR CURB AND GUTTER
3. CONCRETE OR CONCRETE WALKWAY
4. ASPHALT PAVEMENT
5. FENCE / GATE (CHAIN LINK / METAL / WOOD)
6. LIGHT POLE AND FIXTURE (PER ELECTRICAL PLANS)
7. SAWCUT ALL CONCRETE AND ASPHALT AS REQUIRED
8. WET SAND BLAST CONFLICTING STRIPING
9. RETAINING WALL AND FOUNDATION
10. ASPHALT CURB
11. FIRE HYDRANT
12. STORM DRAIN LINE
13. SANITARY SEWER LINE
14. DOMESTIC WATER LINE
15. STORM DRAIN MANHOLE
16. SANITARY SEWER MANHOLE
17. RETAINING WALL UNDERDRAIN LINE
18. BACK OF WALL GUTTER AND DRAIN GATES
19. STORM DRAIN INLET / CATCH BASIN
20. WATER VALVE
21. FIRE DEPARTMENT CONNECTION
22. BACKFLOW ASSEMBLY
23. RAISED PAVEMENT MARKER

LEGEND

LIMIT OF DEMOLITION AREA (SEE NOTE 1)

SAWCUT LINE



MAP INDEX

Source: HMC Architects 2018

Parking Structure R and Tennis Courts – Demolition Plan

Exhibit 3-45a

Mt. SAC 2018 Educational and Facilities Master Plan EIR

0 20 40 80 Feet

PSOMAS

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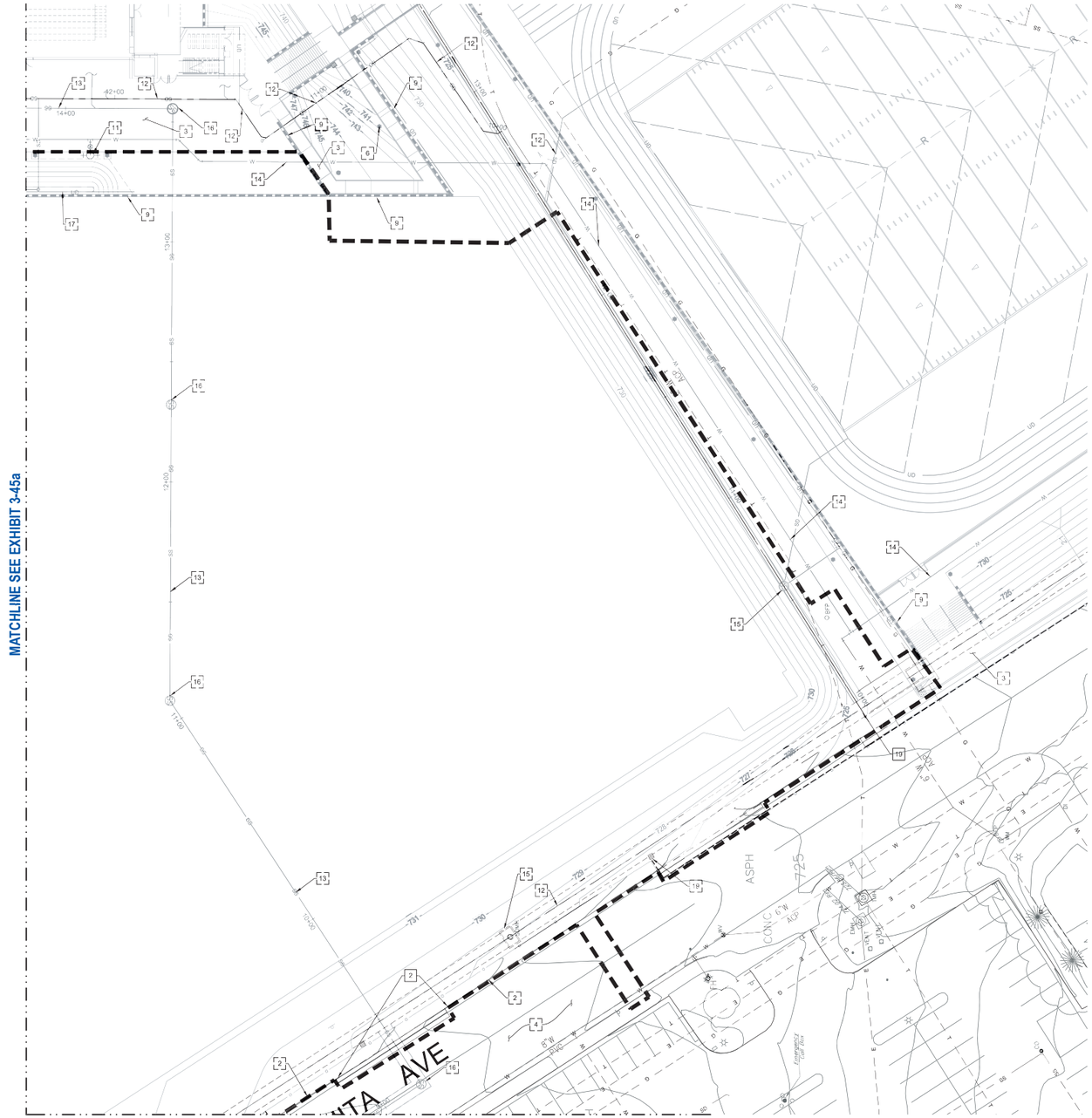


DEMOLITION NOTES:

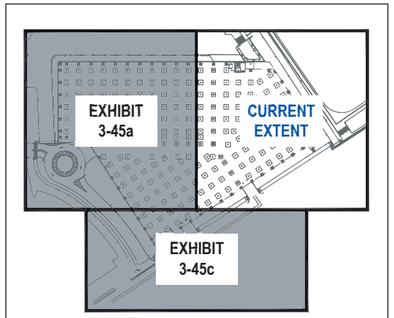
- CONSTRUCT
- EXISTING TO REMAIN -PROTECT IN PLACE
- EXISTING TO REMOVE
- REMOVE & RELOCATE
- ADJUST TO GRADE
- PER SEPARATE CONTRACT

1. BUILDING
2. CONCRETE CURB OR CURB AND GUTTER
3. CONCRETE OR CONCRETE WALKWAY
4. ASPHALT PAVEMENT
5. FENCE / GATE (CHAIN LINK / METAL / WOOD)
6. LIGHT POLE AND FIXTURE (PER ELECTRICAL PLANS)
7. SAWCUT ALL CONCRETE AND ASPHALT AS REQUIRED
8. WET SAND BLAST CONFLICTING STRIPING
9. RETAINING WALL AND FOUNDATION
10. ASPHALT CURB
11. FIRE HYDRANT
12. STORM DRAIN LINE
13. SANITARY SEWER LINE
14. DOMESTIC WATER LINE
15. STORM DRAIN MANHOLE
16. SANITARY SEWER MANHOLE
17. RETAINING WALL UNDERDRAIN LINE
18. BACK OF WALL GUTTER AND DRAIN GATES
19. STORM DRAIN INLET / CATCH BASIN
20. WATER VALVE
21. FIRE DEPARTMENT CONNECTION
22. BACKFLOW ASSEMBLY
23. RAISED PAVEMENT MARKER

LEGEND

LIMIT OF DEMOLITION AREA (SEE NOTE 1)

SAWCUT LINE



MAP INDEX

Source: HMC Architects 2018

Parking Structure R and Tennis Courts – Demolition Plan

Exhibit 3-45b

Mt. SAC 2018 Educational and Facilities Master Plan EIR

0 20 40 80 Feet

PSOMAS

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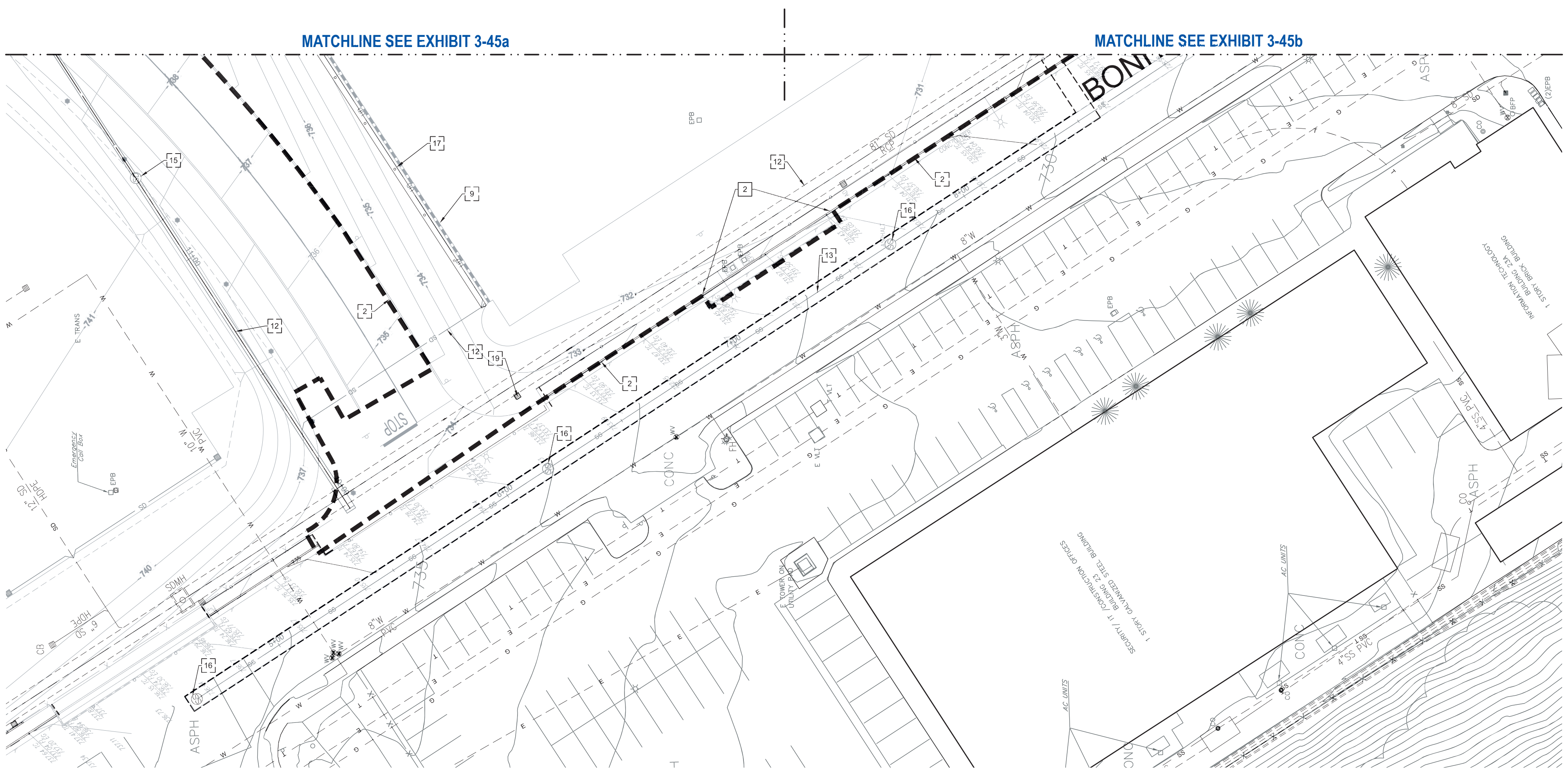

DEMOLITION NOTES:

- CONSTRUCT
- EXISTING TO REMAIN -PROTECT IN PLACE
- EXISTING TO REMOVE
- REMOVE & RELOCATE
- ADJUST TO GRADE
- PER SEPARATE CONTRACT

1. BUILDING
2. CONCRETE CURB OR CURB AND GUTTER
3. CONCRETE OR CONCRETE WALKWAY
4. ASPHALT PAVEMENT
5. FENCE / GATE (CHAIN LINK / METAL / WOOD)
6. LIGHT POLE AND FIXTURE (PER ELECTRICAL PLANS)
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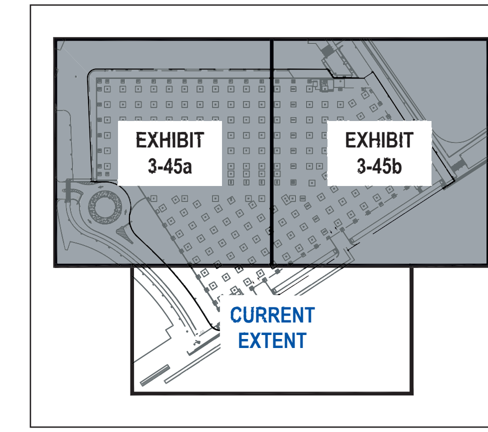
16. SANITARY SEWER MANHOLE
17. RETAINING WALL UNDERDRAIN LINE
18. BACK OF WALL GUTTER AND DRAIN GATES
19. STORM DRAIN INLET / CATCH BASIN
20. WATER VALVE
21. FIRE DEPARTMENT CONNECTION
22. BACKFLOW ASSEMBLY
23. RAISED PAVEMENT MARKER

LEGEND

- LIMIT OF DEMOLITION AREA (SEE NOTE 1)
- SAWCUT LINE



MAP INDEX

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Source: HMC Architects 2018

Parking Structure R and Tennis Courts – Demolition Plan

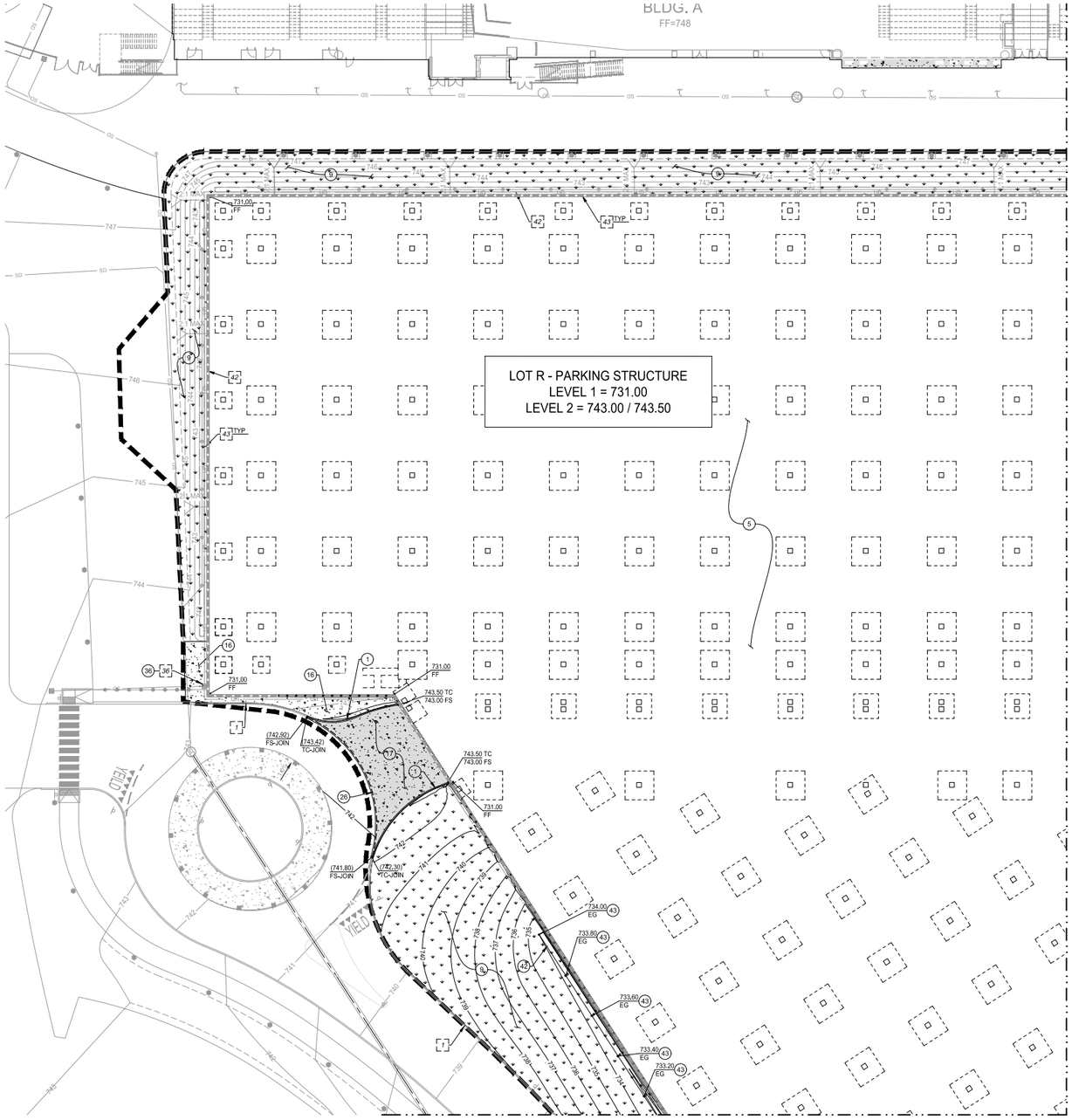
Exhibit 3-45c

Mt. SAC 2018 Educational and Facilities Master Plan EIR

0 20 40 80 Feet

PSOMAS

(04/04/2019 MMD) R:\Projects\MTS\3MTS010300\Graphics\EIR\ex_Parking_StructureR_Tennis_DemoPlan_C.pdf



CONSTRUCTION NOTES:

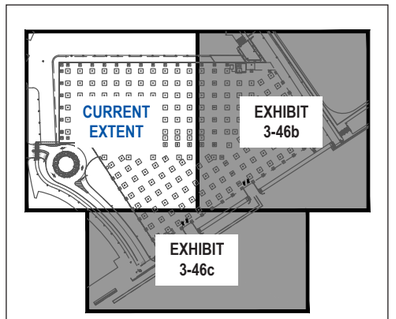
CONSTRUCT
EXISTING TO REMAIN -PROTECT IN PLACE
EXISTING TO REMOVE
REMOVE & RELOCATE
ADJUST TO GRADE
PER SEPARATE CONTRACT

1. CONCRETE CURB TYPE A1-6(150) PER SPPWC STD. PLAN 120-2
2. CONCRETE CURB AND GUTTER TYPE A2-6(150) PER SPPWC STD. PLAN 120-2
5. STRUCTURE PER ARCHITECTURAL PLANS
9. PLANTED AREA PER LANDSCAPE PLANS
10. NOT USED
11. CONCRETE CURB RAMP PER SPPWC STD. PLAN 111-5 AND DETAIL 10 / SHEET C6.1
12. RETAINING WALL PER STRUCTURAL PLANS
13. CONCRETE WALL PER ARCHITECTURAL PLANS
14. STAIRS PER ARCHITECTURAL PLANS
15. FENCE AND GATE PER ARCHITECTURAL PLANS
16. CONCRETE WALKWAY PER DETAIL 4 / SHEET C6.1
17. HEAVY DUTY CONCRETE PAVING PER DETAIL 5 / SHEET C6.1
18. AC PAVING PER DETAIL 6 / SHEET C6.1
19. NOT USED
26. SAWCUT AND JOIN PAVEMENT
28. NOT USED
29. CONCRETE CURB AND GUTTER TYPE A2-8(200) PER SPPWC STD. PLAN 120-2
34. VEGETATED SWALE PER DETAIL 12 / SHEET C6.1
35. NOT USED
36. 24"x24" CATCH BASIN , SEE CIVIL UTILITY SHEET FOR DETAILS
38. NOT USED
39. 3/4 " WASHED ROCK, 6" DEEP OVER NATIVE
41. DETECTABLE WARNING PER DETAIL 10 / SHEET C6.1
42. CONCRETE RETAINING WALL GUTTER PER SPPWC STD. PLAN 617-3.
43. RETAINING WALL GUTTER GRATED DRAIN PER SPPWC STD. PLAN 617-3, 20' SPACING.

LEGEND:

- CONCRETE WALKWAY PER DETAIL 4 / SHEET C6.1
- LANDSCAPE AREA PER LANDSCAPE PLANS
- HEAVY DUTY CONCRETE PAVEMENT PER DETAIL 5 / SHEET C6.1
- ASPHALT CONCRETE PER DETAIL 6 / SHEET C6.1
- HEAVY DUTY DECOMPOSED GRANITE PER ARCHITECTURAL PLANS

- LIMITS OF CIVIL WORK
- SAWCUT AND JOIN LINE
- 235 PROPOSED CONTOUR LINE
- 280 EXISTING CONTOUR LINE
- DAYLIGHT LINE
- EXISTING RETAINING WALL
- NEW STORM DRAIN LINE (≥18")
- SD NEW STORM DRAIN LINE (<18")
- W NEW WATER LINE
- NEW RETAINING WALL
- GB GRADE BREAK
- R RIDGE LINE
- SWALE FLOW LINE
- X FENCE PER ARCHITECTURAL PLANS
- FLOW DIRECTION
- DRINKING FOUNTAIN
- CATCH BASIN
- GATE PER ARCHITECTURAL PLANS
- SD MANHOLE
- FIELD LIGHT



MAP INDEX

Source: HMC Architects 2018

Parking Structure R and Tennis Courts - Civil Paving and Grading Plan

Exhibit 3-46a

Mt. SAC 2018 Educational and Facilities Master Plan EIR

0 20 40 80 Feet

PSOMAS

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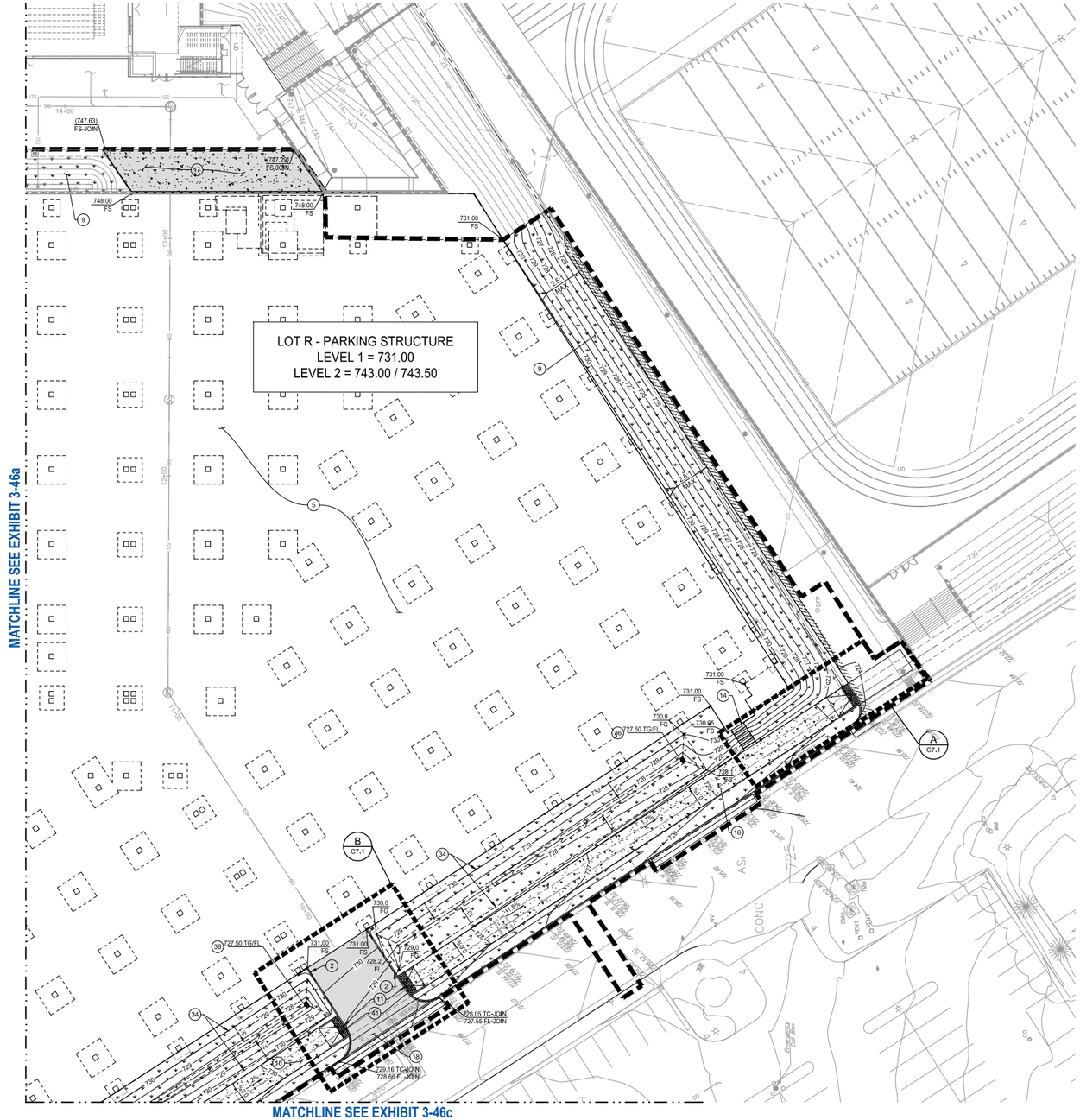

CONSTRUCTION NOTES:

- CONSTRUCT
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- PER SEPARATE CONTRACT

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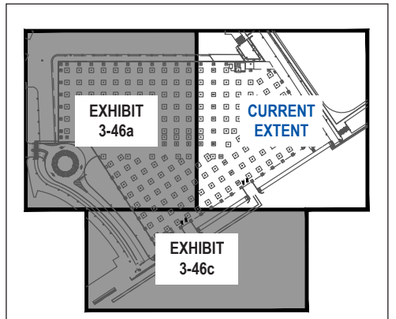

MAP INDEX

LEGEND:

- CONCRETE WALKWAY PER DETAIL 4 / SHEET C6.1
- LANDSCAPE AREA PER LANDSCAPE PLANS
- HEAVY DUTY CONCRETE PAVEMENT PER DETAIL 5 / SHEET C6.1
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- SAWCUT AND JOIN LINE
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- NEW RETAINING WALL
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- R RIDGE LINE
- SWALE FLOW LINE
- X FENCE PER ARCHITECTURAL PLANS
- FLOW DIRECTION
- DRINKING FOUNTAIN
- CATCH BASIN
- GATE PER ARCHITECTURAL PLANS
- SD MANHOLE
- FIELD LIGHT

Source: HMC Architects 2018

Parking Structure R and Tennis Courts – Civil Paving and Grading Plan

Mt. SAC 2018 Educational and Facilities Master Plan EIR

Exhibit 3-46b

0 20 40 80 Feet

PSOMAS

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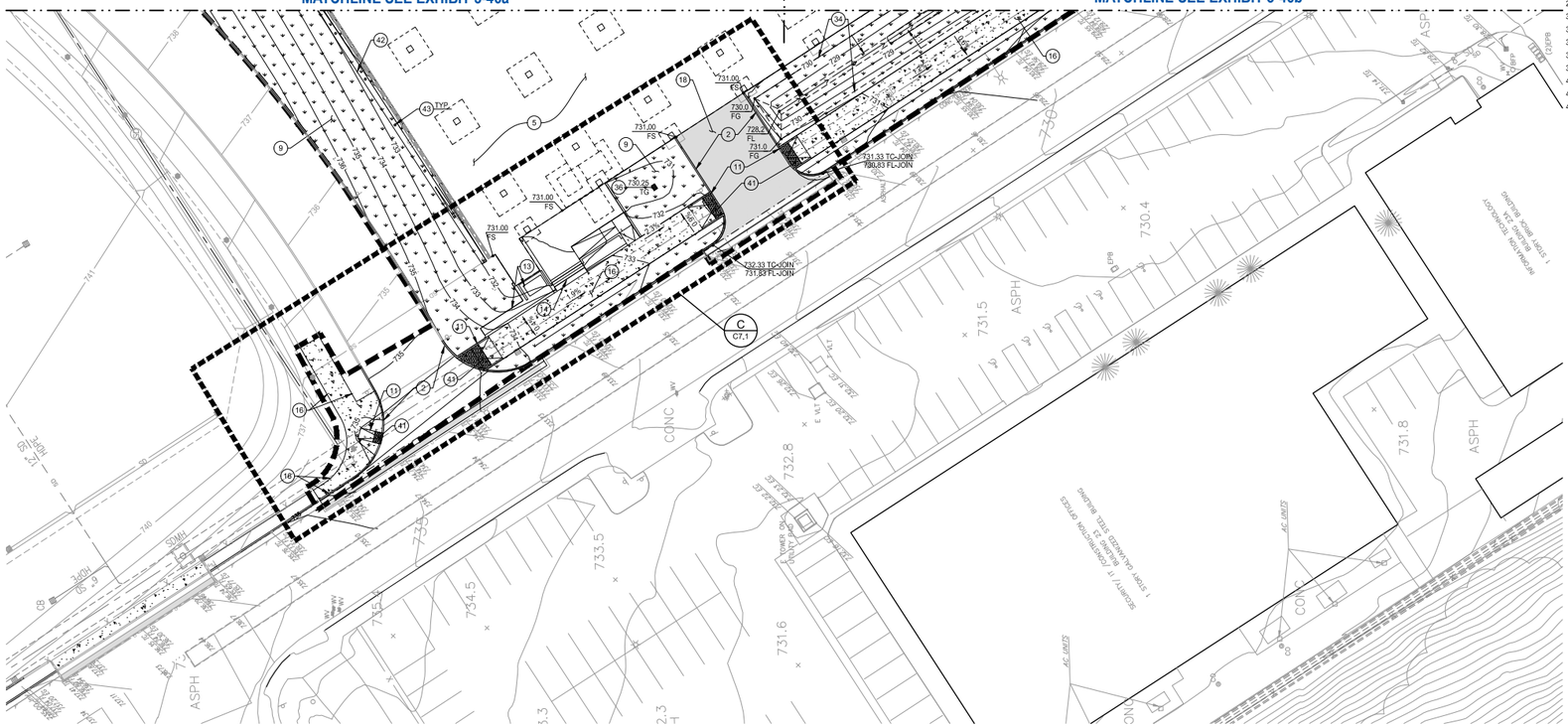

CONSTRUCTION NOTES:

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43. RETAINING WALL GUTTER GRATED DRAIN PER SPPWC STD. PLAN 617-3, 20' SPACING.

LEGEND:

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- LANDSCAPE AREA PER LANDSCAPE PLANS
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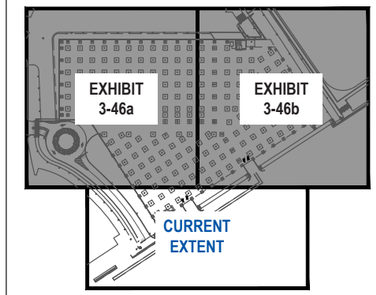
- FLOW DIRECTION
- DRINKING FOUNTAIN
- CATCH BASIN
- GATE PER ARCHITECTURAL PLANS
- SD MANHOLE
- FIELD LIGHT



MAP INDEX

Source: HMC Architects 2018

Parking Structure R and Tennis Courts - Civil Paving and Grading Plan

Exhibit 3-46c

Mt. SAC 2018 Educational and Facilities Master Plan EIR

N E S W

0 20 40 80 Feet

PSOMAS

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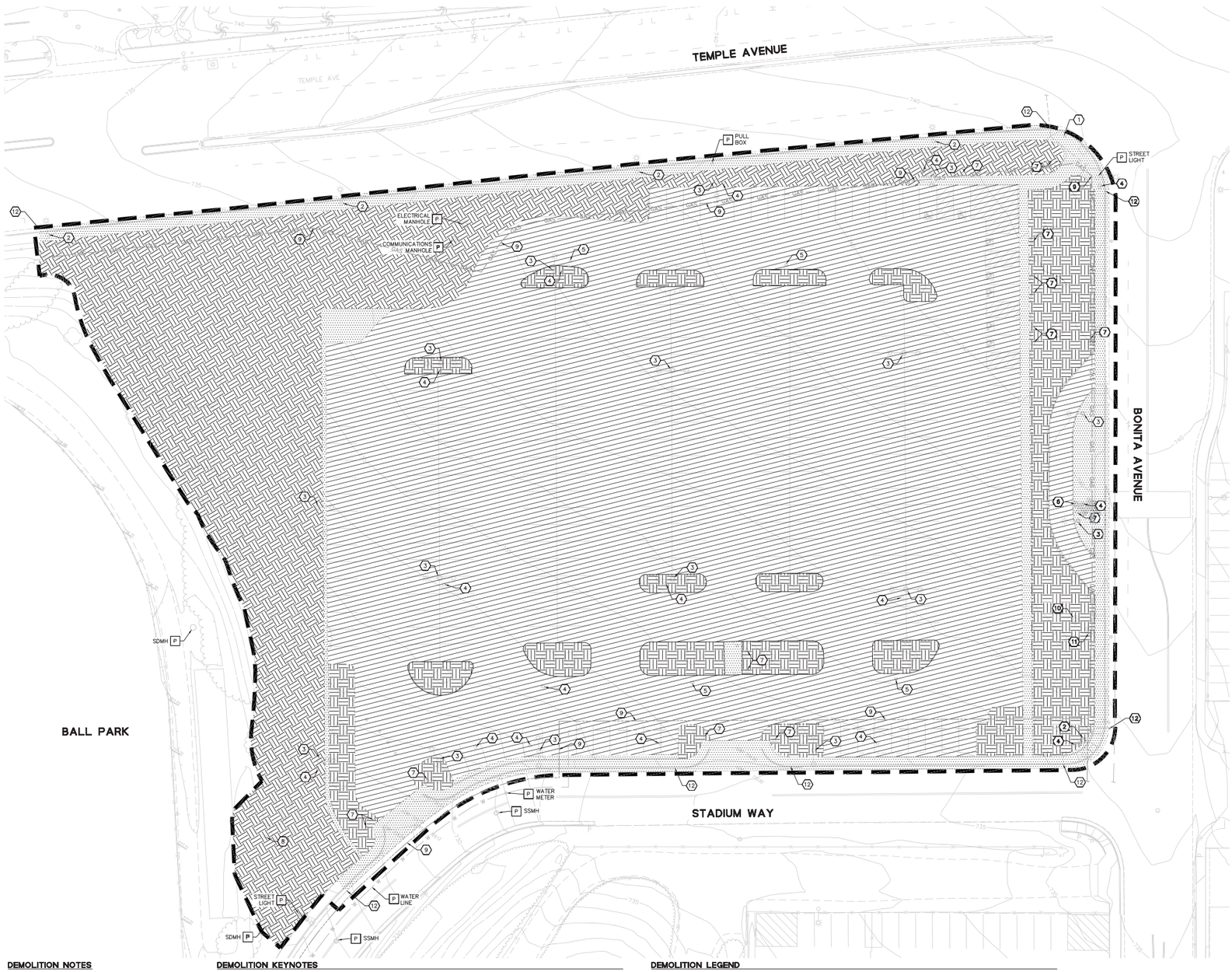

DEMOLITION NOTES

1. PROTECT ALL EXISTING UNDERGROUND UTILITIES UNLESS OTHERWISE NOTED ON THE PLAN.
2. UTILITIES SHOWN ON THIS PLAN ARE DERIVED FROM RECORD DATA, SURFACE OBSERVATION, AND FIELD SURVEY. ACTUAL LOCATIONS AND SIZE, TOGETHER WITH THE PRESENCE OF ANY ADDITIONAL UTILITIES NOT SHOWN ON THIS PLAN, SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO COMMENCING DEMOLITION ACTIVITIES.
3. REFER TO IMPROVEMENT PLANS FOR LIMITS OF IMPROVEMENT PRIOR TO COMMENCING DEMOLITION ACTIVITIES.
4. PROTECT ALL OFFSITE FEATURES NOT EXPRESSLY NOTED FOR DEMOLITION OR IMPROVEMENT ON THIS PLAN.
5. REMOVE ALL EXISTING TREES WITHIN THE LIMITS OF WORK UNLESS OTHERWISE NOTED.

DEMOLITION KEYNOTES

- (P) PROTECT IN PLACE, SEE DEMOLITION NOTES 2 & 3
- (1) RELOCATE TRAFFIC SIGNAL LIGHT PER SEPARATE PLAN
- (2) DEMOLISH STREET LIGHT PER SEPARATE PLAN
- (3) DEMOLISH EXISTING PARKING LOT LIGHT AND FOUNDATION
- (4) DEMOLISH EXISTING PARKING LOT ELECTRICAL PULL BOX
- (5) DEMOLISH EXISTING IRRIGATION PULL BOX
- (6) DEMOLISH PARKING LOT TICKET DISPENSER
- (7) REMOVE EXISTING SIGN AND POST
- (8) RELOCATE EXISTING STEEL POLE
- (9) REMOVE AND RELOCATE EXISTING GAS LINE PER MEP PLANS
- (10) REMOVE EXISTING ELECTRICAL MANHOLE PER MEP PLANS
- (11) REMOVE EXISTING TELECOM MANHOLE PER MEP PLANS
- (12) REMOVE EXISTING CURB AND GUTTER

DEMOLITION LEGEND

- DEMOLISH EXISTING SITE IMPROVEMENTS AND FEATURES (PAVEMENT, CURB & GUTTER, SIDEWALK, ETC.)
- DEMOLISH EXISTING ASPHALT CONCRETE SURFACE TO PROPOSED SUBGRADE
- LANDSCAPE/PLANTING AREA TO BE CLEAR & GRUB AND DEMOLISHED
- PROTECT EXISTING
- LIMITS OF WORK
- W — EXISTING WATER LINE
- GAS — EXISTING GAS LINE (SHOWN AS REFERENCE)
- EXISTING GAS LINE PER AS BUILTS (SHOWN AS REFERENCE)

Source: BKF, HPI Architecture 2019

Parking Structure S and West Temple Avenue Pedestrian Bridge – Demolition Plan

Exhibit 3-47

Mt. SAC 2018 Educational and Facilities Master Plan EIR

0 20 40 80 Feet

PSOMAS

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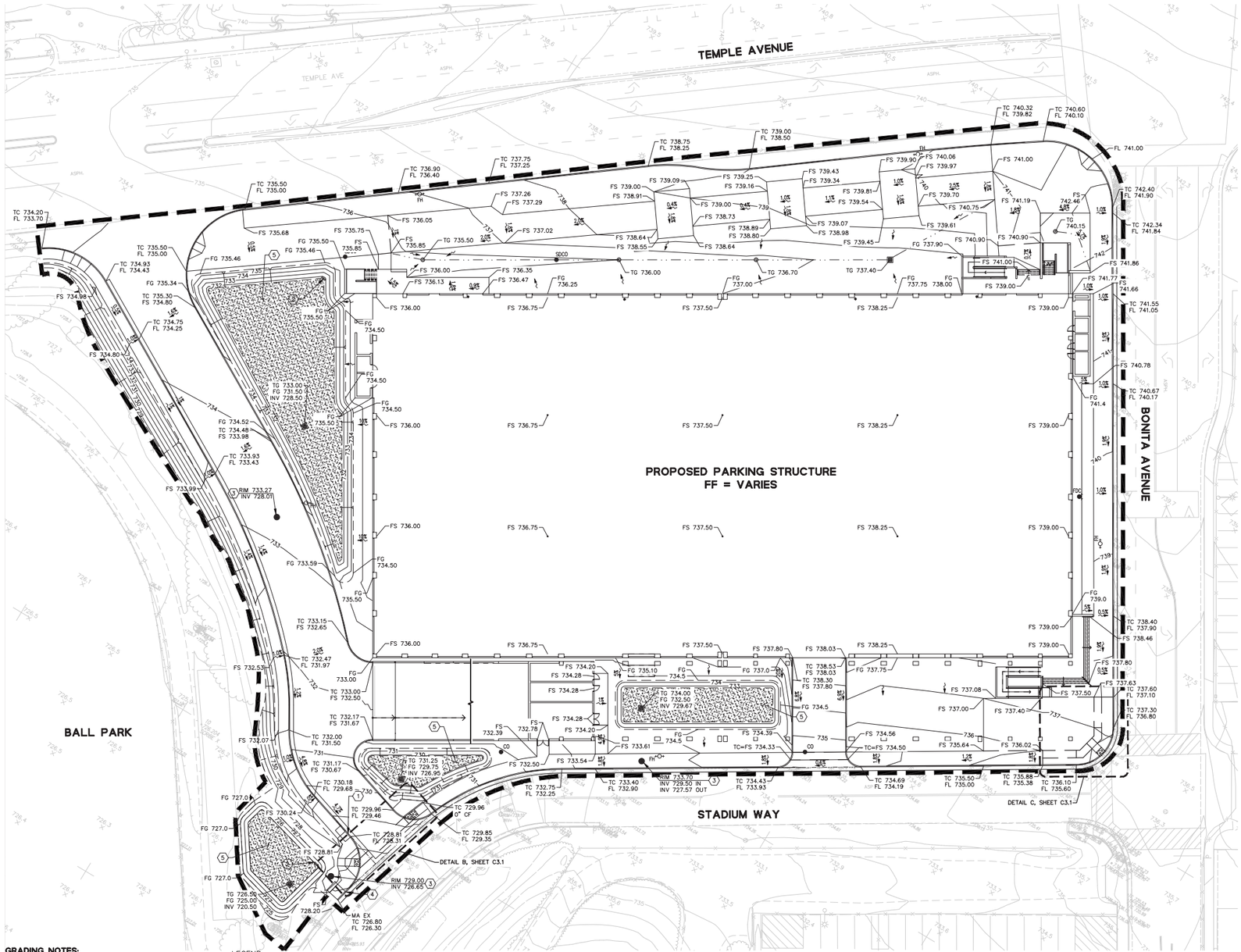

GRADING NOTES:

1. TC ELEVATION SHOWN IS FOR 6" CURB HEIGHT UNLESS OTHERWISE NOTED ON PLAN.
2. ALL EXISTING UTILITY COVERS WITHIN LIMIT OF WORK ARE TO BE ADJUSTED TO GRADES SHOWN ON PLAN.
3. SEE LANDSCAPE PLANS FOR ALL GRADING IN LANDSCAPE AREAS AND FOR FINE GRADING.
4. FOR WALKS IN ADA ACCESSIBLE AREAS CROSS SLOPES SHOULD NOT EXCEED 1.9% GRADE.
5. REFER TO LANDSCAPE AND STRUCTURAL PLANS FOR WALL DETAILS.
6. CONTRACTOR SHALL SAWCUT AND REMOVE PORTION OF EXISTING CONCRETE TO CREATE STRAIGHT AND SMOOTH EDGE WHERE NEW CONCRETE JOINS TO EXISTING.
7. FOR EXPANSION JOINTS VS. CONTROL JOINT LAYOUT SEE LANDSCAPING PLANS AND DETAILS.

LEGEND

- PROPOSED FLOW DIRECTION
- 106 — ELEVATION CONTOUR
- LIMIT OF WORK
- FLOW LINE
- 24"x24" CATCH BASIN WITH INLET GRATE PER DETAIL 5/C6.0
- 24"x24" CATCH BASIN WITH SOLID COVER PER DETAIL 5/C6.0
- SDCO — SD CLEANOUT PER DETAIL 6/C6.0
- ATRIUM AREA DRAIN PER DETAIL 7/C6.0
- BOS — BOTTOM OF STAIR

BW	BOTTOM OF WALL	MA	MATCH
BOT	BOTTOM	MAX	MAXIMUM
CB	CATCH BASIN	(N)	NEW
CF	CURB FACE	RL	RIDGE LINE
EX	EXISTING	SD	STORM DRAIN
FF	FINISHED FLOOR	SDCO	STORM DRAIN CLEANOUT
FG	FINISHED GRADE (EARTH)	SDDI	STORM DRAIN DROP INLET
FL	FLOW LINE	SS	SANITARY SEWER
FS	FINISHED SURFACE (AC OR PCC)	TC	TOP OF CURB
GB	GRADE BREAK	TG	TOP OF GRATE
GR	GRATE	TW	TOP OF WALL
INV	INVERT		PROPOSED BIORETENTION AREA

GRADING & DRAINAGE KEYNOTES

1. INSTALL DRAINAGE INLET PER CALTRANS STANDARD PLAN D72, MODIFIED PER DETAIL 9, SHEET C6.0
2. INSTALL CONCRETE HEADWALL PER CALTRANS STANDARD PLAN D89
3. INSTALL STORM DRAIN MANHOLE PER SPPWC STANDARD PLAN 324-2
4. INSTALL PARKWAY DRAIN PER SPPWC STANDARD PLAN 151-2, S = 60"
5. INSTALL BIORETENTION FACILITY PER LOS ANGELES COUNTY LID MANUAL, SEE TYPICAL SECTION PER DETAIL A, SHEET C3.1

Source: BKF, HPI Architecture 2019

Parking Structure S and West Temple Avenue Pedestrian Bridge – Grading and Drainage Plan

Exhibit 3-48

Mt. SAC 2018 Educational and Facilities Master Plan EIR

0 20 40 80 Feet

PSOMAS

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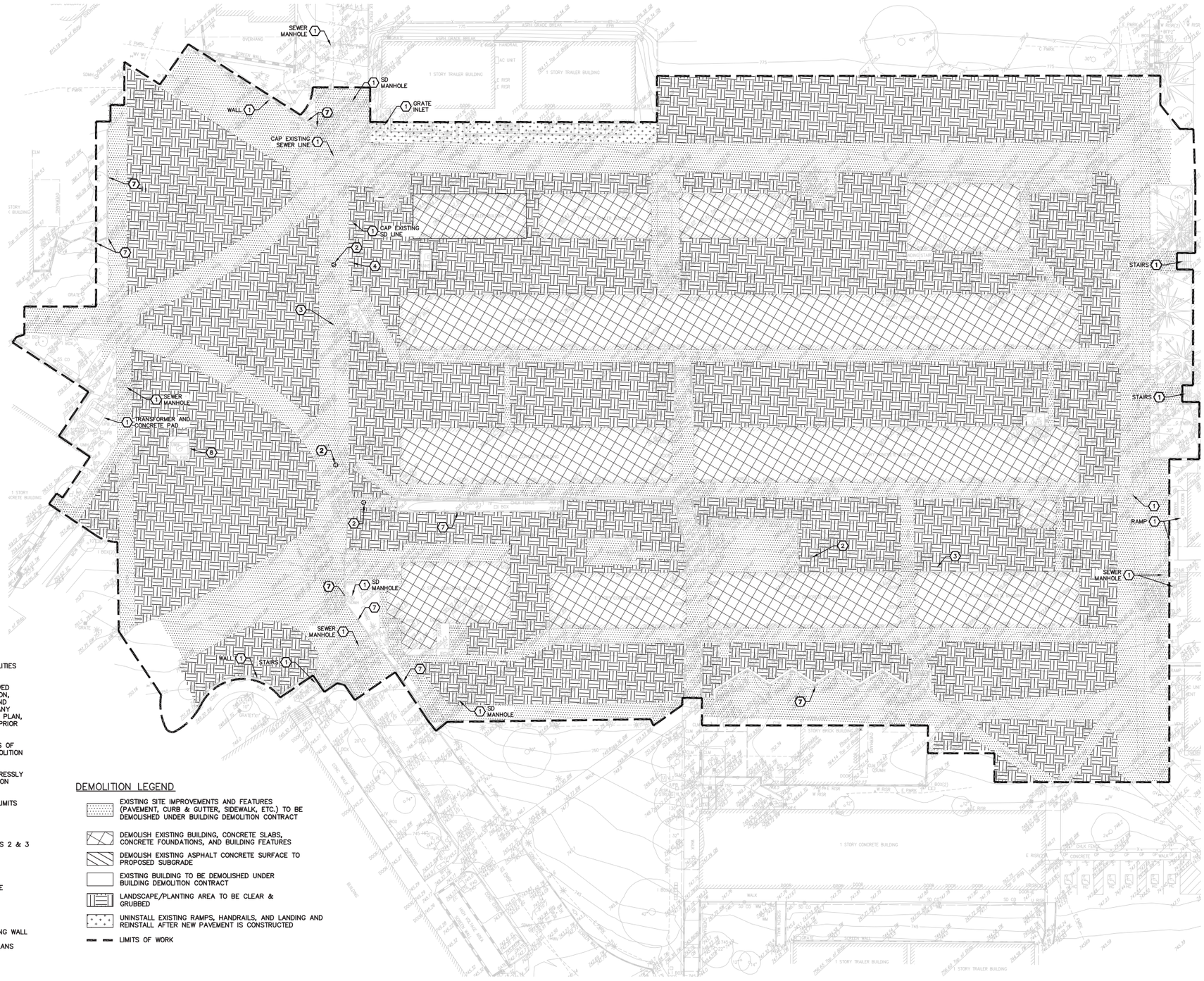

DEMOLITION NOTES:

1. PROTECT ALL EXISTING UNDERGROUND UTILITIES UNLESS OTHERWISE NOTED ON THE PLAN.
2. UTILITIES SHOWN ON THIS PLAN ARE DERIVED FROM RECORD DATA, SURFACE OBSERVATION, AND FIELD SURVEY. ACTUAL LOCATIONS AND SIZE, TOGETHER WITH THE PRESENCE OF ANY ADDITIONAL UTILITIES NOT SHOWN ON THIS PLAN, SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO COMMENCING DEMOLITION ACTIVITIES.
3. REFER TO IMPROVEMENT PLANS FOR LIMITS OF IMPROVEMENT PRIOR TO COMMENCING DEMOLITION ACTIVITIES.
4. PROTECT ALL OFFSITE FEATURES NOT EXPRESSLY NOTED FOR DEMOLITION OR IMPROVEMENT ON THIS PLAN.
5. REMOVE ALL EXISTING TREES WITHIN THE LIMITS OF WORK UNLESS OTHERWISE NOTED.

DEMOLITION KEYNOTES:

1. PROTECT IN PLACE, SEE DEMOLITION NOTES 2 & 3
2. DEMOLISH EXISTING SEWER MANHOLE
3. DEMOLISH EXISTING SEWER LINE
4. DEMOLISH EXISTING STORM DRAIN MANHOLE
5. DEMOLISH EXISTING STORM DRAIN LINE
6. DEMOLISH EXISTING LIGHT POLE
7. DEMOLISH EXISTING SCREEN WALL/RETAINING WALL
8. RELOCATE ELECTRICAL VAULT PER MEP PLANS

DEMOLITION LEGEND

- EXISTING SITE IMPROVEMENTS AND FEATURES (PAVEMENT, CURB & GUTTER, SIDEWALK, ETC.) TO BE DEMOLISHED UNDER BUILDING DEMOLITION CONTRACT
- DEMOLISH EXISTING BUILDING, CONCRETE SLABS, CONCRETE FOUNDATIONS, AND BUILDING FEATURES
- DEMOLISH EXISTING ASPHALT CONCRETE SURFACE TO PROPOSED SUBGRADE
- EXISTING BUILDING TO BE DEMOLISHED UNDER BUILDING DEMOLITION CONTRACT
- LANDSCAPE/PLANTING AREA TO BE CLEAR & GRUBBED
- UNINSTALL EXISTING RAMPS, HANDRAILS, AND LANDING AND REINSTALL AFTER NEW PAVEMENT IS CONSTRUCTED
- LIMITS OF WORK

Source: BKF, HPI Architecture 2019

Student Center – Demolition Plan

Exhibit 3-49

Mt. SAC 2018 Educational and Facilities Master Plan EIR

N W E S

0 20 40 80 Feet

PSOMAS

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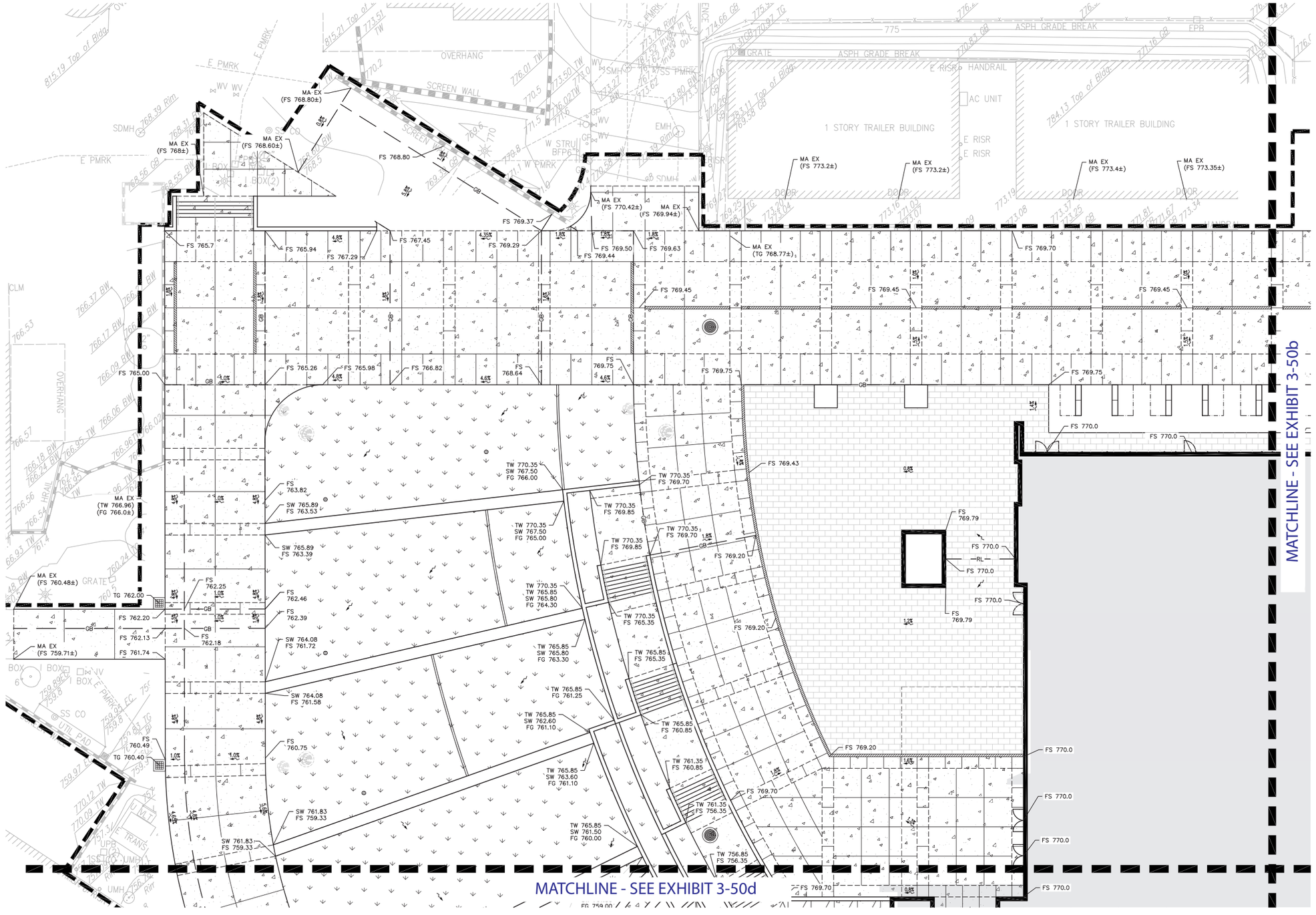
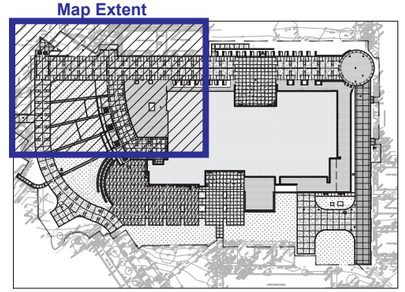


Map Extent



KEYMAP

LEGEND:

- PROPOSED FLOW DIRECTION
- 106 — ELEVATION CONTOUR
- LIMIT OF WORK
- EXISTING
- (E)
- BOS — BOTTOM OF STAIR
- BW — BOTTOM OF WALL
- BOT — BOTTOM
- CB — CATCH BASIN
- C.F. — CURB FACE
- FF — FINISHED FLOOR
- FG — FINISHED GRADE (EARTH)
- FL — FLOW LINE
- FS — FINISHED SURFACE (AC OR PCC)
- GB — GRADE BREAK
- HP — HIGH POINT
- INV — INVERT
- MA — MATCH
- MAX — MAXIMUM
- (N) — NEW
- RL — RIDGE LINE
- SD — STORM DRAIN
- SDCO — STORM DRAIN CLEANOUT
- SDDI — STORM DRAIN DROP INLET
- SS — SANITARY SEWER
- SW — TOP OF SEAT WALL
- TC — TOP OF CURB
- TG — TOP OF GRATE
- TW — TOP OF WALL
- PROPOSED LANDSCAPING. SEE LANDSCAPE PLANS
- PROPOSED AC PAVEMENT. PAVEMENT SECTION PER SEE GEOTECHNICAL REPORT
- PROPOSED CONCRETE PAVEMENT. PAVEMENT SECTION PER SEE GEOTECHNICAL REPORT
- PROPOSED PAVERS. SEE LANDSCAPE PLANS PAVER SECTIONS AND DETAILS

GRADING NOTES:

1. TC ELEVATION SHOWN IS FOR 6" CURB HEIGHT UNLESS OTHERWISE NOTED ON PLAN.
2. ALL EXISTING UTILITY COVERS WITHIN LIMIT OF WORK ARE TO BE ADJUSTED TO GRADES SHOWN ON PLAN.
3. SEE LANDSCAPE PLANS FOR ALL GRADING IN LANDSCAPE AREAS AND FOR FINE GRADING.
4. FOR WALKS IN ADA ACCESSIBLE AREAS CROSS SLOPES SHOULD NOT EXCEED 1.0% GRADE.
5. REFER TO LANDSCAPE AND STRUCTURAL PLANS FOR WALL DETAILS.
6. CONTRACTOR SHALL SAWCUT AND REMOVE EXISTING ASPHALT CONCRETE PAVEMENT TO STRAIGHT AND SMOOTH EDGE WHERE NEW CONCRETE JOINS TO EXISTING.
7. FOR EXPANSION JOINTS VS. CONTROL JOINT LAYOUT SEE LANDSCAPING PLANS AND DETAILS.

Source: BKF, HPI Architecture 2019

Student Center - Grading and Drainage Plan

Exhibit 3-50a

Mt. SAC 2018 Educational and Facilities Master Plan EIR

N W E S

0 10 20 40 Feet

PSOMAS

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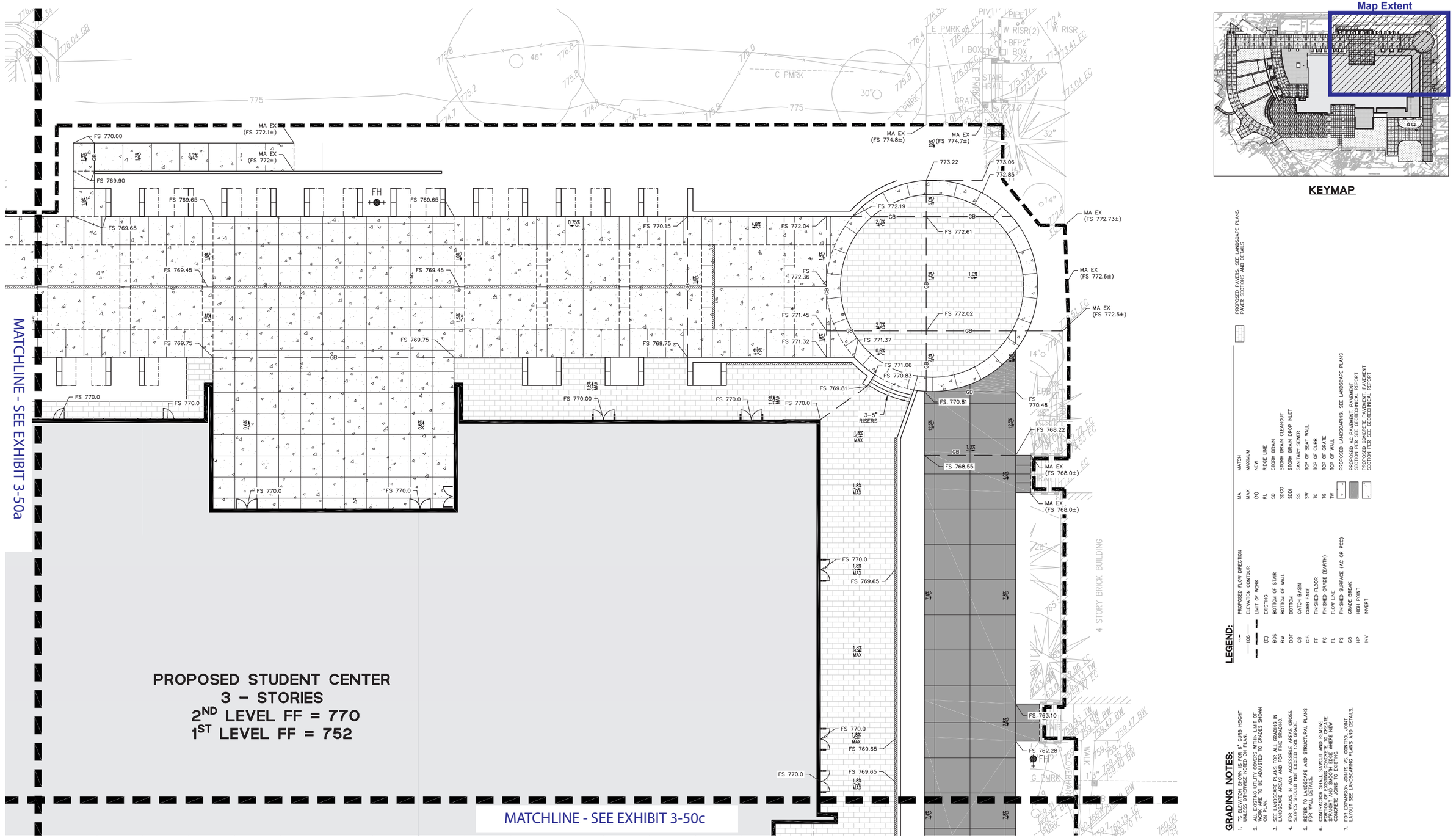

Source: BKF, HPI Architecture 2019

Student Center - Grading and Drainage Plan

Exhibit 3-50b

Mt. SAC 2018 Educational and Facilities Master Plan EIR

PSOMAS

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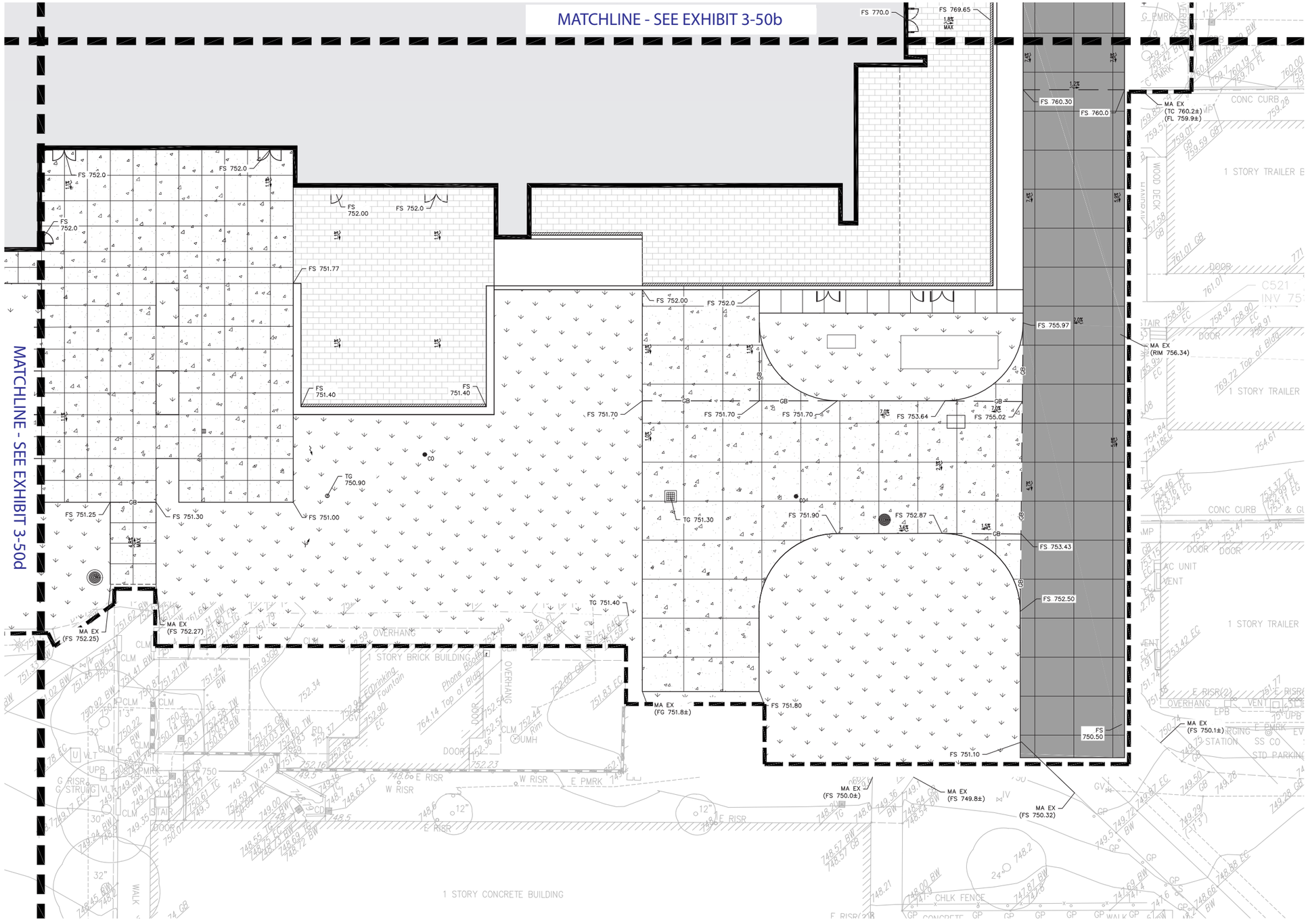

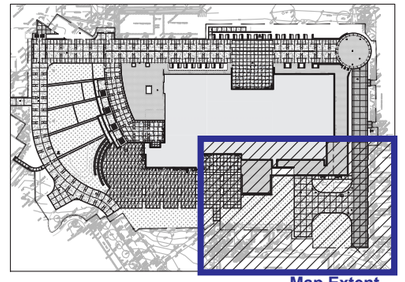

KEYMAP

PROPOSED PAVERS. SEE LANDSCAPE PLANS PAVER SECTIONS AND DETAILS

MA	MATCH
MAX	MAXIMUM
(N)	NEW
RL	RIDGE LINE
SD	STORM DRAIN
SDCO	STORM DRAIN CLEANOUT
SDDI	STORM DRAIN DROP INLET
SS	SANITARY SEWER
SW	TOP OF SEAT WALL
TC	TOP OF CURB
TG	TOP OF GRATE
TW	TOP OF WALL
- - -	PROPOSED LANDSCAPING. SEE LANDSCAPE PLANS
- - -	PROPOSED AC PAVEMENT. PAVEMENT SECTION PER SEE GEOTECHNICAL REPORT
- - -	PROPOSED CONCRETE PAVEMENT. PAVEMENT SECTION PER SEE GEOTECHNICAL REPORT

LEGEND:

→	PROPOSED FLOW DIRECTION
—106—	ELEVATION CONTOUR
	LIMIT OF WORK
(E)	EXISTING
BOS	BOTTOM OF STAIR
BW	BOTTOM OF WALL
BOT	BOTTOM
CB	CATCH BASIN
C.F.	CURB FACE
FF	FINISHED FLOOR
FG	FINISHED GRADE (EARTH)
FL	FLOW LINE
FS	FINISHED SURFACE (AC OR PCC)
GB	GRADE BREAK
HP	HIGH POINT
INV	INVERT

GRADING NOTES:

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4. FOR WALKS IN ADA ACCESSIBLE AREAS CROSS SLOPES SHOULD NOT EXCEED 1.9% GRADE.
5. REFER TO LANDSCAPE AND STRUCTURAL PLANS FOR WALL DETAILS.
6. CONTRACTOR SHALL SAWCUT AND REMOVE EXISTING ASPHALT CONCRETE TO CREATE STRAIGHT AND SMOOTH EDGE WHERE NEW CONCRETE JOINS TO EXISTING.
7. FOR EXPANSION JOINTS VS. CONTROL JOINT LAYOUT SEE LANDSCAPING PLANS AND DETAILS.

Source: BKF, HPI Architecture 2019

Student Center - Grading and Drainage Plan

Mt. SAC 2018 Educational and Facilities Master Plan EIR

Exhibit 3-50c

N W E S

0 10 20 40 Feet

PSOMAS

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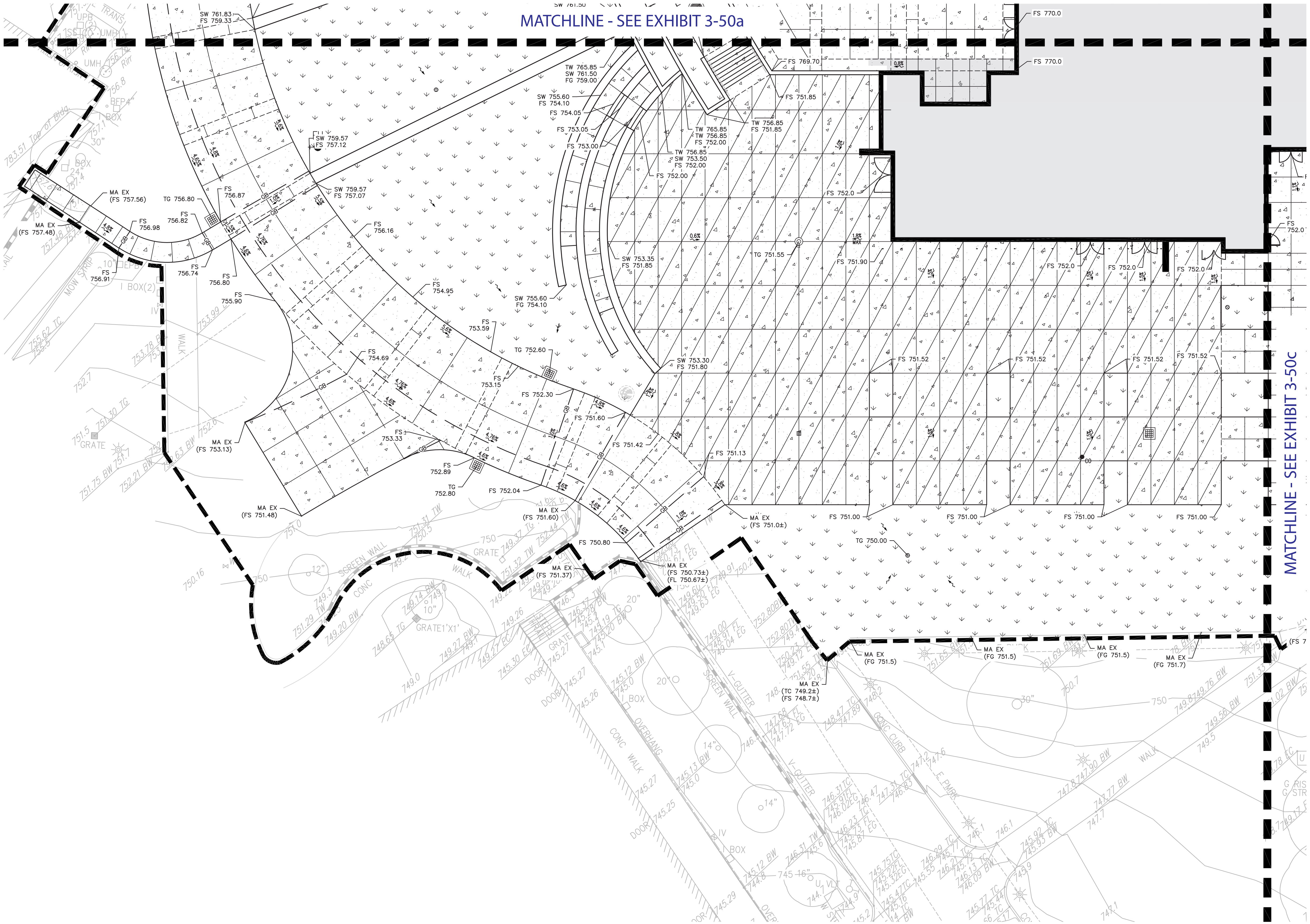

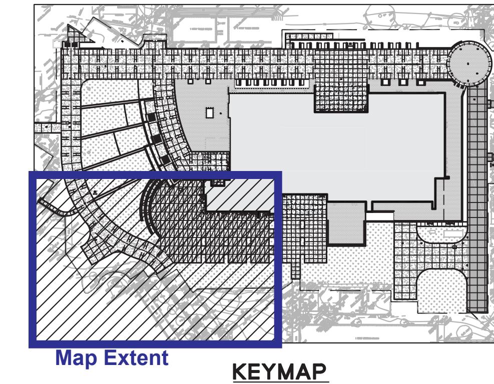

LEGEND:

→	PROPOSED FLOW DIRECTION
—106—	ELEVATION CONTOUR
▬ ▬	LIMIT OF WORK
(E)	EXISTING
BOS	BOTTOM OF STAIR
BW	BOTTOM OF WALL
BOT	BOTTOM
CB	CATCH BASIN
C.F.	CURB FACE
FF	FINISHED FLOOR
FG	FINISHED GRADE (EARTH)
FL	FLOW LINE
FS	FINISHED SURFACE (AC OR PCC)
GB	GRADE BREAK
HP	HIGH POINT
INV	INVERT
MA	MATCH
MAX	MAXIMUM
(N)	NEW
RL	RIDGE LINE
SD	STORM DRAIN
SDCO	STORM DRAIN CLEANOUT
SDDI	STORM DRAIN DROP INLET
SS	SANITARY SEWER
SW	TOP OF SEAT WALL
TC	TOP OF CURB
TG	TOP OF GRATE
TW	TOP OF WALL
	PROPOSED LANDSCAPING. SEE LANDSCAPE PLANS
	PROPOSED AC PAVEMENT. PAVEMENT SECTION PER SEE GEOTECHNICAL REPORT
	PROPOSED CONCRETE PAVEMENT. PAVEMENT SECTION PER SEE GEOTECHNICAL REPORT
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6. CONTRACTOR SHALL SAWCUT AND REMOVE PORTION OF EXISTING CONCRETE TO CREATE STRAIGHT AND SMOOTH EDGE WHERE NEW CONCRETE JOINS TO EXISTING.
7. FOR EXPANSION JOINTS VS. CONTROL JOINT LAYOUT SEE LANDSCAPING PLANS AND DETAILS.

Source: BKF, HPI Architecture 2019

Student Center – Grading and Drainage Plan

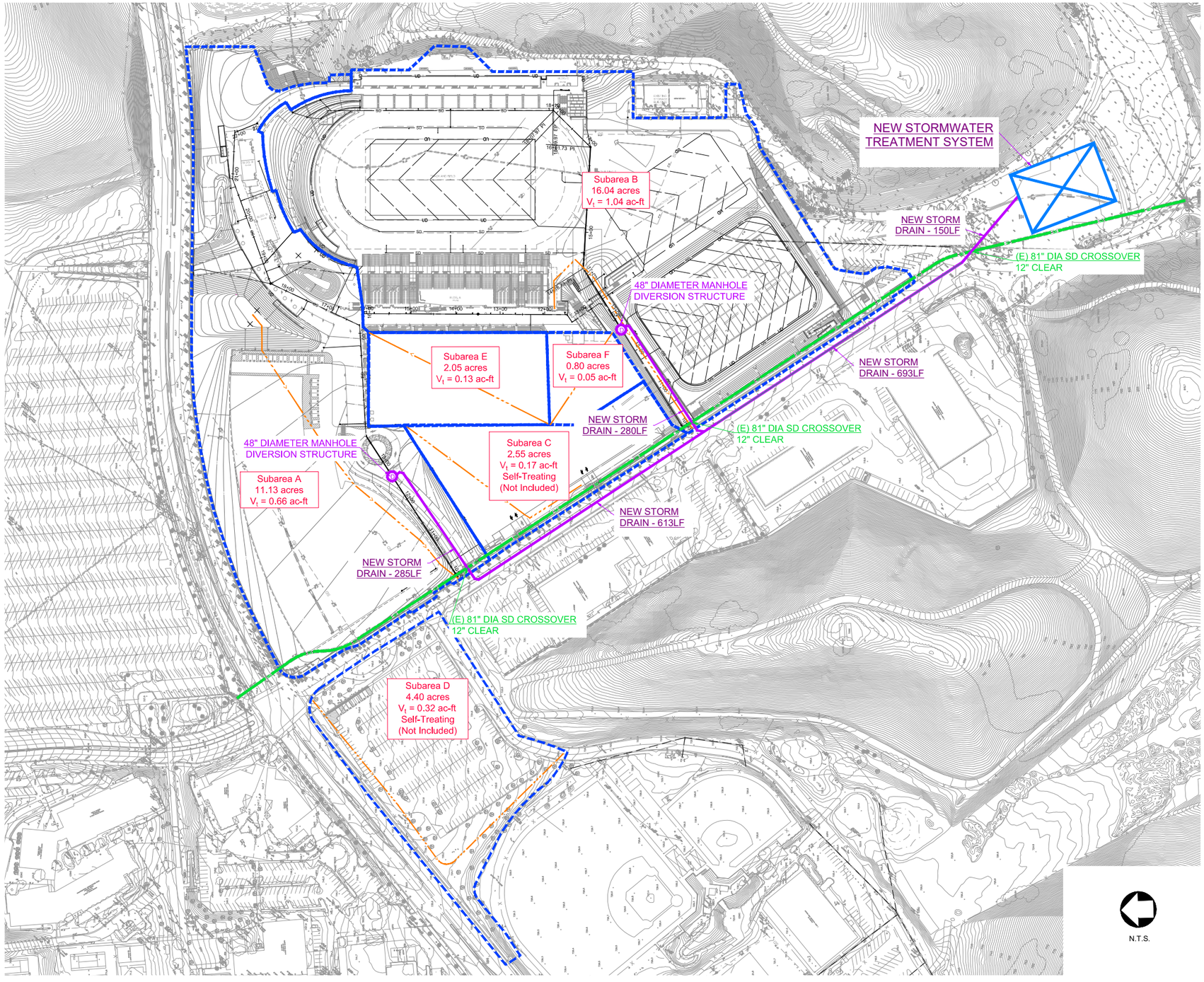
Exhibit 3-50d

Mt. SAC 2018 Educational and Facilities Master Plan EIR

N W E S

0 10 20 40 Feet

PSOMAS



NOTES

- DIVERSION STRUCTURE
- EXISTING 81" STORM DRAIN
- ADS STORMTECH CHAMBER ISOLATION ROW TREATMENT SYSTEM
- ACE STORM DRAIN

N.T.S.

Source: HMC Architects 2018

South Temple Avenue Precinct – Stormwater Plan

Exhibit 3-51

Mt. SAC 2018 Educational and Facilities Master Plan EIR

Map not to scale

PSOMAS

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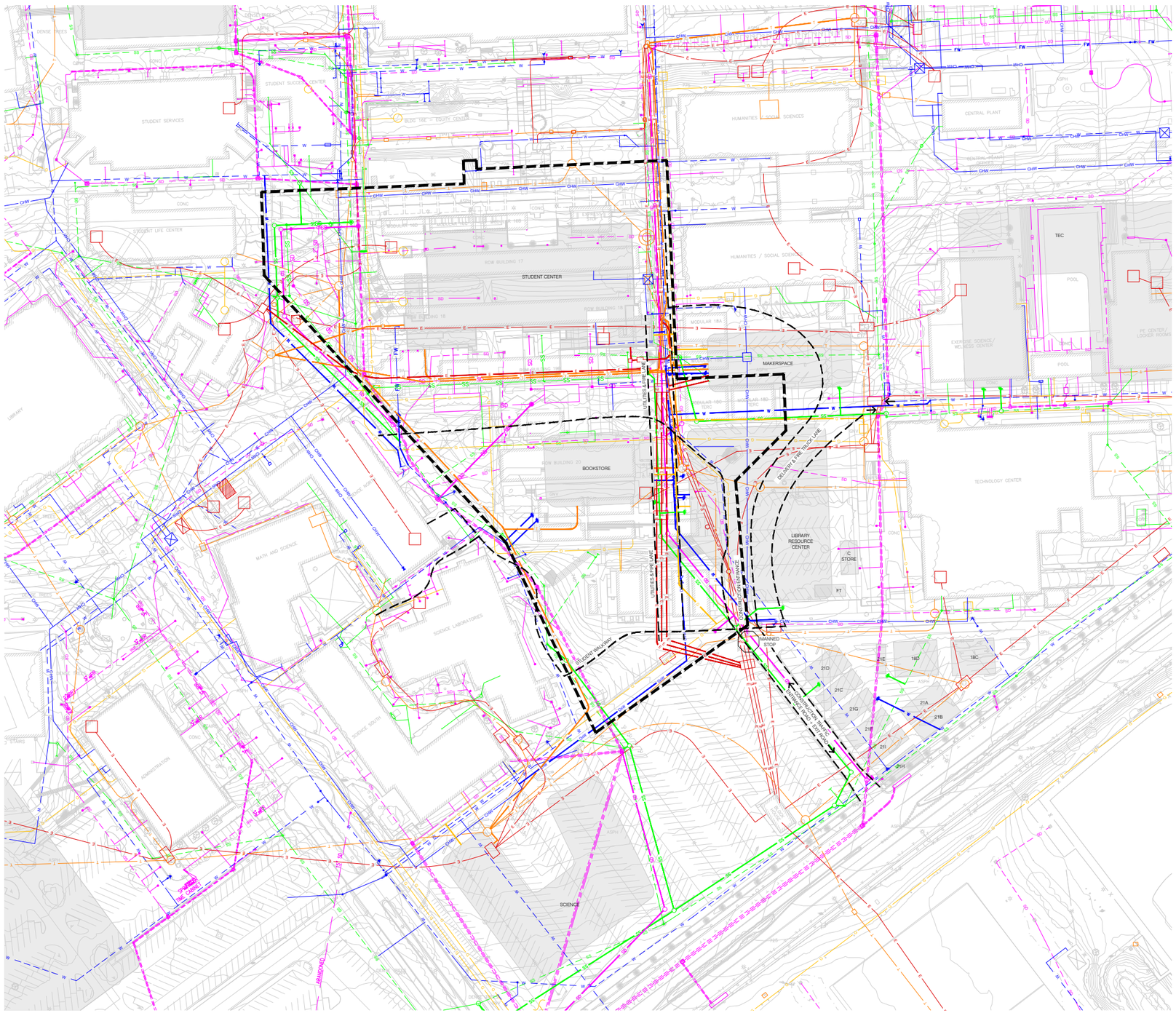

UTILITY LEGEND

- LIMIT OF WORK
- UTILITY TO BE REMOVED
- NEW UTILITY
- E — ELECTRICAL
- CHW — CHILLED WATER
- TEL — TELECOM
- G — GAS
- W — WATER
- SS — SANITARY SEWER
- SD — STORM DRAIN
- IRR — IRRIGATION

BUILDING LEGEND

- EXISTING
- PROPOSED

Source: P2S Engineering 2019

Central Campus Precinct – Utility Plan

Exhibit 3-52

Mt. SAC 2018 Educational and Facilities Master Plan EIR

Map not to scale

PSOMAS

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Grand Avenue and Temple Avenue. The construction of major projects would be coordinated to adjust construction schedules, work hours, and access routes to the extent feasible in order to reduce construction-related traffic congestion. During construction, commuter/passenger vehicles, public transit buses, and emergency vehicles would continue to use existing roadways in the vicinity of the project sites. Pedestrian and bicycle travel adjacent to the construction sites would also be maintained. If temporary closures of sidewalks or bicycle lanes are required, pedestrians and bicyclists would be re-routed to the opposite side of the street.

Construction of proposed 2018 EFMP projects would not only overlap with each other but would also be under construction at the same time as the PEP and West Parcel Site Improvements, which were previously approved, and the Transit Center, which is being evaluated in a separate environmental document (in coordination with Foothill Transit). The construction schedules and assumptions for the PEP, West Parcel Site Improvements and Transit Center are discussed in Section 4.0, Introduction to the Environmental Analyses, of this Draft EIR); the construction duration for these projects is shown in Table 3-4, above. The "cumulative" construction impacts from the proposed 2018 EFMP projects and these projects is evaluated in the applicable cumulative impacts section for the topical issues in this Draft EIR.

3.6 INTENDED USES OF THIS DRAFT EIR

This Draft EIR is intended to inform decision makers and the public of the environmental effects of implementing the proposed Project and of the available mitigation measures or alternatives that lessen or avoid significant impacts. This Draft EIR is intended to cover all State and local government approvals which may be needed to construct or implement the proposed Project, whether or not such approvals are explicitly listed in the Draft EIR. This Draft EIR analyzes and documents the impacts of the proposed Project and all discretionary and ministerial actions associated with the proposed Project. The Mt. San Antonio College District, as Lead Agency, will use this Draft EIR in assessing the effects of the anticipated actions detailed below.

3.6.1 MT. SAN ANTONIO COLLEGE COMMUNITY DISTRICT

Mt. San Antonio Community College District, as the Lead Agency, is expected to use the information contained in the Draft EIR for consideration of the following approvals related to and involved in the implementation of the proposed 2018 EFMP.

- **Certification of the Final Environmental Impact Report.** The proposed Project requires acceptance of the environmental document as having been prepared in compliance with CEQA and the State and City CEQA Guidelines, and certification that the data were considered in the final decisions on the proposed Project.

- **Approval of the 2018 Educational and Facilities Master Plan.** The proposed 2018 EFMP is the long-range development plan for Mt. SAC and is approved following certification of its associated Final EIR.

3.6.2 RESPONSIBLE AGENCIES

Because the proposed 2018 EFMP also involves approvals, permits, or authorization from other agencies, these agencies are "Responsible Agencies" under CEQA. Section 15381 of the *State CEQA Guidelines* defines Responsible Agencies as public agencies other than the Lead Agency that will have discretionary approval power over the proposed Project or some component of the proposed 2018 EFMP, including mitigation. These agencies include, but are not limited to, the agencies identified in Table 3-5.

TABLE 3-5
PROBABLE FUTURE ACTIONS BY RESPONSIBLE AGENCIES

Responsible Agency	Action
California Regional Water Quality Control Board	NPDES Permit and Section 401 water quality certification
South Coast Air Quality Management District	Permits to construct and/or permits to operate new stationary sources of equipment that emit or control air contaminants (e.g., heating, ventilation, and air conditioning units and diesel generators).
Division of the State Architect	California public K–12 schools, community colleges, essential services buildings and various other state-owned and leased facilities must submit plans to the Division of the State Architect to ensure they comply with code requirements and obtain DSA approval before construction begins
California Geological Survey	Required submission of a geologic hazard report to the California Geological Survey (CGS) for acceptance and, subsequently, to the Division of the State Architect (DSA) for projects within the jurisdiction of DSA
LA County Fire Department	A fire access site plan and water supply (fire flow) availability must be designed to comply with LA County Fire Department requirements based on information provided pertaining to hazardous fire area location, and water supply availability. When fire department access and water supply requirements cannot be achieved, the design professional must submit proposed design alternates to LA County Fire Department for review and acceptance.
LA County Public Works Environmental Division	Industrial Waste Disposal Permit Grease Interceptors ongoing permitting and inspection
LA County Department of Public Health Environmental Health Plan Check Program	Retail Food Facilities/Commercial Kitchen construction or remodel approval.
City of Walnut	Approval of Street Improvement Plans and construction easements (in public right-of-way) Administrative Review and Approval of Grading/Drainage Plans for Mt. SAC Non-Exempt Educational Facilities

3.7 REFERENCES

California Community Colleges Chancellor's Office (Data Mart). 2018. California Community Colleges Chancellor's Office Management Information Systems Data Mart. https://datamart.cccco.edu/datamart.aspx

Mt. San Antonio Community College District (District). 2019. Mutual Release and Settlement Agreement. Walnut, CA: District.

———. 2018a. *2018 Educational and Facilities Master Plan.* Walnut, CA: District.

———. 2018b. Emergency Management & Preparedness. Walnut, CA: District. https://www.mtsac.edu/emergency/

———. 2018c. *Mt. SAC 2018 Climate Action Plan*. https://www.mtsac.edu/sustainability/programs-and-initiatives/Mt_SAC_Climate_Action_Plan_FINAL_1.pdf

———. 2018d. *Memorandum of Agreement*. Walnut, CA: District.

Walnut, City of. 2018a (May 9). *City of Walnut General Plan.* Walnut, CA: the City. http://www.cityofwalnut.org/home/showdocument?id=12022.

———. 2018b (June). Walnut City Code, Walnut, California. Walnut, CA: the City. http://qcode.us/codes/walnut/.

SECTION 4.0
INTRODUCTION TO THE ENVIRONMENTAL ANALYSIS

4.0.1 ENVIRONMENTAL IMPACT EVALUATION

Sections 4.1 through 4.16 of this Draft Environmental Impact Report (EIR) contain a discussion of the potential environmental effects of implementing the proposed Mt. San Antonio College (Mt. SAC) 2018 Educational and Facilities Master Plan (proposed 2018 EFMP) and include information related to existing regional, local, and site conditions; analyses of the type and magnitude of individual and cumulative environmental impacts; and feasible mitigation measures that could reduce or avoid environmental impacts.

The environmental topical issues addressed in this Draft EIR are based on Appendix G of the State California Environmental Quality Act (CEQA) Guidelines in effect at the time the Notice of Preparation (NOP) for the Draft EIR was published. The campus does not include agricultural resources (Farmland), forestry resources, or mineral resources; and no further evaluation of these topics is required in this Draft EIR.

This "Introduction to the Environmental Analysis" section is provided to assist the reader in understanding the terminology, format, content, and overall approach to the environmental analysis.

4.0.2 FORMAT OF THE ENVIRONMENTAL ANALYSIS

Sections 4.1 through 4.16 are generally formatted to include the subheadings listed below.

Regulatory Setting

The regulatory setting provides a summary of federal, State, and/or local regulations, plans, policies, and laws that are relevant to the proposed 2018 EFMP.

Methods

This subsection briefly identifies the methods used to analyze potential environmental impacts, as applicable.

Environmental Setting

According to Section 15125 of the State CEQA Guidelines, an EIR must include a description of the existing physical environmental conditions in the vicinity of a proposed project to provide the "baseline condition" against which project-related impacts are compared. Normally, the baseline condition is the physical condition that exists when the Notice of Preparation (NOP) is published. The NOP for this Draft EIR was published in September 5, 2018. However, the State CEQA Guidelines recognize that the date for establishing an environmental baseline cannot be rigid. Because physical environmental conditions may vary over a range of time periods, the use of environmental baselines that differ from the NOP date is reasonable and appropriate when doing so results in a more accurate or conservative environmental analysis. Unless otherwise noted, the baseline condition assumed in this Draft EIR is the condition that existed when the NOP was published; any exception to this is explained in the respective technical sections in Section 4.0 of this Draft EIR. Notably, since release of the NOP: (1) the construction activities for the Physical Education Project (PEP Phase 1) have continued and the City of Walnut has approved the Grading and Improvements Plans, the Low Impact Development (LID) design, and the

Stormwater Pollution Prevention Plan (SWPPP); (2) on December 12, 2018, the Mt. SAC Board of Trustees approved the Mt. San Antonio College Transit Center and adopted the associated Initial Study/Negative Declaration (IS/ND) prepared pursuant to CEQA; and (3) on March 4, 2019 the United Walnut Taxpayers (UWT) and Project legal action (Los Angeles County Superior Court No. BC 639908) as well as various actions taken by the Board of Trustees concerning the West Parcel.

Thresholds of Significance

Thresholds of significance are criteria used to determine whether potential environmental effects are significant. The thresholds of significance used in this analysis were primarily based upon Appendix G of the State CEQA Guidelines. However, in some cases, standards were developed specifically for this analysis, or reflect the *Mt. SAC 2016 CEQA Thresholds of Significance* adopted by the Mt. San Antonio Community College District in May 2016.

The threshold of significance defines the type, amount, and/or extent of impact that would be considered a significant adverse change in the environment. Some thresholds (e.g., air quality, traffic, and noise) are quantitative, while others (e.g., land use and planning) are qualitative.

Environmental Impacts

This section contains the detailed analysis of potential environmental impacts resulting from the proposed 2018 EFMP based on the established thresholds of significance. As required by Section 15126.2(a) of the State CEQA Guidelines, direct, indirect, short-term (construction-related), and long-term (operational) impacts are addressed, as appropriate, for the environmental issue area being analyzed. Impacts on campus and off campus are addressed as appropriate. A determination regarding the significance of the impact (no impact, less than significant, or significant and unavoidable) is provided.

The proposed Project includes implementation of Phases 1A, 1B, and 2 of the proposed 2018 EFMP, as previously described in Section 3.0, Project Description, of this Draft EIR. The anticipated physical construction impact area is shown on Exhibit 3-34.

As identified in Section 3.0, Project Description, of this Draft EIR, buildout of Phases 1A, 1B, and 2 of the proposed 2018 EFMP is being evaluated at a “program level”. The following components of the proposed 2018 EFMP are being evaluated in this Draft EIR at a “project-specific level”:

Phase 1A

- Student Center and Central Campus Infrastructure
- Parking Structure R and Tennis Courts
- Parking Structure S and West Temple Avenue Pedestrian Bridge (including associated South Temple Avenue Green Corridor Improvements)
- Sand Volleyball Courts and Parking Lot W Reconstruction

Phase 1B

- Bookstore

To distinguish the potential environmental impacts resulting from buildout of Phases 1A, 1B, and 2 of the proposed 2018 EFMP from the project-specific level impacts, unless otherwise noted, the analysis for each threshold of significance is separated by these categories.

For each significance threshold the following information is provided in this subsection: (1) level of significance prior to mitigation, (2) feasible mitigation measures to address environmental impacts that are not reduced to a level considered less than significant through project design features (PDFs) or application of standard requirements (e.g., compliance with local and State regulations), and the level of significance of each impact after implementation of identified mitigation measures.

Cumulative Impacts

CEQA requires that EIRs discuss cumulative impacts in addition to project-specific impacts. In accordance with Section 15130(b) of the State CEQA Guidelines, "the discussion of cumulative impacts shall reflect the severity of the impacts and their likelihood of occurrence, but the discussion need not provide as great detail as is provided for the effects attributable to the project alone." Further, the discussion is guided by the standards of practicality and reasonableness. According to Section 15355 of the State CEQA Guidelines,

> "Cumulative impacts" refer to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts.
>
> (a) The individual effects may be changes resulting from a single project or a number of separate projects.
>
> (b) The cumulative impact from several projects is the change in the environment, which results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time.

Section 15130(a) of the State CEQA Guidelines also requires that EIRs discuss the cumulative impacts of a project when the project's incremental effect is cumulatively considerable. Where a lead agency is examining a project with an incremental effect that is not cumulatively considerable, it does not need to consider the effect significant but shall briefly describe the basis for its conclusion. As further clarified by Section 15065 of the State CEQA Guidelines, "cumulatively considerable" means that the incremental effects of an individual 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. If the combined cumulative impact associated with the project's incremental effects and the effects of other projects is not significant, Section 15130(a)(2) of the State CEQA Guidelines requires a brief discussion in the EIR about why the cumulative impact is not significant and is not discussed in further detail. Section 15130(a)(3) of the State CEQA Guidelines requires supporting analysis in the EIR if a determination is made that a project's contribution to a significant cumulative impact is rendered less than cumulatively considerable and, therefore, is not significant. To support each significance conclusion, this Draft EIR provides a cumulative impact analysis and, where proposed project impacts have been identified that, together with the effects of other pending projects, could result in cumulatively significant impacts, these potential impacts are documented.

The State CEQA Guidelines (Section 15130[b][1]) state that the information used in an analysis of cumulative impacts should come from one of two sources, either:

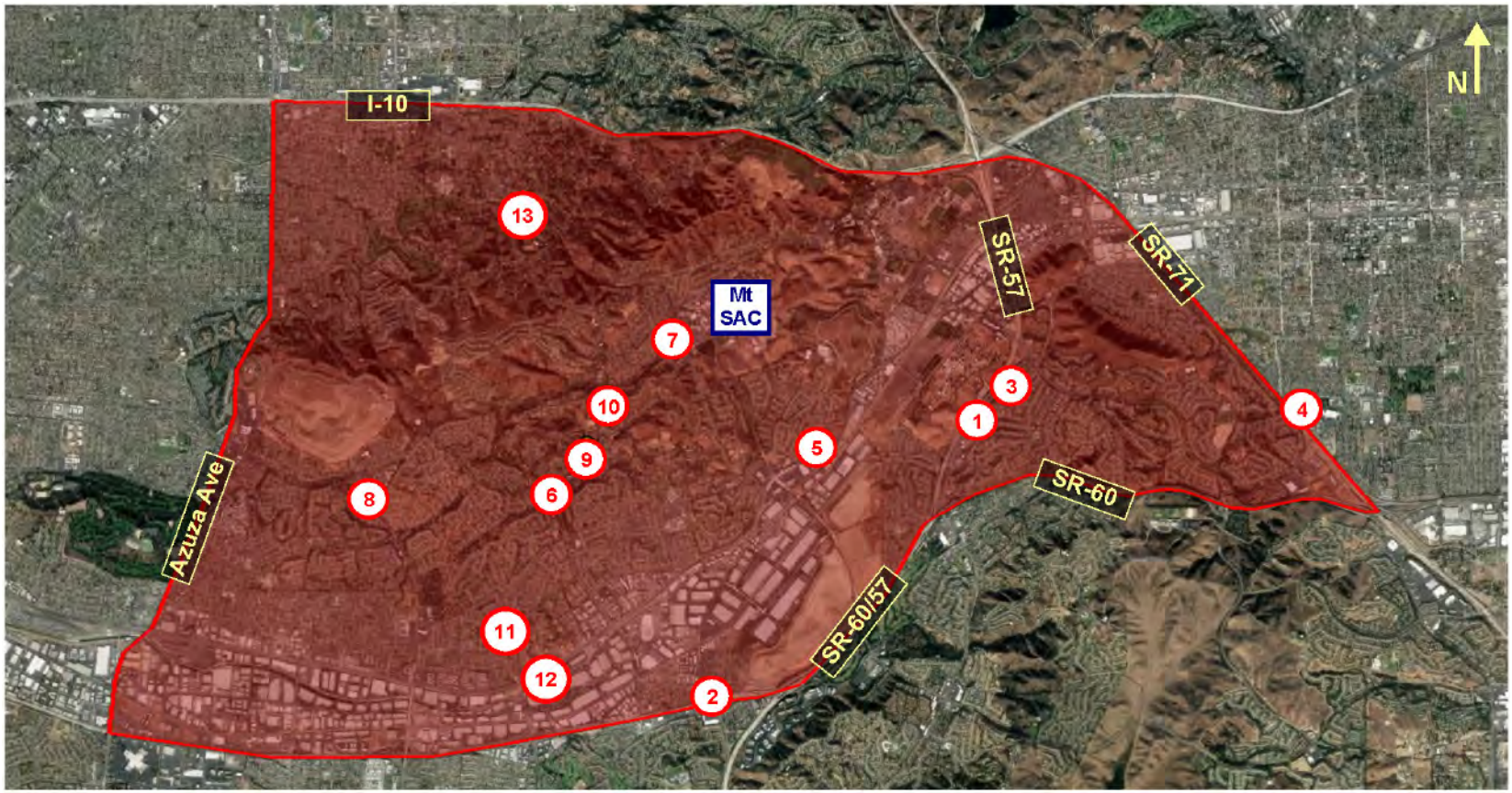
1. A list of past, present, and probable future projects producing related cumulative impacts, including, if necessary, those projects outside the control of the agency, or
2. A summary of projections contained in an adopted general plan or related planning document designed to evaluate regional or areawide conditions.

The cumulative impacts analyses contained in this Draft EIR use both methods. As appropriate, the cumulative impact analyses provided in this Draft EIR use the study area in the *City of Walnut General Plan* and supporting EIR adopted by the City in May 2018 (City of Walnut 2018a, 2018b). These cumulative impact analyses take into consideration the demographic projections and land use buildout assumptions outlined in both the proposed 2018 EFMP and the *City of Walnut General Plan*.

In addition to the *City of Walnut General Plan* study area, the cumulative analysis for individual topical issues may consider specific cumulative study areas designated by respective agencies for regional or area-wide conditions. For instance, topic-specific cumulative study areas have been developed for traffic and air quality (e.g., South Coast Air Basin). Also, this Draft EIR considers regional programs directed at mitigating cumulative impacts of development such as those instituted for urban runoff. A description of the basis for the cumulative impact analysis for individual topical issues is provided within each cumulative analysis discussion in Sections 4.1 through 4.15 of this Draft EIR.

Finally, and where appropriate to the analysis in question, cumulative impacts are assessed with reference to a list of off-campus "cumulative projects," as described by Section 15130(b) of the State CEQA Guidelines. A variety of off-campus, cumulative projects are reflected in Table 4-1 and shown in Exhibit 4-1. The cities of Walnut, Pomona, Diamond Bar, Industry, and West Covina and Cal Poly Pomona were contacted about any potential development projects.

Mitigation measures are to be developed, where feasible, to reduce the project's contribution to cumulative effects such that the contribution is not considerable. This cumulative analysis assumes that all mitigation measures identified in Sections 4.1 through 4.16 to mitigate project impacts are adopted, unless otherwise specified. The analysis herein analyzes whether, after adoption of project-specific mitigation, the residual impacts of the project would cause a cumulatively significant impact or would contribute considerably to existing/anticipated (without the project) cumulatively significant effects.



LEGEND

1. Mixed-Use (Residential and Commercial)
2. Business Park (Hotel, Office, and Retail)
3. Single-Family Housing
4. Single-Family Housing
5. Specific Plan (Residential, Park, Retail)
6. Single-Family Housing
7. Single-Family Housing
8. Multifamily Housing
9. Single-Family Housing
10. Single-Family Housing
11. Single-Family Housing
12. Mixed-Use (Residential and Commercial)
13. Single-Family Housing

Source: Psomas 2018

Cumulative Projects

Exhibit 4-1

Mt. SAC 2018 Educational and Facilities Master Plan EIR

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TABLE 4-1
LIST OF CUMULATIVE OFF-SITE PROJECTS

Project	City	Source	Project	
			Location	Description
1	Diamond Bar	Diamond Bar	888 Diamond Bar	Demolition of two neighborhood commercial centers (Oak Tree Plaza and Ranch Center), construction of 146 condos and 4,300 sq.ft. of commercial retail
2	Diamond Bar	Diamond Bar	850 Brea Canyon Road (Brea Canyon Road, north of SR-60)	Redevelopment of boat and RV storage to include 109-room hotel, 48,000 sq.ft. of office, and 9,500 sq.ft. of retail
3	Diamond Bar	Diamond Bar	1111 N. Diamond Bar (north side between Solitaire Street and Highland Valley Road)	Single-family residence on vacant lot, approximately 4,000 sq.ft.
4	Pomona	Pomona	SW Corner of White Ave and Lexington Ave	110 single-family residential units
5	Walnut	Walnut	1,300 feet east of Valley/Grand intersection	Specific Plan. Single-family residences (12 units), low-rise multifamily housing (277 units), public park (17 acres), shopping center (50,000 sq.ft.)
6	Walnut	Walnut	800 Meadow Pass Road	28 single-family residential units
7	Walnut	Walnut	20650 San Jose Hills Road	22 single-family homes
8	Walnut	Walnut	Francesca Drive, east of Nogales St	36 low-rise multifamily housing units
9	Walnut	Walnut	Pierre and Meadow Pass	6 single-family homes
10	Walnut	Walnut	1521 Meadow Pass Road	13 single-family homes
11	Walnut	Walnut	360 Camino de Teodoro	4 single-family homes
12	Walnut	Walnut	19901 Valley Boulevard	Two buildings - one with 2 residential units, one with approximately 1,000 sq.ft. commercial on 1st floor and residence on second floor
13	West Covina	West Covina	3501 E. Cameron Avenue	2 single-family homes

Ave: Avenue; E: East; N.: North; sq ft: square foot/feet; SR: State Route; St: Street; SW: southwest;

With respect to cumulative Mt. SAC projects, projects identified to be implemented in Phase 3 of the proposed 2018 EFMP and on-campus projects that were previously approved and subject to separate environmental documentation are considered in the cumulative impacts analysis in this Draft EIR. These on-campus projects discussed below are shown on the Proposed 2018 Facilities Master Plan presented in Exhibit 3-4 in Section 3.0, Project Description, of this Draft EIR, and are summarized in Table 4-2.

TABLE 4-2
CUMULATIVE PROJECTS AT MT. SAN ANTONIO COLLEGE

Building No.	Building/Facility Name	Year Built	Approved and Under Construction GSF	New Building Construction GSF	Building GSF to be Demolished	Renovation GSF
Approved and Under Construction Projects						
Physical Education Project (PEP): • Phase 1 (Under Construction) - Athletics Complex East (stadium, concessions, ticketing, and practice fields) • Phase 2 (Approved) – Physical Education Complex (gymnasium, wellness center, aquatics center, heritage hall and south bonita pedestrian bridge)			95,730 127,000			
West Parcel Site Improvements (Under Construction)			NA			
Transit Center (Approved)			NA			
		Total	**222,730**			
Phase 3 (2028–2033)						
	Fine Arts			55,000		
1A	Art Center	1973[a]			(27,668)	
	Nature Center			5,300		
	Adult Education			22,000		
30	Adult Basic Education Center	1993			(8,101)	
31AB, 32,35	Continuing Education/ESL Modulars	1997–2007			(11,487)	
31C	Modular	2007			(504)	
36	Older Adults Modular	1997			(1,414)	
38A	Adult HS Diploma Modular	2000			(1,553)	
38B	Basic Skills Modular	2000			(1,556)	
40AB	Continuing Education Modulars	2014			(2,147)	
23	**College Services**	2003				17,500
9B	**Student Services**	1994				56,730
28A	**Technology Center A**	1971[a]				47,400
28B	**Technology Center B**	1971[a]				80,743
		Subtotal Phase 1A		***82,300***	***(54,430)***	***202,373***
		Total	**1,929,858**	**752,000**	**(207,805)**	**405,023**

GSF: gross square feet (represents outside gross square footage, which includes gross area of the building with covered unenclosed space counts at 50 percent); NA: Not Applicable.

[a] Building is a contributor to the Mt. SAC Historic District

- **Phase 3 of the proposed 2018 EFMP.** The proposed 2018 EFMP includes the anticipated increase in campus enrollment through its ten-year planning horizon (2027) and identifies the facilities, site improvements, and infrastructure necessary to accommodate that growth. Although components of the proposed 2018 EFMP identified for Phase 3 are expected to be required to accommodate the planned enrollment growth, based on financial and other considerations, it is not reasonable to assume that Phase 3 components could be implemented in the 10-year horizon period. However, for purposes of analysis, Phase 3 components of the proposed 2018 EFMP are included in the cumulative impact analysis in this Draft EIR. The proposed facilities are shown in Exhibit 3-4. It should be noted that no increase in the campus enrollment/headcount is expected.

  As shown in Table 4-2, Phase 3 includes development of the new 55,000-gross-square-foot (gsf) Fine Arts building, 5,300-gsf Nature Center, and 22,000-gsf Adult Education building. It is estimated that the Fine Arts and Adult Education buildings would consist of two levels and the Nature Center would be a single level. Construction of the Fine Arts building would require demolition of the existing 27,688-gsf Art Center (Building 1A), and construction of the Adult Education building would require the demolition of 8,101-gsf Adult Basic Education Center (Building 30) and ten modular buildings (18,661 gsf). In summary, Phase 3 would involve 82,300 gsf of new development and demolition of 54,430 gsf of existing buildings for a net increase of 27,780 gsf.

  Additionally, the following buildings totaling 202,373 gsf would be renovated as part of Phase 3: College Services (Building 23), Student Services (Building 9B), and the Technology Center (Buildings 28A and 28B).

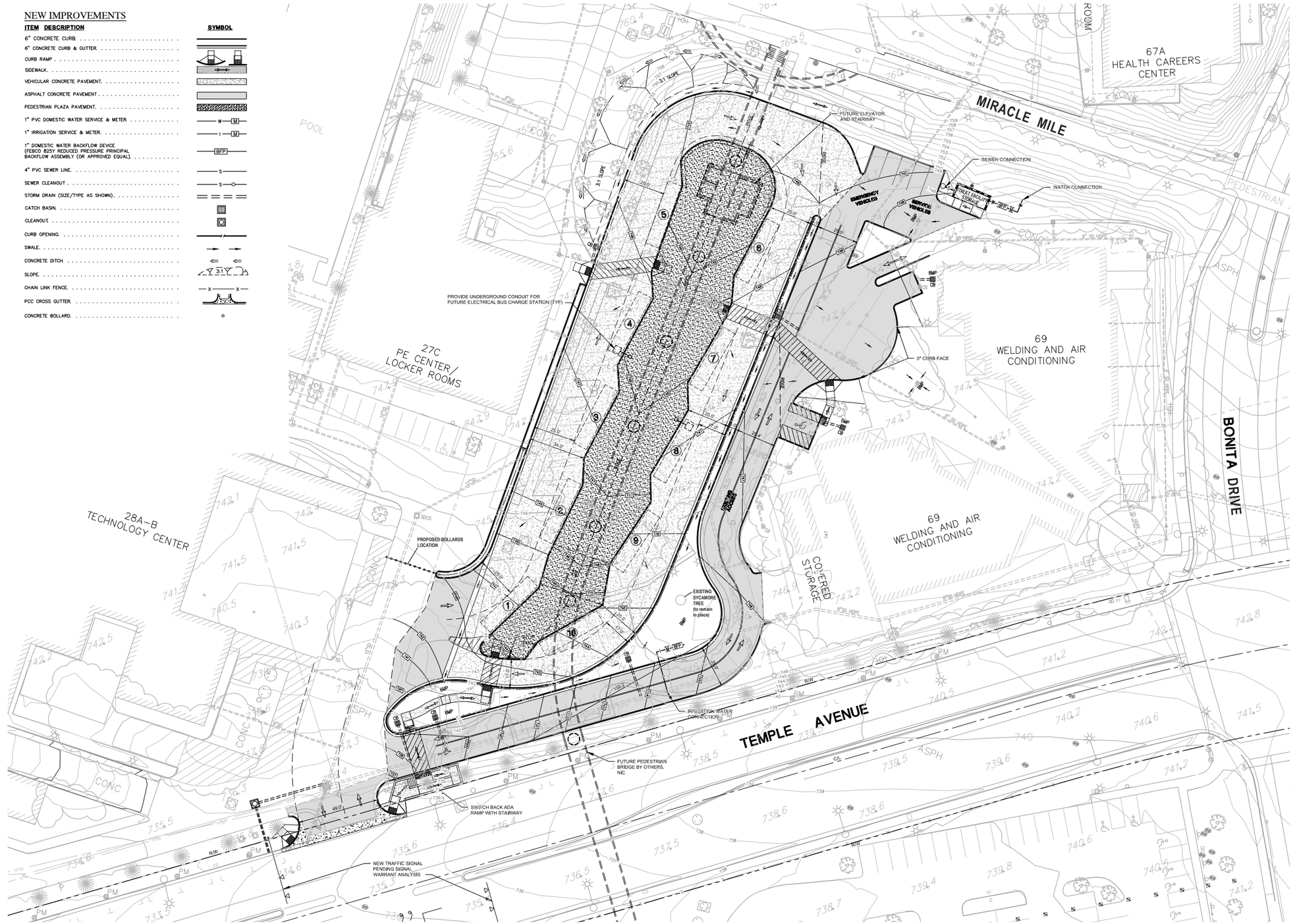
  Phase 3 would not involve any additional Parking Structures on campus; however, required utility infrastructure to serve the new development would be installed. Additionally, site-adjacent landscaping, open space, and on-campus circulation improvements would be implemented consistent with that outlined in the proposed 2018 EFMP.

- **Transit Center.** As shown on the conceptual site plan included on Exhibit 4-2, the Transit Center project involves the construction of a ten-bus bay transit center at existing Parking Lot D3; the existing surface parking lot would be removed. The bus bays would be located around a central bus plaza that would accommodate pedestrian loading and unloading. Additionally, the bus plaza would be constructed to accommodate two electric bus charging stations, to be installed at a future date, as well as bus shelters to be constructed in the pedestrian waiting and boarding areas.

  The Transit Center project also includes installation of a traffic signal at the existing driveway on Temple Avenue and removal of a portion of existing on-street parking along Temple Avenue between Bonita Drive and the project's driveway. This area would be restriped as a right-turn lane for westbound traffic entering the Transit Center. The existing vehicular access southeast of the Technology Center (Building 28A/B) and between the driveway from Lot D-2 and Lot D-3 would be modified to prohibit vehicular movement. The proposed 2018 EFMP would involve repaving this area with decorative concrete pavement; and a series of bollards would be installed in order to restrict through vehicular movement. The bollards would be retractable to accommodate emergency vehicle access only.

NEW IMPROVEMENTS

ITEM DESCRIPTION	SYMBOL
6" CONCRETE CURB	
6" CONCRETE CURB & GUTTER	
CURB RAMP	
SIDEWALK	
VEHICULAR CONCRETE PAVEMENT	
ASPHALT CONCRETE PAVEMENT	
PEDESTRIAN PLAZA PAVEMENT	
1" PVC DOMESTIC WATER SERVICE & METER	W M
1" IRRIGATION SERVICE & METER	I M
1" DOMESTIC WATER BACKFLOW DEVICE (FEBCO 825Y REDUCED PRESSURE PRINCIPAL BACKFLOW ASSEMBLY (OR APPROVED EQUAL)	BFP
4" PVC SEWER LINE	S
SEWER CLEANOUT	S
STORM DRAIN (SIZE/TYPE AS SHOWN)	
CATCH BASIN	
CLEANOUT	
CURB OPENING	
SWALE	
CONCRETE DITCH	
SLOPE	3:1
CHAIN LINK FENCE	X X
PCC CROSS GUTTER	2.0'-0"
CONCRETE BOLLARD	



Source: Psomas, 2018

Conceptual Site Plan – Transit Center

Exhibit 4-2

Mt. SAC 2018 Educational and Facilities Master Plan EIR

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0 20 40 80 Feet

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The existing vehicular driveway that connects the surface parking area adjacent to the Exercise Science/Wellness Center (Building 27A), Pool, Pool Building (Building 27B), and Physical Education Center (Building 27C) to Modulars 18A through 18D, associated parking, and Lot D-2 would be widened. This project element would include removal of the existing northern curb; and extend the drive aisle approximately 4 feet to the north.

Pedestrian access would be provided from each direction surrounding the proposed Transit Center. Notably, the proposed signalized intersection would provide pedestrian crosswalks at each leg of the intersection. The bus plaza and all related features would be designed to accommodate a future pedestrian bridge, anticipated to extend from proposed Parking Structure S.

Construction of the Transit Center is estimated to start in summer 2019 and be complete in summer 2020.

- **Physical Education Project.** The Physical Education Project (PEP) involves development on the former Hilmer Lodge Stadium (HLS) site and adjacent surface parking lots.

  Phase 1 of the PEP, referred to as the Athletics Complex East, is under construction and involves a nine-lane 400-meter track and 10,912-permanent-seat stadium, scoreboard, lighting standards, two pedestrian bridges, five athletic fields, and approximately 6.9 acres of landscaping and support facilities (concessions, ticketing, restrooms, etc.), and approximately 95,730 gsf of new building space, including the Heritage Hall Education Center. The track and field lanes will comply with the International Association of Athletic Federations (IAAF) Compliant Track and Field, Competition Category 1 standards. The new HLS design is open to the north, and additional temporary bleachers may be installed in this area for 8,840 additional seats (a total capacity of 19,752 seats). The construction of the Athletics Complex East was initiated in March 2018 and is estimated to be complete by December 2019.

  Phase 2 of the PEP, referred to in the proposed 2018 EFMP as the Physical Education Complex (PEC), involves the construction of a state-of-the-art kinesiology, wellness, and aquatics facility in Mt. SAC's Athletics Land-use Zone. This project includes two new facilities: a gymnasium/wellness center and an aquatics center (on two levels and approximately 127,000 gsf). The new complex would replace facilities that are currently undersized, outdated, and not fully accessible. The new facilities would be designed to ensure compliance with the regulations of college athletics and the Americans with Disabilities Act. The PEC also includes the construction of the South Bonita Pedestrian Bridge over Bonita Drive connecting to Parking Structure S. Construction of the PEC and Aquatics Center is estimated to start in August 2020 and be complete by August 2022.

  It should be noted that the grading activities for the PEP Phase 1 were substantially completed in December 2018, including the export of soils. The grading activities included the PEP Phase 1 site in its entirety and the Parking Structure R and Tennis Courts site.

- **West Parcel Site Improvements.** The approximately 27.2-acre West Parcel is located generally west of Grand Avenue and south of Amar Road/Temple Avenue. On April 12, 2018, Mt. SAC and the City of Walnut, through their respective governing bodies, reached a conditional settlement agreement [the "Memorandum of Agreement" (MOA)] of the following Los Angeles County Superior Court actions filed by the City of Walnut against Mt. SAC: Case No. BS166152, Case No. BS170683 and Case BS171818 (collectively the

"City Legal Actions"), that established mutual understanding of the scope of work for the West Parcel (and several other projects on the Mt. SAC campus). The MOA was fully executed and approved by the governing bodies of both Mt. SAC and the City. Furthermore, the City agreed to dismiss its pending lawsuits against Mt. SAC. Final settlement and dismissal of the City Legal Actions are subject to the governing bodies of Mt. SAC and the City of Walnut entering into a formal settlement agreement; the City Council of the City of Walnut approving the earthwork and grading plans; and Mt. SAC recording a restrictive covenant. These actions have not occurred as of the date of publication of this Draft EIR.

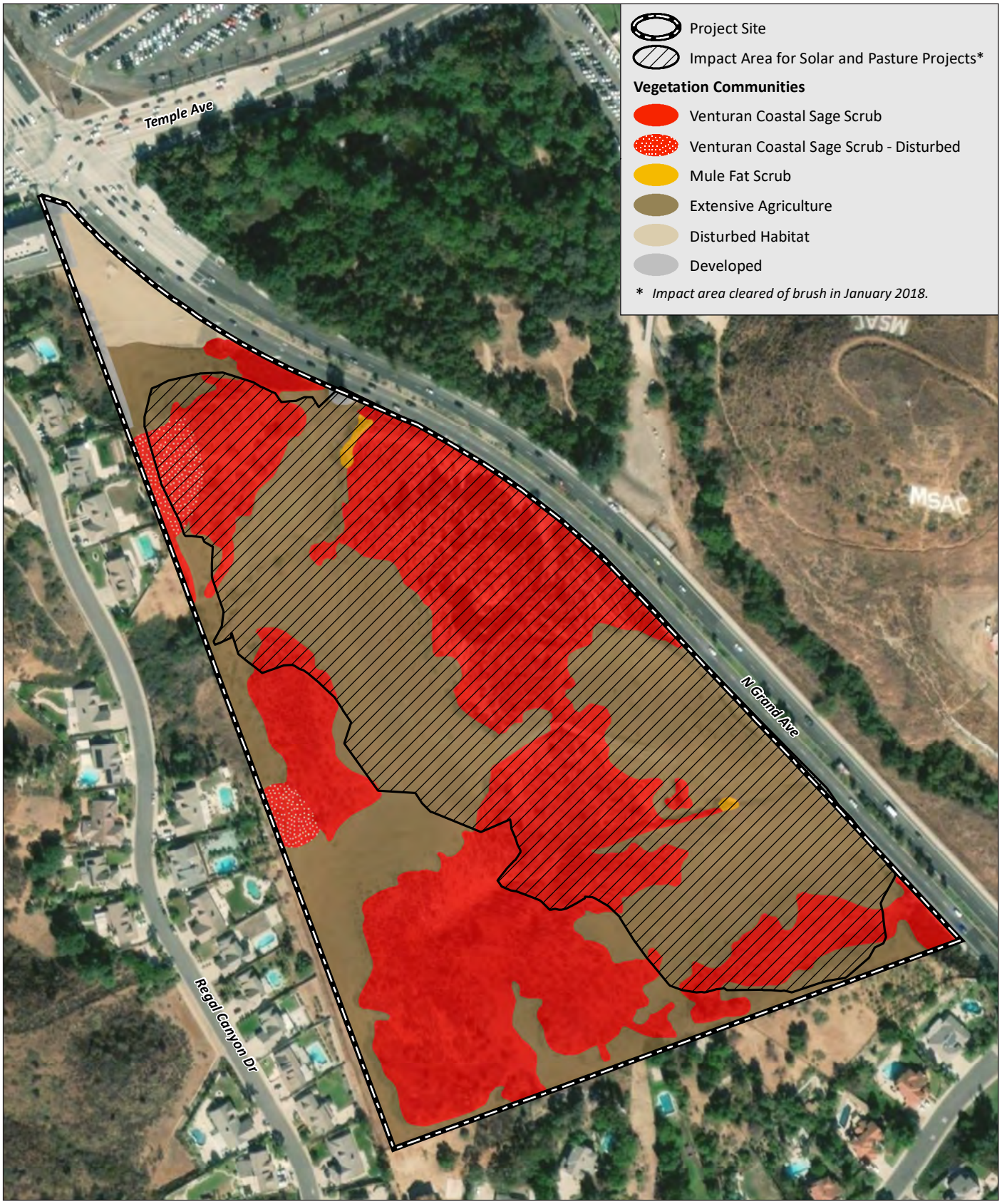
The MOA stipulates that Mt. SAC will not "construct, build or install ground-mount solar panels" on the West Parcel. Rather, Mt. SAC may construct any stand-alone energy project or facility with exposed energy-generating components provided that such energy projects are subject to reasonable standards. Additionally, Mt. SAC will proceed with earthwork and hauling operations related to any project on the West Parcel that is consistent with the applicable requirements of the Walnut Municipal Code and construction of any access road.

The only difference between the scope of the original West Parcel Solar project and the new West Parcel Site Improvements project is the ultimate use of the pad to be created. The impact footprint and uses and treatments to the areas on the West Parcel outside the pad are identical (refer to Exhibit 4-3). The preserve and restoration areas covered by the recorded restricted covenant (RC) on the West Parcel are the same with both projects, as is the coastal sage scrub landscaping palette used on the slopes that are not part of the RC or pad. The pad, which was to have the solar array, will be used as a pasture for cattle. The pasture will be irrigated and seeded with appropriate species. Cattle grazing will be confined to the pad by suitable cattle fencing. Livestock will be moved on and off the pad via a road between North Grand Avenue and the pad. This road was included in the original project design. The road will also be suitably fenced to ensure the cattle are prohibited from wandering elsewhere on the West Parcel. Gates suitable for cattle pastures will be placed at the edge of the pad and adjacent to North Grand Avenue. Construction of the West Parcel Site Improvements project was initiated in September 2017 and is expected to be complete by February 2019, prior to initiation of construction activities for the proposed 2018 EFMP facilities and site improvements.

Mt. SAC currently has no other plans for use/development of the West Parcel. Identification of potential future development scenarios for analysis purposes would be speculative. Should Mt. SAC pursue another use for the West Parcel in the future, that project would be subject to environmental review pursuant to CEQA.

As previously mentioned, on March 4, 2019 the United Walnut Taxpayers (UWT) and the Mt. San Antonio Community College District entered into a Mutual Release and Settlement Agreement regarding the Physical Education Project (PEP) legal action (Los Angeles County Superior Court No. BC 639908) as well as various actions taken by the Mt. San Antonio Community College District Board of Trustees concerning the West Parcel.

The settlement with UWT stipulates that Mt. SAC will not deposit 140,000 cubic yards of earth on the West Parcel in connection with the construction of the PEP. Mt. SAC further agrees that any future earthwork or grading operations at the West Parcel shall require official action of the Mt. SAC Board taken at a duly noticed meeting in compliance with all laws.



Source: Helix Environmental Planning 2018

West Parcel Project Impact Area

Exhibit 4-3

Mt. SAC 2018 Educational and Facilities Master Plan EIR

N W E S

0 125 250 500 Feet

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It should be noted that construction of the proposed 2018 EFMP projects would not only overlap with each other, as described in Section 3.5.10, Construction Activities, of this Draft EIR, but would also be under construction at the same time as the PEP and the Transit Center. Table 3.5-1 in Section 3.5.10 identifies the general construction schedules for the PEP, Transit Center, and projects being evaluated at a project-specific level in this Draft EIR. As shown, the West Parcel Site Improvements would be completed before construction of any of the proposed facilities being evaluated at a project-specific level in this Draft EIR. The construction periods for the various proposed and previously approved projects would overlap. The "cumulative" construction impacts from the proposed 2018 EFMP projects and these projects is evaluated in the cumulative impacts section for the respective topical issues in this Draft EIR.

References

This section identifies sources relied upon for each environmental topic area analyzed in this document (Sections 4.1 through 4.16).

4.0.3 REFERENCES

Mt. San Antonio Community College District (District). 2019. Mutual Release and Settlement Agreement. Walnut, CA: District.

———. 2018a. *2018 Educational and Facilities Master Plan.* Walnut, CA: District.

———.2018b. *Memorandum of Agreement*. Walnut, CA: District.

———. 2016 (April). *Revised Draft 2016 CEQA Thresholds of Significance.* Walnut, CA: District.

Walnut, City of. 2018 (May 9, adopted). *City of Walnut General Plan*. Walnut, CA: City of. http://www.cityofwalnut.org/home/showdocument?id=12022

———. 2018b (February). *Draft Environmental Impact Report Volume I of II, General Plan Update and West Valley Specific Plan SCH No. 2017101010.* Walnut, CA: the City.

4.1 AESTHETICS

This section describes the existing landform and aesthetic character of the campus and surrounding areas. Viewsheds have been identified, and the potential visibility of the site and proposed development has been determined. The potential visual changes, including changes in light and glare, resulting from implementation of the proposed 2018 Educational and Facilities Master Plan (proposed 2018 EFMP) at a project-specific level are addressed. The information presented in this section is based on field reconnaissance; review of the campus and aerial photographs, building elevations, and site sections depicting the proposed Project; and a lighting analysis prepared for the proposed tennis court lights.

The City of Walnut (City) submitted a Notice of Preparation (NOP) comment letter addressing concerns with visual impacts related to the rooftop tennis courts with lighting and rooftop solar panels. The NOP comment letter is included in Appendix A of this Draft Environmental Impact Report (EIR).

4.1.1 REGULATORY SETTING

State

Division of the State Architect

The Division of the State Architect (DSA) provides design and construction oversight for K through 12 schools, community colleges, and other various State-owned and leased facilities.

City of Walnut

City of Walnut General Plan

The recently adopted 2018 *City of Walnut General Plan's* (WGP) Land Use and Community Design Element identifies gateways, corridors, landmarks, and nodes on Figure LCD-11, Community Design Plan. There is one Major Gateway at the intersection of Temple Avenue and Grand Avenue and one Minor Gateway on Temple Avenue at the eastern City boundary. Grand Avenue also serves as a Landscape Corridor from the southern City boundary to the northern City boundary. A portion of Grand Avenue from Temple Avenue to the southern boundary of Snow Creek Park is a Trail Corridor. Additionally, a Creek Corridor runs to the east of Grand Avenue from Temple Avenue to La Puente Road and another Creek Corridor runs along the Snow Creek neighborhood residential Trail Corridor to the south of the Mt. San Antonio College (Mt. SAC) campus and terminates at the southern end of campus near the Hammer Throw area and Poop Out Hill. Figure LCD-11 also identifies a Historical/Cultural Landmark at the southeast corner of the Temple Avenue/Grand Avenue intersection.

Although the Scenic Highway Element of the WGP does not officially designate any scenic highways, routes, or vistas, it does describe certain streets that possess scenic attributes that qualify them as scenic routes. In the vicinity of the Mt. SAC campus, these include Temple Avenue from the west City limits to the east City limits, Mountaineer Road between Grand Avenue and San Dimas Avenue, and Grand Avenue between Valley Boulevard and the northern City limits.

City of Walnut Planning and Zoning Ordinance

Chapter 6.08 of Title 6, Planning and Zoning, the Walnut Municipal Code includes the City's Zoning Provisions, which regulate development in the City. It establishes zones in a zoning map

and includes development standards (e.g., building setbacks, building height, yards, vision clearance, lot area); permitted principal, accessory, and conditional uses; parking requirements; sign standards; and reviews, licenses, and permits needed to comply with the applicable zone.

As part of the consistency zoning process (i.e., to make the zoning code consistent with the recently adopted WGP), the City is proposing the creation of a Schools and Public Institutional (SPI) zone, including development standards; permitted, conditionally permitted, and prohibited uses; and other regulations.

Relevant to the proposed 2018 EFMP, permitted principal uses include:

- Colleges and related classroom facilities
- Public transit centers/transportation facilities
- Pedestrian bridges (in connection with public use)
- Utility infrastructure/facilities
- Parking facilities
- Wildlife preserves
- Other similar types of public facilities and related amenities on publicly owned land
- Emergency operations and facilities equipment.
- Maximum building height of three stories and no more than 35 feet
- Setbacks of 20 feet from public rights-of-way, minimum of 10 feet from any interior property line, 300 feet between residential properties and on-campus parking facilities (including parking garages or transit centers but excluding surface parking lots and public utility services [e.g., water pump stations and electrical substations]).

Proposed development standards applicable to non-classroom structures include:

- Site development plan review by the Planning Commission
- Maximum building height of three stories and no more than 35 feet
- Setbacks of 20 feet from public rights-of-way, minimum of 10 feet from any interior property line, 300 feet between residential properties and on-campus parking facilities (including parking garages or transit centers but excluding surface parking lots and public utility services [e.g., water pump stations and electrical substations]).
- Compliance with landscaping standards for water efficient landscaping and off-street parking requirements in the Walnut Municipal Code
- Screening from public views or enclosure of trash receptacles, mechanical equipment, and other utilities
- A community theme for walls, fences, screening, and enclosures, as approved by the Community Development Department
- Improvement of public sidewalks and filling of gaps in pedestrian accessibility
- Compliance with requirements for areas visible from the public right-of-way, telecommunication and emergency operations equipment, and sign regulations in the Walnut Municipal Code

In addition, the City is proposing various zone changes to the Zoning Map to match the recently adopted WGP Land Use Plan. Relevant to the proposed 2018 EFMP, the campus area east of Grand Avenue is proposed to be rezoned to SPI to provide a consistent land use and zoning designation. The proposed Zoning Code Amendment (ZCA) and Zone Change (ZC) were recommended by the Walnut Planning Commission to the City Council for approval on September 5, 2018. The City Council heard this matter on January 9, 2019 and moved to continue this item until the settlement agreement between Mt. SAC and the City of Walnut is definitive.

4.1.2 METHODS

The analysis of visual impacts focuses on the nature and magnitude of changes in the visual character of the campus that would occur with implementation of the proposed 2018 EFMP, including the visual compatibility of on-campus and adjacent uses, public vantage points where visual changes would be evident, and the introduction of sources of light and glare. A site visit was conducted to document the existing visual character and context of the campus. The effects related to visual character and quality are assessed qualitatively. Visual change that is compatible with existing patterns of development would not constitute a significant impact.

A computer-generated lighting study for the proposed tennis courts on the top level of Parking Structure R was prepared for analysis purposes by Musco Lighting and is included as Appendix B to this EIR. This analysis calculates the horizontal foot-candles, vertical foot-candles, and candela lighting levels (i.e., candlepower) that would result assuming athletic field lighting is being used at each of the existing athletic fields and proposed tennis courts at the same time. This analysis assumes that light-emitting diode (LED) lights would be installed as proposed with the project. The tennis courts would have sufficient lighting to accommodate nighttime practice and recreational play.

4.1.3 ENVIRONMENTAL SETTING

Following is a discussion of the current environmental setting of the campus and surrounding areas regarding topography/landforms and aesthetics/visual character.

Topography and Landforms

As shown in Exhibit 3-1, the campus is bound by residential development to the north and south; residential and commercial development to the west; and Cal Poly Pomona (CPP) and the closed Spadra Landfill and undeveloped land, both of which are within the City of Pomona, to the east. The San Jose Hills border the Mt. SAC campus to the north, and hilly terrain occurs in the southern and eastern portions of campus. The most prominent natural feature in the vicinity of the campus is the San Jose Hills, which have a maximum elevation of approximately 1,375 feet above mean sea level (msl) at Buzzard Peak. The campus sits in a valley that is surrounded by residential neighborhoods and open space. The hills along the eastern and southern boundaries of campus effectively provide a physical and visual barrier between the campus and residential uses to the east and south.

The campus encompasses 418.44 acres and has been subject to previous grading and development activities. However, these activities have been sensitive to the natural terrain to the extent feasible; elevations across the campus range from approximately 975 feet above msl in the northeast to approximately 663 feet above msl in the southwest. As shown on Exhibit 4.1-1, Existing Slope Analysis, the majority of the campus has slopes of 2 percent or greater, with slopes of 5 percent or greater located throughout the northern portion of campus, and other areas with slopes of 10 percent or greater within the southern and eastern portions of campus.

BUILDING KEY

ID No.	BUILDING NAME
1A	Art Center
1B/C	Art Center / Gallery
2T/M	Performing Arts Center
3	Gymnasium
4	Administration
6	Library/Learning Technology Center
6A	Information Kiosk
7	Science South
8	Mountie Café
9A	Sac Book Rac (Bookstore)
9B	Student Services Center
9C	Student Life Center
9D	Modular 9D
9E	Student Success Center
9F	Modular 9F
9G	Modular 9G
10	Founders Hall
11	Science North
12	Building 12
12C	Elevator Tower
13	Design Technology
16A	Express Stop Modular
16B	Modular 16B
16C	Modular 16C
16D	Math Success Lab Modular
16E	Equity Center Modular
16F	Campus Testing Center Modular
17	Building 17
18	Building 18
18A	Modular 18A
18B	Modular 18B
18C	Technical Education Resource Center (TERC) Modular
18D	Classroom Modular
19A	Building 19A
19B	Building 19B
19C	Mountie Grill
20	Building 20
21A–21C	Classroom Modulars
21D	Innovative Business Projects Modular
21E	Toilet Room Modular
21F–21J	Classroom Modulars

ID No.	BUILDING NAME
23	College Services
23A	Data Center
26A	Humanities/Social Sciences North
26B	Humanities/Social Sciences East
26C	Planetarium
26D	Humanities/Social Sciences South
27A	Exercise Science/Wellness Center
27B	Pool Building
27C	Physical Education Center
28A/B	Technology Center
29	Central Plant
29B	Central Plant Office Modular
30	Adult Basic Education Center
31A/B	Cont. Ed./ESL Modular
31C	Toilet Room Modular
32	Cont. Ed./ESL Modular
35	Cont. Ed./ESL Modular
36	Older Adults Modular
38A	Adult High School Diploma Modular
38B	Basic Skills Modular
40	Building 40
40A	Modular 40A
40B	Modular 40B
43	Tilden Coil Constructors/ Vinewood Modular
44	Athletics Modular
45	Kinesiology/Athletics/ Dance
46	Emergency Operations Center
46A	Document Storage Modular
47	Facilities Planning + Management / Maintenance + Operations
48	Receiving/Transportation
51	Athletics Storage
60	Science Laboratories

ID No.	BUILDING NAME
61	Math and Science
66	Language Center
67A	Health Careers Center
67B	Health Careers Center
69	Welding, Heating/Air Conditioning
70–73	Child Development Complex
77–79	Business and Computer Technology
80	Agricultural Science
104	Brackett Field (Off Campus)
BH	Block House
F1	Horticulture Unit
F1A	Sherman Park Restrooms
F2A	Farm Offices
F2B	Horticulture Storage
F2C	Irrigation + Landscape Construction
F3	Equipment Barn
F3A	Old Dairy Unit
F4A	Swine Market Pens
F4B	Swine Farrowing House
F5A	Vivarium
F5B	Small Animal Care Unit
F6A	Equine Breeding Barn
F6B	Equine Mare Motel
F6C	Equine Hay Barn
F7	Equipment Technology
F8	Hay Barn
F9	Livestock Pavilion
F10	48th Agricultural District Office
G1	Greenhouse
G2	Greenhouse
G3	Greenhouse
G4	Greenhouse
G5	Greenhouse
G7	Greenhouse/The Conservatory
PEP1	Physical Education Projects: Phase 1
TES	Thermal Energy Storage System
WT	Water Tower

LEGEND

- PROPERTY LINE
- EXISTING FACILITIES
- FACILITIES UNDER CONSTRUCTION
- LANDSCAPE UNDER CONSTRUCTION
- 0 - 2% SLOPE
- >2 - 5% SLOPE
- >5 - 10% SLOPE
- >10% SLOPE
- GROUND ELEVATION

REFERENCES

PSOMAS Mt. SAC Topographical Survey, 2016

Source: CBT and HMC Architects 2018

Existing Slope Analysis

Exhibit 4.1-1

Mt. SAC 2018 Educational and Facilities Master Plan EIR

N W E S

0 650 1300 2600 Feet

PSOMAS

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Visual Character of the Campus and Surrounding Areas

Currently, the Mt. SAC campus comprises 144 buildings. Existing buildings on campus range in age from the oldest building constructed in the 1940s to the newest constructed in 2017.

The Mt. SAC campus has a cohesive visual character defined primarily by one- to three-level buildings located primarily in the northern and western portions of the campus (the Academic Core), roadways and surface parking lots primarily within and along the perimeter of the Academic Core, extensive mature vegetation on the southwest edge of campus, and edges that consist of hills which provide a visual buffer and enhance the visual character of the built environment.

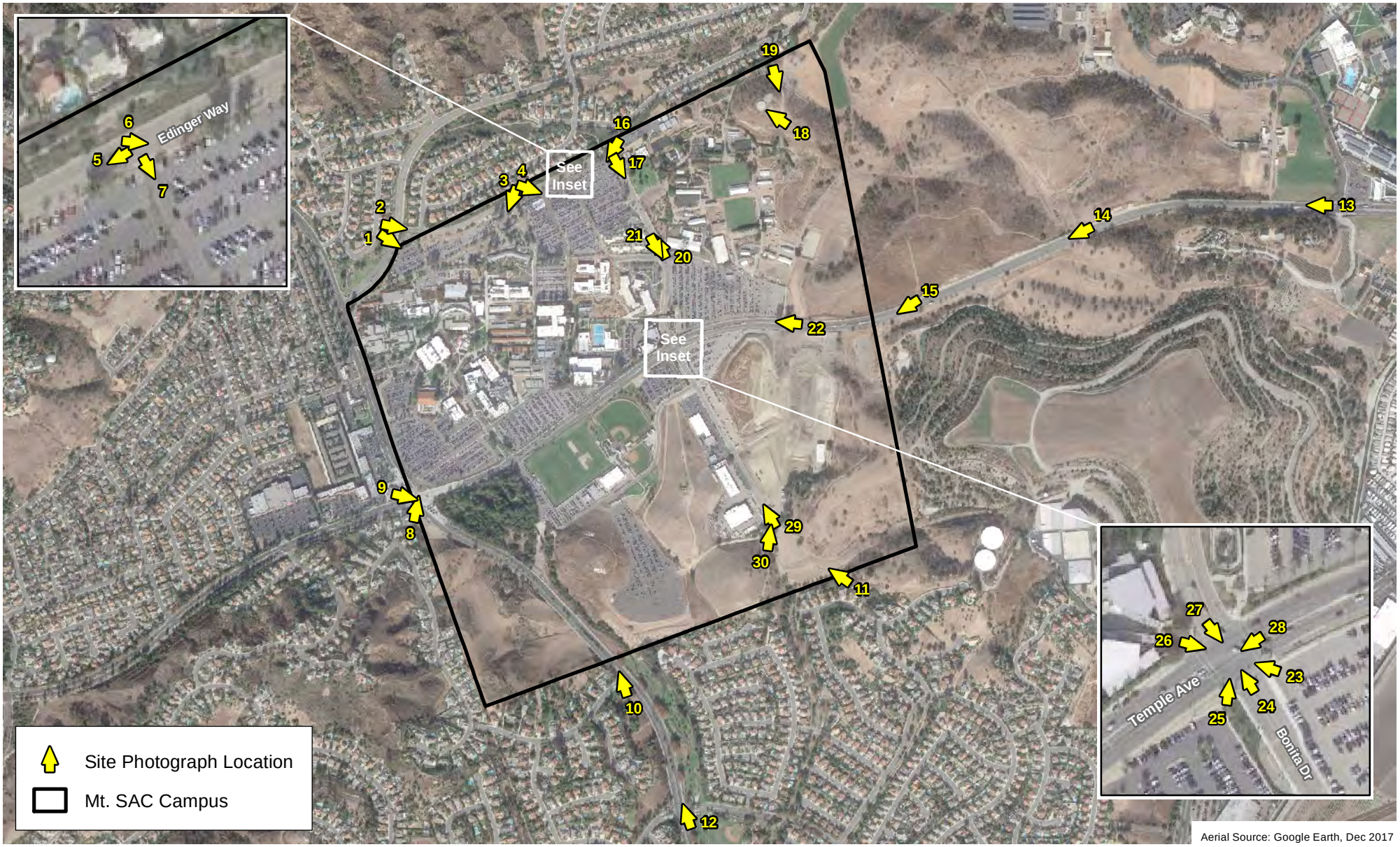
The Wildlife Sanctuary, located on the southeast corner of the Grand Avenue/Temple Avenue intersection, provides a unique scenic resource and creates a natural buffer between the campus and development to the west. The campus has no other unique scenic resources; however, the San Jose Hills are a prominent natural feature located north of and visible from the campus. Additionally, the campus edges to the north, east, and south consist of hilly terrain, including Reservoir Hill and MSAC Hill, which are prominent natural features and act as visual buffers screening campus buildings from adjacent uses.

Due to the location of the campus, the varying topography in the area, and the presence of mature vegetation and existing development, the views of the campus vary substantially based on where the viewer is located in relation to the campus. However, views into the campus are largely limited to vantage points in the immediate vicinity. Views from distant vantage points are obstructed due to intervening topography, vegetation, and development. Ground photographs have been taken from various vantage points surrounding the campus and on campus to depict the visual character of the campus and surrounding areas. Exhibit 4.1-2, Photograph Location Index, provides an index of the vantage points where ground photographs were taken.

The following describes the existing visual character/setting of the campus and surrounding area as demonstrated by the site photographs provided in Exhibits 4.1-3a through 4.1-3o. It should be noted that existing site photographs were taken from multiple vantage points surrounding the campus and on the campus to demonstrate the varying visual character that is experienced depending on the location.

Views from North of the Campus

The campus is visible from Edinger Way, a campus perimeter road. Views 1 through 7 in Exhibits 4.1-3a through 4.1-3d show existing views from vantage points along Mountaineer Road and Edinger Way. As identified previously, Mountaineer Road was previously identified as having attributes that would qualify it as a scenic route. Views 1 and 2 in Exhibit 4.1-3a are representative of momentary views from motorists, bicyclists, and pedestrians traveling along this roadway. As shown, views of the campus are partially obstructed by existing mature trees and vegetation along the western campus perimeter. These photographs also show partially obstructed background views of the hills along the eastern and southern edges of campus and the topographic changes throughout campus. Views 3 through 7 represent views of the campus from the north along Edinger Way. Currently, from these vantage points, there are little to no views of campus buildings due to intervening topography and mature trees. As shown in View 7, only the upper levels or roofs of campus buildings, including the Child Development Complex (buildings 70–73) and Business and Computer Technology (buildings 77–79), can be seen in the background. This is due to the change in elevation, with Edinger Way being at a higher elevation than much of the campus; because existing buildings on campus are set back from the northern campus edge.



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Photograph Location Index

Exhibit 4.1-2

Mt. SAC 2018 Educational and Facilities Master Plan EIR

N W E S

1,200 600 0 1,200 Feet

PSOMAS

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View 1

View 2

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Existing Views

Exhibit 4.1-3a

Mt. SAC 2018 Educational and Facilities Master Plan EIR

PSOMAS

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View 3

View 4

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Existing Views

Exhibit 4.1-3b

Mt. SAC 2018 Educational and Facilities Master Plan EIR

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View 5

View 6

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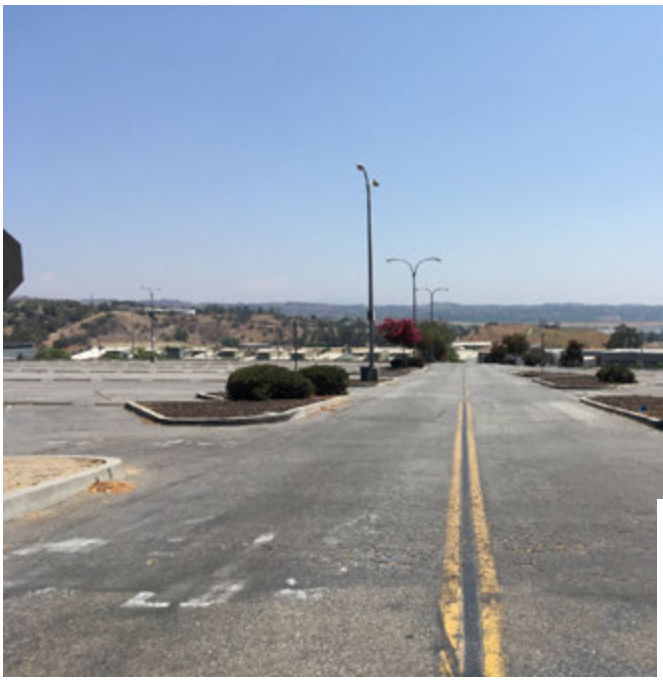
Existing Views

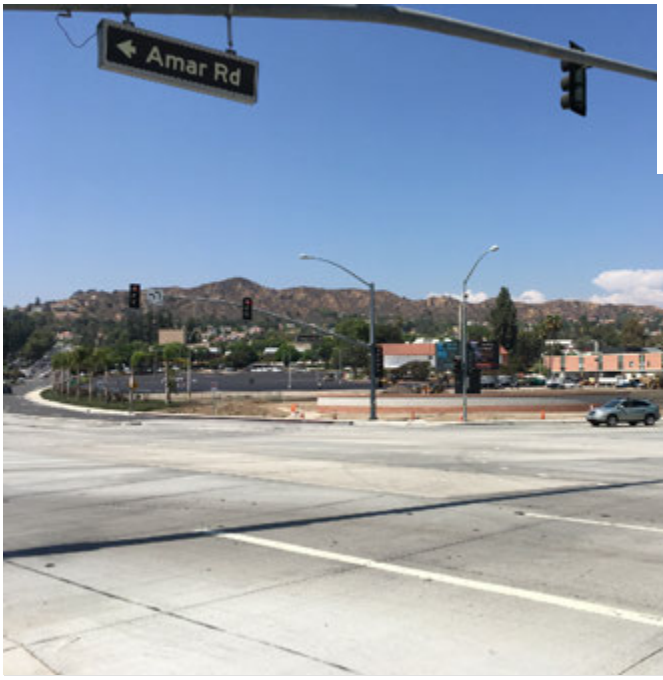
Exhibit 4.1-3c

Mt. SAC 2018 Educational and Facilities Master Plan EIR

PSOMAS



View 7



View 8

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Existing Views

Exhibit 4.1-3d

Mt. SAC 2018 Educational and Facilities Master Plan EIR

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View 9

View 10

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Existing Views

Exhibit 4.1-3e

Mt. SAC 2018 Educational and Facilities Master Plan EIR

PSOMAS

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View 11

View 12

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Existing Views

Exhibit 4.1-3f

Mt. SAC 2018 Educational and Facilities Master Plan EIR

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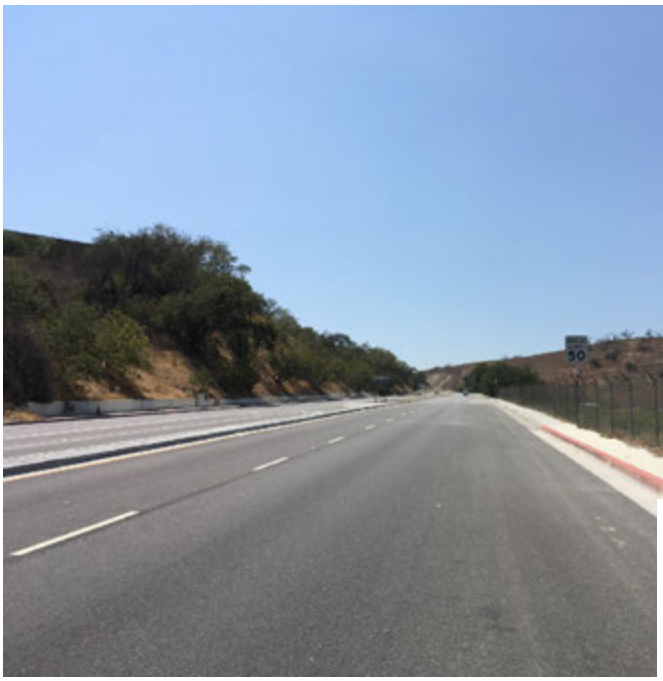
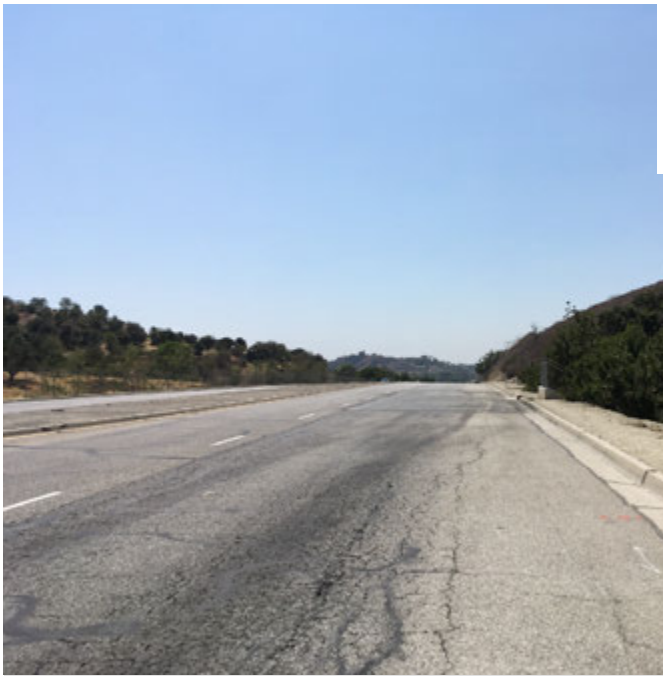


View 13



View 14

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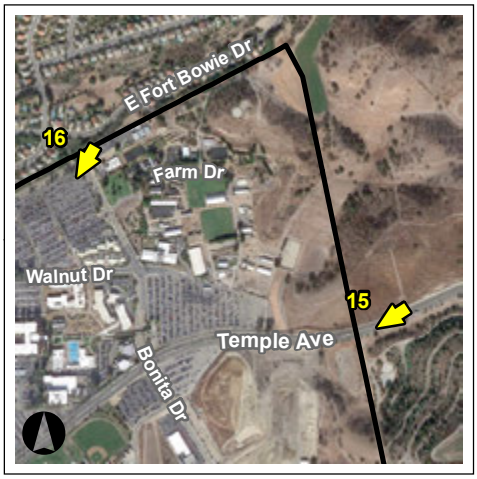
Existing Views

Exhibit 4.1-3g

Mt. SAC 2018 Educational and Facilities Master Plan EIR

PSOMAS

View 15



View 16

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Existing Views

Exhibit 4.1-3h

Mt. SAC 2018 Educational and Facilities Master Plan EIR

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View 17

View 18

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Existing Views

Exhibit 4.1-3i

Mt. SAC 2018 Educational and Facilities Master Plan EIR

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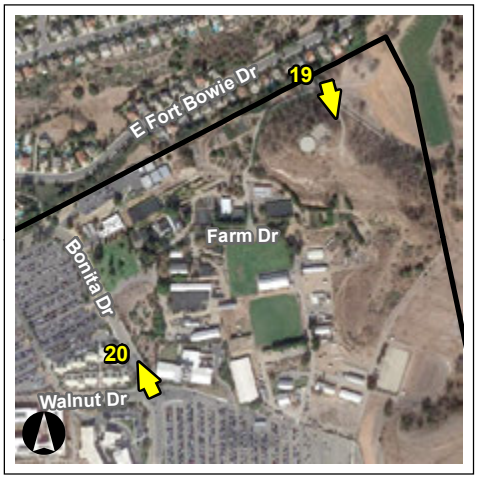
View 19



View 20

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Existing Views

Exhibit 4.1-3j

Mt. SAC 2018 Educational and Facilities Master Plan EIR

PSOMAS

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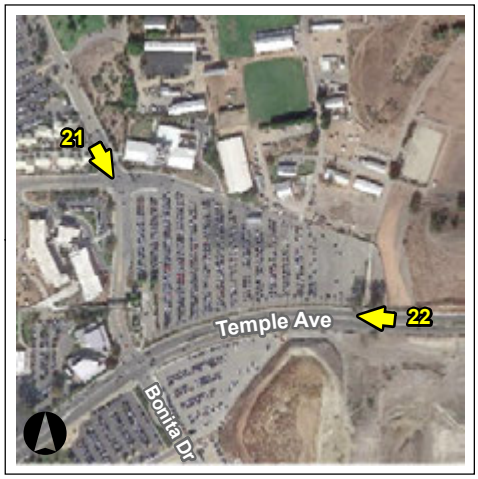
View 21



View 22

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Existing Views

Exhibit 4.1-3k

Mt. SAC 2018 Educational and Facilities Master Plan EIR

PSOMAS

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View 23

View 24

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Existing Views

Exhibit 4.1-3l

Mt. SAC 2018 Educational and Facilities Master Plan EIR

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View 25

View 26

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Existing Views

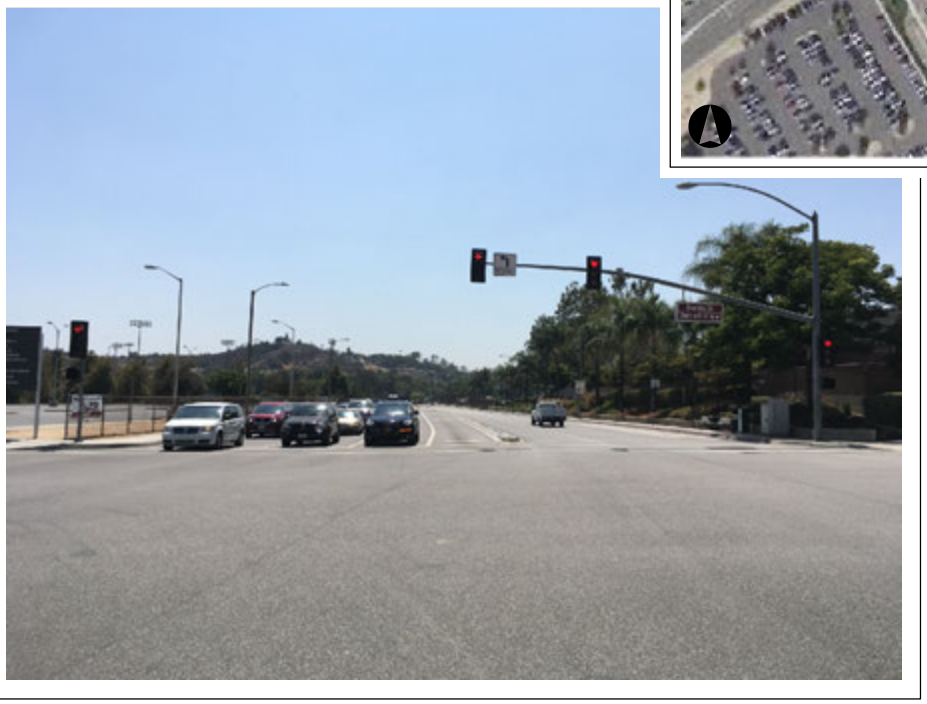
Exhibit 4.1-3m

Mt. SAC 2018 Educational and Facilities Master Plan EIR

PSOMAS

(Rev: 10/25/2018 MMD) R:\Projects\MTS\3MTS010300\Graphics\EIR\ex_photos.pdf

View 27



View 28

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Existing Views

Exhibit 4.1-3n

Mt. SAC 2018 Educational and Facilities Master Plan EIR

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View 29

View 30

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Existing Views

Exhibit 4.1-3o

Mt. SAC 2018 Educational and Facilities Master Plan EIR

PSOMAS

Views 2, 4, and 5 also show the steep, heavily vegetated slope that separates the campus from the Timberline residential neighborhood to the north.

Views from West of the Campus

Views 8 through 10 on Exhibits 4.1-3d and 4.1-3e show existing views of the campus from vantage points along the western boundary of the campus, along Temple Avenue and Grand Avenue. These photographs are representative of what motorists, bicyclists, and pedestrians view from this roadway. View 8, shown in Exhibit 4.1-3d, is looking at the northeast corner of the Grand Avenue/Temple Avenue intersection and shows the northwestern portion of the campus. This view shows both the elevation change in Grand Avenue and the prominence of the San Jose Hills in the background.

Views 9 and 10, shown in Exhibit 4.1-3e, are looking at the southeast corner of the Grand Avenue/Temple Avenue intersection and at the east side of Grand Avenue from Stonybrook Drive, respectively. The southwestern perimeter of the main campus in general consists of hilly terrain and is heavily vegetated with mature trees and other vegetation. Views into the campus from these views are mostly obstructed, as the perimeter vegetation and hills are the prominent visual features from these of the views. As shown in View 10, parking lot light standards and fencing around Lot M are visible from vantage points along Grand Avenue. View 9 shows that there are no views of existing buildings on the southern portion of the campus nor are there views of residential uses in the background.

Views from South of the Campus

Views 11 and 12 on Exhibit 4.1-3f show existing views from vantage points at the south and southwest edges of the campus. An equestrian trail is located immediately south of the campus, north of the Snow Creek neighborhood residences along Buckskin Drive. View 11 shows the view from the equestrian trail looking northwest. In the foreground of this view is a cattle grazing area owned by Mt. SAC; in the middleground is the Hammer Throw area; and in the background is Reservoir Hill and the San Jose Hills farther in the distance. From this vantage point, only one partially obstructed campus building and the two aboveground storage tanks on top of Reservoir Hill can be seen. As shown in View 12, views of the campus from the southwest are completely obstructed by the mature vegetation along Grand Avenue and MSAC Hill.

Views from East of the Campus

Views 13 through 15 on Exhibits 4.1-3g and 4.1-3h depict views from vantage points from east of the campus along Temple Avenue. As shown in Views 13 and 14, there are no public views of the campus from the east due to intervening topography. However, View 15 shows that near the eastern City boundary, which is also the eastern boundary of the campus, obstructed views of the southern portion of campus can be seen. The prominent views in the foreground of this photograph are the Temple Avenue roadway, hills, and vegetation; and the middleground view shows the construction equipment related to the Physical Education Project Phase 1 (PEP Phase 1), which is on the southeastern edge of campus. There are no views of the northeastern portion of campus from this vantage point. In the background of View 15, there are obstructed views of the Snow Creek neighborhood residences to the west of the West Parcel.

Views from Vantage Points Internal to the Campus

Views 16 through 30 on Exhibits 4.1-3h through 4.1-3o show views of the campus from various vantage points internal to the campus. View 16 shows the view looking southwest from the

driveway from the Adult Basic Education Center. As shown, like the Timberline residential neighborhood just north of the Edinger Way, the existing Lot H sits at a lower elevation than the Adult Basic Education Center (building 30); and much of the view of Lot H is obstructed by slopes and mature trees. The background consists mostly of obstructed views of campus buildings. View 17 shows the view looking southeast on Bonita Avenue. This photograph shows mostly obstructed views of campus buildings from this vantage point due to trees and vegetation and also shows the dramatic change in topography from this point toward Walnut Avenue. Views of Lot F (in the middleground) from this point are unobstructed, with prominent views of the hills on the southern edge of campus in the background.

Views 18 and 19 on Exhibits 4.1-3i and 4.1-3j show the location of the existing underground utilities infrastructure water tank in the Farm Precinct off Reservoir Road. Views 18 and 19 are taken from the southeast looking northwest and the northeast looking southwest, respectively. These views show that the steep slope that the water tank is located on, in addition to the trees and other vegetation on this hill, obstruct views of the water tank from the rest of the campus.

Views 20 and 21 on Exhibits 4.1-3j and 4.1-3k depict views along Bonita Avenue from Walnut Avenue. View 20 looks northwest along Bonita Avenue and shows that views of the rest of the campus from this vantage point, as well as views of most of the Timberline residential neighborhood north of campus, are obstructed by intervening vegetation and development. View 21 looks toward the southeastern corner of the Bonita Avenue/Walnut Avenue intersection; this view shows the uninterrupted views of the hillside to the southeast of campus from this vantage point, but little to no views of the rest of the southern portion of campus due to intervening vegetation and the curvature of the roadway.

Views 22 through 28 on Exhibits 4.1-3k through 4.1-3n are views from different vantage points along Temple Avenue. View 22 is looking west along Temple Avenue from the south entrance to Lot F. This view shows that, due to mature trees along the roadway, development near the intersection of Bonita Drive and Temple Avenue is obstructed. No views of any development further west of that intersection can be seen due to a curve in the road, mature trees and vegetation, and intervening topography.

Views 23 through 28 are views from the intersection of Bonita Drive and Temple Avenue. View 23 looks to the northwest toward Welding, Heating/Air Conditioning (building 69). This view shows that the trees and vegetation on the northwest corner of this intersection majorly obstruct views of the development behind it. View 24, which looks northwest up Bonita Drive, shows views of some buildings south of Walnut Avenue, one of which obstructs a portion of the San Jose Hills that lie in the background. However, vegetation, the curvature of the road, and the pedestrian ramp and bridge obstruct all views of other development to the north/northwest. Similarly, View 25 shows that the vegetation and the pedestrian ramp and bridge obstruct much of the development to the north and partially obstruct views of the San Jose Hills. View 26 looks to the south toward the athletic fields and MSAC Hill. The most prominent features in this photograph are the two hills in the middle and backgrounds (Reservoir and MSAC Hills) and the mature trees and vegetation which obstruct views of the athletic fields and related campus buildings. View 27 shows the view to the southeast down Bonita Drive. In the middle and backgrounds, the hills on the southern edge of campus can be seen prominently, as well as the vegetation that lines the hills at the end of Bonita Drive. This vegetation and the intervening topography obstruct views of the Snow Creek neighborhood residences to the south and southeast. The campus buildings that line the west side Bonita Drive are unobstructed from this vantage point. View 28 looks southwest along Temple Avenue and reinforces that the vegetation along the northern edge of Temple Avenue and the vegetation in front of the athletic fields obstruct views of the campus and off-campus commercial development to the northwest and campus development and athletic fields southwest,

respectively. The background of this photograph provides distant, mostly obstructed views of the Snow Creek residential neighborhood to the southwest.

Finally, Views 29 and 30 on Exhibit 4.1-3o show the views from the southern end of Bonita Drive near the Hammer Throw area toward the northwest. From View 29, there are views of the buildings on the western side of Bonita Drive, as well as the upper levels of campus buildings to the north and northwest above Temple Avenue. From View 30, views of campus development are obscured by intervening vegetation as well as construction activities for the new stadium. The most prominent feature in these photographs are the San Jose Hills in the background, which are significantly taller than the development on campus. The Timberline neighborhood residences to the north of campus can be seen at a higher elevation than the campus in these views.

Light and Glare

Existing sources of lighting on campus primarily include security lighting for buildings, walkways, bikeways, and parking lots; sports field lights used at the soccer fields, softball field, and Mazmanian (baseball) Field; and light standards along the streets. Approximately 17 existing sports field lights which are used in the evening hours are present at the soccer fields, softball field, and Mazmanian Field.

Ambient lighting also comes from off-campus uses, including residential uses north, west, and south of the campus, commercial uses west of the campus, and street lighting.

Existing daytime glare could reflect from building windows; however, buildings are finished with materials that do not provide a significant source of daytime glare. The landscaping around and between buildings also serves as a visual screen that further reduces glare from the existing buildings. Currently, nighttime glare is primarily associated with vehicle headlights and, to a lesser extent, on-campus lighting.

4.1.4 THRESHOLDS OF SIGNIFICANCE

According to Appendix G of the California Environmental Quality Act (CEQA) Guidelines, a project will normally have a significant adverse environmental impact related to aesthetics if, except as provided in Public Resources Code Section 21099, it will:

- Have a substantial adverse effect on a scenic vista.
- Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway.
- 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?
- Create a new source of substantial light or glare which would adversely affect day or nighttime views of the area.

Mt. SAC 2016 CEQA Thresholds of Significance

To the extent the following thresholds of significance are applicable to the proposed 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 the parking lot boundary	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 (fc) and prolonged exposure off-site
CDFW: California Department of Fish and Wildlife; fc: Foot-candle(s); IES: Illuminating Engineering Society				

4.1.5 ENVIRONMENTAL IMPACTS

Impact Analysis

Threshold 1.1	Would the project have a substantial adverse effect on a scenic vista?

2018 Educational and Facilities Master Plan (Phases 1A, 1B, and 2)

As mentioned in Section 4.1.1, Regulatory Setting, above, the recently adopted 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 2018).

The improvements under Phases 1A, 1B, and 2 would occur throughout campus but would be heavily focused in the northwestern portion of campus. Exhibits 4.1-4a and 4.1-4b, Proposed 2018 EFMP 3D Aerial Renderings, illustrate the anticipated visual appearance of the campus with implementation of the proposed Project. As discussed above, the improvements occurring toward the center of the campus would not be visible from the Major Gateway due to the curvature of the roadway and intervening topography and vegetation; this would include implementation of all construction and improvements under Phase 1A, the majority of the improvements under Phase 1B, and some improvements under Phase 2. Any improvements under Phases 1B and 2 that front either Temple Avenue or Grand Avenue in the northwest portion of the campus have the potential to be viewed from the Major Gateway. All of these areas to be improved are either currently

Source: HMC Architects 2019

View from Northwest

Exhibit 4.1-4a

Mt. SAC 2018 Educational and Facilities Master Plan EIR

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Source: HMC Architects 2019

View from Southwest

Exhibit 4.1-4b

Mt. SAC 2018 Educational and Facilities Master Plan EIR

PSOMAS

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developed with structures or surface parking or are surrounded by development. As discussed previously and detailed in Section 4.10, Land Use and Planning, 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 (for non-classroom facilities) 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. None of the proposed improvements under Phases 1A, 1B, or 2 would be visible from the Minor Gateway. Additionally, the proposed improvements would not be viewed from or affect the Historical/Cultural Landmark.

Similar to views from the Major Gateway, improvements under Phases 1B and 2 that front either Temple Avenue or Grand Avenue in the northwest portion of the campus have the potential to be visible from the Landscape and Trail Corridors along Grand Avenue. As previously described, views of the campus from the Trail Corridor that runs behind the Snow Creek neighborhood residences along Buckskin Drive are mostly obstructed. The minor improvements under Phases 1B and 2 that are closest to the Hammer Throw area may be visible, but all other improvements on campus would be obscured by intervening topography and vegetation. Additionally, these sites are currently developed, and these minor improvements would not add bulk to the existing development. Views of the campus from the Creek Corridor which terminates near the Hammer Throw area are partially obstructed; however, there may be views of the minor improvements to Buildings 47 and 48, the construction of Parking Structure R (as described above), and future improvements and construction located on the existing Lot F. As previously described, the minor improvements to these buildings and the construction of Parking Structure R would not block any scenic views from this Creek Corridor. Any improvements at Lot F under Phase 2 would be surrounded by development and would not obstruct any scenic views. Additionally, views of the Lot F improvements may actually be obstructed by the stadium, which is currently under construction. Views from the Creek Corridor that terminates in the Wildlife Sanctuary would be mostly obscured by intervening topography and vegetation with the exception of brief views of Phase 1B improvements where the vegetation breaks at Mt. SAC Way. Any distant views of the hillsides from this break in the vegetation would not be obstructed by the proposed improvements.

Level of Significance Prior to Mitigation

Less than significant.

Recommended Mitigation Measures

No significant impacts were identified, and mitigation is not required.

Level of Significance After Mitigation

Less than significant.

Project-Specific

Parking Structure R and Tennis Courts, Parking Structure S and West Temple Avenue Pedestrian Bridge, Student Center and Central Campus Infrastructure, Bookstore, and Sand Volleyball Courts and Parking Lot W Reconstruction

As mentioned in Section 4.1.1, Regulatory Setting, above, the 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 2018).

Specific proposed projects that would be constructed during Phase 1A of the proposed 2018 EFMP include the Student Center and Central Campus Infrastructure in the northwestern portion of the campus; Parking Structure R and Tennis Courts in the southeastern portion of the campus; Parking Structure S and West Temple Avenue Pedestrian Bridge near the center of campus; and the Sand Volleyball Courts and Parking Lot W Reconstruction in the southwestern portion of the campus (refer to Exhibit 3-4 in Section 3.0, Project Description). Phase 1B would involve construction of the Bookstore which would occur in the northwestern portion of the campus (refer to Exhibit 3-4 in Section 3.0, Project Description).

Figure LCD-11 of the WGP Land Use and Community Design Element identifies a Major Gateway at the intersection of Temple Avenue and Grand Avenue and a Minor Gateway on Temple Avenue at the eastern City boundary. As demonstrated in Views 8, 9, and 15 (Exhibits 4.1-3d, 4.1-3e, and 4.1-3h), development toward the center of the campus, which would include project development under Phases 1A and 1B, would not be visible from the identified Major or Minor Gateways due to intervening topography, development, and vegetation. Additionally, Figure LCD-11 identifies a Historical/Cultural Landmark at the southeast corner of Temple Avenue and Grand Avenue within the Wildlife Sanctuary area; however, development associated with these projects would not be visible from this Landmark.

Figure LCD-11 also identifies Grand Avenue as a Landscape Corridor and the portion of Grand Avenue from Temple Avenue to the southern boundary of Snow Creek Park as a Trail Corridor. As shown in Views 8, 9, 10, and 12 (Exhibits 4.1-3d through 4.1-3f), views from the south into the campus from Grand Avenue are obstructed by intervening topography and vegetation. Buildings along the edge of campus can be viewed when traveling along Grand Avenue between approximately Mountaineer Road and Temple Avenue; however, due to the placement of those buildings and the existing vegetation, as well as the topography and curvature of the roadway, development associated with these projects would not be visible from the Trail or Landscape Corridors along Grand Avenue.

The WGP Land Use and Community Design Element also identifies two Creek Corridors that terminate in the southern portion of the campus: one that follows the Trail Corridor along Grand Avenue from Snow Creek Park and terminates in the Wildlife Sanctuary and one that follows an equestrian trail which runs through the Snow Creek residential neighborhood south of campus and terminates on campus near the existing Hammer Throw area. An additional Trail Corridor also follows the Creek Corridor which runs along the equestrian trail but, instead of terminating on campus, it loops behind the Snow Creek residential uses along Buckskin Drive and continues south on Percheron Drive. As shown in View 11 (Exhibit 4.1-3f), which depicts views from the Trail Corridor that runs behind the Snow Creek residential uses along Buckskin Drive, views of the campus from this Trail Corridor are mostly obstructed. No projects proposed for construction during Phases 1A or 1B would be visible from here. As shown in View 30 (Exhibit 4.1-3o), which looks north into the campus from the Creek Corridor terminus near the Hammer Throw area, the

proposed Parking Structure R and Tennis Courts project could be viewed from this Corridor. Although the new two-level structure could obstruct distant views of the hills from this Corridor, the new stadium (PEP Phase 1) adjacent to the parking structure, which is currently under construction, would be taller than this structure and would obstruct distant views prior to construction of Parking Structure R. Additionally, pedestrians along the Creek Corridor, which terminates in the Wildlife Sanctuary, would have no views of the campus due to intervening topography and vegetation with the exception of potential brief views of the Bookstore and Student Center and Central Campus Infrastructure from a break in the vegetation near Mt. SAC Way. Any distant views of the hillsides from this break in the vegetation would not be obstructed by the proposed Bookstore and Student Center and Central Campus Infrastructure projects.

Level of Significance Prior to Mitigation

Less than significant.

Recommended Mitigation Measures

No significant impacts were identified, and mitigation is not required.

Level of Significance After Mitigation

Less than significant.

Threshold 1.2	**Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway?**

2018 Educational and Facilities Master Plan (Phases 1A, 1B, and 2) and Project-Specific

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 proposed 2018 EFMP project site, respectively (Caltrans 2011). Views of the proposed Project site from the portion of State Route (SR) 57, which is an Eligible State Scenic Highway, are completely obstructed by intervening topography. Therefore, implementation of Phases 1A, 1B, and 2 would not damage scenic resources within a State scenic highway.

Level of Significance Prior to Mitigation

No impact.

Recommended Mitigation Measures

No impacts were identified, and mitigation is not required.

Level of Significance After Mitigation

No impact.

Threshold 1.3	**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?**

The visual impacts of a project include both the objective visual resource change created by the project and the subjective viewer response to that change. Distance from a project site, frequency of view, length of view, viewer activity, viewer perception, and viewing conditions contribute to the assessment of a visual impact. Different viewer groups' perception of the visual environment and its elements varies based on viewer activity and awareness. Activities such as commuting in traffic can distract an observer from many aspects of the visual environment. Off-site views for motorists are short-lived. Conversely, pleasure driving or relaxing in a scenic environment can encourage an observer to look at the view more closely and at greater length, thereby increasing the observer's attention to detail. Sensitivity is also determined by how much the viewer has at stake in the viewshed. Typically, people who reside or own property in an area are more sensitive to change than those just passing/commuting through an area. The Mt. SAC campus is located within an urbanized area within the City of Walnut. Existing viewer groups that would experience the change in visual character resulting from the implementation of the proposed Project were previously described under existing conditions and generally include individuals traveling along adjacent roadways and City-identified Landscape, Trail, and Creek Corridors; residents that surround the campus; and individuals on campus.

2018 Educational and Facilities Master Plan (Phases 1A, 1B, and 2)

During implementation of Phases 1A, 1B, and 2, construction activities would be visible throughout the campus, including soil excavation and associated construction equipment, building construction activities and equipment, and building material stockpiles. In general, views of construction activities may be considered unappealing by some; however, construction is common in urban areas and interruptions to the visual character of a site during construction are largely accepted as a temporary inconvenience, even though individual construction projects may last for extended periods of time. Construction activities for the proposed improvements may overlap, or they could occur at different times based on the logistics of relocating on-campus uses currently located in buildings to be demolished. Other project components proposed during Phases 1A, 1B, and 2 may have shorter construction schedules. In general, views of building construction, roadway improvements, and utility installations would be temporary in nature; therefore, potential impacts would be less than significant.

Long-Term (Operational) Visual Changes

Proposed development on campus with implementation of Phases 1A, 1B, and 2 of the proposed 2018 EFMP would change the views of the campus from various on- and off-campus vantage points, primarily due to the introduction of new structures and completion of other proposed improvements to on-campus facilities. A detailed description of the proposed 2018 EFMP is provided in Section 3.0, Project Description, of this Draft EIR. Phases 1A, 1B, and 2 of the proposed Project would involve the demolition of 21 buildings, the renovation of 7 buildings, the construction of 18 buildings and parking structures, the construction of water tanks, and the implementation of various improvements around campus, including new pedestrian and vehicular circulation improvements.

Physical development on campus is required to comply with the provisions of the City's Planning and Zoning Ordinance, which addresses visual character, as described previously in Section 4.1.1, Regulatory Setting. As described previously, these regulations include landscaping, building height, and building setbacks. Light poles would be installed as part of these project elements as necessary to provide sufficient lighting for proposed activities, security, and safety. Landscaping would be installed at future development sites consistent with the recommendations set forth in the Mt. SAC Climate Action Plan (CAP) and the Landscape Guidelines included as an appendix to the 2018 EFMP, including the continued use of native and drought-tolerant landscaping.

Per Threshold 1.3, the following analysis focuses on public views of the campus; however, some of these views are representative of the visual change that would be expected from adjacent private vantage points, therefore for the purpose of the analysis, the following discussion includes potential impacts associated with views from vantage points surrounding, and internal to, the campus.

Views from North of the Campus

As discussed previously, the campus is visible from Edinger Way, a campus perimeter road which forms the northern boundary of the campus. Along this roadway views of the campus are mostly obstructed due to intervening vegetation and the fact that this road is at a higher elevation than much of the campus further south. The campus is also visible from the Timberline neighborhood residences to the north, which are located at a higher elevation than the campus. The views for these residents would not change dramatically, as the areas to be developed under Phases 1A, 1B, and 2 are currently developed with campus uses and are also surrounded by existing campus development.

Development and physical improvements are proposed along Edinger Way and would be visible from vantage points along Edinger Way as well as from the Timberline residences to the north. The proposed School of Continuing Education (SCE) buildings to be located at the corner of Edinger Way and Bonita Avenue would be the only structures that may obstruct any existing views. However, as shown in Views 1 through 7 and 16, due to the topography of the campus relative to Edinger Way and the Timberline residences to the north, these proposed structures, as well as other improvements under Phase 2, would not obstruct any distant views from Edinger Way and the Timberline residences to the north. Additionally, the proposed SCE buildings and other Phase 2 improvements along Edinger Way would not degrade the character or quality of the site as the site is currently developed with campus-related buildings and surface parking. Development and improvements under Phases 1A, 1B, and 2 would add new campus buildings and infrastructure that would maintain or improve the site's visual quality.

The construction and operation of two new underground utilities infrastructure water tanks off Reservoir Road to be implemented under Phase 2 may be visible to some Timberline neighborhood residents to the north, which sit at a higher elevation than the existing water tank. However, these tanks would be visually consistent with the existing water tank and would not block any distant or scenic views.

Therefore, development associated with the proposed 2018 EFMP would not substantially degrade the visual character of the site or surrounding areas as viewed from vantage points to the north.

Views from West of the Campus

As previously identified and shown in site photographs for Views 8 through 10 (Exhibits 4.1-3d and 4.1-3e), motorists, bicyclists, and pedestrians along Grand Avenue and East Amar Road are the primary viewer groups from vantage points to the west. Also, as discussed previously, no new major development associated with the proposed 2018 EFMP would be visible from vantage points along Grand Avenue and East Amar Road due to intervening development, topography, and vegetation, as well as the curvature of the roadway.

Project components that would potentially be visible from vantage points to the west would be implemented as part of Phase 2 and include the construction and operation of the Auditorium, Fine Arts, and Science buildings, and Parking Structure B, as well as the renovation of the College Services (building 6) and both the Science South and Science Laboratories (buildings 7 and 60), minor improvements to the Performing Arts Center (buildings 2M and 2T), and the demolition of the existing Art Center (building 1A) and Gymnasium (building 3) (refer to Exhibit 3-4 in Section 3.0, Project Description). As shown in View 8, current views from the west at the intersection of Grand Avenue and East Amar Road include unobstructed views of the Gymnasium (3), Administration (building 4), Science South (7), Science Laboratories (60), and Math and Science (building 61). Views of the College Services building (6) are mostly obstructed by vegetation except for views from San Jose Hills Road. Views of the Performing Arts Center (2T/M) are also mostly obstructed except when directly west of the building along Grand Avenue.

The minor improvements to the Performing Arts Center (2T/M) and the renovation of the College Services (6) and Science South (7) and Science Laboratories (60) buildings would not degrade the visual character or quality of these sites, as the improvements would not change the height or massing of these buildings or result in any physical changes to the buildings that would make them out of character for the surrounding area. The vegetation along Grand Avenue would continue mostly obstructing views of the Performing Arts Center (2T/M) and College Services (6) buildings after the minor improvements and renovation. Although demolition of the Art Center (1A) and Gymnasium (3) would temporarily change the appearance of the western portion of campus, these buildings would be replaced with the new Auditorium, Parking Structure B, and Fine Arts buildings. With the replacement of the Art Center (1A) and Gymnasium (3) buildings, the site would be redeveloped with new campus buildings and the character and quality of the site would be improved. Viewers from the Grand Avenue/Amar Road intersection would have unobstructed views of construction and operation of the proposed Science building but would have limited to no views from further north or south on Grand Avenue or further west on Amar Road.

Although there would be views of some of the new and renovated buildings, all of the structures under the proposed 2018 EFMP would be located within the developed campus and be surrounded by development of similar height and massing. Therefore, implementation of the proposed 2018 EFMP would not substantially degrade the visual character of the site or surrounding areas as viewed from vantage points to the west.

Views from South of the Campus

As previously identified and shown in site photographs for Views 11 and 12 (Exhibit 4.1-3f), Snow Creek neighborhood residents to the south of campus, individuals walking or horseback riding along the Trail and Creek Corridors near these Snow Creek residences, and those traveling northbound along Grand Avenue are the primary viewer groups from vantage points to the south. View 12 is also representative of some private views from Snow Creek residences south of the campus. Vantage points to the south have a limited number of viewers due to intervening

topography. As discussed previously, major development would not degrade the visual character or quality of the site.

As shown in View 12, the only portion of campus visible from Grand Avenue (at Snow Creek Drive) is the southern face of MSAC Hill. All other views of the campus are fully obstructed by mature vegetation, the hilly topography, and the curvature of the roadway. Development associated with the proposed 2018 EFMP would not change views from this vantage point. View 11 shows that, while some Snow Creek residences along the Trail Corridor have views into the campus, these views are mostly obstructed by existing topography and vegetation. The only proposed Project components that may be visible from this vantage point are the Phase 2 minor improvements at Buildings 47 and 48. Views of these buildings are largely obstructed by intervening topography and vegetation; additionally, these improvements would not change the height or massing of these sites or make any changes to the buildings that would make them out of character for the surrounding area. Views of the proposed Reuse Depot behind Building 48 are completely obstructed due to the intervening vegetation and hilly topography. Additionally, the construction and operation of the proposed Fire Training facility located within the existing Lot M could potentially be viewed briefly from Grand Avenue (see the right side of View 10). The Snow Creek neighborhood residences to the south may have limited views of this facility, as well; however, these Snow Creek residences and Grand Avenue sit at a lower elevation than Lot M, and the proposed facility would not obscure any distant views as the hillside already obscures any potential distant views.

As the proposed development near the Snow Creek neighborhood residences to the south of campus would be mostly obscured by topography and vegetation, would not block any distant views, and would not change the character or quality of the site, development of the proposed 2018 EFMP would not substantially degrade the visual character of the site or surrounding areas.

Views from the East

As previously identified and shown in site photographs for Views 13 through 15 (Exhibits 4.1-3g and 4.1-3h), views of the eastern portion of the campus are primarily from motorists and bicyclists traveling west on Temple Avenue. Vantage points to the east have a limited number of viewers, as the eastern hillside is part of the City's Open Space designated area.

As previously discussed and as shown in Views 13 through 15, views of the campus are fully obstructed by the hilly topography when traveling west on Temple Avenue until the eastern campus boundary. There would be little to no views of proposed Parking Structure R and Tennis Courts. Views of the improvements to Buildings 47 and 48 under Phase 2 would be mostly to fully obstructed by the stadium, which is currently under construction. Views of the proposed Fire Training facility would also be obstructed from vantage points to the east because Reservoir Hill, where the existing communications tower and two aboveground storage tanks are located, stands at a higher elevation than Lot M. Any proposed circulation improvements would also not be visible from vantage points to the east as they are internal to the campus and obstructed by topography, and these improvements would not degrade but rather would improve the visual character or quality of the site.

Views from Vantage Points Internal to Campus

In addition to the various photos discussed above that provide views of the campus from surrounding vantage points, Views 16 through 30 on Exhibits 4.1-3h through 4.1-3o show views of the campus from vantage points internal to the campus.

With implementation of the proposed 2018 EFMP, 21 buildings would be demolished, 18 new buildings and parking structures would be constructed, and 7 buildings would be renovated throughout the campus, in addition to the implementation of various improvements around campus, including new pedestrian and vehicular circulation improvements. With the exception of the proposed Fire Training facility, views of which would be mostly obstructed due to topography, and the proposed School of Continuing Education and Adult Education buildings, which would be located near the existing continuing education facilities (buildings 30–38B), new building construction would occur in areas that are currently developed or adjacent to existing development.

The visual changes associated with the implementation of the proposed 2018 EFMP components along the perimeter of the campus that are visible from vantage points surrounding the campus, as discussed above, would also be visible from vantage points internal to the campus. Due to the hilly topography, mature vegetation, and existing development that would remain in place throughout campus, views of many of the new, renovated, or demolished buildings and other improvements would be obscured unless viewed from adjacent on-campus buildings or properties. While the introduction of new structures and other improvements on campus would alter the existing views, the new buildings would be visually consistent with existing development on campus. Views of the San Jose Hills would be maintained. Additionally, circulation improvements would ultimately, during operation, enhance the visual character and quality of the campus.

Therefore, implementation of the proposed Project would not substantially degrade the visual character of the site or surrounding areas as viewed from various vantage points internal to campus.

In summary, implementation of the proposed 2018 EFMP would alter the views of the campus from vantage points to the north, south, east, and west and internal to the campus to varying degrees. However, these visual changes would occur within an already developed campus and would be implemented in compliance with the applicable requirements and development standards outlined in the City's Planning and Zoning Ordinance related to aesthetics. Therefore, the proposed 2018 EFMP would not substantially degrade the existing visual character or quality of the site and its surroundings. This impact is less than significant, and no mitigation is required.

Level of Significance Prior to Mitigation

Less than significant.

Recommended Mitigation Measures

No significant impacts were identified, and mitigation is not required.

Level of Significance After Mitigation

Less than significant.

Project-Specific

Parking Structure R and Tennis Courts, Parking Structure S and West Temple Avenue Pedestrian Bridge, Student Center and Central Campus Infrastructure, Bookstore, and Sand Volleyball Courts and Parking Lot W Reconstruction

Temporary (Construction-Related) Visual Changes

During construction of specific projects associated with the proposed 2018 EFMP, construction activities would be visible in various stages throughout campus, including soil excavation and associated construction equipment, building construction activities and equipment, and building material stockpiles. In general, views of construction activities may be considered unappealing by some; however, construction is common in urban areas and interruptions to the visual character of a site during construction are largely accepted as a temporary inconvenience even though individual construction projects may last for extended periods of time. Therefore, these impacts would be temporary in nature and would be less than significant.

Long-Term (Operational) Visual Changes

Proposed development on campus with development of specific projects identified in Phases 1A and 1B would change the views of the campus from various on- and off-campus vantage points, primarily due to the introduction of new institutional structures and completion of other proposed improvements to on-campus facilities. A detailed description of the specific project elements is provided in Section 3.0, Project Description, of this Draft EIR. In summary, the specific projects that are being addressed at a project level include the construction of the new Student Center and Central Campus Infrastructure, the Sand Volleyball Courts and Parking Lot W Reconstruction, Parking Structure R and Tennis Courts, and Parking Structure S and West Temple Avenue Pedestrian Bridge; and the implementation of improvements related to these construction and demolition activities during Phase 1A and construction of the Bookstore during Phase 1B.

Physical development on campus is required to comply with the applicable provisions of the City's Planning and Zoning Ordinance, which addresses visual character, as described previously in Section 4.1.1, Regulatory Setting. Applicable regulations in the Planning and Zoning Ordinance include landscaping, building height, and building setbacks and are applicable to non-classroom facilities. As detailed in Section 4.10, Land Use and Planning, each of the specific projects would comply with the development standards for the proposed SPI Zone. Mt. SAC will continue to work with the City to ensure that non-classroom facilities either conform to permitted uses or, if needed, will obtain a Conditional Use Permit. Light poles of various types and heights would be installed as part of these project elements as necessary to provide sufficient lighting for proposed activities, security, and safety.

The following analysis focuses on public views of the campus; however, some of these views are representative of the visual change that would be expected from adjacent private vantage points, as identified in the analysis below. Following is the analysis of potential impacts associated with views from vantage points surrounding and internal to the campus.

Views from North of the Campus

As discussed previously, the campus can be viewed from Edinger Way, a campus perimeter road which forms the northern boundary of the campus. Based on the location of proposed Project components in Phases 1A and 1B, the only new development that would potentially be visible from vantage points along Edinger Way is a small portion of the new Student Center and Central Campus Infrastructure project. The remaining proposed projects would be more internal to campus; would be surrounded by existing development; and would not be visible due to intervening development, topography, and vegetation. Similar to existing development along the northern boundary of the campus, views of the Student Center and Central Campus Infrastructure project from vantage points along Edinger Way would be either completely or partially obstructed or the views would be momentary, as shown in Views 3 through 7. Additionally, views of development would be limited from Mountaineer Road between Edinger Way and Grand Avenue, as shown in Views 1 and 2.

The Student Center and Central Campus Infrastructure project would not alter the visual character of the campus at those locations because similar development already exists at and/or surrounding these locations; therefore, impacts would be less than significant.

Views from West of the Campus

As previously discussed, motorists, bicyclists, and pedestrians along Grand Avenue and East Amar Road are the primary viewer groups from vantage points to the west. Based on the location of proposed Project components including the Student Center and Central Campus Infrastructure, Bookstore, Parking Structure R and Tennis Courts and Parking Structure S and West Temple Avenue Pedestrian Bridge, views of these new structures would be limited due to intervening development, topography, and vegetation, as well as the curvature of the roadway. Additionally, the proposed structures would be surrounded by development of similar height and massing. Therefore, implementation of these projects would not alter views of the campus from the west.

Views from South of the Campus

As previously discussed, Snow Creek neighborhood residents located south of campus, individuals walking or horseback riding along the Trail and Creek Corridors near these Snow Creek residences, and those traveling northbound along Grand Avenue are the primary viewer groups from vantage points to the south. Due to intervening topography, the number of viewers from vantage points to the south is limited.

As shown in View 12, the only portion of campus visible from Grand Avenue (at Snow Creek Drive) is the southern face of MSAC Hill. All other views of the campus are fully obstructed by mature vegetation, the hilly topography, and the curvature of the roadway. Development under Phases 1A and 1B would not change views from this vantage point. View 11 shows that, while some Snow Creek residences along the Trail Corridor have views into the campus, these views are mostly obstructed by the topography and vegetation.

Views from East of the Campus

As previously identified and shown in site photographs for Views 13 through 15 (Exhibits 4.1-3g and 4.1-3h), views of the eastern portion of the campus are primarily from motorists and bicyclists traveling west on Temple Avenue. The number of viewers from vantage points to the east is limited as the eastern hillside is part of the City's Open Space designated area.

As shown in site photographs, the campus is fully obstructed by the hilly topography when traveling west on Temple Avenue up until the eastern campus boundary. The only proposed Project component that may be visible from the eastern boundary would be Parking Structure R and Tennis Courts; however, this would be mostly to fully obstructed by the stadium (PEP Phase 1) which is currently under construction. Therefore, implementation of the projects associated with Phases 1A and 1B would not substantially degrade the visual character of the site or surrounding areas as viewed from vantage points east of the campus. As the majority of the proposed Project would not be visible from vantage points to the east and Parking Structure R and Tennis Courts would not be inconsistent with the surrounding development, the proposed Project would not substantially degrade the visual character of the site or surrounding areas as viewed from vantage points to the east.

Views from Vantage Points Internal to the Campus

In addition to the various photos discussed above that provide views of the campus from surrounding vantage points, Views 16 through 30 on Exhibits 4.1-3h through 4.1-3o show views of the campus from vantage points internal to the campus.

While the introduction of new structures on campus (Student Center and Central Campus Infrastructure, Bookstore, Parking Structure R and Tennis Courts, Parking Structure S and West Temple Avenue Pedestrian Bridge, and the Sand Volleyball Courts and Parking Lot W Reconstruction) would alter the existing views, the buildings would be visually consistent with existing development on campus. Views of the San Jose Hills would be maintained. Therefore, implementation of these projects would not substantially degrade the visual character of the site or surrounding areas as viewed from various vantage points internal to campus.

In summary, implementation of the specific projects to be developed under Phases 1A and 1B may alter views of the campus from vantage points to the north and internal to the campus, and to a lesser extent from the south. However, these visual changes, which would occur on an already developed campus, would be implemented in compliance with the requirements and development standards outlined in the City's Planning and Zoning Ordinance related to aesthetics and would not substantially degrade the existing visual character or quality of the site and its surroundings. This impact is less than significant, and no mitigation is required.

Level of Significance Prior to Mitigation

Less than significant.

Recommended Mitigation Measures

No significant impacts were identified, and mitigation is not required.

Level of Significance After Mitigation

Less than significant.

Threshold 1.4	**Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?**

Existing sources of lighting on campus primarily include security lighting for buildings, walkways, bikeways, and parking lots; sports field lights used at the existing athletics fields; and light standards along the streets. There is also ambient lighting from off-campus uses, including

Timberline and Snow Creek residential uses north and south of the campus, commercial uses west of campus, and street lighting. The proposed 2018 EFMP would introduce new lighting sources associated with the construction and operation of the proposed Project, including new lighting at the proposed tennis courts to allow use of the facilities to extend into evening hours (no later than 10:00 PM).

Night lighting from sports facilities is commonly the brightest source of light in the nighttime landscape (International Dark-Sky Association 2002). The analysis for light and glare from proposed athletic facility lights is based on the lighting study developed by Musco Lighting.

2018 Educational and Facilities Master Plan (Phases 1A, 1B, and 2)

Light

Short-Term (Construction-Related) Impacts

Construction activities associated with development of the proposed 2018 EFMP would not occur after 7:00 PM Mondays through Saturdays. No construction activities are permitted on Sundays and federal holidays except for emergencies. 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 would be reduced to a less than significant level.

Long-Term (Operational) Impacts

Consistent with the Landscape Guidelines included in the Appendix to the proposed 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. Additionally, as discussed in more detail below, athletic lighting would be provided at the proposed tennis courts.

Lighting under the proposed 2018 EFMP would be designed and installed so that all direct rays are confined to the site and adjacent properties are protected from glare. In general, and with the exception of lighting associated with the proposed Parking Structure R and Tennis Courts project, which is analyzed in detail below, lighting would be consistent with existing conditions on campus and in the adjacent residential communities 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, and no mitigation is required.

Glare

Short-Term (Construction-Related) Impacts

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.

Long-Term (Operational) Impacts

As discussed above for Phases 1A and 1B, 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, as part of the implementation of the proposed 2018 EFMP, Mt. SAC will be developing design guidelines and building standards to provide direction regarding the physical design of building elements, including exterior building materials. These guidelines and standards will 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, and no mitigation is required.

The proposed 2018 EFMP would involve the installation of new lighting as necessary to provide sufficient lighting for proposed activities, security, and safety. 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. In addition to the proposed addition of Parking Structures R and S as part of Phase 1A, the proposed Project would involve modifications to existing parking lots and construction of new parking structures. However, parking facilities would be provided in areas similar to existing conditions and would not result in substantial new sources of glare from vehicle headlights. This is because the access for the parking areas would be similar to existing conditions and because existing landscaping would be retained or new landscaping would be installed in and around the parking areas which would reduce the potential for glare from vehicle headlights. The vehicular circulation would also 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 2018 EFMP (Phases 1A, 1B, and 2) would not represent a new source of substantial glare; and this impact would be less than significant.

The potential glare from proposed athletic facility lighting at the Parking Structure R and Tennis Courts would be the most notable visual change associated with on-campus lighting to be installed as part of the proposed Project. Tennis court lighting would be installed with Phase 1A but is assumed in the analysis presented above for Phases 1A and 1B. As identified above, potential glare impacts from athletic field lighting would be less than significant.

Therefore, the proposed athletic facility lighting and lighting for the proposed parking structures and surface parking lots would not create a new source of substantial glare, based on the proposed lighting study.

Level of Significance Prior to Mitigation

Potentially significant.

Recommended Mitigation Measures

MM AES-1 would reduce potentially significant impacts.

Level of Significance After Mitigation

Less than significant.

Project-Specific

Parking Structure R and Tennis Courts, Parking Structure S and West Temple Avenue Pedestrian Bridge, Student Center and Central Campus Infrastructure, Bookstore, and Sand Volleyball Courts and Parking Lot W Reconstruction

Light

Short-Term (Construction-Related) Impacts

As further discussed in Section 4.11, Noise, of this Draft EIR, construction activities would be limited to daytime hours. While the hours of construction may be limited, lighting would likely be used within the construction areas (notably the construction staging areas) to provide security for construction equipment and construction materials. This type of temporary security lighting is often unshielded and may shine onto adjacent properties and roadways. None of the proposed development under Phases 1A and 1B is adjacent to residential uses; and any necessary temporary security lighting on the construction sites would be shielded from view by surrounding development, topography, and vegetation.

Long-Term (Operational) Impacts

As identified in Section 3.0, Project Description, the proposed Project involves the installation of exterior site lighting as necessary for 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 (surface lots and parking structures), roadways, pedestrian walkways, bikeways and bicycle storage facilities, buildings, and landscape features. Additionally, athletic lighting would be provided at the proposed tennis courts. All proposed lighting would be installed interior to the campus and would be installed so that all direct rays are confined to the site and would not spill over onto adjacent off-campus properties.

Athletic field lighting would be installed during Phase 1A at the tennis courts located on the top level of Parking Structure R. The tennis court lighting would be designed to allow for nighttime recreational play and would comply with National Collegiate Athletic Association (NCAA) standards. The analysis presented in this section for Phases 1A and 1B is based on a lighting study developed by Musco Lighting. The lighting study assumes up to twenty-four 50-foot poles with approximately 72 luminaires (fixtures) would be installed (refer to Exhibit 3-17 in Section 3.0, Project Description). The lighting is proposed to maximize the use of campus facilities by allowing for safe use of the athletic fields in the evening hours (no later than 10:00 PM), while also minimizing impacts to off-campus uses, including spill light and glare light.

As previously identified, an analysis of the estimated lighting levels that would occur with implementation of the proposed athletic field lighting was conducted. The lighting study is provided in its entirety in Appendix B of this Draft EIR. With respect to spill light, Exhibit 4.1-5, Property Boundary Spill Light – Footcandles, depicts the horizontal foot-candles for the property boundary areas potentially affected by the athletic facility lighting, which is bounded by Temple Avenue, Bonita Drive, the eastern edge of the stadium currently under construction, and the northern boundary of Lot 50G South. The lighting system that would be used consists of light-emitting diode (LED) fixtures and not metal halide, which is an older technology; use of metal

halide fixtures would result in higher lighting levels. The light fixtures would include reflectors that direct the light onto the field, reducing sky glow and spill light onto neighboring properties, and a visor assembly that works in conjunction with the reflector to provide more light control and reduce glare on and off the field. As shown in Exhibit 4.1-5, the measured horizontal foot-candles at the property boundary are 0.0. Therefore, impacts from spill light would be less than significant.

Glare

Short-Term (Construction-Related) Impacts

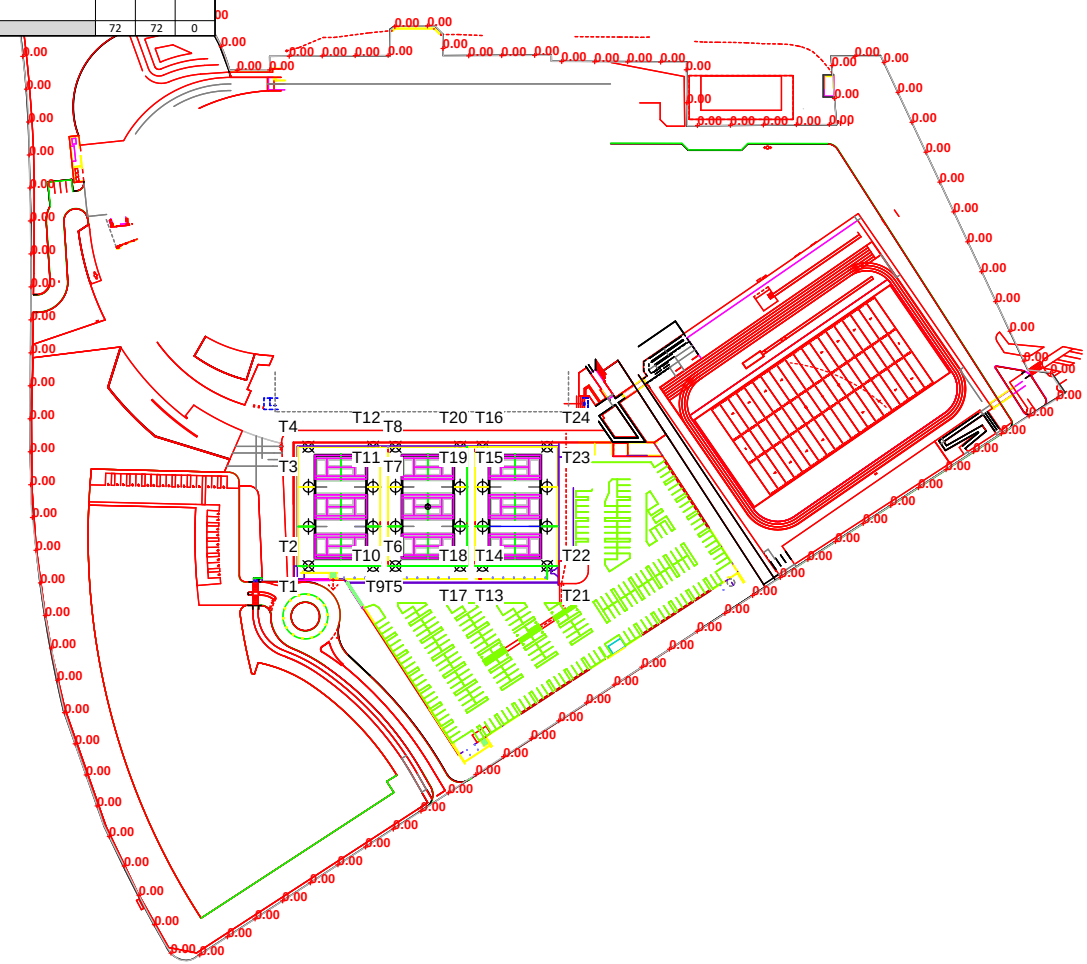
As identified above, the hours of construction activities would not occur after 7:00 PM Mondays through Saturdays. No construction activities are permitted on Sundays or federal holidays. While the hours of construction may be limited, lighting would likely be used within the construction areas (notably the construction staging areas) to provide security for construction equipment and construction materials. 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 aiming security lighting into the sky or onto nearby residential properties. These measures would also serve to reduce potential glare impacts during construction to a less than significant level.

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. During daylight hours, the amount of reflective glare depends on intensity and direction of sunlight and the amount of landscaping that serves as a visual screen and can reduce the glare. Glare can create hazards to motorists and can be a nuisance for pedestrians and other viewers. Proposed construction on campus could create new sources of glare in the form of glazed building surfaces, use of glass as exterior building surfaces, and other reflective materials that would reflect the sun or light sources and create glare. To address these potential issues, as part of the implementation of the proposed 2018 EFMP, Mt. SAC will be developing design guidelines and building standards to provide direction regarding the physical design of building elements, including exterior building materials to provide direction regarding the physical design of building elements, including exterior building materials. These guidelines and standards will 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, and no mitigation is required.

Under existing conditions, nighttime glare is primarily associated with vehicle headlights and, to a lesser extent, on-campus lighting that is provided for safety and security, including lighting for parking areas, pedestrian walkways, and architectural and landscape features. The proposed Project would involve the installation of new lighting as necessary to provide sufficient lighting for proposed activities, security, and safety. 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. Phases 1A and 1B would involve the construction of two new parking structures in the central portion of the campus. Parking would occur in areas similar to existing conditions for Parking Structures R and S; and, therefore, substantial new sources of glare from vehicle headlights would not result. Additionally, the vehicular circulation for both parking structures would follow existing patterns. Therefore, the potential increase in glare from campus safety and security lighting and

EQUIPMENT LIST FOR AREAS SHOWN								
Pole					Luminaires			
QTY	LOCATION	SIZE	GRADE ELEVATION	MOUNTING HEIGHT	LUMINAIRE TYPE	QTY / POLE	THIS GRID	OTHER GRIDS
12	T1, T4-T5 T12-T13 T16-T17 T20-T21 T24 T8-T9	50'	12'	62'	TLC-LED-1150	2	2	0
12	T10-T11 T14-T15 T18-T19 T2-T3 T22-T23 T6-T7	50'	12'	62'	TLC-LED-1150	4	4	0
24	TOTALS					72	72	0



GRID SUMMARY	
Name:	**Property Line Spill**
Spacing:	50.0'
Height:	0.0' above grade

ILLUMINATION SUMMARY	
MAINTAINED HORIZONTAL FOOTCANDLES	
	Entire Grid
Scan Average:	**0.0000**
Maximum:	0.00
Minimum:	0.00
No. of Points:	107
LUMINAIRE INFORMATION	
Color / CRI:	5700K - 75 CRI
Luminaire Output:	121,000 lumens
No. of Luminaires:	**72**
Total Load:	82.8 kW

Lumen Maintenance

Luminaire Type	L90 hrs	L80 hrs	L70 hrs
TLC-LED-1150	>63,500	>63,500	>63,500

Reported per TM-21-11. See luminaire datasheet for details.

Guaranteed Performance: The ILLUMINATION described above is guaranteed per your Musco Warranty document and includes a 0.95 dirt depreciation factor.

Field Measurements: Individual field measurements may vary from computer-calculated predictions and should be taken in accordance with IESNA RP-6-15.

Electrical System Requirements: Refer to Amperage Draw Chart and/or the **"Musco Control System Summary"** for electrical sizing.

Installation Requirements: Results assume ± 3% nominal voltage at line side of the driver and structures located within 3 feet (1m) of design locations.

Source: Musco Sports Lighting, LLC 2018

Property Boundary Spill Light - Footcandles

Exhibit 4.1-5

Mt. SAC 2018 Educational and Facilities Master Plan EIR

N W E S

0 400 800 1600 Feet

PSOMAS

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vehicle headlights that would occur with implementation of Phases 1A and 1B would not represent a new source of substantial glare, and this impact would be less than significant.

The potential glare from proposed athletic facility lighting at the tennis courts would be the most notable visual change associated with on-campus lighting to be installed as part of the proposed Project. Tennis court lighting would be installed with Phase 1A. As previously identified, night lighting from sports facilities is commonly the brightest source of light in the nighttime landscape. The expected level of glare has been calculated by Musco Lighting.

Exhibit 4.1-6, Glare Impact – Candela, depicts the maximum candela (candlepower) an observer would see when facing the brightest light source from any direction. As shown in Exhibit 4.1-6, the maximum candela would occur within the tennis courts. The level of glare would decrease immediately outside the boundaries of the tennis courts, and no glare from the tennis court lighting would occur. The proposed athletic facility lighting system and operations have also been designed to reduce the potential impact from glare to a less than significant level.

Therefore, the proposed lighting for the tennis courts and parking structures would not create a new source of substantial glare based on the proposed lighting study.

Level of Significance Prior to Mitigation

Potentially significant.

Recommended Mitigation Measures

MM AES-1 would reduce potentially significant impacts.

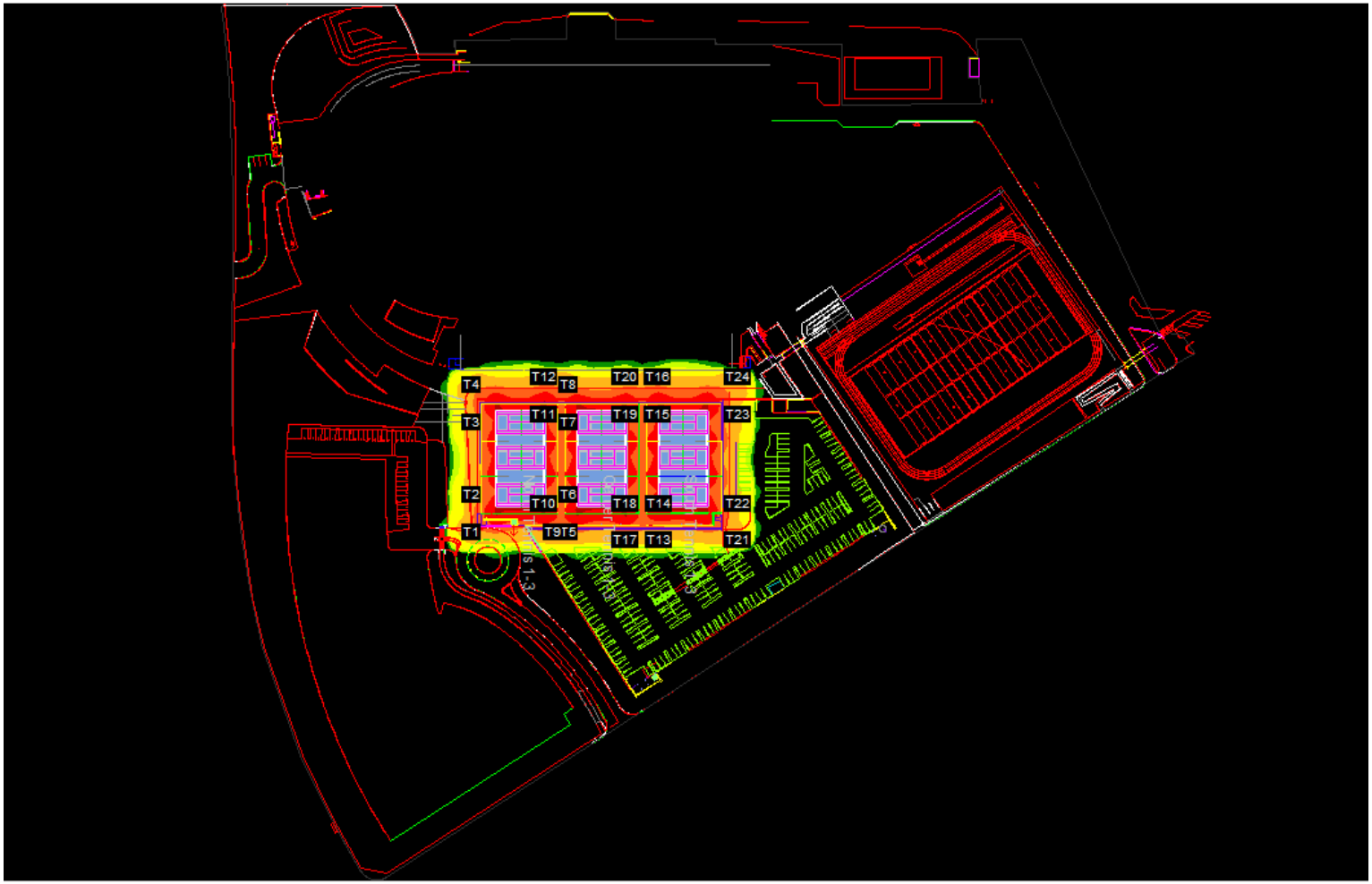
Level of Significance After Mitigation

Less than significant.

4.1.6 CUMULATIVE IMPACTS

When evaluating cumulative aesthetic impacts, a number of factors must be considered. In order for a cumulative aesthetic impact to occur, the proposed elements of the cumulative projects would need to be seen together or in proximity to each other. If the projects were not in proximity to each other, the viewer would not perceive them in the same scene. Based on the cumulative project's list provided in Table 4-1, no cumulative projects would be in the same viewshed as the proposed Project; the nearest cumulative project is approximately 1.5 miles away from the campus.

Development on campus and in the vicinity of the campus has previously resulted in changes to the visual character of the area through alterations to the natural terrain and the construction of structures. Although previous and future development would alter the visual character of the area, mitigation set forth for the respective development projects; compliance with applicable provisions of the City's Zoning Ordinance that address visual resources; and implementation of the comprehensive programs for the preservation of open space have mitigated potential aesthetic impacts to the extent feasible. It is also important to note that the San Jose Hills, located north and east of the campus, are designated open space areas; and the visual character of these areas would not be altered with implementation of the proposed Project or any future development planned in the City.



GLARE IMPACT

Summary

Map indicates the maximum candela an observer would see when facing the brightest light source from any direction.

A well-designed lighting system controls light to provide maximum useful on-field illumination with minimal destructive off-site glare.

GLARE

Candela Levels

High Glare: 150,000 or more candela
Should only occur on or very near the lit area where the light source is in direct view. Care must be taken to minimize high glare zones.

Significant Glare: 25,000 to 75,000 candela
Equivalent to high beam headlights of a car.

Minimal to No Glare: 500 or less candela
Equivalent to 100W incandescent light bulb.

Source: Musco Sports Lighting, LLC 2018

Glare Impact – Candela

Exhibit 4.1-6

Mt. SAC 2018 Educational and Facilities Master Plan EIR

N W E S

PSOMAS

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The proposed 2018 EFMP does not result in impacts to key visual features that have been preserved as open space. The proposed Project would not substantially alter the physical topography of the area, nor would it degrade any scenic vistas, highways, or areas considered to be scenic resources. Therefore, the aesthetic impacts associated with the proposed Project would be less than significant. The proposed 2018 EFMP would not result in a cumulatively considerable contribution to a significant aesthetic impact related to scenic resources or visual character.

The proposed 2018 EFMP, along with other future development in the City, would involve the installation of exterior lighting for safety and security in compliance with the City requirements and, consequently, could result in the creation of new sources of substantial light or glare that could affect day or nighttime views. As with typical urban environments, the campus and surrounding areas are already subject to nighttime light sources (from existing development, street lights, motor vehicles) so added light would not substantially penetrate into residential communities beyond existing conditions. As with existing development, light and glare impacts from the proposed Project and future development in the area would be reduced through the adherence to applicable lighting and design standards established by the City, including for athletic facility lighting. However, no cumulative development projects were identified in the vicinity of the campus. Implementation of MM AES-1 identified in this section related to light and glare would result in less than significant construction-related and operational light and glare impacts from the proposed Project. Therefore, the proposed 2018 EFMP would not result in a cumulatively considerable contribution to a significant cumulative aesthetic impact related to light and glare.

4.1.7 MITIGATION MEASURES

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.

4.1.8 REFERENCES

California Department of Transportation (Caltrans). 2011 (September 7, updated). California Scenic Highway Mapping System. Sacramento, CA: Caltrans. http://www.dot.ca.gov/hq/LandArch/16_livability/scenic_highways/index.htm.

International Dark-Sky Association. 2002 (September). *Outdoor Lighting Code Handbook.* Tucson, AZ: International Dark-Sky Association.

Mt. San Antonio Community College District (District). 2018a. *2018 Educational and Facilities Master Plan.* Walnut, CA: District.

Walnut, City of. 2018 (May 9, adopted). *City of Walnut General Plan*. Walnut, CA: City of. http://www.cityofwalnut.org/home/showdocument?id=12022.

4.2 AIR QUALITY

This section provides background information on air quality and air pollutants, presents existing emissions at the proposed Project site and air quality in the region, and examines air quality impacts that would potentially occur during construction and operation of the proposed Mt. SAC 2018 Educational and Facilities Master Plan (proposed 2018 EFMP).

The South Coast Air Quality Management District (SCAQMD) submitted a comment letter in response to the Notice of Preparation. The letter identified recommended analysis methodologies and significance thresholds as well as guidance for developing mitigation measures. The letter also provided guidance for the alternatives analysis and a source for information on permits.

Air Pollutants

Criteria Pollutants

Air quality regulations were first promulgated with the Federal Clean Air Act (CAA) of 1970. Air quality is defined by ambient air concentrations of seven "criteria air pollutants", which are a group of common air pollutants identified by the United States Environmental Protection Agency (USEPA) to be of concern with respect to the health and welfare of the general public. Federal and State governments regulate criteria air pollutants by using ambient standards based on criteria regarding the health and/or environmental effects of each pollutant. The criteria pollutants are defined as nitrogen dioxide (NO_2), ozone (O_3), particulate matter (including both respirable particulate matter with a diameter of 10 microns or less [PM10] and fine particulate matter with a diameter of 2.5 microns or less [PM2.5]), carbon monoxide (CO), sulfur dioxide (SO_2), and lead. A description of each criteria air pollutant, including source types and health effects, is provided below.

Nitrogen Dioxide

Nitrogen gas, normally relatively inert (nonreactive), comprises about 80 percent of the air. At high temperatures (e.g., in a combustion process) and under certain other conditions, nitrogen can combine with oxygen to form several different gaseous compounds collectively called nitrogen oxides (NOx). Nitric oxide (NO), NO_2, and nitrous oxide (N_2O) are important constituents of NOx. NO is converted to NO_2 in the atmosphere. Motor vehicle emissions are the main source of NOx in urban areas.

NO_2 is a red-brown pungent gas and is toxic to various animals and to humans because of its ability to form nitric acid with water in the eyes, lungs, mucus membranes, and skin. In animals, long-term exposure to NOx increases susceptibility to respiratory infections, lowering resistance to such diseases as pneumonia and influenza. Laboratory studies show that susceptible humans, such as asthmatics, who are exposed to high concentrations of NO_2 can suffer lung irritation and, potentially, lung damage. Epidemiological studies have also shown associations between NO_2 concentrations and daily mortality from respiratory and cardiovascular causes and with hospital admissions for respiratory conditions.

While the National Ambient Air Quality Standards (NAAQS) only address NO_2, NO and NO_2 are both precursors in the formation of O_3 and PM2.5, as discussed below. Because of this, and the fact that NO emissions largely convert to NO_2, NOx emissions are typically examined when assessing potential air quality impacts.

Ozone

O_3 is a secondary pollutant, meaning that it is not directly emitted. It is a gas that is formed when volatile organic compounds (VOCs) (also referred to as reactive organic gases) and NOx undergo photochemical reactions that occur only in the presence of sunlight. The primary source of VOC emissions is unburned hydrocarbons in motor vehicle and other internal combustion engine exhaust. NOx forms as a result of the combustion process, most notably due to the operation of motor vehicles. Sunlight and hot weather cause ground-level O_3 to form;[1] as a result, ozone is known as a summertime air pollutant. Ground-level O_3 is the primary constituent of smog. Because O_3 formation occurs over extended periods of time, both O_3 and its precursors are transported by wind and high O_3 concentrations can occur in areas well away from sources of its constituent pollutants.

People with lung disease, children, older adults, and people who are active can be affected when O_3 levels exceed ambient air quality standards. Numerous scientific studies have linked ground-level O_3 exposure to a variety of problems, including:

- lung irritation that can cause inflammation much like a sunburn
- wheezing, coughing, pain when taking a deep breath, and breathing difficulties during exercise or outdoor activities
- permanent lung damage to those with repeated exposure to O_3 pollution
- aggravated asthma, reduced lung capacity, and increased susceptibility to respiratory illnesses like pneumonia and bronchitis

Ground-level O_3 can have detrimental effects on plants and ecosystems. These effects include:

- interfering with the ability of sensitive plants to produce and store food, making them more susceptible to certain diseases, insects, other pollutants, competition, and harsh weather
- damaging the leaves of trees and other plants
- reducing crop yields and forest growth, potentially impacting species diversity in ecosystems

Particulate Matter

Particulate matter includes both aerosols and solid particles of a wide range of size and composition. Of particular concern are those particles smaller than or equal to 10 microns in diameter size (PM10) and smaller than or equal to 2.5 microns in diameter (PM2.5). Particulate matter size refers to the aerodynamic diameter of the particle. Smaller particles are of greater concern because they can penetrate deeper into the lungs than large particles.

PM10 is generally emitted directly as a result of mechanical processes that crush or grind larger particles or from the resuspension of dust, most typically through construction activities and vehicular travel. PM10 generally settles out of the atmosphere rapidly and is not readily transported over large distances.

[1] Ground-level O_3 is not to be confused with atmospheric O_3 or the “ozone layer”, which occurs very high in the atmosphere and shields the planet from some ultraviolet rays.

PM2.5 is directly emitted in combustion exhaust and is formed in atmospheric reactions between various gaseous pollutants, including NOx, sulfur oxides (SOx), and VOCs. PM2.5 can remain suspended in the atmosphere for days and/or weeks and can be transported long distances.

The principal health effects of airborne particulate matter are on the respiratory system. Short-term exposure to high PM2.5 and PM10 levels are associated with premature mortality and increased hospital admissions and emergency room visits; a decline in respiratory function is also associated with short-term exposure to high PM10 levels. Long-term exposure to high PM2.5 levels is associated with premature mortality and development of chronic respiratory disease. According to the USEPA, some people are much more sensitive than others to breathing PM10 and PM2.5. People with influenza, chronic respiratory and cardiovascular diseases, and the elderly may suffer worse illnesses; people with bronchitis can expect aggravated symptoms; and children may experience decline in lung function due to breathing in PM10 and PM2.5. Other groups considered sensitive include smokers and people who cannot breathe well through their noses. Exercising athletes are also considered sensitive because many breathe through their mouths.

Particulate matter tends to occur primarily in the form of fugitive dust. This dust appears to be generated by both local sources and by region-wide dust during moderate- to high-wind episodes. These regional episodes tend to be multidistrict and sometimes interstate in scope. The principal sources of dust in urban areas are from grading, construction, disturbed areas of soil, and dust entrained by vehicles on roadways.

Carbon Monoxide

CO is a colorless and odorless gas which, in the urban environment, is associated primarily with the incomplete combustion of fossil fuels in motor vehicles. CO combines with hemoglobin in the bloodstream and reduces the amount of oxygen that can be circulated through the body. High CO concentrations can cause headaches, aggravate cardiovascular disease, and impair central nervous system functions. CO concentrations can vary greatly over comparatively short distances. Relatively high CO concentrations are typically found near crowded intersections; along heavily used roadways carrying slow-moving traffic; and at or near ground level. Even under the most severe meteorological and traffic conditions, high concentrations of CO are limited to locations within a relatively short distance (i.e., up to 600 feet or 185 meters) of heavily traveled roadways. Overall CO emissions are decreasing as a result of the Federal Motor Vehicle Control Program, which has mandated increasingly lower emission levels for vehicles manufactured since 1973. CO levels in the South Coast Air Basin (SoCAB) are in compliance with the State and federal one-hour and eight-hour standards.

Sulfur Dioxide

SOx constitutes a class of compounds of which SO_2 and sulfur trioxide (SO_3) are of greatest importance. Ninety-five percent of pollution-related SOx emissions are in the form of SO_2. SOx emissions are typically examined when assessing potential air quality impacts of SO_2. The primary contributor of SOx emissions is fossil fuel combustion for generating electric power. Industrial processes, such as nonferrous metal smelting, also contribute to SOx emissions. SOx is also formed during combustion of motor fuels; however, most of the sulfur has been removed from fuels, greatly reducing SOx emissions from vehicles.

SO_2 combines easily with water vapor, forming aerosols of sulfurous acid (H_2SO_3), a colorless, mildly corrosive liquid. This liquid may then combine with oxygen in the air, forming the even more irritating and corrosive sulfuric acid (H_2SO_4). Peak levels of SO_2 in the air can cause temporary breathing difficulty for people with asthma who are active outdoors. Longer-term exposures to high levels of SO_2 gas and particles cause respiratory illness and aggravate existing heart disease. SO_2 reacts with other chemicals in the air to form tiny sulfate particles that are measured as PM2.5.

Lead

Lead is a stable compound, which persists and accumulates both in the environment and in animals. In humans, it affects the body's blood-forming (or hematopoletic), nervous, and renal systems. In addition, lead has been shown to affect the normal functions of the reproductive, endocrine, hepatic, cardiovascular, immunological and gastrointestinal systems, although there is significant individual variability in response to lead exposure. Since 1975, lead emissions have been in decline due, in part, to the introduction of catalyst-equipped vehicles and the decline in the production of leaded gasoline. In general, an analysis of lead is limited to projects that emit significant quantities of the pollutant (i.e., lead smelters) and are not applied to transportation projects.

Toxic Air Contaminants

Toxic air contaminants (TACs) are a diverse group of air pollutants that may cause or contribute to an increase in deaths or in serious illness or that may pose a present or potential hazard to human health. TACs include both organic and inorganic chemical substances that may be emitted from a variety of common sources, including motor vehicles, gasoline stations, dry cleaners, industrial operations, painting operations, and research and teaching facilities.

TACs are different than the "criteria" pollutants previously discussed in that ambient air quality standards have not been established for them. TACs occurring at extremely low levels may still cause health effects, and it is typically difficult to identify levels of exposure that do not produce adverse health effects. TAC impacts are described by carcinogenic risk and chronic (i.e., of long duration) and acute (i.e., severe but of short duration) adverse effects on human health.

Diesel engines emit a complex mixture of air pollutants composed of gaseous and solid material. The solid emissions in diesel exhaust are known as diesel particulate matter (diesel PM). In 1998, California identified diesel PM as a TAC based on its potential to cause cancer, premature death, and other health problems (e.g., asthma attacks and other respiratory symptoms). Those most vulnerable are children (whose lungs are still developing) and the elderly (who may have other serious health problems). Overall, diesel engine emissions are responsible for the majority of California's known cancer risk from outdoor air pollutants. Diesel engines also contribute to California's PM2.5 air quality problems.

Carcinogenic risks (i.e., cancer risks) are estimated as the incremental probability that an individual will develop cancer over his/her lifetime as a direct result of exposure to potential carcinogens. The estimated risk is expressed as a probability (e.g., 10 in 1 million). A risk level of 1 in 1 million implies a likelihood that up to 1 person out of 1 million equally exposed people would contract cancer if exposed continuously (24 hours per day) to the specific concentration over 70 years (an assumed lifetime). This would be in addition to those cancer cases that would normally occur in an unexposed population of 1 million people. The Hazard Index (HI) expresses the potential for chemicals to result in non-cancer-related health impacts. HIs are expressed using decimal notation (e.g., 0.001). A calculated HI exposure of less than 1.0 will likely not result in

adverse non-cancer-related health effects over a lifetime of exposure. Although a value of 1.0 is a commonly accepted California Environmental Quality Act (CEQA) significance threshold, an HI greater than 1.0 does not necessarily mean that adverse effects will occur.

4.2.1 REGULATORY SETTING

The proposed 2018 EFMP project site is located in the South Coast Air Basin (SoCAB). The SoCAB comprises all of Orange County and parts of San Bernardino, Los Angeles, and Riverside Counties. Air quality in the SoCAB is regulated by the USEPA, California Air Resources Board (CARB), and the South Coast Air Quality Management District (SCAQMD). Each of these agencies develops rules, regulations, policies, and/or goals to comply with applicable legislation. Although USEPA regulations may not be superseded, both State and local regulations may be more stringent. The Southern California Association of Governments (SCAG) is an important partner to the SCAQMD and produces estimates of anticipated future growth and vehicular travel in the basin that are used for air quality planning. The federal, State, regional, and local regulations for criteria air pollutants and TACs are discussed below.

Federal

United States Environmental Protection Agency

The USEPA is responsible for implementing the CAA, which was first enacted in 1955[2] and amended numerous times thereafter. The CAA established federal air quality standards known as the NAAQS. These standards identify levels of air quality for criteria pollutants that are considered the maximum levels of ambient (background) air pollutants considered safe (with an adequate margin of safety) to protect the public's health and welfare. The USEPA is responsible for setting and enforcing the NAAQS for criteria pollutants. The NAAQS are shown in Table 4.2-1.

The USEPA regulates emission sources that are under the exclusive authority of the federal government, such as aircraft, ships, and certain locomotives. The USEPA requires each State with federal nonattainment areas to prepare and submit a State Implementation Plan (SIP). The SIP must integrate federal, State, and local plan components and regulations to identify specific measures to reduce pollution and thereby attain or maintain federal standards by using a combination of performance standards and market-based programs within the SIP-identified time frame.

[2] The Air Pollution Control Act, predecessor to the Clean Air Act, was enacted in 1955.

TABLE 4.2-1
CALIFORNIA AND NATIONAL AMBIENT AIR QUALITY STANDARDS

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

O_3: ozone, ppm: parts per million, µg/m^3: micrograms per cubic meter, –: No Standard; PM10: respirable particulate matter with a diameter of 10 microns or less, AAM: Annual Arithmetic Mean, PM2.5: fine particulate matter with a diameter of 2.5 microns or less, CO: carbon monoxide, mg/m^3: milligrams per cubic meter, NO_2: nitrogen dioxide, SO_2: sulfur dioxide, km: kilometer.

[a] *National Primary Standards:* The levels of air quality necessary, within an adequate margin of safety, to protect the public health.

[b] *National Secondary Standards:* The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.

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

Source: CARB 2016.

State

California Air Resources Board

CARB, as part of the California Environmental Protection Agency (CalEPA), is responsible for coordinating and administering both the federal and State air pollution control programs in California. In this capacity, CARB establishes the California Ambient Air Quality Standards (CAAQS), as shown in Table 4.2-1, which are generally more stringent and apply to more pollutants than the NAAQS. In addition to the criteria pollutants, CAAQS have been established for visibility-reducing particulates, sulfates, hydrogen sulfide, and vinyl chloride.

In addition, CARB conducts research, compiles emissions inventories, develops suggested control measures, provides oversight of local programs, and prepares the SIP. CARB requires the air districts in regions that do not attain the CAAQS to prepare plans for attaining the standards. These plans are then integrated into the State SIP. CARB establishes emissions standards for motor vehicles sold in California, consumer products (e.g., hair spray, aerosol paints, and barbecue lighter fluid), and various types of commercial equipment. It also sets fuel specifications to further reduce vehicular emissions.

The California Clean Air Act (CCAA), which was approved in 1988, requires that each local air district prepare and maintain an Air Quality Management Plan (AQMP) to achieve compliance with CAAQS. The AQMP for the SoCAB is discussed below.

Title 24, Part 6, Energy Efficiency Standards

The Energy Efficiency Standards for Residential and Nonresidential Buildings (Title 24, Part 6 of the California Code of Regulations [CCR]) were established in 1978 in response to a legislative mandate to reduce California's energy consumption. The current applicable standards are the 2016 Standards, effective January 1, 2017. The Energy Efficiency Standards are updated on an approximately three-year cycle. The 2019 code will go into effect on January 1, 2020, and will continue to improve upon the 2016 standards of new construction, additions, and alterations of residential and nonresidential buildings.

Title 24, Part 11, Green Building Standards

The 2016 California Green Building Standards Code (24 CCR 11), also known as the CALGreen code, contains mandatory requirements for new residential and nonresidential buildings (including buildings for retail, office, public schools and hospitals) throughout California (CBSC 2018a). The 2016 CALGreen Code was effective January 1, 2017 (CBSC 2018b). The development of the CALGreen Code is intended to: (1) cause a reduction in greenhouse gas (GHG) emissions from buildings; (2) promote environmentally responsible, cost effective, healthier places to live and work; (3) reduce energy and water consumption; and (4) respond to the directives by the Governor. In short, the code is established to reduce construction waste, make buildings more efficient in the use of materials and energy, and reduce environmental impact during and after construction.

The CALGreen Code contains requirements for construction site selection, stormwater control during construction, construction waste reduction, indoor water use reduction, material selection, natural resource conservation, site irrigation conservation, and more. The code provides for design options allowing the designer to determine how best to achieve compliance for a given site or building condition. The code also requires building commissioning, which is a process for the verification that all building systems, such as heating and cooling equipment and lighting systems, are functioning at their maximum efficiency.

The CALGreen Code provides mandatory requirements for bicycle parking, carpool/vanpool parking, and electric vehicle charging spaces (EVCS), light and glare reduction, grading and paving, energy efficient appliances, renewable energy, graywater systems, water efficient plumbing fixtures, recycling and recycled materials, pollutant controls (including moisture control and indoor air quality), acoustical controls, stormwater management, building design, insulation, flooring, and framing, among others.

Beyond the mandatory requirements, optional Tier 1 status can be achieved by complying with voluntary measures for energy and water efficiency, material conservation, and other design

features. Examples of Tier 1 requirements are 15 percent less energy use in residential construction than required by existing regulations and 12 percent less indoor water use in non-residential construction. Tier 2 status can be achieved by complying with additional voluntary measures; example requirements are 30 percent less energy use in residential construction and 20 percent less indoor water use in non-residential construction.

Regional

South Coast Air Quality Management District

The proposed 2018 EFMP project site lies within the SoCAB, which is bound by the Ventura County/Los Angeles County border to the northwest, the Mojave Desert Air Basin to the north, the Riverside County border to the east, and the San Diego County-Riverside County border to the south. Air quality in Los Angeles County is regulated by the SCAQMD, which is the agency principally responsible for comprehensive air pollution control in the SoCAB. As a regional agency, the SCAQMD works directly with the Southern California Association of Governments (SCAG), county transportation commissions, and local governments and cooperates actively with all federal and State government agencies. The mission of the SCAQMD is to undertake all necessary steps to protect public health from air pollution, with sensitivity to the impacts of its actions on the community and businesses through a comprehensive program of planning, regulation, compliance assistance, enforcement, monitoring, technology advancement, and public education (SCAQMD 2015a). The SCAQMD develops rules and regulations; establishes permitting requirements for stationary sources; inspects emissions sources; and enforces such measures through educational programs or fines, when necessary.

Air Quality Management Plan

In response to federal and State requirements to implement measures to achieve the NAAQS and CAAQS, the SCAQMD is responsible for reducing emissions from stationary (area and point), mobile, and indirect sources. It has responded to this requirement by preparing a sequence of air quality management plans (AQMPs). An AQMP establishes a program of rules and regulations directed at attaining the NAAQS and CAAQS.

The current regional plan applicable to the proposed 2018 EFMP is the SCAQMD's 2016 AQMP. The 2016 AQMP replaces the 2007 AQMP and the 2012 AQMP that was adopted subsequent to the 2007 AQMP. The AQMP control measures and related emission reduction estimates are based on emissions projections for a future development scenario derived from land use, population, and employment characteristics defined in consultation with local governments. Accordingly, conformance with the AQMP for development projects is determined by demonstrating compliance with local land use plans and/or population projections.

The AQMP and SIP processes generally occur concurrently: The SIP is required under the CAA to provide the framework for nonattainment areas to come into attainment, and the AQMP is prepared by the SCAQMD, in part, to satisfy the requirement for the SIP. The AQMP traditionally evaluates all nonattainment and maintenance criteria pollutants; portions of the AQMP represent the required SIP elements, which are then transmitted to CARB for review and approval before being transmitted to the USEPA for inclusion in the overall California SIP.

As previously identified, the SoCAB is currently designated as a nonattainment area for the federal and State O_3 standards, the State PM10 standards, and the federal and State PM2.5 standards. The Los Angeles County portion of the SoCAB is a federal nonattainment area for

lead. Currently, PM10, CO, and NO_2 are designated "Attainment/Maintenance areas" for federal standards. The current status of the SIPs for these nonattainment pollutants are shown below:

- On November 28, 2007, CARB submitted a SIP revision to the USEPA for O_3, PM2.5 (1997 Standard), CO, and NO_2 in the SoCAB. This revision is identified as the "2007 South Coast SIP". The 2007 South Coast SIP demonstrates attainment of the federal PM2.5 standard in the SoCAB by 2014 and attainment of the federal eight-hour O_3 standard by 2023. This SIP also includes a request to reclassify the O_3 attainment designation from "severe" to "extreme". The USEPA approved the redesignation effective June 4, 2010. The "extreme" designation requires the attainment of the eight-hour O_3 standard in the SoCAB by June 2024. CARB approved PM2.5 SIP revisions in April 2011 and the O_3 SIP revisions in July 2011. The USEPA approved the PM2.5 SIP on September 25, 2013, and has approved 46 of the 61 1997 8-hour O_3 SIP requirements (USEPA 2018b). On November 30, 2014, the USEPA proposed a finding that the SoCAB has attained the 1997 PM2.5 standards. In July 2016, the USEPA determined that the SoCAB had attained the 1997 PM2.5 standards; however the SoCAB was not redesignated as an attainment area because the USEPA had not approved a maintenance plan and additional requirements under the CAA had not been met (USEPA 2018a).
- On December 7, 2012, the SCAQMD adopted the 2012 AQMP, which was a regional and multiagency effort (the SCAQMD, CARB, SCAG, and the USEPA). The 2012 AQMP incorporates the latest scientific and technical information and planning assumptions, including SCAG's 2012–2035 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), updated emission inventory methods for various source categories, and SCAG's latest growth forecasts. The primary purposes of the 2012 AQMP were to demonstrate attainment of the federal 24-hour PM2.5 standard by 2014 and to update the USEPA-approved 8-hour Ozone Control Plan. On December 20, 2012, the 2012 AQMP was submitted to CARB and the USEPA for concurrent review and approval for inclusion in the SIP. The 2012 AQMP was approved by CARB on January 25, 2013.
- On March 3, 2017, the SCAQMD adopted the 2016 AQMP (CARB 2017). The 2016 AQMP includes strategies and measures to meet the following NAAQS (SCAQMD 2017):
    - 2008 8-hour O_3 (75 parts per billion [ppb]) by 2031[3]
    - 2012 Annual PM2.5 (12 micrograms per cubic meter [µg/m^3]) by 2025
    - 1997 8-hour O_3 (80 ppb) by 2023
    - 1979 1-hour O_3 (120 ppb) by 2022
    - 2006 24-hour PM2.5 (35 µg/m^3) by 2019

South Coast Air Quality Management District Rules

The proposed 2018 EFMP will be required to comply with existing SCAQMD rules for the reduction of fugitive dust emissions. The following rules are most relevant to the proposed Project.

[3] On October 1, 2015, the USEPA lowered the 8-hour O_3 standard to 0.070 parts per million (ppm) (70 ppb). The SIP (or AQMP) for the 70 ppb standard will be due four years after the attainment/nonattainment designations are issued by the USEPA, which is expected in 2017. Thus, meeting the 70 ppb standard will be addressed in a 2021 AQMP.

SCAQMD Rule 201 requires a "Permit to Construct" prior to the installation of any equipment "the use of which may cause the issuance of air contaminants . . ." and Regulation II provides the requirements for the application for a Permit to Construct. Rule 203 similarly requires a Permit to Operate. Rule 219, Equipment not Requiring a Written Permit Pursuant to Regulation II, identifies "equipment, processes, or operations that emit small amounts of contaminants that shall not require written permits . . ." Rule 201 would primarily apply to any new backup generators or commercial cooking equipment installed at the campus. SCAQMD Rule 402, Nuisance, states that a project shall not "discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property".

SCAQMD Rule 403, Fugitive Dust, requires actions to prevent, reduce, or mitigate fugitive particulate matter emissions. These actions include applying water or chemical stabilizers to disturbed soils; managing haul road dust by applying water; covering all haul vehicles before transporting materials; restricting vehicle speeds on unpaved roads to 15 miles per hour (mph); and sweeping loose dirt from paved site access roadways used by construction vehicles. In addition, Rule 403 requires that vegetative ground cover be established on disturbance areas that are inactive within 30 days after active operations have ceased. Alternatively, an application of dust suppressants can be applied in sufficient quantity and frequency to maintain a stable surface. Rule 403 also requires grading and excavation activities to cease when winds exceed 25 mph.

SCAQMD Rule 1113 governs the sale of architectural coatings and limits the VOC content in paints and paint solvents. Although this rule does not directly apply to the proposed 2018 EFMP, it does dictate the VOC content of paints available for use during building construction and ongoing maintenance.

SCAQMD Rule 1401 under Regulation XIV requires new source review of any new, relocated, or modified permit units that emit TACs. The rule establishes allowable risks for permit units requiring permits pursuant to Rules 201 and 203 discussed above.

SCAQMD Rule 1403, Asbestos Emissions from Demolition/Renovation Activities, specifies work practice requirements to limit asbestos emissions from building demolition and renovation activities, including the removal and associated disturbance of asbestos-containing materials (ACM). All operators are required to maintain records, including waste shipment records, and are required to use appropriate warning labels, signs, and markings. Potential impacts associated with the removal of asbestos materials from existing buildings at the campus are discussed in the Hazards section of this Draft EIR.

Southern California Association of Governments

SCAG is the regional planning agency for Orange, Los Angeles, Ventura, Riverside, San Bernardino, and Imperial Counties and serves as a forum for regional issues relating to transportation, the economy, community development, and the environment. SCAG serves as the federally designated Metropolitan Planning Organization (MPO) for the Southern California region. On April 7, 2016, SCAG's Regional Council adopted the 2016–2040 Regional Transportation Plan/Sustainable Communities Strategy (2016 RTP/SCS). The RTP/SCS is a long-range visioning plan that balances future mobility and housing needs with economic, environmental, and public health goals. The RTP/SCS includes a strong commitment to reduce emissions from transportation sources in order to improve public health, to meet the NAAQS as set forth by the CAA, and to comply with Senate Bill (SB) 375. SCAG addresses this commitment

by ensuring that the RTP meets the Transportation Conformity requirements of the CAA. SB 375 states that RTPs must include an SCS that reduces GHG emissions from passenger vehicles by 8 percent per capita by 2020 and 13 percent per capita by 2035 compared to 2005 emissions levels. The 2016–2040 RTP/SCS is expected to reduce per capita transportation emissions by 8 percent by 2020 and by 18 percent by 2035 (SCAG 2016).

Local

City of Walnut

The City of Walnut's General Plan addresses air quality mainly within Chapter 4, Conservation, Open Space, and Recreation (City of Walnut 2018). The air quality goals and policies within the General Plan include:

> **Policy LCD-5.7, Reduce Vehicle Trips and Miles Traveled:** Coordinate land use patterns with the Circulation Element to improve and protect air quality, reduce vehicular trips, and promote walkability.
>
> **Goal C-6:** Reduction in total vehicle miles traveled to help improve local air quality and reduce greenhouse gas emissions.
>
> **Goal COR-10:** Clean local air quality and reduced greenhouse gas emissions.
>
> **Policy COR-10.2, Coordination:** Assure the City provides updated data to the Southern California Regional Governments to assist in updates to the Sustainable Communities Strategies and Regional Transportation Plan.
>
> **Policy COR-10.6, Minimize Air Quality Impacts:** Minimize air quality impacts of new development projects on established uses.
>
> **Policy COR-10.7, Air Quality Goals:** Ensure that land use and transportation plans support air quality goals, with new development projects reducing vehicle miles traveled and vehicle trips.
>
> **Policy COR-10.8, Education Programs:** Partner with regional agencies to establish public education programs that provide information on ways to reduce and control emissions and make clean air choices.

4.2.2 METHODS

Construction and Operations Mass Daily Emissions

The proposed 2018 EFMP project emissions were estimated using the California Emissions Estimator Model (CalEEMod) version 2016.3.2 computer program (CAPCOA 2016). CalEEMod is designed to model construction and operational emissions for land development projects and allows for the input of project-specific information. CalEEMod has separate databases for specific counties and air districts. This analysis used the Los Angeles County database. The model calculates emissions of CO, SO_2, PM10, PM2.5, and the O_3 precursors VOC and NOx. For this analysis, the results in Tables 4.2-5 and 4.2-6 are expressed in pounds per day and are compared with the SCAQMD mass daily thresholds identified in Table 4.2-4 to determine impact significance.

Specific inputs to CalEEMod include land uses and acreages. Construction input data include, but are not limited to: (1) the anticipated start and finish dates of each project construction activity, such as demolition, grading, building, and paving; (2) inventories of construction equipment to be used during each activity; (3) areas to be excavated and graded for development; (4) volumes of materials to be imported to and exported from the project site; (5) areas to be paved; and (6) areas to be painted. The input data and assumptions are discussed in Section 4.2.5 below and are shown in notes on the CalEEMod data in Appendix C. CalEEMod has the capability to calculate reductions in construction emissions from the effects of dust control, off-road diesel-engine classifications, low-emission paints, and other selected measures. CalEEMod was developed using EMFAC 2014 and OFFROAD 2011 for calculating emissions from on-road vehicles and off-road construction equipment, respectively.

Operational inputs to CalEEMod include: (1) the specific year for project operations, (2) vehicle trip generation rates, and (3) project criteria for energy use. Output operational emissions data are separated into energy use, area sources, and mobile sources. The area sources are landscape maintenance equipment, consumer products, and architectural coatings used for routine maintenance. Consumer products (e.g., household cleaners, air fresheners, automotive products, and personal care products) emit VOCs. Mobile sources are the vehicles used by students, faculty, staff, visitors, and vendors traveling to and from the campus. CalEEMod also includes data to calculate emissions reductions based on project-specific characteristics and results from the implementation of Mitigation Measures (MMs). The methodology for most emissions reductions is based on the August 2010 California Air Pollution Control Officers Association (CAPCOA) publication, *Quantifying Greenhouse Gas Mitigation Measures, A Resource for Local Government to Assess Emission Reductions from Greenhouse Gas Mitigation Measures* (CAPCOA 2010).

Local Concentrations of Criteria Pollutants from On-Site Sources

The SCAQMD developed localized significance threshold (LST) methodology and mass rate lookup tables that public agencies can use to determine whether or not a project may generate significant adverse localized air quality impacts. The lookup tables allow the evaluation of impacts without the complex task of dispersion modeling and have been developed for construction sites that are one, two, and five acres in size.

The local concentration analysis was performed for the proposed 2018 EFMP construction activities. The analysis is not performed for operations because the proposed Project would not result in substantial on-site sources of pollutants. The LST methodology translates the concentration standards into emissions thresholds. The LST methodology is recommended to be limited to projects of 5 acres or less. Although individual construction sites may be larger than 5 acres, the method may be used for larger sites if it is demonstrated that the calculated project emissions would be less than the 5-acre site emissions limits. In the case of the proposed Project, the construction area for each component of the project or for components that are adjacent and would potentially be implemented at the same time would be less than 5 acres in size at any one time.

The LST methodology addresses NO_2, CO, PM10, and PM2.5 emissions. For NO_2 and CO, the one-hour standards are used; and receptors that could be exposed for one hour are considered. For PM10 and PM2.5, the 24-hour standards are used; and the receptors of interest are those where persons would be for 24 hours, such as residences.

CO Hotspots

The SCAQMD does not have a screening approach as to the number of vehicles that would likely result in a CO hotspot. Therefore, for localized CO impacts from mobile sources at congested intersections, the Bay Area Air Quality Management District (BAAQMD) screening has been used, which establishes the number of vehicles that are likely to cause a CO hotspot within their CEQA screening criteria. This screening criteria states that a less-than-significant impact to localized CO concentrations would result if the following screening criteria are met:

1. The project is consistent with an applicable congestion management program established by the county congestion management agency for designated roads or highways, regional transportation plan, and local congestion management agency plans.
2. The project traffic would not increase traffic volumes at affected intersections to more than 44,000 vehicles per hour.
3. The project traffic would not increase traffic volumes at affected intersections to more than 24,000 vehicles per hour where vertical and/or horizontal mixing is substantially limited (e.g., tunnel, parking garage, bridge underpass, natural or urban street canyon, below-grade roadway) (BAAQMD 2017).

4.2.3 ENVIRONMENTAL SETTING

Climate and Meteorology

As previously identified, the proposed 2018 EFMP project site is located in the SoCAB, which includes all of Orange County and the urbanized portions of Los Angeles, Riverside, and San Bernardino Counties. The SoCAB is arid, with virtually no rainfall and abundant sunshine during the summer months. It has light winds and poor vertical mixing compared to the other large urban areas in the United States. The combination of poor dispersion and abundant sunshine, which drives the photochemical reactions that form pollutants (such as O_3), provide conditions especially favorable to the formation of smog. The SoCAB is bound to the north and east by mountains with maximum elevations exceeding 10,000 feet. The unfavorable combination of meteorology, topography, and emissions from the nation's second largest urban area results in the SoCAB having some of the worst air quality in the United States.

Sensitive Air Quality Receptors

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 proposed 2018 EFMP 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 proposed Project and to provide a conservative analysis, the nearest sensitive receptors are considered to be persons in on-campus buildings. The nearest off-campus sensitive land uses are residential uses located on Edinger Way, across the street from the proposed Project's northern boundary.

Ambient Air Quality

Air quality data for the proposed 2018 EFMP project site is represented by the Pomona Monitoring Station located at 924 North Garey Avenue, Pomona, located approximately 5 miles east of the proposed Project site, and the Azusa Monitoring Station, located at 803 North Loren Avenue, Azusa, located approximately 7 miles northwest of the proposed Project site. Pollutants measured at the Pomona Monitoring Station include O_3, NO_2, and CO. Data for PM2.5, PM10, and CO were

provided from the Azusa Monitoring Station because PM10 and PM2.5 data were not provided from the CARB website. The monitoring data is presented in Table 4.2-2. Table 4.2-2 also presents federal and State air quality standards with the frequency that may be exceeded.

TABLE 4.2-2
AIR QUALITY LEVELS MEASURED AT THE
POMONA AND ASUZA MONITORING STATIONS

Pollutant	California Standard	Federal Standard	Year	Maximum Level[a]	Days State Standard Exceeded	Days National Standard Exceeded
Pomona Monitoring Station Data						
O_3 (1-hour)	0.09 ppm	None	2015	0.136	30	2
			2016	0.127	20	1
			2017	0.147	18	5
O_3 (8-hour)	0.070 ppm	0.070 ppm	2015	0.098	55	53
			2016	0.092	29	26
			2017	0.114	38	35
NO_2 (1-Hour)	0.18 ppm	0.100 ppm	2015	0.072	0	0
			2016	0.069	0	0
			2017	0.081	0	0
CO (1-hour)	20 ppm	20 ppm	2015	1.8	0	0
			2016	1.7	0	0
			2017	--	--	--
CO (8-hour)	9 ppm	9 ppm	2015	1.6	0	0
			2016	1.3	0	0
			2017	--	--	--
Azusa Monitoring Station Data						
PM10 (24-hour)	50 µg/m^3	150 µg/m^3	2015	101	75.6	0
			2016	74	--	0
			2017	84	--	0
PM2.5 (24-Hour)	None	35 µg/m^3	2015	70.3	0	6
			2016	32.1	0	0
			2017	24.9	0	0

–: Data Not Reported or insufficient data available to determine the value; O_3: ozone; ppm: parts per million; PM10: respirable particulate matter with a diameter of 10 microns or less; µg/m^3: micrograms per cubic meter; NO_2: nitrogen dioxide; PM2.5: fine particulate matter with a diameter of 2.5 microns or less.

[a] California maximum levels were used.

Source: CARB 2018, SCAQMD 2018.

The Pomona monitoring data shows that O_3 is the air pollutant of primary concern in the proposed 2018 EFMP project area. At the monitoring station, the 1-hour O_3 standard was exceeded 18 to 30 days for the State standard between 2015 and 2017 and 1 to 5 days between 2015 and 2017 for the federal standard. The 8-hour O_3 standards were exceeded 29 to 55 days under the State 8-hour O_3 standards and 26 to 53 days under the federal 8-hour O_3 standards between 2015 and 2017. O_3 is a secondary pollutant and is not directly emitted from a source; it occurs as the result of photochemical reactions from ozone precursors, which include volatile organic compounds (VOCs) and NO_2 and sunlight.

Attainment Status

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 for the SoCAB are shown in Table 4.2-3. As shown, the SoCAB is a nonattainment area for PM10 (State), PM2.5 (State and federal), and O_3 (State and federal).

TABLE 4.2-3
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)		Nonattainment
PM10	Nonattainment	Attainment/Maintenance
PM2.5	Nonattainment	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: particulate matter 10 microns or less in diameter; PM2.5: particulate matter 2.5 microns or less in diameter; CO: carbon monoxide; NO_2: nitrogen dioxide; SO_2: sulfur dioxide.

* The Los Angeles County portion of the SoCAB is designated nonattainment for lead; the remainder of the SoCAB is designated attainment.

Source: CARB 2017, USEPA 2018a.

4.2.4 THRESHOLDS OF SIGNIFICANCE

According to Appendix G of the State CEQA Guidelines, a project will normally have a significant adverse environmental impact related to air quality if it would:

- Conflict with or obstruct implementation of the applicable air quality plan.
- Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in nonattainment under an applicable federal or state ambient air quality standard.
- Expose sensitive receptors to substantial pollutant concentrations.
- Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.

Appendix G of the State CEQA Guidelines states that the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make significance determinations. The SCAQMD has established significance thresholds to assess the regional and localized impacts of project-related air pollutant emissions. These significance thresholds are updated as needed to appropriately represent the most current technical information and attainment status in the SoCAB.

Table 4.2-4 presents the current SCAQMD significance thresholds, including regional daily thresholds for short-term construction and long-term operational emissions; maximum

incremental cancer risk and hazard indices for TACs; and maximum ambient concentrations for exposure of sensitive receptors to localized pollutants. A project with daily emission rates, risk values, or concentrations below these thresholds is generally considered to have a less than significant effect on air quality.

TABLE 4.2-4
SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT CRITERIA POLLUTANT SIGNIFICANT EMISSIONS THRESHOLDS

Mass Daily Thresholds[a]		
Pollutant	**Construction**	**Operation**
NOx	100 lbs/day	55 lbs/day
VOC	75 lbs/day	55 lbs/day
PM10	150 lbs/day	150 lbs/day
PM2.5	55 lbs/day	55 lbs/day
SOx	150 lbs/day	150 lbs/day
CO	550 lbs/day	550 lbs/day
Lead	3 lbs/day	3 lbs/day
Toxic Air Contaminants, Odor, and Greenhouse Gas Thresholds		
TACs (including carcinogens and non-carcinogens)	Maximum Incremental Cancer Risk ≥ 10 in 1 million Cancer Burden > 0.5 excess cancer cases (in areas ≥ 1 in 1 million) Chronic and Acute Hazard Index ≥ 1.0 (project increment)	
Odor	Project creates an odor nuisance pursuant to SCAQMD Rule 402	
GHG	10,000 MT/yr CO_2eq for industrial facilities	
Ambient Air Quality Standards for Criteria Pollutants[b, c]		
NO_2 1-hour average annual arithmetic mean	SCAQMD is in attainment; project is significant if it causes or contributes to an exceedance of the following attainment standards: 0.18 ppm (State) 0.03 ppm (State) and 0.0534 ppm (federal)	
PM10 24-hour average annual average	 10.4 µg/m^3 (construction)[c] and 2.5 µg/m^3 (operation) 1.0 µg/m^3	
PM2.5 24-hour average	 10.4 µg/m^3 (construction)[c] & 2.5 µg/m^3 (operation)	
SO_2 1-hour average 24-hour average	 0.25 ppm (State) and 0.075 ppm (federal – 99th percentile) 0.04 ppm (State)	
Sulfate 24-hour average	 25 µg/m^3 (State)	

TABLE 4.2-4
SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT CRITERIA POLLUTANT SIGNIFICANT EMISSIONS THRESHOLDS

Ambient Air Quality Standards for Criteria Pollutants[b, c] (Continued)	
CO	SCAQMD is in attainment; project is significant if it causes or contributes to an exceedance of the following attainment standards:
1-hour average 8-hour average	20.0 ppm (State) and 35 ppm (federal) 9.0 ppm (State/federal)
Lead 30-day average Rolling 3-month average	 1.5 µg/m^3 (State) 0.15 µg/m^3 (federal)

NOx: nitrogen oxides; lbs/day: pounds per day; VOC: volatile organic compound; 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; CO: carbon monoxide; TACs: toxic air contaminants; SCAQMD: South Coast Air Quality Management District; GHG: greenhouse gas; MT/yr CO_2eq: metric tons per year of carbon dioxide equivalents; NO_2: nitrogen dioxide; ppm: parts per million; µg/m^3: micrograms per cubic meter; SO_2: sulfur dioxide.

[a] Source: SCAQMD CEQA Handbook (SCAQMD 1993).
[b] Ambient air quality thresholds for criteria pollutants based on SCAQMD Rule 1303, Table A-2 unless otherwise stated.
[c] Ambient air quality threshold is based on SCAQMD Rule 403.

Source: SCAQMD 2015d.

Mt. SAC 2016 CEQA Thresholds of Significance

To the extent the following thresholds of significance are applicable to the proposed 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
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);	CARB; CalEPA; SCAQMD; SCAQMD 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.

Environmental Topic in the CEQA Checklist	Impact	Mt. San Antonio Community College District Threshold of Significance	Agencies and Regulations	CEQA Procedures
		when a new building is located less than 417 feet (130 meters) from a sensitive receptor off-site (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).		
asf: assignable square feet; gsf: gross square feet; CARB: California Air Resources Board; CalEEMod: California Emissions Estimator Model; CalEPA: California Environmental Protection Agency; CEQA: California Environmental Quality Act; FMP: Facilities Master Plan; LST: Localized Significance Threshold; MM: Mitigation Measure; MMP: Mitigation Monitoring Program; SCAQMD: South Coast Air Quality Management District; VOC: volatile organic compound.				

4.2.5 ENVIRONMENTAL IMPACTS

Impact Analysis

Threshold 2.1	Would the project conflict with or obstruct implementation of the applicable air quality plan?

2018 Educational and Facilities Master Plan (Phases 1A, 1B, and 2) and Project-Specific

The SCAQMD develops rules and regulations, establishes permitting requirements for stationary sources, inspects emissions sources, and enforces such measures through educational programs or fines, when necessary. It is directly responsible for reducing emissions from stationary (area and point), mobile, and indirect sources and has prepared an AQMP that establishes a program of rules and regulations directed at attaining the NAAQS and CAAQS.

As stated above, the SCAQMD adopted the 2016 AQMP on March 3, 2017 (SCAQMD 2017). The 2016 AQMP incorporates the latest scientific and technical information and planning assumptions, including the 2016–2040 RTP/SCS, updated emission inventory methodologies for various source categories, and 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.

With respect to the first criterion of consistency with the AQMP, a project may have a significant impact where project-related emissions would exceed federal, State, or regional standards or

thresholds or where project-related emissions would substantially contribute to an existing or projected air quality violation. The SCAQMD and Mt. SAC have 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 4.2-4) would have a less than significant effect on regional air quality, consistent with Mt. SAC's thresholds of significance. The proposed 2018 EFMP emissions were estimated using the CalEEMod version 2016.3.2 computer program (CAPCOA 2016). The proposed Project identifies the framework for the uses and development of land on campus necessary to accommodate an identified level of enrollment and physical development. However, enrollment decisions and the actual implementation of specific capital projects are influenced by multiple factors, including funding decisions, demographics, and other factors external to the proposed Project process. Thus, while the proposed Project identifies the physical resources necessary to meet Mt. SAC's mission and its long-range development plans, it makes no commitments regarding the timing for achieving identified enrollment projections or implementing physical development. Specifically, construction details for Phase 2 are too speculative to be quantified at this time. The construction of Phases 1A and 1B were quantified for this analysis.

Construction of Phases 1A and 1B would occur over approximately 38 months and was modeled to occur from 2020 through 2022. The CalEEMod input for construction activities was based primarily on the proposed 2018 EFMP's construction assumptions and default assumptions derived from CalEEMod, as summarized below. For the purposes of providing a conservative air quality analysis, most construction occurring during Phases 1A and 1B were modeled to have overlapping construction phasing.

Construction Emissions

Air pollutant emissions would occur from construction equipment exhaust; fugitive dust from demolition and site grading; exhaust from trucks hauling demolition debris, soil, 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, have been incorporated into the proposed Project and are included in the emissions calculations.

Regional Emissions Thresholds – Maximum Daily Regional Emissions

Table 4.2-5, presents the estimated unmitigated maximum daily emissions during construction of the proposed Project and compares the estimated emissions with the SCAQMD's daily regional emission thresholds.

TABLE 4.2-5
PROPOSED 2018 EFMP
UNMITIGATED MAXIMUM DAILY REGIONAL CONSTRUCTION EMISSIONS

Year	Emissions (lbs./day)					
	VOC	NOx	CO	SOx	PM10	PM2.5
2019	23	241	154	<1	30	16
2020	62	146	94	<1	29	14
2021	17	100	81	<1	29	15
2022	16	80	68	<1	17	8
Maximum	**62**	**241**	**154**	**<1**	**30**	**16**
SCAQMD Thresholds (Table 4)	*75*	*100*	*550*	*150*	*150*	*55*
Exceeds SCAQMD Thresholds?	**No**	**Yes**	**No**	**No**	**No**	**No**

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

Source: SCAQMD 2015a (thresholds); see Attachment A for CalEEMod model outputs.

As shown in Table 4.2-5, NOx emissions during construction in 2019 would exceed the SCAQMD threshold of 100 pounds per day. Table 4.2-6, shows the proposed 2018 EFMP's emissions with implementation of MM AQ-1. Implementation of MM AQ-1, discussed in detail in Section 4.2.7, requires that all off-road diesel-powered construction equipment greater than 50 horsepower (hp) shall meet Tier 4 off-road emissions standards. MM AQ-1 would reduce NOx emissions to less than the SCAQMD threshold for NOx. Phase 2 construction was not modeled for this analysis; and, although Phase 2 construction emissions are likely to be comparable to or less than Phase 1A and 1B emissions, emissions would potentially exceed thresholds. Therefore, Phase 2 construction would also be required to comply with MM AQ-1 to reduce impacts to less than significant. Impacts related to regional construction emissions for Phases 1A, 1B, and 2 would be less than significant with mitigation.

TABLE 4.2-6
PROPOSED 2018 EFMP
MITIGATED MAXIMUM DAILY REGIONAL CONSTRUCTION EMISSIONS

Year	Emissions (lbs./day)					
	VOC	NOx	CO	SOx	PM10	PM2.5
2019	6	54	159	<1	13	4
2020	56	53	96	<1	15	6
2021	12	39	87	<1	14	6
2022	12	36	72	<1	11	4
Maximum	**56**	**54**	**159**	**<1**	**15**	**6**
SCAQMD Thresholds (Table 4)	*75*	*100*	*550*	*150*	*150*	*55*
Exceeds SCAQMD Thresholds?	**No**	**No**	**No**	**No**	**No**	**No**

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

Source: SCAQMD 2015a (thresholds); see Attachment A for CalEEMod model outputs.

Construction Phase Localized Significance Thresholds

In accordance with the Mt. SAC CEQA Thresholds of Significance, the proposed 2018 EFMP does not require preparation of analysis pursuant to the SCAQMD localized significance threshold (LST) methodology. However, for informational purposes, Table 4.2-7 provides an 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 on site are considered. For the CO and NO_2 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 one hour are students, faculty, and staff adjacent to the construction activities. The nearest receptors who could be exposed for 24 hours (e.g., residences) are located approximately 275 meters (902 feet) north of Phases 1A and 1B, and 37 meters (120 feet) from Phase 2 construction activities. 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 4.2-7 shows the highest maximum localized daily construction emissions for NO_x, CO, PM10, and PM2.5 for on-site construction activities, which would occur during the grading phase of the Student Center and Central Campus Infrastructure. These 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 proposed 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 Phase 1A- and Phase 1B-related air pollutant emissions attributable to the proposed Project. Emissions from Phase 2 emissions would be comparable to or less than the emissions generated from overlapping phasing of Phases 1A and 1B, and the receptors would be greater than the 25-meter-threshold used in this analysis. Therefore, it can be reasonably assumed that localized emissions would be less than the respective LST thresholds for Phase 2. This impact would be less than significant with mitigation.

TABLE 4.2-7
PROPOSED 2018 EFMP
MAXIMUM LOCALIZED DAILY CONSTRUCTION EMISSIONS (LBS/DAY)

Year	NO_x	CO	PM10	PM2.5
Maximum Daily Emissions	3	33	3	2
SCAQMD LST[a]	*178*	*1,112*	*8*	*5*
Exceeds Thresholds	**No**	**No**	**No**	**No**

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

[a] Thresholds for Source Receptor Area 10, Pomona/Walnut Valley for a 3-acre site, 25-meter receptor distance.

Source: SCAQMD 2008.

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.

The proposed 2018 EFMP would generate 5,613 net trips per day. Emissions for the net daily operational emissions were derived by estimating the net trips and land uses that were added as

a result of Phases 1A, 1B, and 2, for full build-out in 2027. Estimated peak daily operational emissions are shown in Table 4.2-8.

TABLE 4.2-8
NET DAILY OPERATIONAL EMISSIONS

Source	Emissions (lbs/day)					
	VOC	**NOx**	**CO**	**SOx**	**PM10**	**PM2.5**
Area sources	13	<1	<1	<1	<1	<1
Energy sources	<1	2	2	<1	<1	<1
Mobile sources	6	21	75	<1	36	10
Total Operational Emissions*	19	23	77	<1	36	10
SCAQMD Significance Thresholds (Table 4)	*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

* Some totals do not add due to rounding.

Note: CalEEMod model data sheets are included in Attachment A.

As shown in Table 4.2-8, the proposed 2018 EFMP's operational emissions would be less than the SCAQMD CEQA significance thresholds for all criteria pollutants. Therefore, the proposed Project's operational impact on regional emissions would be less than significant; and no mitigation is required.

Ambient Air Quality for Criteria Pollutants – Carbon Monoxide Hotspots

The ambient air quality standard for CO is analyzed when there is a potential for severe traffic congestion at high-volume, signalized intersections. Localized areas where ambient concentrations exceed federal and/or State standards for CO are termed CO "hotspots". The BAAQMD has established the number of vehicles that are likely to cause a CO hotspot within their CEQA screening criteria (BAAQMD 2017). This screening criteria states that less-than-significant impact to localized CO concentrations would result if the following screening criteria are met:

1. The project is consistent with an applicable congestion management program established by the county congestion management agency for designated roads or highways, regional transportation plan, and local congestion management agency plans.
2. The project traffic would not increase traffic volumes at affected intersections to more than 44,000 vehicles per hour.
3. The project traffic would not increase traffic volumes at affected intersections to more than 24,000 vehicles per hour where vertical and/or horizontal mixing is substantially limited (e.g., tunnel, parking garage, bridge underpass, natural or urban street canyon, below-grade roadway).

In terms of the first criterion, the proposed 2018 EFMP was found to be consistent with the current Congestion Management Program for Los Angeles County (Psomas 2018). For the second criterion, the proposed Project would not increase traffic volumes at affected intersections to more than 44,000 vehicles per hour; trip generation for the proposed Project would have a morning

peak hour volume of 537 new trips and the afternoon peak hour would be 537 new trips (Psomas 2018). For the third criterion, after application of the trip reduction credits,[4] the proposed Project is anticipated to generate 537 new trips during the morning peak hour and 537 new trips during the afternoon peak hour, which is substantially below the 24,000 vehicles per hour for roadways that have limited dispersion of air pollutants. Because the proposed Project fulfills the abovementioned BAAQMD's screening criteria, the proposed Project's vehicle trips would not result in CO concentrations of such magnitude to exceed the State and federal ambient air quality standards. Therefore, the proposed 2018 EFMP would not result in the creation of a CO hotspot, and the impacts would be less than significant.

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 proposed 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 proposed 2018 EFMP is consistent with the goals of the AQMP, no conflict with the 2016 AQMP would occur with the proposed Project.

Level of Significance Prior to Mitigation

Potentially Significant for construction emissions.

Recommended Mitigation Measures

MM AQ-1 would reduce NOx emissions from construction equipment.

Level of Significance After Mitigation

Less than significant.

Threshold 2.2	**Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?**

2018 Educational and Facilities Master Plan (Phases 1A, 1B, and 2) and Project-Specific

With respect to determining the significance of the proposed 2018 EFMP contribution, the SCAQMD neither recommends quantified analyses of construction and/or operational emissions from multiple development projects nor provides methodologies or thresholds of significance to be used to assess the cumulative emissions generated by multiple cumulative projects. Instead, the SCAQMD recommends that a project's potential contribution to cumulative impacts be assessed utilizing the same significance criteria as those for project-specific impacts. Furthermore, the SCAQMD states that if an individual development project generates less-than-significant construction or operational emissions impacts, then the development project would not

[4] For the proposed Project a trip reduction credit has been included in the traffic impact assessment to reflect some internal capture. This is discussed in Section 4.14, Transportation and Traffic.

contribute to a cumulatively considerable increase in emissions for those pollutants for which the SoCAB is in nonattainment.

As previously identified in Table 4.2-3, the region is in nonattainment for O_3, PM10, and PM2.5. The proposed 2018 EFMP would contribute criteria pollutants to the area during short-term construction and long-term operational activities. As discussed under Threshold 2.2 and shown in Table 4.2-6, proposed Project regional construction emissions of O_3 precursor NOx would be less than significant with mitigation. Therefore, the proposed 2018 EFMP's short-term construction emissions of the nonattainment pollutants would not be cumulatively considerable.

As shown in Table 4.2-8, mass daily operational emissions would be less than SCAQMD significance thresholds. The cumulative operational impact of nonattainment pollutants would be less than significant.

Level of Significance Prior to Mitigation

Potentially significant for construction emissions and less than significant for operational emissions.

Recommended Mitigation Measures

MM AQ-1 would reduce NOx emissions from construction equipment.

Level of Significance After Mitigation

Less than significant for construction and operational emissions.

Threshold 2.3	**Would the project expose sensitive receptors to substantial pollutant concentrations?**

2018 Educational and Facilities Master Plan (Phases 1A, 1B, and 2) and Project-Specific

The following addresses construction emissions to off-site receptors, exposure of sensitive receptors to CO hotspots, and exposure of sensitive receptors to TACs from the proposed 2018 EFMP's construction and operations.

Construction Emissions to On- and Off-site Receptors

The analysis of Ambient Air Quality for Criteria Pollutants – Local Significance Thresholds (under the discussion of Threshold 2.1) for the proposed Project shows that exposure of on- and off-site receptors to localized construction emissions would be less than significant with MM AQ-1.

CO Hotspots

The analysis of Ambient Air Quality for Criteria Pollutants – Carbon Monoxide Hotspots (under the discussion of Threshold 2.1) shows that sensitive receptors would not be exposed to substantial CO concentrations at congested intersections; the impact would be less than significant, and no mitigation is required.

Toxic Air Contaminants

Construction

Construction activities associated with the proposed 2018 EFMP would result in short-term emissions of diesel PM from the exhaust of off-road, heavy-duty diesel equipment used for demolition, site preparation (e.g., excavation and grading), paving, building construction, and other miscellaneous activities. The dose to which receptors are exposed is the primary factor used to determine health risk. Dose is a function of the concentration of a substance or substances in the environment and the duration of exposure to the substance. Thus, the risks estimated for a maximally exposed individual (MEI) are higher if a fixed exposure occurs over a longer period of time. According to the Office of Environmental Health Hazards Assessment (OEHHA), health risk assessments, which determine the exposure of sensitive receptors to TAC emissions, should be based on a 70-year exposure period; however, such assessments should be limited to the period/duration of activities associated with a proposed Project. Construction-related emissions of TACs would not expose sensitive receptors to substantial emissions of TACs because (1) the use of off-road, heavy-duty diesel equipment would be short in duration when compared to 70 years; (2) diesel PM has highly dispersive properties; and (3) further reductions in exhaust emissions from improved equipment would occur. Therefore, the proposed 2018 EFMP would have a less than significant impact related to emissions of diesel PM during construction, and no mitigation is required.

Operations

Projects that may be long-term sources of TACs are generally those with commercial or industrial stationary sources of TAC emissions, such as manufacturing operations, gasoline stations, or those that attract multiple sources of diesel engine-driven equipment (e.g., distribution centers, truck stops, railroad yards, or bus stations). College campuses may also be sources of TACs associated with the use of chemicals for educational and research activities. The potential health risks associated with the use of chemicals for educational and research activities are dependent upon the types and amounts of chemicals used and actually released into the outside air. None of the new or expanded buildings proposed for the campus under the proposed 2018 EFMP would provide new facilities that use and release toxic chemicals into the outside air. Therefore, the impact would be less than significant, and no mitigation is required.

Level of Significance Prior to Mitigation

Less than significant.

Recommended Mitigation Measures

No significant impacts were identified, and mitigation is not required.

Level of Significance After Mitigation

Less than significant.

4.2.6 CUMULATIVE IMPACTS

Air quality is generally a regional issue, determined by geography and meteorology. The region of interest for the proposed 2018 EFMP is the SoCAB. The USEPA and CARB use the SoCAB as the basis for attainment designations. Threshold 2.2 provides an analysis of the proposed Project's individual impact on regional nonattainment pollutants. It is concluded that the regional construction-related impacts would be significant and unavoidable and long-term operational impacts to regional criteria pollutant concentrations would be less than significant.

Construction activities associated with the proposed 2018 EFMP would result in less than significant construction-related localized air quality impacts, as quantified above in Table 4.2-7. Short-term cumulative impacts related to air quality could occur if construction of the proposed Project and other projects in the surrounding area were to occur simultaneously. In particular, with respect to local impacts, the consideration of cumulative construction particulate (PM10 and PM2.5) impacts is limited to cases when projects constructed simultaneously are within a few hundred yards of each other because of (1) the combination of the short range (distance) of particulate dispersion (especially when compared to gaseous pollutants) and (2) the SCAQMD's required dust-control measures, which further limit particulate dispersion from a project site.

The proposed 2018 EFMP project area is largely developed, and no other development projects in the vicinity of the project site could potentially be under construction concurrently with the proposed project. Therefore, local construction emissions would not be cumulatively considerable, the impact would be less than significant, and no additional mitigation would be required.

As discussed under Threshold 2.2, the SCAQMD recommends that a project's potential contribution to cumulative impacts be assessed utilizing the same significance criteria as those for project-specific impacts. Furthermore, the SCAQMD states that if an individual development project generates less-than-significant construction or operational emissions impacts, then the development project would not contribute to a cumulatively considerable increase in emissions for those pollutants for which the SoCAB is in nonattainment. Therefore, the proposed 2018 EFMP would not generate a cumulatively considerable net increase of criteria pollutants for regional construction and operational emissions.

With respect to local concentrations of CO, the analysis of Threshold 2.1 is also a cumulative analysis because it considers traffic from existing and all future sources as well as traffic from the proposed 2018 EFMP. The impact would be less than significant.

The proposed 2018 EFMP's contribution to both regional and local TAC concentrations would be negligible. The proposed Project would not result in a cumulatively considerable contribution to a significant cumulative impact for air quality.

4.2.7 MITIGATION MEASURES

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.

4.2.8 REFERENCES

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4.3 BIOLOGICAL RESOURCES

The information in this section is based on the results of a literature review and a general biological survey and vegetation mapping for the proposed Mt. SAC 2018 Educational and Facilities Master Plan (proposed 2018 EFMP) project (hereinafter referred to as the "proposed Project").

No comment letters addressing biological resources were received in response to the Notice of Preparation (NOP) for this Draft Environmental Impact Report (EIR).

4.3.1 REGULATORY SETTING

Federal

Federal Endangered Species Act

The Federal Endangered Species Act of 1973 (FESA) protects plants and animals that the U.S. Fish and Wildlife Service (USFWS) has listed as "endangered" or "threatened". A federally listed species is protected from unauthorized "take", which is defined in the FESA as acts to "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect or attempt to engage in any such conduct" (16 *United States Code* [USC] Sections 1532[19] and 1538[a]). In this definition, "harm" includes "any act which actually kills or injures fish or wildlife, and emphasizes that such acts may include significant habitat modification or degradation that significantly impairs essential behavioral patterns of fish or wildlife" (50 *Code of Federal Regulations* [CFR], Title 50, Section 17.3). Unless performed for scientific or conservation purposes with the permission of the USFWS, take of listed species is only permissible if the USFWS issues an Incidental Take Permit (ITP). When issuing an ITP, all federal agencies, including the USFWS, must ensure that their activities are "not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of habitat of such species" (16 USC 1536[a]). Enforcement of the FESA is administered by the USFWS.

The FESA also provides for designation of Critical Habitat: specific areas within the geographical range occupied by a species where physical or biological features "essential to the conservation of the species" are found and "which may require special management considerations or protection" (16 USC 1538[5][A]). Critical Habitat may also include areas outside the current geographical area occupied by the species that are nonetheless essential for the conservation of the species.

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) prohibits actions, unless permitted, "to pursue, hunt, take, capture, kill, attempt to take, capture or kill, possess, offer for sale, sell, offer to purchase, purchase, deliver for shipment, ship, cause to be shipped, deliver for transportation, transport, cause to be transported, carry, or cause to be carried by any means whatever, receive for shipment, transportation or carriage, or export, at any time, or in any manner, any migratory bird, included in the terms of the Convention for the protection of migratory birds or any part, nest, or egg of any such bird" (16 USC 703).

The MBTA covers the taking of any nests or eggs of migratory birds, except as allowed by permit pursuant to 50 CFR, Part 21. Disturbances causing nest abandonment and/or loss of reproductive effort (i.e., killing or abandonment of eggs or young) may also be considered take. This regulation seeks to protect migratory birds and active nests.

In 1972, the MBTA was amended to include protection for migratory birds of prey (e.g., raptors). Six families of raptors occurring in North America were included in the amendment: *Accipitridae* (kites, hawks, and eagles), *Cathartidae* (New World vultures), *Falconidae* (falcons and caracaras), *Pandionidae* (ospreys), *Strigidae* (typical owls), and Tytonidae (barn owls). The provisions of the 1972 amendment protects all species and subspecies of the families listed above.

The MBTA protects over 800 species, including geese, ducks, shorebirds, raptors, songbirds, and many relatively common species. Bird species protected under the provisions of the MBTA are identified by the List of Migratory Birds (50 CFR 10.13), as updated by the 1983 American Ornithologists' Union (AOU) Checklist and published supplements by the USFWS.

Bald and Golden Eagle Protection Act

The Bald and Golden Eagle Protection Act (16 USC 668) provides for the protection of the bald eagle (*Haliaeetus leucocephalus*) and the golden eagle (*Aquila chrysaetos*) by prohibiting, except under certain specified conditions, the taking, possession, and commerce of such birds. The 1972 amendments increased penalties for violating provisions of the Act and strengthened other enforcement measures. A 1978 amendment authorizes the Secretary of the Interior to permit the taking of golden eagle nests that interfere with resource development or recovery operations. A 1994 Memorandum from President William J. Clinton to the heads of executive agencies and departments sets out the policy concerning collection and distribution of eagle feathers for Native American religious purposes.

Sections 404 and 401 of the Clean Water Act of 1972

Section 404 of the Clean Water Act (CWA) (33 USC 1251 et seq.) regulates the discharge of dredged or fill material into waters of the United States, including wetlands. The U.S. Army Corps of Engineers (USACE) is the designated regulatory agency responsible for administering the 404 permit program and for making jurisdictional determinations. This permitting authority applies to all waters of the United States where the material has the effect of (1) replacing any portion of waters of the United States with dry land or (2) changing the bottom elevation of any portion of waters of the United States. These fill materials would include sand, rock, clay, construction debris, wood chips, and materials used to create any structure or infrastructure in waters of the United States. Dredge and fill activities are typically associated with development projects; water resource-related projects; infrastructure development; and wetland conversion to farming, forestry, or urban development.

Under Section 401 of the CWA, an activity requiring a USACE Section 404 permit must obtain a State Water Quality Certification (or waiver thereof) to ensure that the activity will not violate established State water quality standards. The State Water Resources Control Board (SWRCB), in conjunction with the nine California Regional Water Quality Control Boards (RWQCBs), is responsible for administering the Section 401 water quality certification program.

Under Section 401 of the federal CWA, an activity involving discharge into a water body must obtain a federal permit and a State Water Quality Certification to ensure that the activity will not violate established water quality standards. The U.S. Environmental Protection Agency (USEPA) is the federal regulatory agency responsible for implementing the CWA. However, it is the SWRCB, in conjunction with the nine RWQCBs, who essentially has been delegated the responsibility of administering the water quality certification (Section 401) program.

State

California Endangered Species Act

In addition to federal laws, the State of California implements the California Endangered Species Act (CESA) which is enforced by the California Department of Fish and Wildlife (CDFW). The CESA program maintains a separate listing of species beyond the FESA, although the provisions of each act are similar.

State-listed Threatened and Endangered species are protected under provisions of the CESA. Activities that may result in take of individuals (defined in CESA as acts to "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill") are regulated by the CDFW. Habitat degradation or modification is not included in the definition of take under CESA. Nonetheless, the CDFW has interpreted take to include the destruction of nesting, denning, or foraging habitat necessary to maintain a viable breeding population of protected species.

If a species is also federally listed, CDFW can issue a consistency finding in accordance with Section 2080.1 of the *California Fish and Game Code* if the USFWS has issued an incidental take authorization, which also satisfies CESA's requirements.

California Environmental Quality Act

Section 15380 of the California Environmental Quality Act (CEQA) Guidelines independently defines "endangered" and "rare" species separately from the definitions of the CESA. Under CEQA, endangered species of plants or animals are defined as those whose survival and reproduction in the wild are in immediate jeopardy, while rare species are defined as those with such low numbers that they could become endangered if their environment worsens.

California Fish and Game Code

The CDFW administers the *California Fish and Game Code*. Particular sections of the Code are applicable to natural resource management.

Lake and Streambed Alteration Program

California Fish and Game Code Sections 1600 et seq. establish a process to ensure that projects conducted in and around lakes, rivers, or streams do not adversely impact fish and wildlife resources or, when adverse impacts cannot be avoided, ensures that adequate mitigation and/or compensation is provided.

California Fish and Game Code Section 1602 requires any person, State, or local governmental agency or public utility to notify the CDFW before beginning any activity that will do one or more of the following:

- substantially obstruct or divert the natural flow of a river, stream, or lake;
- substantially change or use any material from the bed, channel, or bank of a river, stream, or lake; or
- deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it can pass into a river, stream, or lake.

Section 1602 of the *California Fish and Game Code* applies to all perennial, intermittent, and ephemeral rivers, streams, and lakes in the State. CDFW's regulatory authority extends to include riparian habitat (including wetlands) supported by a river, stream, or lake regardless of the presence or absence of hydric soils and saturated soil conditions. Generally, the CDFW takes jurisdiction to the top bank of the stream or to the outer limit of the adjacent riparian vegetation (outer drip line), whichever is greater. Notification is generally required for any project that will take place in or in the vicinity of a river, stream, lake, or their tributaries. This includes rivers or streams that flow at least periodically or permanently through a bed or channel with banks that support fish or other aquatic life and watercourses having a surface or subsurface flow that support or have supported riparian vegetation. A Section 1602 Streambed Alteration Agreement would be required if impacts to identified CDFW jurisdictional areas occur. As discussed below, two drainages in the survey area fall under the jurisdiction of CDFW based on Section 1602 of the *California Fish and Game Code*.

California Native Plant Protection Act

Sections 1900–1913 of the *California Fish and Game Code* were developed to preserve, protect, and enhance Rare and Endangered plants in the State of California. Known as the California Native Plant Protection Act, it requires all State agencies to use their authority to carry out programs to conserve Endangered and Rare native plants. Provisions of the Native Plant Protection Act prohibit the taking of listed plants from the wild and require notification of the CDFW at least ten days in advance of any change in land use that would adversely impact listed plants. This allows the CDFW to salvage listed plant species that would otherwise be destroyed. As discussed below, the survey area does not provide suitable habitat that would support Rare or Endangered plant species.

Birds of Prey and Migratory Birds

Section 3503 of the *California Fish and Game Code* makes it unlawful to take, possess, or destroy any bird's nest or any bird's eggs. Further, any birds in the orders *Falconiformes* or *Strigiformes* (birds of prey, such as hawks, eagles, and owls) and their nests and eggs are protected under Section 3503.5 of the *California Fish and Game Code*. Section 3513 of the *California Fish and Game Code* duplicates the federal protection of migratory birds. A consultation with CDFW would be required prior to the removal of any bird of prey nest that may occur on a survey area.

Fully Protected Birds

Section 3511 of the *California Fish and Game Code* provides a list of fully protected bird species that may not be taken or possessed at any time, except as provided in Section 2081.7 or 2835. The CDFW is unable to authorize the issuance of permits or licenses to take these species, except for necessary scientific research; authorization to live capture and relocate species may be granted for the protection of livestock. Examples of species that are fully protected by the State include the golden eagle and white-tailed kite (*Elanus leucurus*).

Fully Protected Mammals

Section 4700 of the *California Fish and Game Code* lists fully protected mammals, where the CDFW is unable to authorize the issuance of permits or licenses to take these species. As discussed below, no fully protected mammals are expected to occur in the survey area.

Porter-Cologne Water Quality Act

The Porter-Cologne Water Quality Control Act charges the SWRCB and the nine RWQCBs statewide with protecting water quality throughout California. Typically, the SWRCB and RWQCB act in concert with the USACE under Section 401 of the CWA in relation to permitting fill of federally jurisdictional waters. SWRCB and the RWQCBs may require permits (known as "Waste Discharge Requirements" or WDRs) for the fill or alteration of the waters of the State. The term "waters of the State" is defined as "any surface water or groundwater, including saline waters, within the boundaries of the State" (*California Water Code,* Section 13050[e]). The State and RWQCBs have interpreted their authority to require WDRs to extend to any proposal to fill or alteration of the waters of the State, even if those same waters are not under USACE jurisdiction. Pursuant to this authority, the State and Regional Boards may require the submission of a "report of waste discharge" under Section 13260, which is treated as an application for WDRs.

The survey area is located within RWQCB Region 4, the Los Angeles Region. The SWRCB and the RWQCB have adopted a Water Quality Control Plan for this region (the Santa Ana Region Basin Plan [Basin Plan]). The Basin Plan contains goals and policies, descriptions of conditions, and proposed solutions to surface and groundwater issues. The Basin Plan also establishes water quality standards for surface and groundwater resources and includes beneficial uses and levels of water quality that must be met and maintained to protect these uses. The Basin Plan is further discussed in Section 4.9, Hydrology and Water Quality, of this Draft EIR.

Local

City of Walnut General Plan

The recently adopted 2018 *City of Walnut General Plan* (WGP) and a discussion of the proposed Project's consistency with applicable goals and policies related to biological resources is discussed in Section 4.10, Land Use and Planning, of this Draft EIR.

Mt. San Antonio College California Black Walnut Management Plan

In 2012, Mt. SAC developed the California Black Walnut Management Plan to provide details for mitigation of impacts to southern California black walnut (*Juglans californica*) and the associated woodland vegetation on the campus (Helix 2012). A conservation plan was adopted in the 2005 Mt. SAC College Master Plan Update, which recommended "development of a land management plan for the open space area where the California black walnut and the animal species that depend on them are located." The goal of the California Black Walnut Management Plan is to replace southern California black walnut habitat and provide connectivity between areas of intact native vegetation on campus and enhance the overall value of on-site designated open space and conservation.

Restrictive Covenant, West Parcel Solar Project

In January 2018, Mt. SAC entered into a Restrictive Covenant in favor of the State of California, acting by and through the CDFW and the United States of America, acting by and through the U.S. Army Corps of Engineers, which grants a restrictive covenant over a 16.72-acre portion of the Mt. SAC campus, known as the West Parcel Solar Project. This Restrictive Covenant grants jurisdiction of the conservation, protection, restoration, and management of biological resources on this property due to the property's highly valued wildlife and habitat resources. Although this property is located within the Mt. SAC campus, the proposed 2018 EFMP does not involve any direct or indirect impacts to this property.

4.3.1 METHODS

A Psomas Biologist conducted a biological survey in September 2018. The survey area for the general biological survey and vegetation mapping includes the portions of the campus anticipated to be affected by the proposed Project (Exhibit 4.3-1), with a focus on undeveloped areas. A summary of the methods and limitations of the literature review, vegetation mapping, and biological surveys is provided below.

Literature Review

Prior to conducting surveys, Psomas conducted a literature review to identify special status plants, wildlife, and habitats known to occur in the vicinity of the proposed Project. This search included a review of the California Native Plant Society's (CNPS's) Locational Inventory of Rare and Endangered Vascular Plants of California (CNPS 2018) and the CDFW's California Natural Diversity Database (CNDDB, CDFW 2018a). Database searches included the U.S. Geological Survey's (USGS's) San Dimas, Baldwin Park, La Habra, Yorba Linda, Prado Dam, Ontario, Glendora, Azusa, and Mt. Baldy 7.5-minute quadrangles. The database searches were completed in 2018 to obtain the most recent occurrence data.

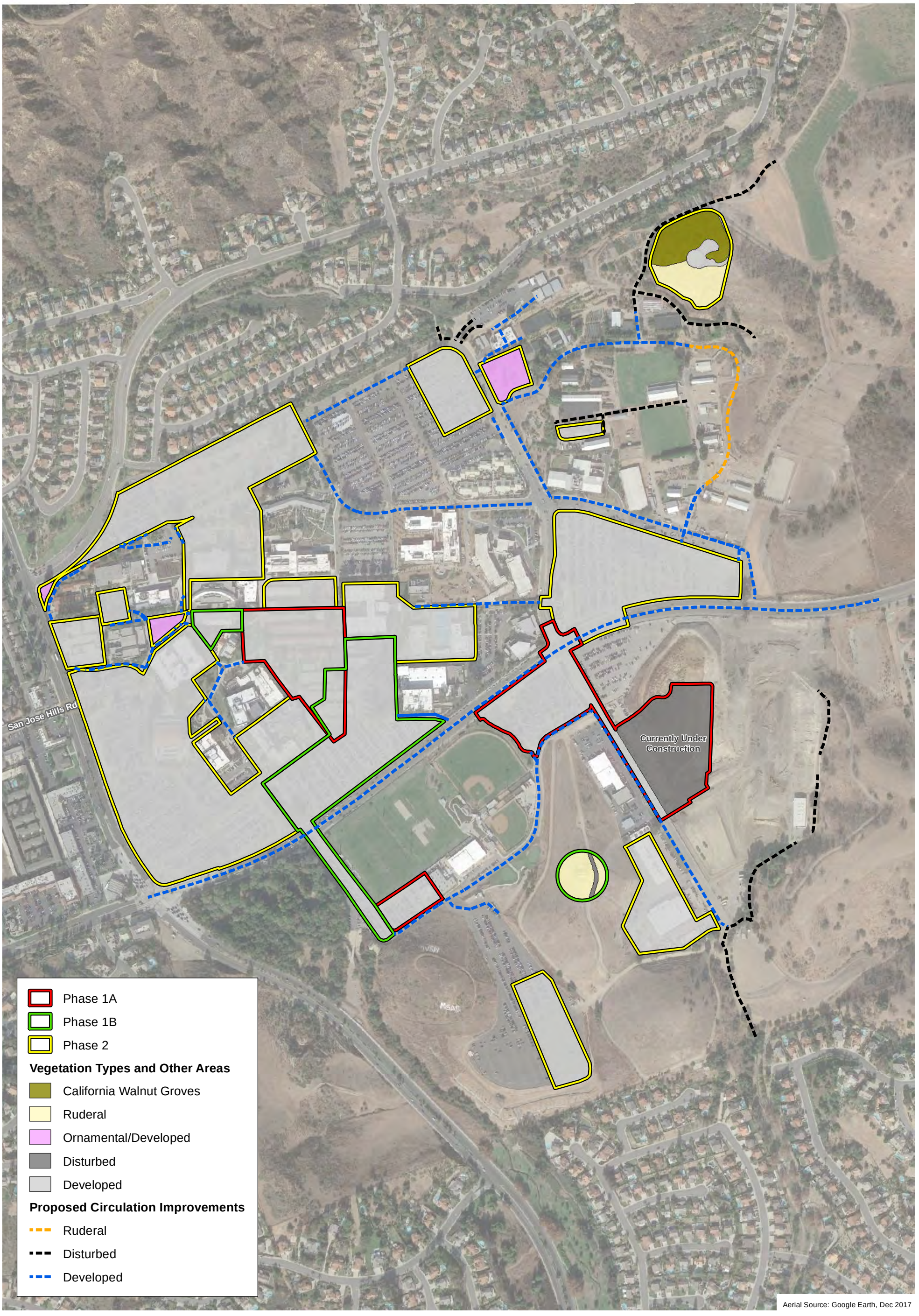
Vegetation Mapping and General Surveys

Psomas Senior Biologist Steve Norton conducted a general plant and wildlife survey and mapped vegetation in the survey area on September 19, 2018. Vegetation was mapped in the field on a 1 inch equals 500 feet (1″ = 500′) scale color aerial photograph. The purpose of the survey was to describe the vegetation present in the survey area and to evaluate the potential of the habitats to support special status species. Nomenclature for vegetation types generally follows that of the second edition of *A Manual of California Vegetation* (Sawyer et al. 2009). All plant species were recorded in field notes.

A general survey for amphibians, reptiles, birds, and mammals was conducted simultaneously with vegetation mapping in 2018. Each habitat type was evaluated for its potential to support special status species that are known to occur or that are expected to occur in the region. Taxonomy and nomenclature generally follows Baldwin et al. (2012), Hickman (1993), and Munz (1974) for plants; Crother (2012) for amphibians and reptiles; American Ornithologists' Society (AOS 2018) for birds; and Wilson and Reeder (2005) for mammals. All wildlife species observed were recorded in field notes.

4.3.2 ENVIRONMENTAL SETTING

The 418.44-acre Mt. SAC campus is located in the lower elevations of the San Jose Hills, between approximately 650 and 990 feet above mean sea level. The campus property is mostly composed of development including paved parking lots, academic and administrative buildings, and sporting and agricultural facilities. Portions of the campus, however, contain naturally vegetated areas. These areas include the Mt. SAC Wildlife Sanctuary, the hills that support running and athletic trails, and the hills leading to the existing underground utilities infrastructure water tank in the Farm Precinct off Reservoir Road. The proposed Project would occur in predominantly developed areas that contain sparse, ornamental vegetation subject to heavily landscaped activities. The portions of the proposed Project that will occur in naturally vegetated areas are the focus of this analysis; and the survey area, totaling approximately 105.26 acres, is limited to those areas identified for future development and/or improvements associated with buildout of Phases 1A, 1B and 2 of the proposed 2018 EFMP and resulting in physical impacts.



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Vegetation Types

Exhibit 4.3-1

Mt. SAC 2018 Educational and Facilities Master Plan EIR

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Vegetation Types and Other Areas

Vegetation types in the survey area include California walnut groves, ruderal, and ornamental/developed; disturbed and developed landcover also occurs (Exhibit 4.3-1). A general description of each of the vegetation types and other areas is included below, and the plant species observed in the survey area during the survey are included in the vegetation descriptions. The total acreage of each vegetation type is summarized below in Table 4.3-1.

TABLE 4.3-1
VEGETATION TYPES AND OTHER AREAS IN THE SURVEY AREA

Vegetation Types and Other Areas	Existing (Acres)*
California Walnut Groves	1.96
Ruderal	2.91
Ornamental/Developed	1.83
Disturbed	6.85
Developed	91.71
Total	***105.26***

* Acreage includes the total footprint of Phase 1A, Phase 1B, and Phase 2; the footprint of the proposed circulation improvements is not included.

California Walnut Groves

The vegetation type California walnut groves occurs on the north/northwest-facing slopes in the northeast corner of the campus (Phase 2). This vegetation type is dominated by an open canopy of southern California black walnut with an understory of non-native grasses (e.g., bromes [*Bromus* spp.] and oats [*Avena* sp.]), which were desiccated at the time of the survey, and scattered native species including California sagebrush (*Artemisia californica*), black sage (*Salvia mellifera*), and western poison oak (*Toxicodendron diversilobum*).

This vegetation type is consistent with the California walnut groves (Alliance in Sawyer et al. 2009). It is considered sensitive by the CDFW (CDFW 2018b).

Ruderal

The term “ruderal” is used to describe weedy, non-native vegetation often associated with soil that has been disturbed. These areas are consistent with various non-native stands (Sawyer et al. 2009), such as yellow star-thistle fields and upland mustards. This vegetation type is not considered sensitive by the CDFW.

Ruderal vegetation occurs on undeveloped slopes in the northeast corner of the campus (Phase 2) and in the southern portion of the campus (Phase 1B). The vegetation in the northeast corner is adjacent to the California walnut groves and is dominated by non-native, invasive species such as mustard (desiccated at the time of the survey, but likely shortpod mustard [*Hirschfeldia incana*]) and tocalote (*Centaurea melitensis*). Sparsely scattered native shrubs (e.g., prickly-pear [*Opuntia* sp.], California sagebrush, and California buckwheat [*Eriogonum fasciculatum*]) are also present. The ruderal vegetation in the southern portion of the campus is dominated by Russian thistle (*Salsola tragus*) with non-native grasses (*Bromus* spp.), mustard,

and a stand of coyote melon (*Cucurbita foetidissima*). Two dead gum tree (*Eucalyptus* sp.) snags are located next to two aboveground adjacent storage tanks on the slope of Reservoir Hill.

A portion of the proposed circulation improvements also extend through a ruderal area in the northeast corner of the campus. There are stands of prickly-pear in this immediate area and on the surrounding slopes.

Ornamental/Developed

Ornamental/developed areas occur in a few portions of Phase 2 in the northern half of the campus, as shown on Exhibit 4.3-1. The areas consist of slightly larger patches of landscaping than the developed landcover described below. They consist of planted ornamental trees, including pines (*Pinus* sp.) and turf grass or other groundcover.

Developed

Developed areas comprise the majority of the campus. These areas consist of structures associated with the existing campus, paved roads, sidewalks, and parking lots. Some of these areas have closely associated landscaping such as pepper tree (*Schinus molle*), Brazilian pepper tree (*Schinus terebinthifolius*), pine, gum tree, and Mexican fan palm (*Washingtonia robusta*).

Disturbed

Disturbed areas are located throughout the campus and consist of dirt roads, trails, and a large active construction site for the new stadium in the southeast corner of the campus. Portions of the proposed circulation improvements also occur in disturbed areas. These areas are unvegetated.

Wildlife Species Observed or Expected to Occur

Common wildlife species observed or expected to occur in the survey area are discussed below. Wildlife species observed in the survey area are documented in the discussion below.

Fish

No perennial creeks, drainages, or other water bodies are present in the survey area. Therefore, no fish occur within the survey area.

Amphibians

Amphibians require moisture for at least a portion of their life cycle and many require standing or flowing water for reproduction. Terrestrial species may or may not require standing water for reproduction; they survive in dry areas by aestivating (i.e., remaining beneath the soil in burrows or under logs and leaf litter and emerging only when temperatures are low and humidity is high). Many of these species' habitats are associated with water, and they emerge to breed once the rainy season begins. Soil moisture conditions can remain high throughout the year in some habitat types depending on factors such as amount of vegetation cover, elevation, and slope/aspect.

No standing surface water was observed during the survey, and only limited surface water is anticipated in the vicinity during seasonally wet months of the year. Therefore, only one common amphibian species has potential to occur in the survey area: western toad (*Anaxyrus boreas*). No amphibians were observed during the survey.

Reptiles

Reptiles are well-adapted to life in arid habitats. They have several physiological adaptations that allow them to conserve water. Reptiles can also become dormant during weather extremes, allowing them to survive prolonged droughts and shortages of food (Ruben and Hillenius 2005). Reptilian diversity and abundance typically vary with vegetation type and character. Many species prefer only one or two vegetation types; however, most species will forage in a variety of habitats. Most reptile species that occur in open areas will excavate a burrow or use rodent burrows for cover, protection from predators, and refuge during extreme weather conditions.

One reptile species, western fence lizard (*Sceloporus occidentalis*), was observed in the survey area. Other common reptile species expected to occur in the survey area include common side-blotched lizard (*Uta stansburiana*) and gopher snake (*Pituophis catenifer*).

Birds

A variety of bird species are expected to be residents in the survey area, using the habitats throughout the year. Other species are expected to be present only during certain seasons. For example, the white-crowned sparrow (*Zonotrichia leucophrys*) is expected to occur in the survey area during the winter season but would not occur in the survey area in the summer season because it migrates north to its breeding range.

Several resident bird species were observed in the survey area including western scrub jay (*Aphelocoma californica*), Bewick's wren (*Thryomanes bewickii*), western bluebird (*Sialia mexicana*), California towhee (*Pipilo crissalis*), mourning dove (*Zenaida macroura*), Anna's hummingbird (*Calypte anna*), black phoebe (*Sayornis nigricans*), American crow (*Corvus brachyrhynchos*), northern mockingbird (*Mimus polyglottos*), Say's phoebe (*Sayornis saya*), and house finch (*Carpodacus mexicanus*).

Birds of prey (raptors) observed in the survey area include turkey vulture (*Cathartes aura*) and red-shouldered hawk (*Buteo lineatus*).

Mammals

Active burrows are present in portions of the survey area and could provide cover for a number of small mammal species. One small ground-dwelling mammal was observed in the survey area: California ground squirrel (*Otospermophilus beecheyi*). The urban-adapted fox squirrel (*Sciurus niger*) was also observed.

Medium to large-sized mammals or their sign that were observed or expected to occur in the survey area include desert cottontail (*Sylvilagus audubonii*), coyote (*Canis latrans*), bobcat (*Lynx rufus*), northern raccoon (*Procyon lotor*), Virginia opossum (*Didelphia virginiana*), and striped skunk (*Mephitis mephitis*). Cattle (*Bos taurus*) were also observed during the survey.

Bats occur throughout most of Southern California and may use any portion of the survey area as foraging habitat. Most of the bats that may occur in the survey area are inactive during the winter and either hibernate or migrate, depending on the species. No bat species were observed during surveys; however, species that may occur in the survey area include big brown bat (*Eptesicus fuscus*) and Brazilian free-tailed bat (*Tadarida brasiliensis*).

Special Status Biological Resources

The following section addresses special status biological resources that were observed, reported, or have the potential to occur in the survey area or in adjacent off-site areas. These resources include plant and wildlife species that have been afforded special status and/or recognition by federal and State resource agencies as well as private conservation organizations. In general, the principal reason an individual taxon (i.e., species, subspecies, or variety) is given such recognition is the documented or perceived decline or limitations of its population size, geographic range, and/or distribution, resulting in most cases from habitat loss. In addition to species, special status biological resources include vegetation types and habitats that are either unique; of relatively limited distribution in the region; or of particularly high wildlife value. These resources have been defined by federal, State, and local government conservation programs.

Both the FESA and CESA define "Endangered species" as one in danger of extinction throughout all or a significant portion of its geographic range while a "Threatened species" is one likely to become an Endangered species within the foreseeable future throughout all or a significant portion of its range. California "Species of Special Concern" is an informal designation used by the CDFW for some declining wildlife species that are not State Candidates for listing. This designation does not provide legal protection but signifies that these species are recognized as special status by the CDFW. Recently, the CDFW downlisted several species from Species of Special Concern to the "Watch List". Species that are California "Fully Protected" include those protected by special legislation for various reasons, such as the mountain lion (*Puma* [*Felis*] *concolor*) and white-tailed kite. Fully Protected species may not be taken or possessed at any time. "Special Animal" is a general term that refers to species that the California Natural Diversity Database (CNDDB) is interested in tracking, regardless of legal or protective status.

The California Rare Plant Rank (CRPR) is a ranking system by the Rare Plant Status Review group[1] and is managed by the California Native Plant Society (CNPS) and the CDFW. A CRPR summarizes information on the distribution, rarity, and endangerment of California's vascular plants. Plants with a CRPR of **1A** are presumed extirpated from the State because they have not been seen in the wild in California for many years, and they are either rare or extinct elsewhere. Plants with a CRPR of **1B** are Rare, Threatened, or Endangered throughout their range. Plants with a CRPR of **2A** are presumed extirpated from California but are more common elsewhere. Plants with a CRPR of **2B** are considered Rare, Threatened, or Endangered in California but are more common elsewhere. Plants with a CRPR of **3** require more information before they can be assigned to another rank or rejected; this is a "review" list. Plants with a CRPR of **4** are of limited distribution or are infrequent throughout a broader area in California; this is a "watch" list. The Threat Rank is an extension that is added to the CRPR to designate the plant's endangerment level. An extension of **.1** is assigned to plants that are considered to be "seriously threatened" in California (i.e., over 80 percent of the occurrences are threatened or have a high degree and immediacy of threat). Extension **.2** indicates the plant is "fairly threatened" in California (i.e., between 20 and 80 percent of the occurrences are threatened or have a moderate degree and immediacy of threat). Extension **.3** is assigned to plants that are considered "not very threatened" in California (i.e., less than 20 percent of occurrences are threatened or have a low degree and immediacy of threat or no current threats are known). The absence of a threat code extension indicates that this information is lacking for the plant(s) in question.

The CDFW provides a list of vegetation Alliances, Associations, and Special Stands that are considered "Sensitive Natural Communities" based on their rarity and threat (CDFW 2018b). In

[1] This group consists of over 300 botanical experts from the government, academia, nongovernmental organizations, and the private sector.

addition to providing an inventory of special status plant and wildlife species, the CNDDB also provides an inventory of vegetation types that are considered special status by the State and federal resource agencies, academic institutions, and various conservation groups (such as the CNPS). Determination of the level of imperilment (i.e., exposure to injury, loss, or destruction) is based on the NatureServe Heritage Program Status Ranks that rank both species and native vegetation types on a global (G) and statewide (S) basis according to their rarity, trend in population size or area, and recognized threats (e.g., proposed developments, habitat degradation, and non-native species invasion) (Faber-Langendoen et al. 2012). The ranks are scaled from 1 to 5. NatureServe considers **G1 or S1** communities to be critically imperiled and at a very high risk of extinction or elimination due to extreme rarity, very steep declines, or other factors; **G2 or S2** communities to be imperiled and at high risk of extinction or elimination due to very restricted range, very few populations or occurrences, steep declines, or other factors; **G3 or S3** communities to be vulnerable and at moderate risk of extinction or elimination due to a restricted range, relatively few populations or occurrences, recent and widespread declines, or other factors; **G4 or S4** communities to be apparently secure and uncommon but not rare with some cause for long-term concern due to declines or other factors; and **G5 or S5** communities to be secure. A question mark (?) denotes an inexact numeric rank, but existing information points to this rank (Faber-Langendoen et al. 2012). For vegetation alliances[2] that have State ranks of S1 through S3, all associations within the alliance are considered to be highly imperiled.

Special Status Vegetation Types

One special status vegetation type, California walnut groves, occurs in the survey area on the northeastern portion of the campus. The CDFW considers this Alliance to have a global and State rarity rank of 3. Southern California black walnut is also a special status plant species, as discussed below.

Jurisdictional Waters

No jurisdictional waters are anticipated to be impacted. Measures to avoid indirect impacts to any adjacent drainages are discussed in Section 4.9, Hydrology and Water Quality, of this Draft EIR.

Special Status Plant Species

Table 4.3-2 provides a summary of special status plant species reported to occur in the vicinity of the survey area and includes information on their status and potential for occurrence. As identified in Table 4.3-2, one special status plant species was observed during the general survey: southern California black walnut.

[2] A vegetation alliance is “a classification unit of vegetation, containing one or more associations and defined by one or more diagnostic species, often of high cover, in the uppermost layer or the layer with the highest canopy cover” (Sawyer et al. 2009).

TABLE 4.3-2
SPECIAL STATUS PLANT SPECIES REPORTED FROM THE SURVEY AREA VICINITY

Species	Status			Habitat	Potential to Occur in the Survey Area; Results of Surveys
	USFWS	CDFW	CRPR		
California androsace *Androsace elongata* ssp. *acuta*	–	–	4.2	Chaparral, cismontane woodland, coastal scrub, meadows and seeps, pinyon and juniper woodland, valley and foothill grassland.	Not expected to occur; marginally suitable habitat in the California walnut grove and ruderal vegetation in the northeastern corner of the campus, but all nearby reported occurrences are historic (1919 and 1937 records; CCH 2018).
western spleenwort *Asplenium vespertinum*	–	–	4.2	chaparral, cismontane woodland, coastal scrub. Rocky substrate.	Not expected to occur; no suitable habitat.
Parish's brittlescale *Atriplex parishii*	–	–	1B.1	Vernal pools, chenopod scrub, playas. Usually on drying alkali flats with fine soils.	Not expected to occur; no suitable habitat.
Davidson's saltscale *Atriplex serenana* var. *davidsonii*	–	–	1B.2	Coastal bluff scrub and coastal scrub. Alkaline soils.	Not expected to occur; no suitable habitat.
Catalina mariposa lily *Calochortus catalinae*	–	–	4.2	Chaparral, cismontane woodland, coastal scrub, valley and foothill grassland.	Low potential to occur; marginally suitable habitat in the California walnut grove and ruderal vegetation in the northeastern corner of the campus.
Plummer's mariposa lily *Calochortus plummerae*	–	–	4.2	Coastal scrub, chaparral, valley and foothill grassland, cismontane woodland, lower montane coniferous forest. Occurs on rocky and sandy sites, usually of granitic or alluvial material. Can be very common after fire.	Low potential to occur; marginally suitable habitat in the California walnut grove and ruderal vegetation in the northeastern corner of the campus.
intermediate mariposa lily *Calochortus weedii* var. *intermedius*	–	–	1B.2	Coastal scrub, chaparral, valley and foothill grassland. Dry, rocky calcareous slopes and rock outcrops.	Low potential to occur; marginally suitable habitat in the California walnut grove and ruderal vegetation in the northeastern corner of the campus.
southern tarplant *Centromadia parryi* ssp. *australis*	–	–	1B.1	Marshes and swamps (margins), valley and foothill grassland, vernal pools. Often in disturbed sites near the coast at marsh edges; also in alkaline soils sometimes with saltgrass. Sometimes on vernal pool margins.	Not expected to occur; no suitable habitat.

TABLE 4.3-2
SPECIAL STATUS PLANT SPECIES REPORTED FROM THE SURVEY AREA VICINITY

Species	Status			Habitat	Potential to Occur in the Survey Area; Results of Surveys
	USFWS	CDFW	CRPR		
small-flowered morning-glory *Convolvulus simulans*	–	–	4.2	Chaparral openings, coastal scrub, and valley and foothill grasslands. Clay, often serpentine soil.	Low potential to occur; marginally suitable habitat in the California walnut grove and ruderal vegetation in the northeastern corner of the campus.
many-stemmed dudleya *Dudleya multicaulis*	–	–	1B.2	Chaparral, coastal scrub, valley and foothill grassland. In heavy, often clayey soils or grassy slopes.	Low potential to occur; marginally suitable habitat in the California walnut grove and ruderal vegetation in the northeastern corner of the campus.
Santa Ana River woollystar *Eriastrum densifolium* ssp. *sanctorum*	–	–	1B.1	Coastal scrub, chaparral. In sandy soils on river floodplains or terraced fluvial deposits.	Not expected to occur; no suitable habitat.
mesa horkelia *Horkelia cuneata* var. *puberula*	–	–	1B.1	Chaparral, cismontane woodland, coastal scrub. Sandy or gravelly sites	Not expected to occur; no suitable habitat.
southern California black walnut *Juglans californica*	–	–	4.2	Chaparral, cismontane woodland, coastal scrub, and riparian woodland.	Observed during the general survey.
Coulter's goldfields *Lasthenia glabrata* ssp. *coulteri*	–	–	1B.1	Coastal salt marshes, playas, vernal pools. Usually found on alkaline soils in playas, sinks, and grasslands.	Not expected to occur; no suitable habitat.
Robinson's pepper-grass *Lepidium virginicum* var. *robinsonii*	–	–	4.3	Chaparral, coastal scrub. Dry soils, shrubland	Not expected to occur; no suitable habitat.
Hubby's phacelia *Phacelia hubbyi*	–	–	4.2	Chaparral, coastal scrub, valley and foothill grassland. Gravelly, rocky, talus soils.	Not expected to occur; no suitable soils.
Brand's star phacelia *Phacelia stellaris*	–	–	1B.1	Coastal scrub, coastal dunes. Open areas.	Not expected to occur; no suitable habitat.
south coast branching phacelia *Phacelia ramosissima* var. *austrolitoralis*	–	–	3.2	Chaparral, coastal dunes, coastal scrub, coastal salt marshes and swamps. Sandy, sometimes rocky soils.	Not expected to occur; no suitable habitat.
white rabbit-tobacco *Pseudognaphalium leucocephalum*	–	–	2B.2	Riparian woodland, cismontane woodland, coastal scrub, chaparral. Sandy, gravelly sites.	Not expected to occur; no suitable habitat.
Engelmann oak *Quercus engelmannii*	–	–	4.2	Chaparral, cismontane woodland, riparian woodland, valley and foothill grassland.	Not expected to occur; suitable habitat but would have been observed, if present.

TABLE 4.3-2
SPECIAL STATUS PLANT SPECIES REPORTED
FROM THE SURVEY AREA VICINITY

Species	Status			Habitat	Potential to Occur in the Survey Area; Results of Surveys
	USFWS	CDFW	CRPR		
Coulter's matilija poppy *Romneya coulteri*	–	–	4.2	Chaparral, coastal scrub. Often in burns.	Not expected to occur; no suitable habitat.
chaparral ragwort *Senecio aphanactis*	–	–	2B.2	Chaparral, cismontane woodland, coastal scrub. Drying alkaline flats.	Not expected to occur; no suitable habitat.
San Bernardino aster *Symphyotrichum defoliatum*	–	–	1B.2	Meadows and seeps, cismontane woodland, coastal scrub, lower montane coniferous forest, marshes and swamps, valley and foothill grassland. Vernally mesic grassland or near ditches, streams and springs; disturbed areas.	Not expected to occur; no suitable habitat.

CCH: Consortium of California Herbaria; USFWS: U.S. Fish and Wildlife Service; CDFW: California Department of Fish and Wildlife; CRPR: California Rare Plant Rank

LEGEND:

California Rare Plant Rank (CRPR)
1B Plants Rare, Threatened, or Endangered in California and elsewhere
2B Plants Rare, Threatened, or Endangered in California but more common elsewhere
3 Plants about which we need more information – A Review List
4 Plants of limited distribution – A Watch List

CRPR Threat Rank Extensions
.1 Seriously threatened in California (over 80% of occurrences threatened; high degree and immediacy of threat)
.2 Fairly threatened in California (20–80% of occurrences threatened; moderate degree and immediacy of threat)
.3 Not very threatened in California (<20% of occurrences threatened; low degree and immediacy of threat or no current threats known)

Special Status Wildlife Species

Table 4.3-3 provides a summary of special status wildlife species reported to occur in the vicinity of the survey area and includes information on their status and potential for occurrence. No special status wildlife species were observed during the general survey.

TABLE 4.3-3
SPECIAL STATUS WILDLIFE SPECIES REPORTED FROM THE SURVEY AREA VICINITY

Species	Status		Habitat	Potential to Occur in the Survey Area
	USFWS	CDFW		
Fish				
arroyo chub *Gila orcutti*	--	SSC	Native to streams from Malibu Creek to San Luis Rey River basin. Introduced into streams in Santa Clara, Ventura, Santa Ynez, Mojave & San Diego river basins. Slow water stream sections with mud or sand bottoms. Feeds heavily on aquatic vegetation and associated invertebrates.	Not expected to occur; no suitable aquatic habitat.
Amphibians				
western spadefoot *Spea hammondii*	--	SSC	Occurs primarily in grassland habitats, but can be found in valley-foothill hardwood woodlands. Vernal pools are essential for breeding and egg-laying.	Not expected to occur; no suitable vernal pool or ponding habitat.
Reptiles				
California glossy snake *Arizona elegans occidentalis*	--	SSC	Patchily distributed from the eastern portion of San Francisco Bay, southern San Joaquin Valley, and the Coast, Transverse, and Peninsular ranges, south to Baja California. Generalist reported from a range of scrub and grassland habitats, often with loose or sandy soils.	Low potential to occur; marginally suitable habitat in undeveloped portions of the survey area and all previous records are historic (greater than 20 years old).
coastal whiptail *Aspidoscelis tigris stejnegeri*	--	SSC	Found in deserts and semi-arid areas with sparse vegetation and open areas. Also found in woodland & riparian areas. Ground may be firm soil, sandy, or rocky.	Moderate potential to occur; marginally suitable habitat in undeveloped portions of the survey area and recently recorded within one mile of the survey area.

TABLE 4.3-3
SPECIAL STATUS WILDLIFE SPECIES REPORTED FROM THE SURVEY AREA VICINITY

Species	Status		Habitat	Potential to Occur in the Survey Area
	USFWS	CDFW		
red-diamond rattlesnake *Crotalus ruber*	--	SSC	Chaparral, woodland, grassland, & desert areas from coastal San Diego County to the eastern slopes of the mountains. Occurs in rocky areas and dense vegetation. Needs rodent burrows, cracks in rocks or surface cover objects.	Moderate potential to occur; moderately suitable habitat in undeveloped portions of the survey area and recently recorded in the greater vicinity.
western pond turtle *Emys marmorata*	--	SSC	A thoroughly aquatic turtle of ponds, marshes, rivers, streams and irrigation ditches, usually with aquatic vegetation, below 6000 ft elevation. Needs basking sites and suitable (sandy banks or grassy open fields) upland habitat up to 0.5 km from water for egg-laying.	Not expected to occur; no suitable aquatic habitat.
coast horned lizard *Phrynosoma blainvillii*	--	SSC	Frequents a wide variety of habitats, most common in lowlands along sandy washes with scattered low bushes. Open areas for sunning, bushes for cover, patches of loose soil for burial, and abundant supply of ants and other insects.	Moderate potential to occur; marginally suitable habitat in undeveloped portions of the survey area and recently recorded in the greater vicinity.
coast patch-nosed snake *Salvadora hexalepis virgultea*	--	SSC	Brushy or shrubby vegetation in coastal Southern California. Requires small mammal burrows for refuge and overwintering sites.	Low potential to occur; marginally suitable habitat in undeveloped portions of the survey area and the only record in the vicinity is historic (greater than 20 years old).

TABLE 4.3-3
SPECIAL STATUS WILDLIFE SPECIES REPORTED FROM THE SURVEY AREA VICINITY

Species	Status		Habitat	Potential to Occur in the Survey Area
	USFWS	CDFW		
Birds				
tricolored blackbird *Agelaius tricolor*	BCC	CE/SSC	Highly colonial species, most numerous in Central Valley & vicinity. Largely endemic to California. Requires open water, protected nesting substrate, and foraging area with insect prey within a few km of the colony.	Not expected to occur; no suitable habitat.
grasshopper sparrow *Ammodramus savannarum*	--	SSC	Dense grasslands on rolling hills, lowland plains, in valleys and on hillsides on lower mountain slopes. Favors native grasslands with a mix of grasses, forbs and scattered shrubs. Loosely colonial when nesting.	Low potential to occur; marginally suitable habitat in the ruderal portions of the survey area and recently recorded in the greater vicinity.
long-eared owl *Asio otus*	--	SSC	Riparian bottomlands grown to tall willows and cottonwoods; also, belts of live oak paralleling stream courses. Requires adjacent open land, productive of mice and the presence of old nests of crows, hawks, or magpies for breeding.	Not expected to occur; lack of suitable habitat.
coastal cactus wren *Campylorhynchus brunneicapillus sandiegensis*	BCC	SSC	Southern California coastal sage scrub. Wrens require tall opuntia cactus for nesting and roosting.	Moderate potential to occur; marginally suitable habitat in the survey area, but suitable habitat immediately adjacent to the California walnut grove vegetation and recently recorded in the greater vicinity.
western yellow-billed cuckoo *Coccyzus americanus occidentalis*	Threatened	Endangered	Riparian forest nester, along the broad, lower flood-bottoms of larger river systems. Nests in riparian jungles of willow, often mixed with cottonwoods, with lower story of blackberry, nettles, or wild grape.	Not expected to occur; no suitable habitat.

TABLE 4.3-3
SPECIAL STATUS WILDLIFE SPECIES REPORTED FROM THE SURVEY AREA VICINITY

Species	Status		Habitat	Potential to Occur in the Survey Area
	USFWS	CDFW		
yellow-breasted chat *Icteria virens*	--	SSC	Summer resident; inhabits riparian thickets of willow and other brushy tangles near watercourses. Nests in low, dense riparian, consisting of willow, blackberry, wild grape; forages and nests within 10 ft of ground.	Not expected to occur; lack of suitable habitat.
California black rail *Laterallus jamaicensis coturniculus*	BCC	Threatened; FP	Inhabits freshwater marshes, wet meadows and shallow margins of saltwater marshes bordering larger bays. Needs water depths of about 1 inch that do not fluctuate during the year and dense vegetation for nesting habitat.	Not expected to occur; lack of suitable habitat.
coastal California gnatcatcher *Polioptila californica*	Threatened	SSC	Obligate, permanent resident of coastal sage scrub below 2500 ft in Southern California. Low, coastal sage scrub in arid washes, on mesas and slopes. Not all areas classified as coastal sage scrub are occupied.	Not expected to occur; no suitable habitat and recently recorded in the greater vicinity.
bank swallow *Riparia riparia*	--	Threatened	Colonial nester; nests primarily in riparian and other lowland habitats west of the desert. Requires vertical banks/cliffs with fine-textured/sandy soils near streams, rivers, lakes, ocean to dig nesting hole.	Not expected to occur; no suitable habitat.

TABLE 4.3-3
SPECIAL STATUS WILDLIFE SPECIES REPORTED FROM THE SURVEY AREA VICINITY

Species	Status		Habitat	Potential to Occur in the Survey Area
	USFWS	CDFW		
yellow warbler *Setophaga petechial*	BCC	SSC	Riparian plant associations in close proximity to water. Also nests in montane shrubbery in open conifer forests in Cascades and Sierra Nevada. Frequently found nesting and foraging in willow shrubs and thickets, and in other riparian plants including cottonwoods, sycamores, ash, and alders.	Not expected to occur; no suitable habitat.
least Bell's vireo *Vireo bellii pusillus*	Endangered	Endangered	Summer resident of Southern California in low riparian in vicinity of water or in dry river bottoms; below 2000 ft. Nests placed along margins of bushes or on twigs projecting into pathways, usually willow, Baccharis, mesquite.	Not expected to occur; no suitable habitat.
Mammals				
pallid bat *Antrozous pallidus*	--	SSC	Deserts, grasslands, shrublands, woodlands and forests. Most common in open, dry habitats with rocky areas for roosting. Roosts must protect bats from high temperatures. Very sensitive to disturbance of roosting sites.	Low potential to occur; marginally suitable habitat roosting habitat in eucalyptus snags by the proposed underground utilities infrastructure water tanks in the Farm Precinct for Phase 1B and historic records of occurrence in the vicinity (greater than 20 years old).
western mastiff bat *Eumops perotis californicus*	--	SSC	Many open, semi-arid to arid habitats, including conifer & deciduous woodlands, coastal scrub, grasslands, chaparral, etc. Roosts in crevices in cliff faces, high buildings, trees and tunnels.	Not expected to occur; lack of suitable roosting habitat.

TABLE 4.3-3
SPECIAL STATUS WILDLIFE SPECIES REPORTED FROM THE SURVEY AREA VICINITY

Species	Status		Habitat	Potential to Occur in the Survey Area
	USFWS	CDFW		
western yellow bat *Lasiurus xanthinus*	--	SSC	Found in valley foothill riparian, desert riparian, desert wash, and palm oasis habitats. Roosts in trees, particularly palms. Forages over water and among trees.	Not expected to occur; lack of suitable roosting habitat.
San Diego black-tailed jackrabbit *Lepus californicus bennettii*	--	SSC	Intermediate canopy stages of shrub habitats & open shrub / herbaceous & tree / herbaceous edges. Coastal sage scrub habitats in Southern California.	Moderate potential to occur; moderately suitable habitat in undeveloped portions of the survey area and recently recorded in the greater vicinity.
pocketed free-tailed bat *Nyctinomops femorosaccus*	--	SSC	Variety of arid areas in Southern California; pine-juniper woodlands, desert scrub, palm oasis, desert wash, desert riparian, etc. Rocky areas with high cliffs.	Not expected to occur; lack of suitable roosting habitat.
big free-tailed bat *Nyctinomops macrotis*	--	SSC	Low-lying arid areas in Southern California. Need high cliffs or rocky outcrops for roosting sites. Feeds principally on large moths.	Not expected to occur; lack of suitable roosting habitat.
American badger *Taxidea taxus*	--	SSC	Most abundant in drier open stages of most shrub, forest, and herbaceous habitats, with friable soils. Needs sufficient food, friable soils and open, uncultivated ground. Preys on burrowing rodents. Digs burrows.	Low potential to occur; marginally suitable habitat in undeveloped portions of the survey area but recently recorded in the greater vicinity.

USFWS: U.S. Fish and Wildlife Service; CDFW: California Department of Fish and Wildlife;

LEGEND:

Federal (USFWS)
FE Endangered
FT Threatened
BCC Birds of Conservation Concern
SSC Species of Special Concern

State (CDFW)
SE Endangered
ST Threatened
CE Candidate Endangered
FP Fully Protected

Wildlife Movement

The fragmentation of open space areas by urbanization creates isolated "islands" of wildlife habitat. In the absence of habitat linkages that allow movement to adjoining open space areas, various studies have concluded that some wildlife species, especially the larger and more mobile mammals, will not likely persist over time in fragmented or isolated habitat areas because infusion of new individuals and genetic information is hindered and/or impossible (MacArthur and Wilson 1967; Soule 1987; Harris and Gallagher 1989; Bennett 1990). Corridors mitigate the effects of this fragmentation by (1) allowing animals to move between remaining habitats, thereby permitting depleted populations to be replenished and promoting genetic exchange; (2) providing escape routes from fire, predators, and human disturbances and thus reducing the risk that catastrophic events (such as fire or disease) will result in population or local species extinction; and (3) serving as travel routes for individual animals as they move within their home ranges in search of food, water, mates, and other necessary resources.

Wildlife movement activities usually fall into one of three movement categories: (1) dispersal (e.g., juvenile animals from natal areas or individuals extending range distributions); (2) seasonal migration; and (3) movements related to home-range activities (e.g., foraging for food or water; defending territories; or searching for mates, breeding areas, or cover). Once open space areas become constrained and/or fragmented as a result of urban development or the construction of physical obstacles such as roads and highways, the remaining landscape features or travel routes that connect the larger open space areas become corridors as long as they provide adequate space, cover, food, and water and do not contain obstacles or distractions (e.g., man-made noise, lighting) that would generally hinder wildlife movement. The Mt. SAC campus is located within a largely urbanized landscape that typically constrains wildlife movement; however, there is open space in the immediate vicinity of the campus, including much of the San Jose Hills located approximately 0.25 mile north and 0.07 mile east of the campus. The proposed Project footprint occurs largely within developed and/or disturbed areas where wildlife movement has already been compromised. Areas that are not developed and/or disturbed occur immediately adjacent to development, further serving as a deterrent to movement. As a result, the campus is expected to support local wildlife movement exclusively, with no potential for regional wildlife movement. Implementation of the proposed Project is not expected to further limit local wildlife movement on site due to the lack of any new substantial obstructions resulting from proposed Project implementation. Furthermore, indirect effects on movement such as increased night lighting, increased noise, or other increases associated with increased human activity would be considered negligible and unlikely to further degrade the quality of the open spaces on site and other local travel routes used by wildlife in the campus. Direct and indirect impacts, such as noise pollution and human activity, on wildlife movement within the San Jose Hills are considered adverse but less than significant since the loss of local movement areas is expected to be extremely minimal and would not have a substantial effect on regional wildlife populations. Therefore, no mitigation would be required.

4.3.3 THRESHOLDS OF SIGNIFICANCE

According to Appendix G of the CEQA Guidelines, a project will normally have a significant adverse environmental impact on biological resources if it will:

- 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.

- 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 U.S. Fish and Wildlife Service.
- Have a substantial adverse effect on State or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.
- 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.
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.
- Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan.

Mt. SAC 2016 CEQA Thresholds of Significance

To the extent the following thresholds of significance are applicable to the proposed 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
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; 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)	USACE USFWS SWRCB CDFW	Approved permits from responsible agencies; Case studies if needed; Unless there are unusual circumstances, no additional mitigation for biological resources beyond that included in the latest approved FMP MMP.
CDFW: California Department of Fish and Wildlife; CEQA: California Environmental Quality Act; FMP: Facilities Master Plan; MMP: Mitigation Monitoring Plan; SWRCB: State Water Resources Control Board; USACE: U.S. Army Corps of Engineers; USFWS: U.S. Fish and Wildlife Service.				

4.3.4 ENVIRONMENTAL IMPACTS

Impact Analysis

Threshold 3.1	**Would the project have a substantial adverse effect, either directly or through habitat modification, 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?**

2018 Educational and Facilities Master Plan (Phases 1A, 1B, and 2)

Direct Impacts

Special Status Species

Table 4.3-3 identifies the special status plants reported in the vicinity of the survey area. The southern California black walnut is the only special status species to be observed in the survey area. Additionally, it is noted that marginally suitable habitat is present within the survey area for five species: Catalina mariposa lily (*Calochortus catalinae*), Plummer's mariposa lily (*Calochortus plummerae*), intermediate mariposa lily (*Calochortus weedii* var. *intermedius*), small-flowered morning-glory (*Convolvulus simulans*), and many-stemmed dudleya (*Dudleya multicaulis*). The other 17 special status plant species are not expected to occur in the survey area due to lack of suitable habitat. The southern California black walnut, Catalina mariposa lily, Plummer's mariposa lily, and small-flowered morning-glory are CRPR List 4.2 species, while the intermediate mariposa lily is a CRPR List 1B.2 species. There are no State or federally listed Threatened or Endangered plant species with the potential to occur in the survey area. Impacts on small numbers of non-listed CRPR List 4.2 species are not likely to meet the significance criteria under State CEQA Guidelines, as the impacts are negligible on regional population abundance and distribution. Non-listed CRPR List 4.2 species tend to be wider spread than Threatened or Endangered species, and no significant impacts would likely occur if the species were present. Potential impacts to the intermediate mariposa lily (a CRPR List 1B.2 species), however, may be considered significant due to the rarity of the species. Implementation of MM BIO-1 requiring focused special status plant surveys and, if needed, preparation and implementation of an Avoidance and Mitigation Plan including on-site translocation of any bulbs of special status plant species within the impact area would reduce the impact on intermediate mariposa lily to less than significant.

As previously discussed, one special status plant species was observed during the survey: southern California black walnut. Direct impacts to southern California black walnut may occur during implementation of Phase 2 of the proposed Project. If southern California black walnut trees are impacted, impacts must be mitigated per the Mt. San Antonio College California Black Walnut Management Plan (Helix 2012). Implementation of Mitigation Measure BIO-2 requiring implementation of minimization and mitigation requirements in the Mt. SAC California Black Walnut Management Plan would reduce impacts to less than significant levels.

Table 4.3-4 identifies the special status wildlife species reported from the survey area. As noted in Table 4.3-4, ten special status wildlife species have a low to moderate potential to occur within the survey area: California glossy snake (*Arizona elegans occidentalis*), red-diamond rattlesnake (*Crotalus ruber*), coastal whiptail (*Aspidoscelis tigris stejnegeri*), coast horned lizard (*Phrynosoma blainvillii*), coast patch-nosed snake (*Salvadora hexalepis virgultea*), grasshopper sparrow (*Ammodramus savannarum*), coastal cactus wren (*Campylorhynchus brunneicapillus*

sandiegensis), pallid bat (*Antrozous pallidus*), San Diego black-tailed jack rabbit (*Lepus californicus bennettii*), and American badger (*Taxidea taxus*). None of these species were observed during the survey; however, marginally suitable habitat is present in the survey area, and occurrences for these species are reported in the greater vicinity (CDFW 2018a). The survey area does not contain the preferred habitat for these species; however, suitable habitat occurs near the survey area, and the close proximity to this habitat may facilitate low numbers of the species in the survey area. Due to the expectation that occurrence on the proposed Project site would be limited, impacts to these species would be considered adverse but less than significant per State CEQA guidelines, and no mitigation is required.

Nesting Birds

In California, nesting birds are protected under the provisions of Sections 3503 and 3505 of the *California Fish and Game Code*. The MBTA no longer prohibits incidental take of migratory birds. The USFWS periodically publishes the list of migratory birds covered by the provisions of this statute, but essentially all naturally occurring bird species in North America are considered to be migratory and are included on the list. This list also applies to migratory birds protected by the *California Fish and Game Code*. Suitable nesting habitat for migratory birds is present throughout all habitats of the proposed Project site and adjacent areas and could be adversely impacted either directly or indirectly. The loss of an active nest may be considered a violation of the *California Fish and Game Code* protecting nesting birds, resulting in a significant impact; however, implementation of MM BIO-3 requiring that protective measures be undertaken, including a pre-construction survey and, if an active nest is found, delineation of a buffer zone during construction activities, would reduce potentially significant impacts to less than significant levels.

Indirect Impacts

Implementation of Phases 1A, 1B, and 2 of the proposed 2018 EFMP have the potential to indirectly impact special status species utilizing adjacent habitat. These impacts may result from increases in noise, human activity, and night lighting. The following is a discussion of the potentially significant indirect impacts on special status species that could result from implementation of Phases 1AWEs, 1B, and 2 of the proposed 2018 EFMP.

Construction Related Noise

Noise levels on the survey area would increase over present levels during construction of the proposed Project. During construction, temporary noise impacts have the potential to disrupt foraging, nesting, roosting, and denning activities for a variety of wildlife species. Because wildlife species expected to occur on or adjacent to the survey area are not listed as Threatened or Endangered by State or federal resource agencies, are limited in other special status designations, have limited and low-quality potential habitat, and are limited in numbers if present, these impacts are considered adverse but less than significant.

Human Activity

Wildlife stressed by noise may be extirpated from the natural open space on the site, leaving only wildlife tolerant of human activity. Due to the generally developed/disturbed nature of the survey area and the distance from open space areas, the increase in human activity during construction is not expected to have an impact on normal foraging and breeding behavior of wildlife that remain in the area adjacent to the proposed Project, and no mitigation is required.

Night Lighting

Construction activities have the potential to extend from 7:00 AM to 7:00 PM, which would include early morning and late evening hours in the fall and winter months. These activities may require lighting of the work area at nighttime. Furthermore, security lighting may be needed for the staged construction materials and equipment at nighttime when construction personnel are not present. All lighting (construction, security, or otherwise) would be directed only toward the identified work or staging areas and would be shielded to prevent illumination of adjacent vegetated areas. Any potential direct impact resulting from night lighting would be less than significant, and no mitigation is required.

Level of Significance Prior to Mitigation

Potentially significant.

Recommended Mitigation Measures

MM BIO-1 through MM BIO-3 would reduce potentially significant impacts.

Level of Significance After Mitigation

Less than significant.

Project-Specific

Parking Structure R and Tennis Courts, Parking Structure S and West Temple Avenue Pedestrian Bridge, and Student Center and Central Campus Infrastructure, Bookstore, and Sand Volleyball Courts and Parking Lot W Reconstruction

Direct Impacts

Special Status Species

The impacts identified above for Phases 1A, 1B, and 2 would apply to the individual projects proposed for development as part of Phases 1A and 1B except for potential impacts to southern California black walnut which are only a potential under implementation of Phase 2. Phases 1A and 1B, which include development of a Student Center and Central Campus Infrastructure, Bookstore, Parking Structure R and Tennis Courts and Parking Structure S and West Temple Avenue Pedestrian Bridge, and Sand Volleyball Courts and Parking Lot W Reconstruction, have the potential to impact special status plants (other than the southern California black walnut), nesting birds, and the coastal whiptail. As discussed under the Program-level Analysis: 2018 Educational and Facilities Master Plan (Phases 1A, 1B, and 2) Impacts Section, mitigation is provided to lessen any potentially significant impacts to special status plants (MM BIO-1) and nesting birds (MM BIO-3). Consistent with the analysis presented above, impacts to special status wildlife species would be less than significant, and no mitigation is required.

Indirect Impacts

The impacts identified above for Phases 1A, 1B, and 2 would apply to the individual projects proposed for development as part of Phases 1A and 1B. As discussed under the Program-level Analysis: 2018 Educational and Facilities Master Plan (Phases 1A, 1B, and 2) Impacts Section, potentially significant impacts are not expected for construction-related noise, human activity, or night lighting; and no mitigation is required.

Level of Significance Prior to Mitigation

Potentially significant.

Recommended Mitigation Measures

MM BIO-1 and MM BIO-3 would reduce potentially significant impacts.

Level of Significance After Mitigation

Less than significant.

Threshold 3.2	**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 U.S. Fish and Wildlife Service?**

2018 Educational and Facilities Master Plan (Phases 1A, 1B, and 2)

Direct Impacts

Development of the proposed 2018 EFMP (Phases 1A, 1B, and 2) generally include construction of new structures on the campus and circulation and infrastructure improvements. These on-campus improvements and construction activities would result in direct impacts to biological resources potentially occurring in the survey area, as described below.

Special Status Vegetation

One special status vegetation type, California walnut groves, has been mapped within the survey area. Impacts to 1.96 acres of California walnut groves would be considered potentially significant. As previously discussed, Mt. SAC is required to implement the Mt. San Antonio College California Black Walnut Management Plan. According to the California Black Walnut (CBW) Management Plan, mitigation ratios in an on-campus conservation area shall be no less than 1:1 and are tree based on size. The CBW Plan requires the installation of the proposed mitigation within one year from completion of the major site grading. Compliance with the requirements set forth in the California Black Walnut Management Plan as detailed in MM BIO-2 would reduce this potential impact to less than significant.

Indirect Impacts

Phases 1A, 1B, and 2 have the potential to indirectly impact special status vegetation. These impacts may result from temporary or long-term changes in water quality or increases in human activity and invasive plant species. The following is a discussion of the potentially significant indirect impacts to sensitive habitat that could result from implementation of Phases 1A, 1B, and 2. Related indirect impacts to sensitive species that use the sensitive habitat are discussed under Threshold 3.1.

- **Water Quality.** Impacts on drainages in the vicinity of the survey area could occur as a result of changes in water quality. During construction, runoff carrying silt or petroleum residues from construction equipment has the potential to impact water quality and, in turn, affect plant and wildlife species using the Sand Canyon Wash and downstream waters. As discussed in Section 4.9, Hydrology and Water Quality, of this Draft EIR,

construction activities shall comply with applicable provisions of the National Pollutant Discharge Elimination Permit (NPDES) and associated Stormwater Pollution Prevention Program (SWPPP). Application of Best Management Practices (BMPs) pursuant to the NPDES Construction General Permit would protect water quality, avoiding potential impacts to the drainages adjacent to the survey area.

- **Human Activity.** Human intrusion into surrounding areas can have a detrimental effect on vegetation in natural open space, due to effects such as vegetation trampling, resulting in loss of habitat, vandalism, pollution from illegal dumping, erosion from informal trails, or soil compaction. An incremental increase in human intrusion into adjacent open space may occur as a result of the proposed Project. However, due to existing levels of activity on the campus, this increase would be less than significant, and no mitigation would be required.
- **Invasive Plant Species.** Non-native, invasive species (e.g., species listed in the California Invasive Plant Council's [Cal-IPC's] invasive plant inventory) have the potential to spread into surrounding vegetation and displace native species, hybridize with native species (thereby impacting the genetic integrity of the native species), alter biological communities, and/or alter ecosystem processes. This would degrade the quality of the adjacent habitat, including vegetation communities that provide suitable habitat for Threatened or Endangered species. Phases 1A and 1B would include landscaping of areas within the campus boundary. According to the proposed 2018 EFMP and the Landscape Guidelines found in the Appendix, non-native, invasive species are not included in the proposed site and infrastructure improvements; therefore, this impact would be less than significant.

Level of Significance Prior to Mitigation

Potentially significant.

Recommended Mitigation Measures

MM BIO-1 and MM BIO-3 would reduce potentially significant impacts.

Level of Significance After Mitigation

Less than significant.

Project-Specific

Parking Structure R and Tennis Courts, Parking Structure S and West Temple Avenue Pedestrian Bridge, and Student Center and Central Campus Infrastructure, Bookstore, Sand Volleyball Courts and Parking Lot W Reconstruction

Direct Impacts

Special Status Vegetation

No special status vegetation types occur within Phases 1A and 1B. No impacts to special status vegetation are expected during Phases 1A and 1B, therefore, no mitigation is required.

Indirect Impacts

The impacts identified above for Phases 1A, 1B, and 2 would apply to the individual projects proposed for development as part of Phases 1A and 1B. Indirect impacts to vegetation from implementation of the proposed Project such as water quality, human activity, and invasive plant species, would not be considered potentially significant; and no mitigation is required.

Level of Significance Prior to Mitigation

Less than significant.

Recommended Mitigation Measures

No significant impacts were identified, and mitigation is not required.

Level of Significance After Mitigation

Less than significant.

Threshold 3.3	**Would the project have a substantial adverse effect on state or federally protected (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?**

2018 Educational and Facilities Master Plan (Phases 1A, 1B, and 2)

Direct Impacts

No federally protected waters, including federally protected wetlands under the jurisdiction of the USACE, occur within the survey area. No State protected waters subject to the jurisdiction of the RWQCB or CDFW are present on the survey area. Therefore, there would be no direct impacts by the proposed Project to either federally or State protected waters. No direct impacts would occur, and no mitigation is required.

Indirect Impacts

Indirect impacts to State and federally protected waters may occur. As discussed in Section 4.9, Hydrology and Water Quality, of this Draft EIR, construction activities shall comply with applicable provisions of the NPDES and associated SWPPP. Application of BMPs pursuant to the NPDES Construction General Permit would protect water quality, avoiding potential impacts to the drainages adjacent to the survey area. Therefore, no indirect impacts would occur, and no mitigation is required.

Level of Significance Prior to Mitigation

Less than significant.

Recommended Mitigation Measures

No significant impacts were identified, and mitigation is not required.

Level of Significance After Mitigation

Less than significant.

Project-Specific

Parking Structure R and Tennis Courts, Parking Structure S and West Temple Avenue Pedestrian Bridge, and Student Center and Central Campus Infrastructure, Bookstore, Sand Volleyball Courts and Parking Lot W Reconstruction

No federally protected waters, including federally protected wetlands under the jurisdiction of the USACE, are present on the survey area. No State protected waters subject to the jurisdiction of the RWQCB or CDFW are present on the survey area. Therefore, there would be no impacts by the proposed Project to either federally or State protected waters. No impacts would occur, and no mitigation is required.

Level of Significance Prior to Mitigation

Less than significant.

Recommended Mitigation Measures

No significant impacts were identified, and mitigation is not required.

Level of Significance After Mitigation

Less than significant.

Threshold 3.4	**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?**

2018 Educational and Facilities Master Plan (Phases 1A, 1B, and 2)

Wildlife Movement

The Mt. SAC campus is located within a largely urbanized landscape that typically constrains wildlife movement; however, there is open space in the immediate vicinity of the campus, including the San Jose Hills area approximately 0.25 mile north and 0.07 mile east of the campus. The proposed Project footprint occurs largely within developed and/or disturbed areas where wildlife movement has already been compromised. Areas that are not developed and/or disturbed occur immediately adjacent to development, further serving as a deterrent to movement. As a result, the campus is expected to support local wildlife movement exclusively, with no potential for regional wildlife movement. Implementation of the proposed Project is not expected to further limit local wildlife movement on site due to the lack of any new substantial obstructions resulting from proposed Project implementation. Furthermore, indirect effects on movement such as increased night lighting, increased noise, or other increases associated with increased human activity would be considered negligible and unlikely to further degrade the quality of the open spaces on site and other local travel routes used by wildlife in the campus. Direct and indirect impacts, such as noise pollution and human activity, on wildlife movement within the San Jose Hills are considered adverse but less than significant since the loss of local movement areas is

expected to be extremely minimal and would not have a substantial effect on regional wildlife populations. Therefore, no mitigation would be required.

Level of Significance Prior to Mitigation

Less than significant.

Recommended Mitigation Measures

No significant impacts were identified, and mitigation is not required.

Level of Significance After Mitigation

Less than significant.

Project-Specific

Parking Structure R and Tennis Courts, Parking Structure S and West Temple Avenue Pedestrian Bridge, and Student Center and Central Campus Infrastructure, Bookstore, Sand Volleyball Courts and Parking Lot W Reconstruction

The impacts identified above for Phases 1A, 1A, and 2 would apply to the individual projects proposed for development as part of Phases 1A and 1B. As discussed under the Program-level Analysis: 2018 Educational and Facilities Master Plan (Phases 1A, 1B, and 2), no potentially significant impacts to wildlife movement are expected; and no mitigation is required.

Level of Significance Prior to Mitigation

Less than significant.

Recommended Mitigation Measures

No significant impacts were identified and mitigation is not required.

Level of Significance After Mitigation

Less than significant.

Threshold 3.5	**Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?**

2018 Educational and Facilities Master Plan (Phases 1A, 1B, and 2)

Development of the proposed 2018 EFMP Phase 2 may include impacts to the southern California black walnut trees along the slopes of the hillside adjacent to the proposed underground utilities infrastructure water tanks in the Farm Precinct. These impacts would conflict with the Mt. SAC California Black Walnut Management Plan, which could result in potentially significant impacts. Implementation of MM BIO-2 would eliminate any potential conflict with this policy and any impact would be less than significant.

Level of Significance Prior to Mitigation

Potentially significant.

Recommended Mitigation Measures

MM BIO-2 would reduce potentially significant impacts.

Level of Significance After Mitigation

Less than significant.

Project-Specific

Parking Structure R and Tennis Courts, Parking Structure S and West Temple Avenue Pedestrian Bridge, and Student Center and Central Campus Infrastructure, Bookstore, Sand Volleyball Courts and Parking Lot W Reconstruction

Development of the proposed 2018 EFMP Phases 1A and 1B would not result in any impacts to any local ordinance including the Mt. SAC California Black Walnut Management Plan. Therefore, no impacts would occur, and no mitigation would be required.

Level of Significance Prior to Mitigation

Less than significant.

Recommended Mitigation Measures

No significant impacts were identified, and mitigation is not required.

Level of Significance After Mitigation

Less than significant.

Threshold 3.6	**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?**

2018 Educational and Facilities Master Plan (Phases 1A, 1B, and 2)

No adopted habitat conservation plan (HCP) or natural community conservation plan (NCCP) applies to the Mt. SAC campus. Thus, the adoption and implementation of the proposed 2018 EFMP would not conflict with an HCP or NCCP. The County of Los Angeles General Plan has identified the easternmost portion of the campus as a Significant Ecological Area (SEA). This includes the portion of the survey area that extends around the Phase 2 efforts at the underground utilities infrastructure water tank in the Farm Precinct. The campus is within the East San Gabriel Valley SEA, which extends from Mt. SAC in the south up to Puddingstone Reservoir in the northeast. The SEA boundaries were drawn outside the County of Los Angeles jurisdiction to identify the larger undeveloped areas in the vicinity of the County jurisdiction. Development activities within an SEA outside the Los Angeles County jurisdiction do not conflict with the Los Angeles County General Plan. As such, the proposed Project would not conflict with the Los Angeles County General Plan.

The Mt. San Antonio College California Black Walnut Management Plan applies to the Land Use Management and Athletics area at the southeastern section of campus, and the Wildlife Sanctuary/Open Space area east of Grand Avenue and south of Temple Avenue is managed and maintained by the Biology division of the College. Improvements proposed in these areas include hiking and biking trail and emergency access on an existing dirt road at the base of the hill in the Land Use Management area and a Nature Center (at the southern end), restricted trails, and other improvements at the Wildlife Sanctuary. Both areas would remain as permanent open space, as described in the proposed 2018 EFMP. Thus, impacts would be less than significant, and no mitigation is required.

Level of Significance Prior to Mitigation

Less than significant.

Recommended Mitigation Measures

No significant impacts were identified, and mitigation is not required.

Level of Significance After Mitigation

Less than significant.

Project-Specific

Parking Structure R and Tennis Courts, Parking Structure S and West Temple Avenue Pedestrian Bridge, and Student Center and Central Campus Infrastructure, Bookstore, Sand Volleyball Courts and Parking Lot W Reconstruction

No adopted habitat conservation plan (HCP) or natural community conservation plan (NCCP) applies to the Mt. SAC campus, and the Phases 1A and 1 B individual projects are not located on or near the Land Use Management and Athletics area at the southeastern section of campus or the Wildlife Sanctuary/Open Space area along Grand Avenue. These open space areas would not be disturbed by the proposed Student Center and Central Campus Infrastructure, Bookstore, Sand Volleyball Courts and Parking Lot W Reconstruction, Parking Structure R and Tennis Courts, and Parking Structure S and West Temple Avenue Pedestrian Bridge, which are being evaluated at a project-level in this Draft EIR. Thus, no impact related to an HCP or NCCP would occur.

Level of Significance Prior to Mitigation

Less than significant.

Recommended Mitigation Measures

No significant impacts were identified, and mitigation is not required.

Level of Significance After Mitigation

4.3.5 LESS THAN SIGNIFICANT CUMULATIVE IMPACTS

The majority of the proposed Project would occur within developed portions of the Mt. SAC campus that contain no suitable habitat for native plant or wildlife species. The portions of the campus with low to moderately suitable habitat that would be affected by the proposed Project are very limited in size compared to the unaffected portions of the Mt. SAC campus with equivalent or better habitat. The remaining habitat on campus unaffected by the proposed Project would sufficiently offset any cumulative impact resulting from off-campus projects in the greater vicinity.

4.3.6 MITIGATION MEASURES

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 (Helix 2012). 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.

4.3.7 REFERENCES

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4.4 CULTURAL RESOURCES

This section evaluates the potential for implementation of the proposed 2018 Mt. San Antonio College (Mt. SAC) Educational and Facilities Master Plan (EFMP) to have adverse effects on historic, archaeological, paleontological resources, and human remains.

The California Native American Heritage Commission (NAHC) submitted a Notice of Preparation (NOP) comment letter and identified the following: (1) an analysis of Tribal Cultural Resources is required as a separate category of cultural resources (refer to Section 4.14 of this Draft proposed 2018 EFMP Environmental Impact Report [EIR]), (2) consultation with California Native American tribes that are traditionally and culturally affiliated with the geographic area of the project is required (refer to Section 4.14); and (3) provision of standard guidance on the scope of the analysis of potential impacts to Native American cultural resources that should be analyzed the EIR. This NOP comment letter is included in Appendix A of this Draft EIR.

4.4.1 REGULATORY SETTING

Federal

National Historic Preservation Act

The National Historic Preservation Act (NHPA) of 1966, as amended, promotes the preservation, enhancement, and productive use of historic resources. The NHPA established the Advisory Council on Historic Preservation (ACHP) and provided procedures for the ACHP and federal agencies in promoting historic preservation.

Section 106 of the NHPA requires that federal actions and the use of federal funds take into account their potential effects on historic properties or those listed in or eligible for listing in the National Register of Historic Places (NRHP, National Register).

National Register of Historic Places

Authorized by the NHPA, the U.S. Department of the Interior National Park Service's NRHP is part of a national program to coordinate and support public and private efforts to identify, evaluate, and protect America's historic and archaeological resources. The NRHP is the official list of the nation's historic places worthy of preservation. Listing on the National Register places no obligations on private property owners. It places no restrictions on the use, treatment, transfer, or disposition of private property. Listing on the NRHP does, however, incentivize preservation. Property owners can become eligible to receive federal preservation grants and federal tax credits; they may utilize alternative methods of preservation in compliance with building code provisions. In order for a resource to qualify for listing on the NRHP, the quality of significance in American history, architecture, archaeology, engineering, and culture must be present in districts, sites, buildings, structures, and objects that possess integrity and:

A. are associated with events that have made a significant contribution to the broad patterns of our history; or

B. are associated with the lives of persons significant in our past; or

C. embody distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or

D. have yielded or may be likely to yield information important in prehistory or history.

Integrity

In order to be eligible for listing in the NRHP and California Register of Historical Resources (CRHR), a property must retain sufficient integrity to convey its significance. The NRHP publication *How to Apply the National Register Criteria for Evaluation* (National Register Bulletin 15) establishes how to evaluate the integrity of a property: "Integrity is the ability of a property to convey its significance". The evaluation of integrity must be grounded in an understanding of a property's physical features and how they relate to the concept of integrity. Determining which of these aspects are most important to a property requires knowing why, where, and when a property is significant. To retain historic integrity, a property must possess several, and usually most, aspects of integrity:

1. **Location** is the place where the historic property was constructed or the place where the historic event occurred.
2. **Design** is the combination of elements that create the form, plan, space, structure, and style of a property.
3. **Setting** is the physical environment of a historic property and refers to the character of the site and the relationship to surrounding features and open space. Setting often refers to the basic physical conditions under which a property was built and the functions it was intended to serve. These features can be either natural or man-made, including vegetation, paths, fences, and relationships between other features or open space.
4. **Materials** are the physical elements that were combined or deposited during a particular period or time and in a particular pattern or configuration to form a historic property.
5. **Workmanship** is the physical evidence of crafts of a particular culture or people during any given period of history or prehistory and can be applied to the property as a whole or to individual components.
6. **Feeling** is a property's expression of the aesthetic or historic sense of a particular period of time. It results from the presence of physical features that, when taken together, convey the property's historic character.
7. **Association** is the direct link between the important historic event or person and a historic property.

Secretary of the Interior's Standards

The Secretary of the Interior's (SOI's) Standards were codified in 1995 (36 *Code of Federal Regulations* [CFR] Part 68) to establish professional standards that apply to all proposed development grant-in-aid projects assisted through the National Historic Preservation Fund and to serve as general guidance for work on any other historic building. The SOI Standards apply to historic properties of all periods, styles, types, materials, and sizes. The ten Standards for Rehabilitation are:

1. A property will be used as it was historically or be given a new use that requires minimal change to its distinctive materials, features, spaces, and spatial relationships.

2. The historic character of a property will be retained and preserved. The removal of distinctive materials or alteration of features, spaces, and spatial relationships that characterize a property will be avoided.
3. Each property will be recognized as a physical record of its time, place, and use. Changes that create a false sense of historical development, such as adding conjectural features or elements from other historic properties, will not be undertaken.
4. Changes to a property that have acquired historic significance in their own right will be retained and preserved.
5. Distinctive materials, features, finishes, and construction techniques or examples of craftsmanship that characterize a property will be preserved.
6. Deteriorated historic features will be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature will match the old in design, color, texture, and, where possible, materials. Replacement of missing features will be substantiated by documentary and physical evidence.
7. Chemical or physical treatments, if appropriate, will be undertaken using the gentlest means possible. Treatments that cause damage to historic materials will not be used.
8. Archaeological resources will be protected and preserved in place. If such resources must be disturbed, mitigation measures will be undertaken.
9. New additions, exterior alterations, or related new construction will not destroy historic materials, features, and spatial relationships that characterize the property. The new work will be differentiated from the old and will be compatible with the historic materials, features, size, scale and proportion, and massing to protect the integrity of the property and its environment.
10. New additions and adjacent or related new construction will be undertaken in such a manner that, if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired.

State

California Register of Historical Resources

The CRHR program encourages public recognition and protection of resources of architectural, historical, archaeological, and cultural significance; identifies historical resources for State and local planning purposes; determines eligibility for State historic preservation grant funding; and affords certain protections under the California Environmental Quality Act (CEQA). The criteria established for eligibility for the CRHR are directly comparable to the national criteria established for the NRHP. In order to be eligible for listing in the CRHR, a building, object, or structure must satisfy at least one of the following four criteria:

1. It is associated with events that have made a significant contribution to the broad patterns of local or regional history or the cultural heritage of California or the United States.
2. It is associated with the lives of persons important to local, California, or national history.

3. It embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of a master or possesses high artistic values.
4. It has yielded, or has the potential to yield, information important to the prehistory or history of the local area, California, or the nation.

Archaeologists assess sites based on all four of the above criteria but usually focus on the fourth criterion provided above. Historical resources eligible for listing in the CRHR must also retain enough of their historic character or appearance to be recognizable as historical resources and to convey the reasons for their significance. For the purposes of eligibility for the CRHR, integrity is defined as "the authenticity of an historical resource's physical identity evidenced by the survival of characteristics that existed during the resource's period of significance". This general definition is generally strengthened by the more specific definition offered by the NRHP—the criteria and guidelines on which the CRHR criteria and guidelines are based upon.

California Environmental Quality Act

Archaeological and Historical Resources

CEQA requires a lead agency to determine whether a project would have a significant effect on the environment, including historical resources. CEQA Guidelines Section 15064.5, Determining the Significance of Impacts to Archeological and Historical Resources, requires that all private and public activities not specifically exempted should be evaluated against the potential for environmental damage, including effects to historical resources. Historical resources are recognized as part of the environment under CEQA. It defines historical resources as "any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California".

Lead agencies have a responsibility to evaluate historical resources against the CRHR criteria prior to making a finding as to a proposed project's impacts to historical resources. Mitigation of adverse impacts is required if the proposed project will cause substantial adverse change to a historical resource. Substantial adverse change includes demolition, destruction, relocation, or alteration such that the significance of a historical resource would be impaired. While demolition and destruction are fairly obvious significant impacts, it is more difficult to assess when change, alteration, or relocation crosses the threshold of substantial adverse change. The State CEQA Guidelines provide that a project that demolishes or alters those physical characteristics of a historical resource that convey its historical significance (i.e., its character-defining features) can be considered to materially impair the resource's significance. The CRHR is used in the consideration of historical resources relative to significance for purposes of CEQA. The CRHR includes resources listed in, or formally determined eligible for listing in, the NRHP, as well as some California State Landmarks and Points of Historical Interest. Properties of local significance that have been designated under a local preservation ordinance (local landmarks or landmark districts) or that have been identified in a local historical resources inventory may be eligible for listing in the CRHR and are presumed to be significant resources for purposes of CEQA unless a preponderance of evidence indicates otherwise.

Generally, a resource shall be considered by the lead agency to be a "historical resource" if it:

1. Is listed in or determined to be eligible by the State Historical Resources Commission for listing in the California Register of Historical Resources (*California Public Resources Code* [PRC] Section 5024.1, Title 14 *California Code of Regulations* [CCR], Section 4850 et seq.).
2. Is included in a local register of historical resources or is identified as significant in a historical resource survey meeting the requirements of Section 5024.1(g) of the PRC.
3. Is a building or structure determined to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California.

California Health and Safety Code (Sections 7050.5, 7051, and 7054)

These sections of the *California Health and Safety Code* collectively address the illegality of interference with human burial remains (except as allowed under applicable sections of the PRC). These sections also address the disposition of Native American burials in archaeological sites and protect such remains from disturbance, vandalism, or inadvertent destruction. Procedures to be implemented are established for (1) the discovery of Native American skeletal remains during construction of a project; (2) the treatment of the remains prior to, during, and after evaluation; and (3) reburial.

Section 7050.5 of the *California Health and Safety Code* specifically provides for the disposition of accidentally discovered human remains. Section 7050.5 states that if human remains are found, no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains shall occur until the County Coroner has determined the appropriate treatment and disposition of the human remains.

California Public Resources Code (Section 5097.98)

Section 5097.98 of the PRC states that, if remains are determined by the Coroner to be of Native American origin, the Coroner must notify the Native American Heritage Commission (NAHC) within 24 hours. When the NAHC receives this notification from a County Coroner, it shall immediately notify those persons it believes to be most likely descended from the deceased Native American. The descendants may, with the permission of the owner of the land or his or her authorized representative, inspect the site of the remains and may recommend to the owner or the person responsible for the excavation work means for treatment or disposition, with appropriate dignity, of the human remains and any associated grave goods. The descendants shall complete their inspection and make recommendations or preferences for treatment within 48 hours of being granted access to the site. This regulation also requires that, upon the discovery of Native American remains, the landowner shall ensure that the immediate vicinity, according to generally accepted cultural or archaeological standards or practices, where the Native American human remains are located, is not damaged or disturbed by further development activity until the landowner has discussed and conferred with the most likely descendants regarding their recommendations and all reasonable options regarding their preferences for treatment. This section of the PRC has been incorporated into Section 15064.5(e) of the State CEQA Guidelines.

4.4.2 METHODS AND RESULTS

Cultural Resources Records Search

In 2016, ASM Affiliates, Inc. (ASM Affiliates) requested that the South Central Coastal Informational Center (SCCIC) conduct an archival records search for the Mt. SAC *2015 Facilities Master Plan Update and Physical Education Projects Draft Subsequent Program/Project Environmental Impact Report* (2015 FMPU and PEP EIR). A subsequent records search for the campus was conducted for the currently proposed 2018 EFMP by Psomas Archaeologist Kassie Sugimoto in April 2018 at the SCCIC to assist with the pedestrian survey of the Area of Potential Effect (APE), which includes the construction impact areas identified on Exhibit 3-34, and to identify any cultural resources that may have been documented between 2016 and 2018.

The SCCIC is a designated branch of the California Historical Resources Information System and houses records regarding archaeological and historic resources recorded in San Bernardino, Los Angeles, Orange, and Ventura Counties. The review consisted of a detailed examination of the U.S. Geological Survey's 7.5-minute San Dimas Quadrangle.

Previous Studies

The 2018 records search and literature review at the SCCIC revealed that 15 cultural resource studies have been conducted within a half mile of the campus (refer to Table 4.4-1). Additionally, the following reports addressing historic reports at Mt. SAC have been prepared and are included in Appendix D of this Draft EIR. Appendix D also contains records search results from the South Central Coastal Information Center (SCCIC):

- *Historic Resources Survey: Mount San Antonio College, Walnut, California (*Gregory 2002)
- *Historic Resources Analysis for Five Buildings at Mount San Antonio College, Los Angeles, County, Walnut, California* (ASM Affiliates 2012)
- *Cultural Resources Evaluation Report for Mt. SAC SEIR for 2015 Facilities Master Plan Update and Physical Education Projects, Walnut, Los Angeles County, California* (ASM Affiliates 2016). This report addressed 33 contributing buildings in the Mt. SAC Historic District.
- *Impact Assessment for Historic Resources included in the Proposed Mount San Antonio College 2018 Educational and Facilities Master Plan*

Apart from these historic resources studies, none of the past studies included Mt. SAC. The studies consisted primarily of block archaeological surveys and several linear surveys. The closest studies were conducted a short distance north and south of Mt. SAC.

TABLE 4.4-1
CULTURAL RESOURCE STUDIES WITHIN 0.5 MILE
OF MT. SAN ANTONIO COLLEGE

Report No.	Author(s) (Year)	Title of Study
LA-00342	Taylor, T.T. (1978)	Report of the Archaeological Survey of Five Possible Steel Tank Reservoir Sites and Pipe Routes for the Walnut Valley Water District
LA-00481	Horn, V.H. and M. David (1979)	Archaeological Survey Report: a Parcel Located in the City of Walnut in the County of Los Angeles, California
LA-00836	Cottrell, M.G. (1977)	Letter Report to Ronal Martin & Associates, Inc.
LA-01268	Mason, R.D. & N.W. Desautels (1983)	Archaeological Survey Report and Records Search on Proposed Revised Tract 32158 in the City of Walnut, Los Angeles County, California
LA-01346	Brock, J.P. (1984)	Archaeological Assessment Report for Proposed Sanitary Landfill Expansion Adjacent to the Spadra Landfill Los Angeles County (140 +/- Total Acres)
LA-01392	Anonymous (1980)	Archaeological Assessment and Test Report on LAN-1070, LAN-1071, and LAN-1072 Located on Tt 36682 in the City of Walnut, California
LA-02135	Mason, R.D. (1990)	Cultural Resources Survey Report on a 25-Acre Parcel in the City of Walnut, Los Angeles County, California
LA-03835	Cottrell, M.G. (1979)	Records Search and an Archaeological Survey for the 400-Acre Parcel Designated South Ranch, City of Walnut, Los Angeles County, California
LA-04337	Anonymous (1979)	Cultural Resources Report T.t. 36682 Located in the City of Walnut, California
LA-05644	Duke, C. (2002)	Cultural Resource Assessment: Cingular Wireless Facility No. Vy-130-02 Los Angeles County, California
LA-05646	Duke, C. (2001)	Cultural Resource Assessment: Cingular Wireless Facility No. Vy-130-01 Los Angeles County, California
LA-05648	Strudwick, I.H. (2000)	Results of a Cultural Resource Survey of the 315-Acre Forest Lawn Memorial Park, Covina Hills, Los Angeles County, California
LA-06262	Duke, C. (2002)	Cultural Resource Assessment Cingular Wireless Facility No. Vy-130-04 Los Angeles County, California
LA-08249	Peterson, P.A. (2002)	Cultural Resources Records Search and Survey Report for the Reclaimed Water Backbone Transmission Project, Los Angeles County, California
LA-10043	Strudwick, I.H. (2000)	Results of a Cultural Resource Survey of the 315-Acre Forest Lawn Memorial Park, Covina Hills, Los Angeles County, California
Source: SCCIC 2018.		

Previously Recorded Cultural Resources

The 2018 SCCIC record search identified only one cultural resource within the half-mile search radius, which is the Mt. SAC Historic District (P-19-186869). The district is defined as not eligible for the NRHP; however, it is recommended as eligible for the CRHR (see Section 4.4.3 below for more detailed discussion on the Mt. SAC Historic District).

Pedestrian Survey

Psomas conducted a pedestrian survey of the APE on September 14, 2018. The purpose of the survey was to identify archaeological resources within the APE. The survey consisted of walking along roadways and non-vegetated areas. The ground was inspected for evidence of prehistoric or historic use through the presence/absence of material culture. A field notebook and a digital camera were used to record survey conditions. Copies of the field notes and digital photographs are on file at the Psomas Orange County Office. The results of the survey were as follows:

- The undeveloped area west of the facilities and operations buildings on Bonita Drive and south of the baseball and softball fields (Reservoir Hill) is undisturbed and has outcrops of the Yorba Member of the Puente Formation visible at the surface. Visibility is high (approximately 75 percent) on the north slope of the hill and along the pathway extending up the hill. The south slope is covered with dense vegetation. Rounded cobbles and boulders originating from the Yorba Member are visible throughout the area.
- The proposed circulation improvement areas south of Temple Avenue, along and east of Bonita Drive, are disturbed but partially undeveloped. Visibility is high along the walkways and there are outcrops of the Yorba Member in the slopes on either side.
- The area south of Temple Avenue and east of Bonita Drive is an active construction site and was not surveyed on foot.
- The proposed circulation improvement areas in the northeast portion of the campus (Farm Precinct) are disturbed and developed in most areas south of Farm Drive. The areas north of Farm Drive, including the hill in the northeast, are partially undisturbed and have visible outcrops of the La Vida and Soquel Members of the Puente Formation on the southern slope. The surface at the top of the hill is artificial fill littered with debris. The area surrounding the water tank is fenced and was not surveyed.
- The remaining areas in the northwest and southwest of the campus where demolition of existing building and construction of new buildings is proposed have been completely developed with existing buildings, sidewalks, lawns and other landscaping and native surface visibility is zero (0) percent.

No archaeological resources were observed in any of the areas surveyed.

4.4.3 ENVIRONMENTAL SETTING

Cultural Setting

Prehistoric Overview

Southern California has a long history of human occupation, with dates of the earliest evidence of human occupation during the late Pleistocene, ca. 11,000 years B.C. (Glassow et al. 2007: 191). Prehistoric material culture in the state's southern region has been categorized according to periods or patterns that define technological, economic, social, and ideological elements. Within these periods, archaeologists have defined cultural patterns or complexes specific to prehistory within the state's southern region, including the campus.

This prehistoric chronological framework is divided into four major periods: Paleoindian Period (circa [ca.] 11,000 to 7000 B.C.), Millingstone Period (7000 B.C. to 3000 B.C.), Intermediate Period (3000 B.C. to A.D. 500), and Late Prehistoric Period (A.D. 500 to Historic Contact). Within these broad temporal periods are variations in the timing and nomenclature of cultural complexes for the region. The time scales referenced in the following discussion are presented as calendar dates (years B.C. /A.D.).

Paleoindian Period (11,000 – 7000 B.C.)

Recent data from coastal and inland sites throughout southern California during this period indicate that the economy was a diverse mixture of hunting and gathering, with a major emphasis on aquatic resources in many coastal areas (e.g., Jones et al. 2001) and on Pleistocene lakeshores in eastern San Diego County (Moratto 1984:90–92). Although few Clovis-like or Folsom-like fluted points have been found in southern California, it is widely thought that a greater emphasis on hunting occurred at near-coastal and inland sites during the Paleoindian Period than in later periods (e.g., Dillon 2002; Erlandson et al. 1987). Subsistence patterns shifted around 6000 B.C., coincident with the gradual desiccation associated with the onset of the Altithermal, a warm and dry period that lasted for about 3,000 years. As the climate changed, a greater emphasis was placed on plant foods and small animals.

Millingstone Period (7000 – 3000 B.C.)

The Milling Stone Period (Wallace 1955, 1978) is the earliest well-established period of occupation in southern California (Glassow et al. 2007: 192), characterized by an ecological adaptation to collecting, accompanied by a dependence on ground stone implements associated with the horizontal motion of grinding small seeds: milling stones (metates, slabs) and hand stones (manos, mullers). Milling stones are found in large numbers for the first time and become more numerous toward the end of this period.

As evidenced by their tool kits and cultural middens, people during this period practiced a mixed food-procurement strategy. Subsistence patterns became more specialized as groups became better adapted to their regional or local environments. Projectile points from the period are relatively rare, but are large and generally leaf-shaped, and were probably employed with darts or spears thrown with atlatls. Bone tools, such as awls, and items made from shell, including beads, pendants, and abalone dishes, are also quite uncommon. Evidence of weaving or basketry is present at a few sites. The mortar and pestle, associated with the vertical motion of pounding foods such as acorns, were introduced during the Milling Stone Period but did not become common until the Intermediate Period.

Intermediate Period (3000 B.C. – A.D. 500)

The Intermediate Period is characterized by a shift toward a hunting subsistence strategy, along with use of a wider range of plant foods. During this period, a pronounced trend toward greater adaptation to regional or local resources can be observed. For example, the remains of fish, land mammals, and marine mammals are increasingly abundant and diverse in sites throughout southern California. Chipped stone tools suitable for hunting are more common and both stylistically and technologically varied. Projectile points include large side-notched, stemmed, and lanceolate or leafshaped forms. Koerper and Drover (1983) consider Gypsum Cave and Elko series points, which have a wide distribution in the Great Basin and Mojave Desert between ca. 2000 B.C. to A.D. 500, diagnostic of this period. Larger knives, a variety of stone flake scrapers, and drill-like implements are common during this period. Shell fishhooks discovered near coastal sites become an integral part of the tool kit. Bone tools, including awls, are more numerous than in the preceding period; and the use of asphaltum adhesive becomes more common.

Late Prehistoric Period (A.D. 500 – 1769)

During the Late Prehistoric Period, use of plant food resources increased in conjunction with land and marine mammal hunting. The variety and complexity of material culture also increased during this period, demonstrated by more diverse classes of artifacts. The recovery of a large number of small, finely chipped projectile points, usually stemless with convex or concave bases, suggests an increased utilization of the bow and arrow for hunting rather than the atlatl and dart. During this period, an increase in population size is accompanied by the advent of larger, more permanent villages with greater numbers of inhabitants (Wallace 1955:223). Some coastal and near coastal settlements were occupied by as many as 1,500 people. Many of these larger settlements were permanent villages where at least some people resided year-round. The populations of these villages may have also increased seasonally.

Historic Overview

San Gabriel Valley and Walnut, California

As further discussed in Section 4.14, Tribal Cultural Resources, of this Draft EIR, the first occupants of the San Gabriel Valley were the Gabrielino Indians of Shoshonean origin. After the arrival of the Spanish in the late 1700s, large ranches, extensive agricultural development occurred, and residences were constructed. The first land grants included the Rancho de San Jose, established in 1837 by Don Ricardo Vejar and Don Ygnacio Palomares; the Rancho de los Nogales, presented in 1840 to Jose de la Cruz Linares; and La Puente Rancho, issued to John Rowland and William Workman in 1842. Prior to the establishment of these land grants, the land had been used for cattle and sheep grazing by the San Gabriel Mission (ASM Affiliates 2016).

Walnut originally obtained its name from Rancho de los Nogales (*nogal* is the Spanish word for “walnut tree”), the land the city came to occupy. The Rancho obtained its name from the black walnut trees located along the hillsides. The name of the town was originally Lemon, due to the many citrus trees in the area and the name of the town’s station (Lemon Station) for the Southern Pacific Railroad. The name “Walnut” was adopted as the community’s official name in 1912 with the construction of the new post office (ASM Affiliates 2016).

From the 1880s to just after World War II, the area was used predominantly for cattle-raising and farming, well-known particularly for its walnut and citrus groves. Walnut as well as the surrounding communities remained primarily rural; Pomona being the only major city. After World War II, returning veterans created an increasing demand for housing across southern California,

including the City of Walnut. The small rural town developed quickly and, fearing that they might be annexed by their faster-growing neighbors, the residents of Walnut decided to incorporate with approximately 7.5 miles of territory and about 1,000 residents in January 1959 (ASM Affiliates 2016).

Between 1980 and 1990, Walnut grew by 133 percent, to a population of 29,105, and became the second-fastest-growing city in Los Angeles County (Gregory 2003). Today, Walnut has a population of 29,661. Four elementary schools, three middle schools, two high schools, and Mt. SAC are located within the city boundaries (City of Walnut 2018).

Early Educational Facilities in Walnut and San Gabriel Valley

Walnut's first school was constructed ca. 1876. After the schoolhouse burned in 1892, students transferred to Spadra School. The Lemon School District, of which Walnut was a part, was established in 1893. High school students traveled to Pomona and El Monte until 1915, when La Puente High School was constructed (ASM Affiliates 2016).

When the first junior colleges were established in California at the beginning of the twentieth century, most (two-thirds) were begun either on high school campuses or as parts of high school districts. Citrus College, located in Glendora and founded in 1915, is the oldest junior college in Los Angeles County and the fifth oldest in the state. One of the first junior colleges in the San Gabriel Valley was Pomona Junior College, planned in 1916 and established on the Pomona High School campus in 1917. Oscar H. Edinger was the director of the college (Hall and Pietzsch 1996). Chaffey, located in Rancho Cucamonga, was first established as a private college in 1883 and became public in 1916. Pasadena City College was established in 1924, and Glendale Community College was founded in 1927.

With the return of young men and women after World War II, the San Gabriel Valley, along with much of the state, increasingly recognized the limitations of having colleges set on high school campuses and pushed for the establishment of junior colleges independent from high schools. Pomona Junior College was seen as inadequate to accommodate the many veterans seeking higher education. Thus, in October 1945, the California State Board of Education was petitioned by the school districts of Pomona, Covina, Puente, and Bonita for a junior college to serve the combined communities (Pomona, La Verne, San Dimas, Covina, Baldwin Park, West Covina, Puente, Otterbein, Walnut, and Spadra). Edgar Rothrock, chairman of the Board of Trustees for Bonita High School, and Carl L. Lorbeer, president of the Pomona Board of Education, were particularly influential in encouraging community members to support the creation of the college. Mr. Lorbeer advocated for the formation of a junior college not only for general relief of the school system but to separate the high school and junior college activities. Voters approved the formation of a new college, and the first Board of Trustees was formed. The new college was to replace Pomona Junior College, and Mt. SAC became one of the first junior colleges to be established as independent from a high school campus at the time of its foundation.

A few different locations were considered for the new college, including Kellogg Ranch in Pomona, the Voorhis School in San Dimas, and the Naval Hospital located in Walnut. The Naval Hospital was eventually chosen as the location for the school, as it was considered an ideal location at the center of the proposed college district. The Kellogg Ranch and the Voorhis School were soon after acquired by California Polytechnic School (Cal Poly Pomona) for their southern California branch (ASM Affiliates 2016).

Mt. SAC Property History

In 1920, the State of California purchased lots 6 and 7 of the C. M. Wright Tract on the eastern edge of the original La Puente Rancho, consisting of 800 acres. The land had previously been owned by the Stern Realty Company since 1914. Lot 7 was transferred to the Regents of the University of California and later became the site of the California Polytechnic University, Pomona Campus. Lot 6, the location of the current Mt. SAC, was used to establish the Pacific Colony, an institution for the insane, founded in 1921. The Pacific Colony operated only briefly at this location, as it closed in 1923 due to an inadequate water supply, later reopening in 1927 on Pomona Boulevard. In the early 1930s, lot 6 was occupied by the State Narcotic Hospital; and during World War II, the United States Government leased the property for a U.S. Army Hospital and later a U.S. Naval Hospital. In February 1945, the Pomona Chamber of Commerce requested the State to make the hospital site (which was scheduled to close in 1946) the temporary location for a new junior college which eventually became Mt. SAC (ASM Affiliates 2016).

The first staff of the new junior college included several members of surrounding educational facilities. Additionally, a small group of support staff and 23 faculty members were selected). The new staff and faculty were faced with the task of preparing the buildings of the old Naval Hospital for college classes in only a matter of months. (The property was authorized in July 1946, and the college was to open in September that same year.) Community members as well as prospective students contributed countless hours as well as small sums of money to prepare the campus for opening day (ASM Affiliates 2016).

The temporary name for the college was the East Los Angeles County Junior College. A contest was held to choose the official name for the college, resulting in its official name being changed to Mt. SAC, named after the most visible snow-capped mountain north of the college. When Mt. SAC opened in 1946, nine permanent buildings and 99 temporary barrack buildings from the site's previous uses were utilized as classrooms and faculty housing. A two-story building used by the director of the hospital became the home of President Bell and his family (ASM Affiliates 2016).

When registration began in August 1946, the college advertised seven divisions and 12 departments, including art, commerce, English and speech arts, foreign languages, homemaking, math and engineering, music, physical education and hygiene, science, social sciences, vocational agriculture, and trades and industries. There were 682 students the first year. Over half the students were veterans, and the average age was 25. In March 1947, the college Advisory Committee requested a $1,750,000 bond to aid in the construction of new classrooms and service buildings. The bond issue received an overwhelming approval ratio of 11 to 1. On June 14, 1947, the day of the first commencement, Governor Earl Warren approved Assembly Bill 1904 to allow the college to acquire the former hospital site as their permanent home (Hall and Pietzsch 1996). The first campus master plan, known as Building Plan "M", was designed by President Bell and Pasadena architect Frederick H. Kennedy, Jr. The first buildings designed and approved were the stadium, field houses, shops, gymnasium, and library (ASM Affiliates 2016).

Enrollment continued to increase, and the college grew, with construction of new buildings ongoing until the early 1970s, when the development of the college at that time was complete, and its growth reached a plateau. With a City of Walnut population increase of 133 percent between 1980 and 1990, the college experienced a new period of growth and construction and become one of the largest community colleges in the state; additional buildings were added to the campus in the 1990s and early 2000s.

Today Mt. SAC is the largest single campus community college district of California's 115 community colleges. It had an annual total credit and noncredit student headcount of 66,078

students in 2017–2018 (CCCCO 2019). The college serves approximately 20 communities and over one million residents in the San Gabriel Valley and offers more than 260 degree and certificate programs, 25 support programs, and more than 50 student clubs and athletic programs (Mt. SAC 2019).

4.4.4 RESOURCES DESCRIPTION

Archaeological Resources

According to the SCCIC literature review and records search conducted in 2018, 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 on the campus. Furthermore, the search failed to identify archaeological sites within a a half mile of the campus. Moreover, no archaeological resources were identified during the pedestrian survey. Therefore, based on the above analysis, Mt. SAC has a low sensitivity for archaeological resources; nevertheless, the campus is located within a region of California that has evidence for human occupation dating back several thousand years, so there is always the potential that archaeological resources may be present in native sediments.

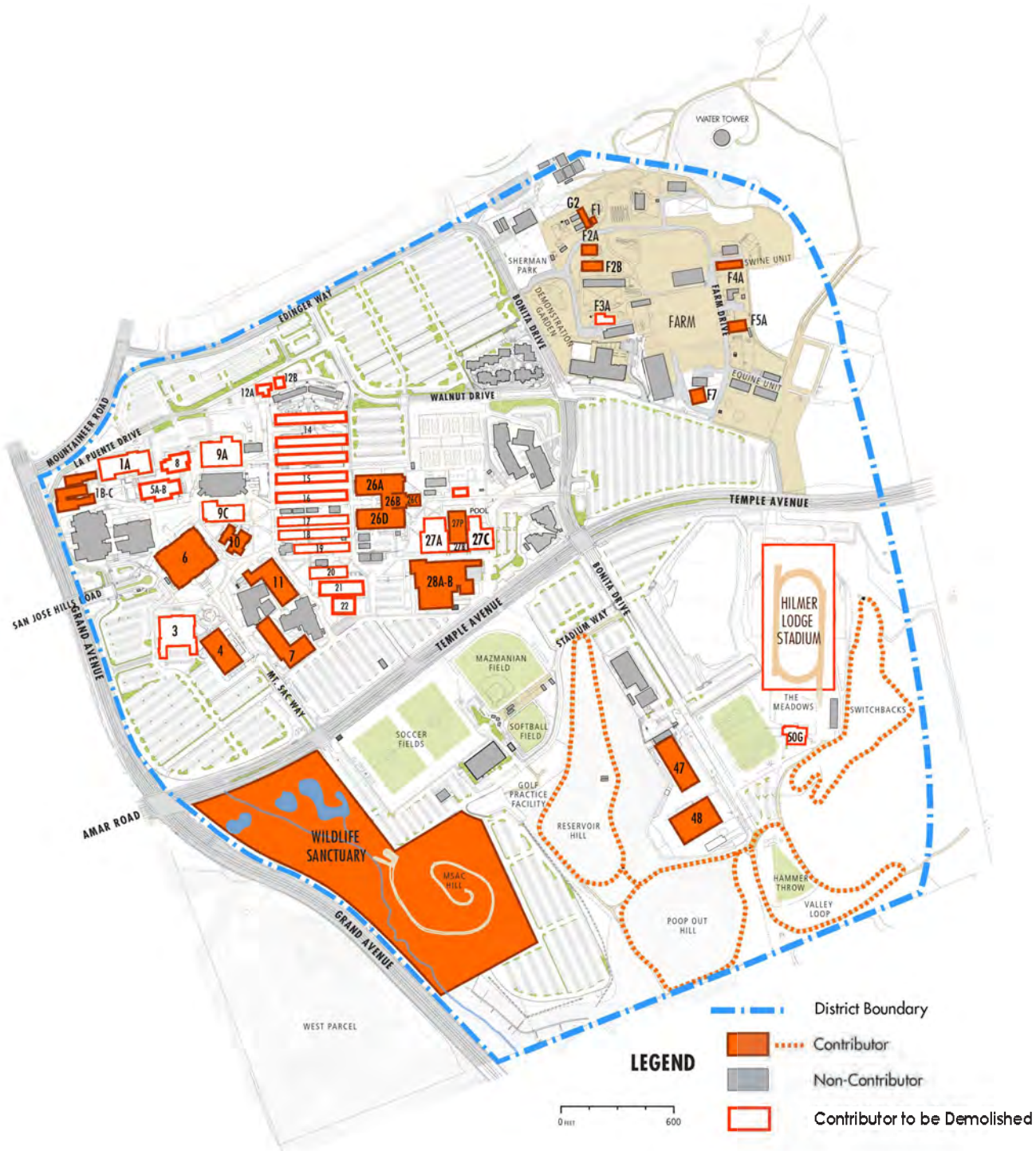
Historic Resources

To provide context for the analysis of potential impacts to historic resources, following is a summary of previous assessments of historic resources at Mt. SAC that have been conducted and are included in Appendix D of this Draft EIR. The boundaries of the Mt. SAC Historic District and contributing resources are shown on Exhibit 4.4-1, Mt. SAC Historic District; the buildings that have been previously demolished or that would be demolished to implement the proposed 2018 EFMP are also identified. Table 4.4-2 below provides a summary of the buildings at Mt. SAC that contribute to or previously contributed to the Mt. SAC Historic District and their current status.

Mt. SAC Buildings

A historic resource evaluation of the campus was conducted by Timothy Gregory, The Building Biographer, in June 2002 (Gregory 2002) to support preparation 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 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.



Source: ASM Affiliates 2018

Mt. SAC Historic District

Exhibit 4.4-1

Mt. SAC 2018 Educational and Facilities Master Plan EIR

N W E S

0 600 1200 Feet

PSOMAS

(04/04/2019 MMD) R:\Projects\MTS\3MTS010300\Graphics\EIR\ex_Historic_District.pdf

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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.

In 2016, ASM Affiliates evaluated whether the 2015 Facilities Master Plan Update (2015 FMPU) and Physical Education Projects (PEP) would impact any historic resources within the established APE for the proposed development. 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.

Table 4.4-2 lists the contributing resources to the Mt. SAC Historic District that were still existing in 2015 when the 2015 FMPU/PEP was prepared.

TABLE 4.4-2
CONTRIBUTING RESOURCES TO THE MT. SAC HISTORIC DISTRICT

Building Number	Building Name	CA SHPO Status Code	Impacts Considered in Previous EIR	Included in Prior HABS	Building has been Demolished
1A	Art Center	3CD	2002 MP EIR	x	
1B/C	Art Center/Gallery	3CD	2002 MP EIR	x	
3	Gym	3CD	2002 MP EIR	x	
4	Administration	3CD			
6	Library	3CD	2015 FMPU/ PEP EIR[a]	x	
7	Science South	3CD			
8	Campus Cafe		2002 EIR	x	X (2015)

TABLE 4.4-2
CONTRIBUTING RESOURCES TO THE MT. SAC HISTORIC DISTRICT

Building Number	Building Name	CA SHPO Status Code	Impacts Considered in Previous EIR	Included in Prior HABS	Building has been Demolished
9A	SAC Book Rac (Bookstore)	3CD	2015 FMPU/ PEP EIR[a] (renovation)[a]	x	
9C	Student Life Center	3CD	2012 FMP EIR	x	
10	Founder's Hall	3CD			
11	Science North	3CD			
12A/B	Oden House		FMPU/PEP 2016 SEIR (demolition)	x	X (2015)
17	Building 17	3CD	2002 MP EIR	x	
18	Building 18	3CD	2002 MP EIR	x	
19A	Building 19A	3CD	2002 MP EIR		
19B	Building 19B	3CD	2002 MP EIR	x	
20	Building 20	3CD	2002 MP EIR	x	
26A	Humanities/Social Sciences North	3CD			
26B	Humanities/Social Sciences East	3CD			
26D	Humanities/Social Sciences South	3CD			
26C	Planetarium	3CD			
27A	Exercise Science/Wellness Center	3CD	2012 FMP EIR	x	
27B	Pool Building	3CD	2012 FMP EIR	x	
27C	Physical Education Center	3CD	2012 FMP EIR	x	
28A/B	Technology Center	3CB Individually eligible for CR under Criterion 3	2015 FMPU/ PEP EIR (renovation)[a]	x	
47	Facilities Planning & Management/Maintenance & Operations Center	3CD			
48	Receiving/Transport	3CD			
F1	Horticulture Unit	3CD			
F2A	Farm Offices	3CD			
F2B	Horticulture Storage	3CD			
F3A	Old Dairy Unit	3CD			

TABLE 4.4-2
CONTRIBUTING RESOURCES TO THE MT. SAC HISTORIC DISTRICT

Building Number	Building Name	CA SHPO Status Code	Impacts Considered in Previous EIR	Included in Prior HABS	Building has been Demolished
F4A	Swine Market Pens	3CD			
F5A	Vivarium	3CD			
F7	Mountie Makerspace	3CD			
G2	Greenhouse				
50A-H	Stadium	3CB Individually eligible for CR under Criterion 3	2015 FMPU/ PEP EIR (demolition)	x	x
	Wildlife Sanctuary	3CD	2015 FMPU/ PEP EIR		

CR: California Register of Historical Resources; CA SHPO: State Historic Preservation Office; HABS: Historic American Buildings Survey; EIR: Environmental Impact Report; 2015 FMPU/PEP: 2015 Facilities Master Plan Update and Physical Education Project;

SHPO Status Code:

3CB – Appears eligible for CR both individually and as a contributor to a CR eligible district through a survey evaluation

3CD – appears eligible for the CR as a contributor to a CR eligible district through a survey evaluation

indicates buildings that are subject to potential impacts as part Phases 1A, 1B, and 2 of the proposed 2018 EFMP

text indicates buildings that are subject to potential impacts as part Phase 3 of the proposed 2018 EFMP

[a] Prior assessment of direct impacts assumed renovations complied with Secretary of Interior Standards.

4.4.5 THRESHOLDS OF SIGNIFICANCE

According to Appendix G of the State CEQA Guidelines, a project will normally have a significant adverse environmental impact on cultural resources if it will:

- Cause a substantial adverse change in the significance of a historical resource pursuant to CEQA Section 15064.5.
- Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Section 15064.5.
- Disturb any human remains, including those interred outside formal cemeteries.

4.4.6 ENVIRONMENTAL IMPACTS

Impact Analysis

Threshold 4.1	**Would the project cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?**

2018 Educational and Facilities Master Plan (Phases 1A, 1B, and 2)

As identified previously, 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 Walnut, California, and its surrounding communities. Table 4.4-3 identifies buildings which are contributors to the Mt. SAC Historic District that would be demolished or renovated to implement the proposed 2018 EFMP. The proposed facilities that would require the demolition of existing contributors are also identified, if applicable.

TABLE 4.4-3
MT. SAC HISTORIC DISTRICT CONTRIBUTORS
TO BE DEMOLISHED OR RENOVATED WITH
PROPOSED 2018 EFMP

	Year Built	HABS Previously Completed
Phase 1A		
Student Center and Central Campus Infrastructure		
Building 17	1949	X
Building 18	1953	X
Building 19A	1952	
Building 19B	1952	X
Building 20	1948	X
Phase 1B		
Student Life Center – Building 9C (to be demolished after new Student Center opens)	1953	X
Phase 2		
Student Services North		
Bookstore – Building 9A	1969	X
Auditorium		
Gymnasium – Building 3	1950	X
Technical Education		
Exercise Science/Wellness Center – Building 27A	1962	X
Pool Building – Building 27B	1970	X
PE Center – Building 27C	1960	X
Farm Precinct Infrastructure		
Old Dairy Unit – Building F3A	1971	
Science South – Building 7 (Renovation)	1960	
College Services – Building 6 (Renovation)	1963	X
Humanities and Social Sciences – Buildings 26ABD (Renovation)	1967	
M&O Building - Building 47 (Renovation)	1968	
Receiving Transportation – Building 48 (Renovation)	1968	

ASM Affiliates has evaluated the potential impacts from implementation of the proposed 2018 EFMP to the contributing resources to the Mt. SAC Historic District (ASM Affiliates 2018); the evaluation is included in Appendix D of this Draft EIR. It should be noted that with the exception of Building F3A that would be demolished with implementation of the proposed 2018 EFMP, and Buildings 7, 26ABD, 47, and 48 that would be renovated, demolition or renovation of buildings identified in Table 4.4-3 has been anticipated by previous Mt. SAC Master Plans and has been evaluated in prior environmental documentation as identified in Table 4.4-2. With the exception of Building 19A, required Historic American Buildings Surveys (HABS) have been completed and no further documentation is required for these buildings. These buildings are described in the 2016 Cultural Resource Evaluation Report included in Appendix D of this Draft EIR (ASM Affiliates 2016). Following is a summary description of Buildings 19A, F3A, 7, 26ABD, 47, and 48.

- **Building 19A**. This building, which would be demolished to accommodate the Student Center and Central Campus Infrastructure (Phase 1A) is a flat-roofed, small, home-like brick building located in the central portion of the campus. This is one of the earlier college structures, probably built after the second financing election of 1950. It is of some historical interest because the construction of a nursery school on the campus would have been a rather revolutionary concept in 1952. The building architect was Frederick H. Kennedy, Jr. The 2002 Historic Resources Survey identified this building as having a provisional 5S3 NRHP evaluate code indicating that it is not eligible for separate listing or designation under an existing local ordinance but is eligible for special consideration in local planning. It was determined not to be eligible for the CRHR (Gregory 2002). This building was reevaluated by ASM Affiliates in 2015, and it was determined that the building was still extant with no major alterations (ASM Affiliates 2016).
- **Building F3A (Old Dairy Unit)**. This building, which would be demolished to accommodate proposed Farm Precinct infrastructure, was constructed in 1960 in no particular architectural style. It is a single-story agricultural building located on the south side of Farm Road and east of Bonita Drive on the eastern side of the Mt. SAC campus. The building has a rectangular floor plan with a concrete foundation. The exterior is clad in cement plaster siding. The roof is a front gable roof clad in standing seam metal sheets. The primary entrance is located on the west facade and consists of two metal-framed glass doors. A row of metal-framed windows lines the south facade underneath the overhanging eaves. Galvanized metal vertical louvers are on the south and north facades. A breezeway on the south and north facades is connected by the continuation of the front gable roof and has a sliding metal door. Modifications to the building include the removal of a concrete wall on the north facade. Despite these modifications, the building retains integrity of materials, design, workmanship, location, setting, feeling, and association. The building was constructed as the Dairy Unit by the architectural firm Austin, Field & Fry. (ASM Affiliates 2016)
- **Building 7 (Science South).** This building was constructed in 1960 in the Modern style. It is a two-story building located on the north side of Temple Avenue, east of Grand Avenue, on the western side of the campus. The educational building has an L-shaped floor plan with a concrete foundation. The exterior is clad in scored concrete siding with a brick bulkhead along the east. The roof is flat and has a screened projection that holds mechanical equipment. The primary entrance is located on the southwest corner of the building and consists of concrete steps and a concrete ramp that lead to three metal and glass double doors located within a recessed entryway covered by a flat canopy porch roof. On the south section of the L, the building is single-story. A secondary entrance on the east end of this section consists of a recessed entryway with a metal canopy. This section has no windows, but louvered vents on the south facade. On the north facade the exterior siding is flush concrete with the brick bulkhead. The north section of the L consists of two stories. On the inside of the L on the east facade of the north section two rows of fixed metal windows line the facade. These rows of windows are interrupted by vertical projections that create bays along the facade. On the north facade of the north section, another entrance to the building has a metal canopy over a recessed entryway. Above this entryway are two columns of windows. The west facade of the north section of the building consists of another entrance that is within a brick and concrete entrance on the northwest corner of the building. The west facade is also lined with two rows of fixed metal windows. The interior of the building includes vinyl composition tile floors, a floating brick wall within the south entrance, and plaster ceilings.

  Modifications to the building include the additional door on the south facade, addition of the canopy on the entrance on the south section of the L's east facade, the replacement

of all the windows, the removal of the louvered shade projections over the windows, the canopy over the entrance on north facade, and the new entryway projection on the northwest corner of the building. These modifications have resulted in some loss of integrity of materials, design, workmanship, feeling, and association. The building was designed by the architectural firm Austin, Field & Fry. (ASM Affiliates 2016).

- **Buildings 26A, B, and D (Humanities North, Humanities East, and Humanities South, respectively)**. These buildings were constructed in 1967 as a complex of educational buildings for the humanities. The Modern-style buildings have flat roofs and are clad in red brick with a wide band of poured concrete at the top and base of the buildings. Because of the grade of the site, the complex is three stories in height at the north and four stories at the south. The three buildings are arranged in an H shape, forming a courtyard at the west and an area to accommodate Building 26C (the Planetarium) at the east. The buildings are connected by continuous open passageways. A series of regularly spaced rectangular concrete columns extends from the ground level to the roof, and metal railings span the distance between the columns. The floor of each passageway provides a shelter for the passageway below; and a wide, deep roof provides shelter for the passageway at the highest level. The complex has interior staircases at each end of the two larger buildings (26A and 26D); at the west facades, elevators are housed in scored-concrete elements that project from the brick facade of the building. The focal point of the complex is the spacious landscaped courtyard. At the east end of the courtyard is a three-story suspended concrete staircase anchored by a multi-story curved brick-clad pylon. At the center of the concave side of the pylon is a dramatic modern clock with stylized numbers and hands separately mounted on the facade. The buildings have back-to-back classrooms accessed from the open corridors. Classrooms have flat metal doors, generally with a single large light. Windows are sparse throughout the complex, consisting of one or two fixed-pane windows for each classroom.

  The complex was designed by campus architects Austin, Field & Fry. The contract for the "social science center" for $3,053,000 was awarded to Steed Bros. Construction Co. of Alhambra in March 1966. At the time, the project was said to be the largest construction project in Mt. SAC's history. The complex was planned for 102,000 square feet, including 63 classrooms, 5 laboratories, 50 offices, and a lecture room in the connecting building. It was to house the sociology, psychology and philosophy, history and political science, and public service and safety departments. Modifications to Buildings 26ABD include addition of elevators to the west facades of Buildings 26A and 26D and a pedestrian bridge from the second floor of Building 26A north to Parking Lot G. As a result, there are minor losses of integrity of materials, design, and workmanship. The interiors were not accessible at the time of the survey. (ASM Affiliates 2016)

- **Building 47 (Facilities Planning + Management/Maintenance + Operations)**. This building was constructed in 1968 in the Modern style and the north end was renovated in 2014. It is a single-story maintenance building located on the south side of Temple Avenue and west of Bonita Drive on the eastern side of the Mt. SAC campus. The building has a rectangular floor plan with a concrete foundation. The exterior is clad in baked enamel finished galvanized steel siding with a concrete block bulkhead. The roof is a low-pitched side gable roof with overhanging eaves and clad in metal. The primary entrance is located on the north facade. The windows are primarily aluminum sliding windows. The building also has roll-top metal garage doors for maintenance equipment and vehicles. On the gable ends are large steel frames that sit over the steel siding. There is no ornamentation on the building. The interior of the building includes tile and carpet floors with garage spaces and offices. Constructed as the Maintenance and Operations building, it was designed to house five offices and shops for carpenters, electricians, plumbers, skilled

trades crack workers, HVAC mechanics, locksmith, painters, and grounds and horticultural technicians. It was part of a larger complex which included Building 48 to consolidate facilities, maintenance, operations, receiving-distribution, and transportation departments in a single modern complex called the College Service Center. The cost was $1.1 million, including outdoor storage areas and the construction of Bonita Drive. The complex was designed by Mt. SAC campus architects Austin, Field & Fry as an element of the college Master Plan, with Hartman Construction Company of San Bernardino as contractor. The modern concrete block-and-steel buildings are Type V-N construction. Groundbreaking for the center was August 1967, with completion on August 2, 1968. (ASM Affiliates 2016)

- **Building 48 (Receiving/Transportation)**. This building was constructed in 1968 in no particular architectural style. It is a single-story maintenance building located on the south side of Temple Avenue and west of Bonita Drive on the eastern side of the Mt. SAC campus. The building has a rectangular floor plan with a concrete foundation. The exterior is clad in vertically-oriented steel siding with a concrete block bulkhead. The roof is a low-pitched side gable roof with overhanging eaves and clad in metal. The primary entrance is located on the north facade. The windows are primarily multi-light steel security windows. The building also has metal louvered vents under the roofline and over the roll-top metal garage doors. There is no ornamentation on the building. The interior of the building includes bays for equipment and vehicles as well as a large warehouse space with a concrete floor, a tall exposed metal frame ceiling, and metal shelving for storage. The building was constructed as the Maintenance and Operations building and was designed to house three offices and warehouse storage space as well as an adjustable dock by the architectural firm Austin, Field & Fry. There appear to be no major modifications to the building. As such, the building retains integrity of design, materials, workmanship, feeling, association, location, and setting. (ASM Affiliates 2016)

It should be noted that the Mountie Grill – Building 19C, which was constructed in 1959 and is over 45 years old, was determined not to contribute to the historic district because it is not directly associated with the theme of education (ASM Affiliates 2012).

The demolition of the buildings that contribute to the Mt. SAC Historic District (as identified in Table 4.4-3) results in the potential to cause an adverse direct impact because implementation of the proposed 2018 EFMP results in the complete loss of contributing resources to a historic district (refer to Exhibit 4.4-1). As such, the proposed 2018 EFMP 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. MM CULT 1 below requires the completion of HABS documentation for remaining buildings in the Historic District to reduce this significant impact to the Mt. SAC Historic District. The HABS documentation would augment the prior HABS documentation that has been prepared for campus. Additionally, MM CULT 2 requires establishment of an interpretive display for the Mt. SAC Historic District. However, even with preparation of the HABS documentation and establishing of an interpretive display, the loss of contributing resources to the Mt. SAC Historic District, and therefore the loss of the historic district, is a significant and unavoidable impact resulting from the proposed 2018 EFMP.

With respect to proposed renovation projects to be implemented as part of Phase 2, specific designs for the renovation of these contributing resources to the Mt. SAC Historic District have not yet been developed. Some of the buildings/projects in the proposed 2018 EFMP were included in the 2016 assessment of impacts on cultural resources (ASM Affiliates 2016). However, renovations proposed for Buildings 7, 26ABD, 47, and 48 were not previously considered; and HABS documentation has not been prepared. Because these buildings are contributing resources to the Mt. SAC Historic District, it is recommended that the designs for the renovations comply

with the *Secretary of the Interior's Standards for Rehabilitation*. However, because there would no longer be a historic district with implementation of the proposed 2018 EFMP, there would be no significant impact to a historic resource if the renovation does not comply with the *Secretary of the Interior's Standards for Rehabilitation.* Proposed renovations would have a less than significant impact on historic resources.

The new construction throughout the historic district also poses the potential to cause adverse indirect visual impacts. Visual impacts upon the historic district and individually eligible resources potentially include views to and from the district and buildings. Mid-ground views of the historic district toward and from the contributing resources are character-defining features. Distant views are not a character-defining feature of the historic district, due to the dense concentration of buildings and/or topography of the land. Project-specific impacts cannot be determined without building design information, but, similar to the analysis provided below, it is likely that proposed development central to the Mt. SAC Historic District would result in significant and unavoidable indirect aesthetic impacts.

Level of Significance Prior to Mitigation

Potentially significant for direct and indirect impacts

Recommended Mitigation Measures

MM CULT 1 and MM CULT 2

Level of Significance After Mitigation

Significant and Unavoidable for direct and indirect impacts

Project-Specific

Student Center and Central Campus Infrastructure and Bookstore

As identified in Table 4.4-3, the Student Center and Central Campus Infrastructure project, which are expected to be constructed during Phase 1A, would involve demolition of buildings that contribute to the Mt. SAC Historic District. Specifically, demolition of Buildings 17, 18, 19A, 19B, and 20 is required. The buildings demolished for these projects would also accommodate construction of the Bookstore (Phase 1B). As identified above, the demolition of buildings that are contributing resources to the Mt. SAC Historic District would result in potentially significant and unavoidable impact. MM CULT 1 and MM CULT 2 are applicable to the proposed Student Center and Central Campus Infrastructure project, but even with implementation of these MMs, the impact to the Mt. SAC Historic District would remain significant and unavoidable.

With respect to indirect visual impacts, the three-level, approximately 105,000-gross-square-foot (gsf) Student Center and three-level approximately 45,000-gsf Bookstore are located in the center of the historic district and would create a visual interruption of the mid-ground views from contributing resources in the historic district (specifically Buildings 10, 11, and 26ABCD, which would be retained). The new Student Center and Central Campus Infrastructure and Bookstore would also impact the historic district's integrity of setting, feeling, or association. The proposed Student Center and Central Campus Infrastructure and Bookstore would result in a substantial adverse change in the significance of a historical resource pursuant to CEQA Section 21084.1 and a significant indirect impact pursuant to CEQA Section 15064.5.

Parking Structure R and Tennis Courts, Parking Structure S and West Temple Avenue Pedestrian Bridge, Sand Volleyball Courts and Parking Lot W Reconstruction

The Parking Structure R and Tennis Courts, Parking Structure S and West Temple Avenue Pedestrian Bridge, and the Sand Volleyball Courts and Parking Lot W Reconstruction are located in the southern portion of the campus, south of Temple Avenue. These projects would not involve the demolition or renovation of any buildings that contribute to the Mt. SAC Historic District.

Additionally, these projects would not result in a visual impact related to the historic district. These buildings/structures would not introduce an element that is incompatible with the criteria under which the property is eligible, nor would they result in obstructive views. Their design would be compatible with the character-defining features of the historic district. The overall impact to the historic district's integrity of setting, feeling, or association as a whole is minimal; there is no impact on the historic district's integrity of location, design, materials, and workmanship. As such, these projects would not result in any adverse indirect visual impacts pursuant to CEQA Section 15064.5.

Level of Significance Prior to Mitigation

Potentially significant for the Student Center and Central Campus Infrastructure and Bookstore.

Less than significant for Parking Structure R and Tennis Courts and Sand Volleyball Courts and Parking Lot W Reconstruction.

Recommended Mitigation Measures

MM CULT 1 and MM CULT 2 for the Student Center and Central Campus Infrastructure and Bookstore.

Level of Significance After Mitigation

Significant and Unavoidable for the Student Center and Central Campus Infrastructure and Bookstore.

Less than significant for Parking Structure R and Tennis Courts and Sand Volleyball Courts and Parking Lot W Reconstruction.

Threshold 4.2	**Would the project cause a substantial adverse change in the significance of an archaeological resource as defined in Section 15064.5?**

2018 Educational and Facilities Master Plan (Phases 1A, 1B, and 2) and Project-Specific

No known archaeological resources are within the campus boundaries, and no archaeological resources were found during the pedestrian survey. Additionally, no known archaeological resources are within a half mile of the campus. However, Mt. SAC is located within a region of California that has evidence for human occupation dating back several thousand years, and archaeological resources have potential to be buried in native sediments beneath the campus. The potential to encounter previously unidentified archaeological resources is potentially a significant impact for any project implementing the proposed 2018 EFMP. This impact would be reduced to a less than significant level with implementation of MM CULT 3, which requires attendance by a qualified archaeologist at the pre-grade conference and identifies actions to take

in the event that cultural resources (i.e., prehistoric sites, historic sites, and/or isolated artifacts) are discovered.

Level of Significance Prior to Mitigation

Potentially significant.

Recommended Mitigation Measures

MM CULT 3.

Level of Significance After Mitigation

Less than significant.

Threshold 4.3	**Would the project disturb any human remains, including those interred outside of formal cemeteries?**

2018 Educational and Facilities Master Plan (Phases 1A, 1B, and 2) and Project-Specific

No human remains are known to exist at Mt. SAC. Therefore, construction activities would not disturb known human remains. However, buried and undiscovered archaeological remains, including human remains, may be present in subsurface soils. *California Health and Safety Code* Section 7050.5 requires that if human remains are discovered on site, no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to *Public Resources Code* Section 5097.98. Potential impacts to human remains resulting from implementation of the proposed 2018 EFMP would be less than significant with adherence to state requirements during construction and in the event human remains are discovered. No additional mitigation is required.

Level of Significance Prior to Mitigation

Less than significant

Recommended Mitigation Measures

No significant impacts were identified and mitigation is not required.

Level of Significance After Mitigation

Less than significant

4.4.7 CUMULATIVE IMPACTS

Historical and archaeological resources impacts are site-specific with regard to any given resource. For this analysis, impacts that may be considered cumulative relate to impacts that would occur with implementation of all components of the proposed 2018 EFMP, including previously approved projects and Phase 3 projects as defined in Section 4.0.2 of this Draft EIR. Therefore, the cumulative study area for archaeological and historic resources is defined as areas within Mt. SAC boundaries.

Potential adverse impacts to historic resources resulting from implementation of the previously approved projects on campus (including the PEP) and projects included in Phase 3 of the proposed 2018 EFMP, combined with the identified adverse impacts for Phases 1A, 1B, and 2, would result in adverse cumulative impacts to a CEQA historical resource, specifically, the Mt. SAC Historic District. With the number of contributing resources lost as a result of implementation of the proposed Project, the Mt. SAC Historic District would no longer be eligible for the CRHR. As such, the proposed Project, which constitutes a substantial adverse change in the significance of a historical resource pursuant to CEQA Section 21084.1 and a significant indirect impact pursuant to CEQA Section 15064.5, would result in a cumulatively considerable contribution to a significant impact to a historic resource.

Implementation of Phase 3 of the proposed 2018 EFMP and previously approved projects on campus would also require grading and excavation that could potentially affect archaeological resources, or human remains. The cumulative effect of these projects would contribute to the continued loss of subsurface cultural resources if these resources are not protected upon discovery. CEQA requirements for protecting archaeological resources and human remains are applicable to development at Mt. SAC. If subsurface cultural resources are protected upon discovery as required by law, impacts to those resources would be less than significant. As indicated above, given the low likelihood of encountering archaeological or human remains on the campus, and the mitigation measures that will be imposed and enforced throughout construction, the contribution of potential impacts from proposed development, including the Phases 1A, 1B, and 2 projects, to the cumulative destruction of subsurface cultural resources throughout the campus would be less than significant. As such, implementation of the proposed 2018 EFMP would not result in a cumulatively considerable contribution to a significant cumulative impact to archaeological resources or human remains.

4.4.8 MITIGATION MEASURES

Historic Resources

MM CULT 1 Historic American Buildings Survey (HABS) documentation shall be implemented to reduce the significant impact on contributing resources to the Mt. SAC Historic District. An augment to the prior HABS documentation package shall be prepared to include all contributing resources within the Historic District not previously recorded. Specifically HABS documentation shall be prepared for Buildings 4, 7, 10, 11, 19A, 26A, 26B, 26C, 26D, 47, 48, F1, F2A, F2B, F3A, F4A, F5A, F7, G2, and the Wildlife Sanctuary:

- **HABS Level II Narrative Historical Report.** As HABS documentation has been prepared for the historic district, this report would serve as an addendum to the extant documentation prepared consistent with *Historic American Buildings Survey Guidelines for Historical Reports* (National Park Service 2007). Prior to the demolition or renovation of resources contributing to the Mt. SAC Historic District, the college shall enlist the services of a qualified architectural historian to prepare an Addendum HABS Narrative Historical Report as well as California Department of Parks and Recreation (CA DPR) 523 forms that documents all contributing resources that were not previously documented. Documentation through HABS is an important measure because it allows documentation of the resource before alterations begin. Given the relative historic significance of the resources, Level II HABS is the recommended documentation standard, to be prepared in accordance with the Secretary of Interior

Standards and Guidelines for Architectural and Engineering Documentation and HABS specific guidelines. A narrative historical report following the *Historic American Buildings Survey Guidelines for Historical Reports* (National Park Service 2007) should be prepared for the adversely impacted resources. All historic documents shall be made available to the public in the collection of the College's Library/Learning Technology Center. Facilities Planning & Management shall ensure compliance.

- **HABS Level II Large-format Photographs.** A qualified HABS photographer shall provide photo-documentation that documents all contributing resources that were not previously documented. The photo-documentation shall be made available to the public in the collection of the College's Library/Learning Technology Center. The documentation shall be done in accordance with the Guidelines provided in the *Photographic Specifications: Historic American Building Survey, Historic American Engineering Record, Division of National Register Programs, National Park Service, Western Region*. Mt. SAC Facilities Planning & Management shall ensure compliance.
- **HABS Level II Reproduction of select existing drawings (if available)** The college shall prepare archivally stable reproduction of original as-built drawings for all contributors that were not previously included in the HABS documentation. Reproductions of drawings shall be done in accordance with the *Secretary of the Interior's Guidelines for Architectural and Engineering Documentation*. Select existing drawings, where available, may be photographed with large-format negatives or photographically reproduced on Mylar or Vellum in accordance with the U.S. Copyright Act, as amended. Mt. SAC's Facilities Planning & Management shall ensure compliance.

MM CULT 2 Prior to demolition of any additional buildings that are contributors to the Mt. SAC Historic District, to recognize the history of Mt. SAC, interpretive sign(s) shall be established in one or adjacent to one of the major buildings in the historical heart of the campus, such as the new Library/Learning Resources or Student Center. The interpretative panels could utilize information from the HABS Level II Narrative Historical Report and large-format photographic documentation, as well as historical views of the campus. Mt. SAC Facilities Planning & Management shall ensure compliance.

Archaeological 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.

4.4.9 REFERENCES

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4.5 ENERGY

This section provides background information on energy consumption associated with the proposed 2018 Educational and Facilities Master Plan (proposed 2018 EFMP), presents the California Environmental Quality Act (CEQA) thresholds, and examines energy-related impacts that would potentially occur during construction and operation of the proposed 2018 EFMP.

No comment letters addressing energy-related impacts were received in response to the Notice of Preparation (NOP) for this Draft Environmental Impact Report (EIR).

4.5.1 REGULATORY SETTING

Federal

Energy Independence and Security Act of 2007

The Energy Independence and Security Act (EISA) of 2007 (*Public Law* 110–140) seeks to provide the nation with greater energy independence and security by increasing the production of clean renewable fuels; improving vehicle fuel economy; and increasing the efficiency of products, buildings, and vehicles. It also seeks to improve the energy performance of the federal government. The EISA sets increased Corporate Average Fuel Economy Standards; the Renewable Fuel Standard; appliance energy efficiency standards; building energy efficiency standards; and accelerated research and development tasks on renewable energy sources (e.g., solar energy, geothermal energy, and marine and hydrokinetic renewable energy technologies), carbon capture, and sequestration.

State

California Public Utilities Commission

The California Public Utilities Commission (CPUC) regulates utility companies and ensures the provision of safe, reliable utility service and infrastructure related to electric, natural gas, telecommunications, water, railroad, rail transit, and passenger transportation companies. CPUC General Order 112E, which is based on the Federal Department of Transportation Guidelines contained in Part 192 of the *Code of Federal Regulations,* specifies a variety of design, construction, inspection, and notification requirements. The CPUC conducts annual audits of pipeline operations to ensure compliance with these safety standards. In addition, Southern California Gas Company (SCG) has a safety program, which has reduced the risk of gas distribution fires by improving welds on the larger diameter (24- to 30-inch) pipelines and by replacing old distribution pipes with flexible plastic pipes.

Renewables Portfolio Standard

The California Renewables Portfolio Standard (RPS) was established in 2002 under Senate Bill 1078 and was amended in 2006 and 2011. The RPS program requires investor-owned utilities, electric service providers, and community choice aggregators to increase the use of eligible renewable energy resources to 33 percent of total procurement by 2020. The CPUC is required to provide quarterly progress reports regarding the State's progress toward RPS goals. This has accelerated the development of renewable energy projects throughout the State. Based on the 3rd quarter 2014 report, the three largest retail energy utilities provided an average of 20.9 percent of their supplies from renewable energy sources. Since 2003, 8,248 megawatts (MW) of renewable energy projects have started operating (CPUC 2014).

Senate Bill (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 Executive Order (EO) B-30-15. The objectives of SB 350 are as follows (California Legislative Information 2015):

1. To increase from 33 percent to 50 percent, the procurement of our electricity from renewable sources.
2. To double the energy efficiency savings in electricity and natural gas final end uses of retail customers through energy efficiency and conservation.

The text of SB 350 sets a December 31, 2030, target for 50 percent of electricity to be generated from renewable sources.

California Energy Commission

In 1974, the California Energy Commission (CEC) was created to be the State's principal energy planning organization and to meet the energy challenges facing the State in response to the 1973 oil embargo. The CEC is charged with seven basic responsibilities when designing State energy policy:

- Advancing State Energy Policy
- Achieving Energy Efficiency
- Certifying Thermal Power Plants
- Investing in Energy Innovation
- Transforming Transportation
- Developing Renewable Energy
- Preparing for Energy Emergencies

State Alternative Fuels Plan

Assembly Bill (AB) 1007 requires the CEC to prepare a plan to increase the use of alternative fuels in California. The State Alternative Fuels Plan was prepared by the CEC with the California Air Resources Board (CARB) and in consultation with other federal, State, and local agencies to reduce petroleum consumption, to increase use of alternative fuels (e.g., ethanol, natural gas, liquefied petroleum gas, electricity, and hydrogen), to reduce greenhouse gas (GHG) emissions, and to increase in-state production of biofuels. The State Alternative Fuels Plan recommends a strategy that combines private capital investment, financial incentives, and advanced technology that will increase the use of alternative fuels, result in significant improvements in the energy efficiency of vehicles, and reduce trips and vehicle miles traveled through changes in travel habits and land management policies. The Alternative Fuels and Vehicle Technologies Funding Program legislation (AB 118, Statutes of 2007) proactively implements this Plan (CEC 2007).

Appliance Efficiency Regulations

California's Appliance Efficiency Regulations (*California Code of Regulations* [CCR], Title 20, Parts 1600–1608) contain energy performance, energy design, water performance, and water design standards for appliances (including refrigerators, wine chillers, ice makers, vending machines, freezers, water heaters, fans, boilers, washing machines, dryers, air conditioners, pool equipment, and plumbing fittings) that are sold or offered for sale in California. These standards are updated regularly to allow consideration of new energy efficiency technologies and methods.

Energy Efficiency Standards

The Energy Efficiency Standards for Residential and Nonresidential Buildings (Title 24 *California Code of Regulations* [CCR] Part 6) were established in 1978 in response to a legislative mandate to reduce California's energy consumption. The CEC adopted the 2008 changes to the Building Energy Efficiency Standards in order to (1) Provide California with an adequate, reasonably-priced, and environmentally-sound supply of energy; and (2) Respond to Assembly Bill 32, the Global Warming Solutions Act of 2006, which mandates that California must reduce its greenhouse gas emissions to 1990 levels by 2020. Title 24, Part 6 of the 2016 California Building Standards Code (known as the 2016 California Energy Code or "Title 24") went into effect on January 1, 2017. California's Building Energy Efficiency Standards are updated on an approximately three-year cycle. The 2019 Energy Standards will go into effect on January 1, 2020 and will continue to improve upon the 2016 standards of new construction, additions, and alterations of residential and nonresidential buildings (CEC 2019).

Green Building Standards

The California Building Standard Commission's (CBSC's) mission is to produce sensible and usable state building standards and administrative regulations that implement or enforce those standards. The 2016 California Green Building Standards Code (Title 24 CCR 11), also known as the CALGreen Code, contains mandatory requirements for new residential and nonresidential buildings (including buildings for retail, office, public schools, and hospitals) throughout California (CBSC 2018a). The 2016 CALGreen Code was effective January 1, 2017 (CBSC 2018b). The development of the CALGreen Code is intended to (1) cause a reduction in GHG emissions from buildings; (2) promote environmentally responsible, cost effective, healthier places to live and work; (3) reduce energy and water consumption; and (4) respond to the directives by the Governor. In short, the CALGreen Code has established regulations to reduce construction waste; make buildings more efficient in the use of materials and energy; and reduce environmental impact during and after construction. The CALGreen Code contains requirements for construction site selection, stormwater control during construction, construction waste reduction, indoor water use reduction, material selection, natural resource conservation, site irrigation conservation, and more. The CALGreen Code provides for design options allowing the designer to determine how best to achieve compliance for a given site or building condition. The CALGreen Code also requires building commissioning, which is a process for verifying that all building systems (e.g., heating and cooling equipment and lighting systems) are functioning at their maximum efficiency (CBSC 2019).

County

Renewable Energy Ordinance

The County of Los Angeles (County) adopted a Renewable Energy Ordinance in December 2016 to establish regulations for the development of small-scale (for on-site or off-site use) and utility-scale renewable energy systems (solar and wind energy facilities).

Local

City of Walnut

The recently adopted 2018 *City of Walnut General Plan* (WGP) has the following policies related to energy:

Land Use and Community Design Element

> Policy LCD-9.1: Conservation
> Encourage the use of building design and materials that conserve energy and material resources.
>
> Policy LCD-9.3: Sustainable Building Features
> Require that development incorporate sustainability, including features that minimize energy and water use, limit carbon emissions, provide opportunities for local power generation and food production, and provide areas for recreation.

Conservation, Open Space, and Recreation Element

> Policy COR-5.1: Reduce Energy
> Implement regulations and provide incentives that require public and private developments to reduce energy use over the long term.
>
> Policy COR-5.2: Southern California Edison
> Work with Southern California Edison to encourage residents and businesses to take advantage of any programs designed to reduce energy. Also, provide such information on the City's website.
>
> Policy COR-5.3: Efficient Design
> Encourage energy-efficient design of all new projects (public and private), including appropriate structure orientation and the use of shade trees to maximize cooling and reduce fossil fuel consumption for heating and cooling.
>
> Policy COR-10.4: Solar Energy Systems
> Encourage the use of solar energy systems or any other technology that similarly reduces the use of power from the grid in residential and commercial uses.
>
> Policy COR-10.5: Green Buildings
> Require Leadership in Energy and Environmental Design (LEED) or similar building efficiency certifications for all new public facilities and buildings and encourage similar green building certifications for private development projects.

Other policies within the WGP also address the need to reduce consumption of other energy-related sources such as from transportation, solid waste, and water conservation.

Mt. San Antonio College

Mt. SAC has incorporated energy efficiency in its Strategic Plan 2015–17 as well as the 2018 Climate Action Plan (2018 CAP). Mt. SAC integrates its planning through the college's Strategic Plan.

Strategic Plan

The Strategic Plan is devoted to the College Goals and Strategic Objectives, which guides the planning process for the campus. The goals and strategic objectives are based on proposals from teams across the campus, departments, and committees as well as the President's Advisory Council. The following are goals and strategies from the Strategic Plan that relate to energy:

- Strategic Objective
    - 11.9 Improve energy efficiency on campus
- Key Performance Indicators
    - 11.9.1 Energy cost per building square foot
    - 11.9.2 Peak energy demand
- Process Objectives
    - 11.9.1 Complete installation of energy meters at major campus buildings (Facilities)
    - 11.9.2 Evaluate energy monitoring software (Facilities)
    - 11.9.3 Research energy use for typical facilities (Facilities)
    - 11.9.4 Collect energy data (Facilities)
- Outcome Objectives
    - 11.9.1 Energy use baseline data (Facilities)
    - 11.9.2 Energy conservation at the campus and building levels (Facilities)

Climate Action Plan

In June 2018, the Mt. SAC Board of Trustees adopted the 2018 CAP to prepare Mt. SAC for the coming environmental and regulatory challenges of the 21st century, to guide the campus toward becoming a more sustainable institution, and to prepare students to engage in finding solutions to the college's environmental challenges (Mt. SAC 2018). The 2018 CAP articulates the vision, goals, and strategies which will move Mt. SAC to become a sustainable campus with net-zero carbon emissions and has been developed in coordination with campus stakeholders to ensure that it meets the various needs of the campus. The 2018 CAP was prepared concurrently with the proposed 2018 EFMP to help coordinate these two plans. The 2018 CAP recommends actions in several areas and these actions were integrated into the proposed 2018 EFMP.

Table 4.5-1 identifies the key areas of sustainability related to energy consumption addressed in the 2018 CAP and the associated established goal.

TABLE 4.5-1
MT. SAC 2018 CLIMATE ACTION PLAN SUSTAINABILITY GOALS

Area of Sustainability	Established Goal
Greenhouse Gas Reduction	Reduce energy consumption from the 2014 baseline by 20 percent by the end of 2025, 50 percent by 2035, and 100 percent by 2050.
Green Building Standard	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.
Water Use Reduction	Reduce water use per student from the 2014 baseline by 50 percent by 2030.
Waste Diversion and Management	Achieve Net-Zero Waste by 2050.
Source: Mt. SAC 2018.	

Notably, in addition to compliance with applicable goals and objectives, Mt. SAC has identified the following sustainable strategies/practices during the 10-year planning period for the proposed 2018 EFMP. It should be noted that this is not inclusive of all sustainable strategies/practices in the 2018 CAP.

- **Reduction of Stationary Emissions (2018–2025)**
    - Implement interior lighting upgrades/retrofits
    - Upgrade heating, ventilation, and air conditioning (HVAC) and building automation controls
    - Implement plug load management
    - Implement exterior lighting upgrades/retrofits
    - Undertake retro-commissioning (RCx)[1]
    - Install BioPCM[2]
    - Monitor electric and natural gas utilities
    - Construct photovoltaic (PV) systems on parking structure and building roofs and at surface parking lots[3]
    - Purchase renewable energy credits

[1] Retro-commissioning is the process employed to improve the efficiency of existing building equipment and systems.
[2] BioPCM is a phase change material that acts to increase the thermal mass of a building.
[3] The 2018 CAP specifically addresses the provision of a PV system on Parking Structure S as Part of Phase 1 (2018–2025) of the emission reduction strategies for stationary sources; however, Phase 2 (2025–2035), which overlaps with the planning horizon for the proposed 2018 EFMP, includes the construction of PV systems on building rooftops, parking structure rooftops, and surface parking lots.

- **On-site Generation and Renewable Energy Strategies**
    - Evaluate clean cogeneration and renewable energy generation
    - Evaluate load-shifting technologies, including the existing thermal energy storage [TES] chilled water system
    - Evaluate participation in Community Choice Aggregation (CCA)[4]
- **Sustainable Building Practices**
    - Design new construction to United States Green Building Council's (USGBC's) Leadership in Energy and Environmental Design (LEED)[5] 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
    - 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
    - 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
    - Specify stormwater saving strategies, where feasible
    - Continue use of native and drought-tolerant landscaping
    - Continue commissioning, enhanced commissioning, and retro-commissioning of buildings

[4] CCA is an alternative to the investor-owned utility energy supply system in which local entities aggregate the buying power of individual customers within a defined jurisdiction in order to secure alternate energy supply contracts.

[5] 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.

- **Transportation Emissions Reduction Strategies**
    - Increase access to alternative modes of transportation (e.g., including construction of the Transit Center, accommodations for electric vehicles, incentives for carpools and vanpools, educational materials, and bicycle and pedestrian facilities
    - Mass transit education and incentives
- **Solid Waste Reduction Strategies**
    - Improve recycling and waste receptacles on campus
    - Install bottle filling stations throughout campus
    - Encourage paperless processes
    - Implement recycling programs
- **Water Conservation Strategies**
    - Reduce stormwater, sewer discharge, and water pollution
    - Employ sustainable landscaping practices
    - Improve irrigation systems

4.5.2 METHODS

Development of the proposed 2018 EFMP would involve the consumption of gasoline and diesel fuel from off-road construction equipment and on-road vehicle sources such as vendor trucks, haul trucks, and worker trips. During operation, vehicles entering and exiting the Mt. SAC campus site would use transportation fuels. In addition, natural gas would be used for heating and other services, while electricity would be used to power the campus buildings and lighting and for conveyance of water to and from the proposed 2018 EFMP project site.

Construction

Fuel use for both diesel and gasoline are provided for the construction phase for off-road equipment, worker commutes, haul trips, and vendor trips. Fuel consumption was estimated based on anticipated construction durations, as well as equipment quantities and types. Construction energy consumption was estimated using a combination of the California Emissions Estimator Model (CalEEMod), the Off-Road Diesel Analysis (OffRoad) inventory tool, and the Emission Factors (EMFAC) database. Construction equipment assumptions were based on data provided by Mt. SAC and CalEEMod for construction equipment activities, while fuel consumption was derived from OffRoad for off-road vehicles and EMFAC for on-road vehicles.

Operations

The operations phase of the proposed 2018 EFMP would result in energy consumption from vehicle trips associated with the proposed Project as well as electrical consumption and natural gas combustion for heating needs. Operational phase energy consumption was estimated using CalEEMod for vehicle trips, trip lengths, and vehicle types. Fuel consumption for each of these vehicle types was obtained from the EMFAC model. The CalEEMod model calculated electricity and natural gas consumption based on energy data specific to land uses.

4.5.3 ENVIRONMENTAL SETTING

Electric Power

Mt. SAC is currently served by Southern California Edison (SCE) from an existing 12 kilovolt (kV) substation located near Grand Avenue. This incoming service is received and metered at a switchgear substation and is distributed to each building on campus through a series of electrical maintenance manholes and medium voltage duct banks.

Natural Gas

Natural gas service is provided to Mt. SAC from SCG high-pressure service laterals that lead into the campus. Three main meters are located throughout the campus as the main connection to these laterals. Medium pressure natural gas is then fed to the campus cogeneration system, and campus buildings where it is converted to low pressure for heating and hot water.

4.5.4 THRESHOLDS OF SIGNIFICANCE

According to Appendix G of the CEQA Guidelines, a proposed Project will normally have a significant adverse environmental impact related to energy if it will:

- Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation.
- Conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

CEQA

Section 21100(b)(3) of the *California Public Resources Code* and Appendix F to the State CEQA Guidelines require a discussion of potential energy impacts of proposed Projects.

Appendix F states:

The goal of conserving energy implies the wise and efficient use of energy. The means of achieving this goal include:

(1) Decreasing overall per capita energy consumption,
(2) Decreasing reliance on fossil fuels such as coal, natural gas, and oil, and
(3) Increasing reliance on renewable energy sources.

Appendix F of the State CEQA Guidelines also identifies that “EIRs include a discussion of the potential energy impacts of proposed Projects, with particular emphasis on avoiding or reducing inefficient, wasteful, and unnecessary consumption of energy”.

Mt. SAC 2016 CEQA Thresholds of Significance

To the extent the following thresholds of significance are applicable to the proposed 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 Energy Commission				

4.5.5 ENVIRONMENTAL IMPACTS

Impact Analysis

Threshold 5.1	**Would the project result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?**

2018 Educational and Facilities Master Plan (Phases 1A, 1B, and 2) and Project-Specific

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 water[6] 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 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 all proposed 2018 EFMP projects 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 diesel fuel and/or gasoline.

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

The use of these energy resources fluctuates according to the phase of construction and would be temporary, as construction activities are anticipated to occur over 10-year period for the proposed 2018 EFMP. As discussed in Section 3.0, *Project Description*, a construction traffic route would be designated for each construction site to move construction vehicles efficiently. Table 4.5-2 quantifies anticipated energy use during construction activities.

TABLE 4.5-2
CONSTRUCTION-RELATED ENERGY USE

Source	Diesel Fuel (gallons)	Gasoline (gallons)
Off-road Construction Equipment		174,173
Worker commute	477	1
Vendors	220	4
On-road haul	125	9,890
Totals	821	184,068

Operations

The operations phase of the proposed 2018 EFMP 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 2018 EFMP projects 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
(3) Increasing reliance on renewable energy sources

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 2018 EFMP 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 2018 EFMP would be developed in compliance with these regulations, plans, and policies.

As discussed previously, analysis by the California Energy Commission concludes that the 2019 energy efficiency standards are projected to result in a 30 percent improvement in energy efficiency over the 2016 standards and are planned to be effective January 1, 2020. Based on the CalEEMod included as Appendix E, the electricity usage from the proposed 2018 EFMP would be approximately 7.1 million kilowatt hours per year (kWh/yr). Natural gas consumption for the proposed 2018 EFMP would be approximately 10.6 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 new campus structures recommended in the proposed 2018 EFMP would be constructed to meet forecasted educational demands as well as comply with the latest energy efficiency standards, energy use associated with buildings

recommended in the proposed 2018 EFMP would not be considered inefficient, wasteful, or unnecessary.

Transportation energy use would be associated with daily trips associated with the proposed 2018 EFMP, (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 E), the proposed 2018 EFMP generated 13.2 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 (EMFAC 2014) model that provides average vehicle emissions rates for California. It is estimated that the proposed 2018 EFMP-generated traffic would use 76,111 gallons of diesel fuel and 386,099 gallons of gasoline per year. The proposed 2018 EFMP 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 proposed 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 4.5-3, from Mt. SAC's 2018 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 4.5-3
ANNUAL ENERGY USE 2014–2016 PURCHASED ELECTRICITY AND NATURAL GAS

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

As described in Table 3-1 in Section 3.0, *Project Description* of this Draft EIR, implementation of the proposed 2018 EFMP would result in 752,000 gross square feet (gsf) of new building construction, renovation of 405,023 gsf of existing buildings, and demolition of 207,805 gsf of existing buildings. The development of new and renovated buildings 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 proposed 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 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.

The proposed 2018 EFMP would require upgrades to the existing dry utility backbone infrastructure to serve the proposed uses on campus. Final plans for electrical and natural gas services would be designed and installed in compliance with SCE and SCG applicable requirements.

In summary, the proposed 2018 EFMP 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 2018 EFMP would result in less than significant impacts to energy, and no mitigation measures are required.

Level of Significance Prior to Mitigation

Less than significant.

Recommended Mitigation Measures

No significant impacts were identified, and mitigation is not required.

Level of Significance After Mitigation

Less than significant.

Threshold 5.2	**Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?**

2018 Educational and Facilities Master Plan (Phases 1A, 1B, and 2) and Project-Specific

Consistency with Statewide, Regional, and Local Policies

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).

All newly constructed buildings 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 (refer to Section 4.7, *Greenhouse Gas Emissions*, of this Draft EIR). New buildings proposed to be developed would be more energy efficient than the existing buildings, including the buildings to be demolished.

Further, the proposed 2018 EFMP would be developed in phases utilizing the most current technologies and best practices available and feasible at the time of each phase of development. These technologies could include retrofitting buildings so that they are more energy efficient, increased use of low-carbon biofuels or zero-emission vehicles, and/or procurement of electricity from renewable sources. In addition, 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 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 2018 EFMP is a long-range development plan that employs the Integrated Systems Approach concept in all future building design projects in order to achieve a sustainable product. Specifically, this Draft EIR analyses several proposed Projects at a "project-level" under the proposed 2018 EFMP. These proposed Projects include Parking Structure R and Tennis Courts, Parking Structure S and West Temple Avenue Pedestrian Bridge, Student Center and Central Campus Infrastructure, Bookstore, and Sand Volleyball Courts and Parking Lot W Reconstruction. For each of these proposed Projects, the sustainable building strategies identified in the 2018 CAP were reviewed and implemented as part of the Integrated Systems Approach, to the extent feasible. A similar process would be required for future projects to be implemented by the proposed 2018 EFMP.

The following sustainable strategies/practices related to energy would be implemented during the 10-year planning period for the proposed 2018 EFMP:

- Design new construction to United States Green Building Council's (USGBC's) Leadership in Energy and Environmental Design (LEED)[7] 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

[7] 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.

- 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
- 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
- Continue commissioning, enhanced commissioning, and retro-commissioning of buildings

Mobile Source Emissions Reduction Strategies

Implementation of the proposed 2018 EFMP would support the reduction of mobile source emissions through implementation of transportation and transit-related projects.

As part of the proposed 2018 EFMP, a Transit Center is proposed for development 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. As described in Section 3.0, *Project Description*, the Transit Center is a separate project being completed in coordination with Foothill Transit and has been evaluated in previous project-level environmental documents pursuant to CEQA. Therefore, the Transit Center is considered a cumulative project for purposes of analysis in this Draft EIR.

The proposed 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 and noted in Section 3.5.8, *Sustainable Practices/Energy* of this Draft EIR, 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. Implementation of the EFMP would support the goals of the 2018 CAP.

Solid Waste Reduction Strategies

With implementation of the proposed 2018 EFMP, 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 proposed 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 left overs. 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, which is willing to achieve a 95-percent landfill diversion rate. Most hauling agencies achieve a 50-percent diversion rate; however, more are becoming well-informed 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 proposed 2018 EFMP), and design this facility to accommodate recycling and reuse events for the college and community
- 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 proposed 2018 EFMP:

- 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

Water Conservation Strategies

According to the proposed 2018 EFMP, Mt. SAC's water use includes on-campus domestic uses, landscape irrigation, athletic field irrigation, pasture and rangeland irrigation, and wildlife sanctuary uses. As part of the proposed 2018 EFMP, 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. The proposed Project would implement the following sustainable strategies/practices during the planning period for the proposed 2018 EFMP:

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

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

- 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). To ensure ease of maintenance, the gallons per flush of these fixtures should not be lower than 1.6
- Reduce water use per student from the 2014 baseline by 50 percent by 2030

In summary, the proposed 2018 EFMP 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.

Level of Significance Prior to Mitigation

Less than significant.

Recommended Mitigation Measures

No significant impacts were identified, and mitigation is not required.

Level of Significance After Mitigation

Less than significant.

4.5.6 CUMULATIVE IMPACTS

Electrical power and natural gas service would be provided by SCE and SCG on demand, consistent with CPUC requirements. The federal and State governments have enacted legislation to improve energy efficiency in vehicles, equipment, and appliances; to reduce vehicle miles traveled; and to develop alternative fuels or energy sources. Utility companies are also increasing their renewable energy sources to meet the RPS mandate of 33 percent renewable supplies by 2020.

On-site energy use would be reduced through compliance with Title 24, the CALGreen Code (as adopted by the County into Title 31 of the County Code) and other energy conservation programs and policies. Cumulative projects in the County would also comply with the same regulations. Further, the proposed 2018 EFMP would implement strategies from Mt. SAC's 2018 CAP including Sustainable Building Strategies, Mobile Source Emissions Reduction Strategies, Solid Waste Reduction Strategies, and Water Conservation Strategies to implement the 2018 CAP to the fullest extent possible, consistent with budgetary constraints and regulatory and programmatic requirements.

Transportation energy use would increase with implementation of the proposed 2018 EFMP and cumulative projects in the area. It is estimated that the proposed 2018 EFMP-generated traffic would use 76,111 gallons of diesel fuel and 386,099 gallons of gasoline per year (refer to Appendix E). However, this transportation energy use would not represent a major amount of energy use in the County of Los Angeles or the region when compared to the amount of existing development and to the total number of vehicle trips and vehicle miles traveled throughout the County and the region. Improved fuel economy in newer vehicles and alternative fuel vehicles are also expected to reduce transportation energy use.

As older appliances, equipment, and vehicles are replaced with newer ones, total energy use is expected to decrease over time. All future proposed 2018 EFMP-related projects would be subject to separate impact analyses and would be subject to mitigation to reduce potential impacts, as appropriate. Thus, energy use from the proposed 2018 EFMP and cumulative projects would not represent a substantial demand for energy and would not be considered inefficient, wasteful, or unnecessary. Cumulative impacts would be less than significant, and no mitigation is required.

4.5.7 MITIGATION MEASURES

No mitigation measures have been identified.

4.5.8 REFERENCES

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4.6 GEOLOGY AND SOILS

Geology and soils information in this section relevant to the Mt. San Antonio College (Mt. SAC) campus is based on the following studies, as appropriate, as well as general geotechnical information from the project-level documents also listed below:

- California Geological Survey Interactive Alquist-Priolo Earthquake Fault Zones (CGS 2018)
- *City of Walnut General Plan*, Public Safety Element, adopted in May 2018 (City of Walnut 2018).

The site-specific information in this section is based on the following geotechnical reports for the proposed Mt. SAC 2018 Educational and Facilities Master Plan (proposed 2018 EFMP) facilities being addressed at a project-specific level in this Draft Environmental Impact Report (EIR):

- Geotechnical Study Report, Proposed Parking Lot Structure at Parking Lot S, Mt. San Antonio College, Walnut, California. Converse Consultants. October 23, 2017
- Geotechnical Study Report, Proposed Lot R Tennis and Parking Structure, Mt. San Antonio College, Walnut, California. Converse Consultants. December 1, 2017
- Geotechnical Study Report, Proposed Student Center Building, Mt. San Antonio College. Converse Consultants. October 5, 2017
- Engineering Geology and Seismology Review for Mt. San Antonio Community College, Lot R Tennis and Parking Structure. California Geological Survey Memorandum. March 26, 2018

The site-specific geotechnical reports are included in Appendix F of this Draft Environmental Impact Report (EIR). Additionally, the paleontological records search is also included in Appendix F of this Draft EIR. Other available information used for preparation of this section are referenced, as appropriate. A site-specific geotechnical report for the proposed Bookstore site has not been prepared but would have to be prepared for submission and acceptance by the California Geological Survey (CGS) prior to the approval of the building plans for the Bookstore, as required by the Division of the State Architect's (DSA's) Geohazard Report Requirements. Structural design and construction of the Bookstore would then be required to comply with recommendations identified in the geotechnical study/geohazard report prepared for the Bookstore.

No comment letters addressing geology or soil constraints were received in response to the Notice of Preparation (NOP) for this Draft Environmental Impact Report. Also, no concerns in this regard were raised during the Public Scoping Meeting.

4.6.1 REGULATORY SETTING

Federal

Paleontological Resources Preservation Act

The Paleontological Resources Preservation Act (PRPA) of 2009, as amended, promotes the preservation, enhancement, and productive use of paleontological resources on federal land. The PRPA provided procedures for federal agencies in promoting paleontological resource preservation.

State

Field Act and California Education Code

The DSA provides design and construction oversight for K–12 schools, community colleges, and various other state-owned and leased facilities. The DSA also develops accessibility, structural safety, and historical building codes and standards for use by public and private buildings throughout the state of California. DSA's oversight for structural safety of school facilities is governed by the provisions of the Field Act contained in Sections 17280–17317 and 81130–81147 of the California Education Code, which mandates earthquake resistant construction for schools in California. The DSA's Geohazard Report Requirements (IR A-4.13) also outlines the requirements for submission of a geohazard report for acceptance by the CGS before the project is submitted to DSA.

California Building Code

The *California Building Code* (CBC) is promulgated under the *California Code of Regulations* (CCR), Title 24, Parts 1 through 12 (also known as the *California Building Standards Code*) and is administered by the California Building Standards Commission (CBSC). The CBSC is responsible for administering California's building codes, including adopting, approving, publishing, and implementing codes and standards. The CBC is a compilation of three types of building standards from three different origins:

- Standards adopted by State agencies without change from the national model codes
- Standards adopted and adapted from the national model code standards to meet California conditions
- Standards authorized by the California legislature that constitute extensive additions not covered by the national model codes and adopted to address concerns particular to California

The national model code standards (i.e., the *International Building Code*) adopted into Title 24 apply to all occupancies in California except for modifications adopted by State agencies and local governing bodies. The current version of the CBC is the 2016 triennial edition, which became effective on January 1, 2017, and is generally updated every three years. The DSA reviews construction projects for compliance with Title 24 and will review the projects in proposed 2018 EFMP as they are developed in accordance with pertinent requirements in Title 24, as may be in effect at the time of project development.

Alquist-Priolo Earthquake Fault Zoning Act

The 1971 San Fernando Earthquake in Southern California resulted in the enactment of the Alquist-Priolo Special Studies Zones Act of 1972. The Act was renamed in 1994 to the Alquist-Priolo Earthquake Fault Zoning (A-P) Act. Land subdivisions and habitable structures consisting of four units or more that are proposed within A-P zones are required to have detailed fault investigations performed so that engineering geologists can mitigate the hazards associated with active faults. The boundary of the fault zone is approximately 500 feet from major active faults and 200 to 300 feet from well-defined minor faults. The State Geologist defines an active fault as a fault that has previously had surface displacement within the Holocene Period (i.e., the last 11,000 years). A potentially active fault is defined as any fault that has had surface displacement during Quaternary time (within the last 1,600,000 years) but not within the Holocene Period. The

latest available data from the CGS indicates there are no Alquist-Priolo Fault Zones or other earthquake faults beneath or adjacent to Mt. SAC (CGS 2018).

Seismic Hazards Mapping Act

The Seismic Hazards Mapping Act was passed in 1990 and directs the State of California Department of Conservation Division of Mines and Geology (CDMG) to identify and map areas subject to earthquake hazards such as liquefaction, earthquake-induced landslides, and amplified ground shaking (*California Public Resources Code,* Sections 2690–2699.6). Passed by the State legislature after the 1989 Loma Prieta Earthquake, the Act is aimed at reducing the threat to public safety and minimizing potential loss of life and property in the event of a damaging earthquake event. Seismic Hazard Zone Maps are a product of the resultant Seismic Hazards Mapping Program and are produced to identify Zones of Required Investigation; most developments designed for human occupancy in these zones must conduct site-specific geotechnical investigations to identify the hazard and to develop appropriate mitigation measures (MMs) prior to permitting by local jurisdictions. Mt. SAC is underlain by deep alluvial soils which have a moderate potential for liquefaction hazards, but only one small earthquake-induced landslide hazard area occurs in the southern portion of the campus near Parking Lot R.

The Seismic Hazards Mapping Act establishes a statewide public safety standard for the mitigation of earthquake hazards. The CGS' Special Publication 117, Guidelines for Evaluating and Mitigating Seismic Hazards in California, provides guidance for the evaluation and mitigation of earthquake-related hazards for projects in designated zones of required investigations. No identified earthquake faults or fault zones are beneath or adjacent to Mt. SAC, as shown in Exhibit 4.6-1, Seismic Hazard Zone Map.

California Environmental Quality Act

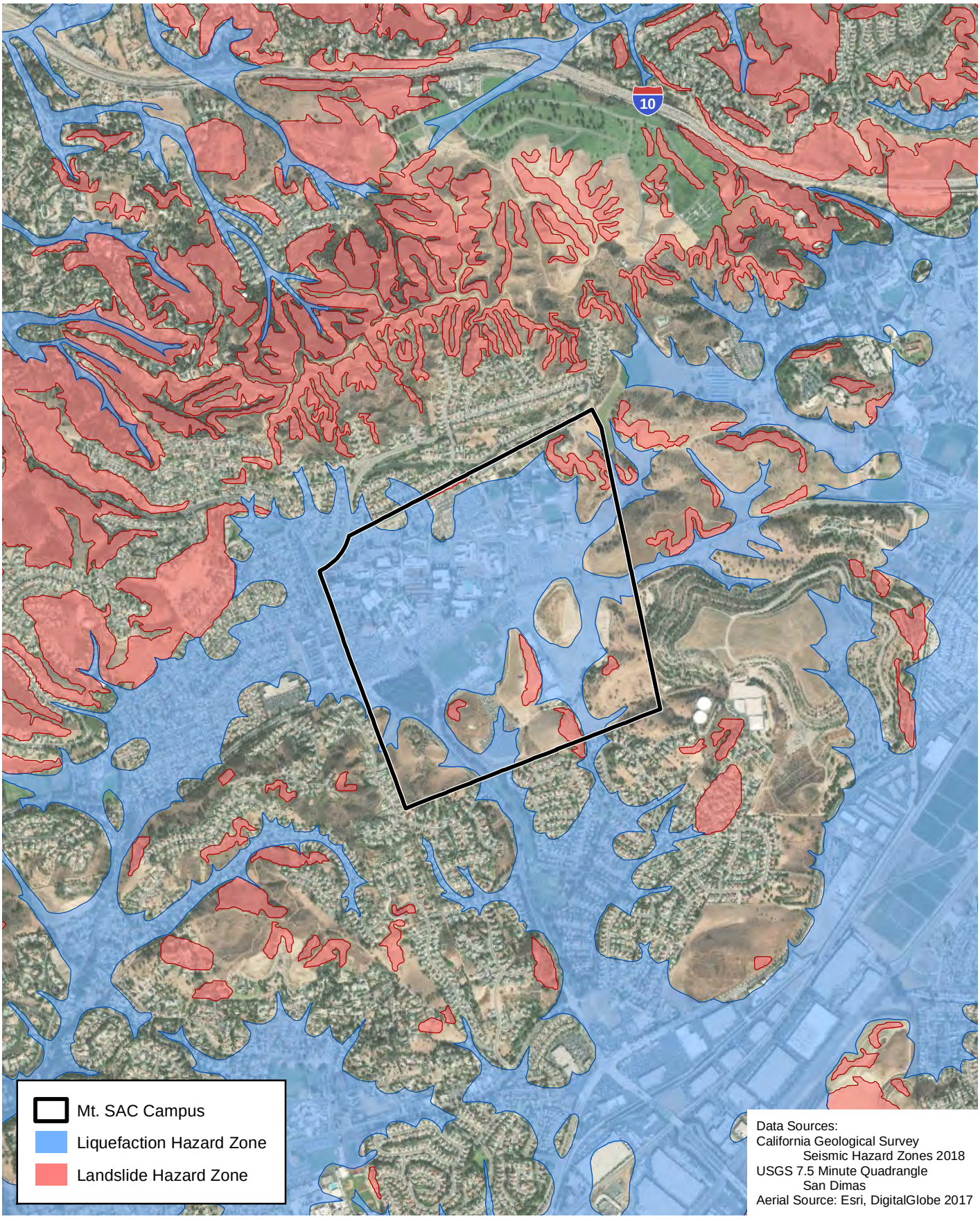
Paleontological Resources

Under Guidelines for the Implementation of California Environmental Quality Act ("CEQA"), as amended March 29, 1999 (Title 1, Chapter 3, California Code of Regulations: 15000 et seq.), procedures define types of activities, persons, and public agencies required to comply with CEQA and include as one of the questions to be answered in the Environmental Checklist: "Will the proposed project disturb paleontological resources?" (Appendix G, Section VII, Part f)

The California Public Resources Code (PRC) Section 5097.5 states:

> a) "No person shall knowingly and willfully excavate upon, or remove, destroy, injure or deface any historic or prehistoric ruins, burial grounds, archaeological or vertebrate paleontological site, including fossilized footprints, inscriptions made by human agency, or any other archaeological, paleontological or historical feature, situated on public lands, except with the express permission of the public agency having jurisdiction over such lands. Violation of this section is a misdemeanor.

As used in this section, "public lands" means lands owned by, or under the jurisdiction of, the state, or any city, county, district, authority, or public corporation, or any agency thereof."



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Seismic Hazard Zone Map

Exhibit 4.6-1

Mt. SAC 2018 Educational and Facilities Master Plan EIR

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According to Eisentraut and Cooper (2002) and Scott and Springer (2003), fossils are considered scientifically significant if they meet any one or more of the following criteria:

- **Taxonomy:** rare or undocumented fossils (or fossil assemblages), those containing species new to the scientific community, or species that are rare or undocumented for that specific area or geologic formation
- **Evolution:** fossils that provide insight to evolutionary relationships and trends of living and extinct organisms
- **Biostratigraphy:** fossils that provide information on a narrow geologic time frame, extinction events, or those that correlate geologic formations throughout geographic regions. This includes index fossils (abundant, widespread, short-lived, easily identifiable fossils) for a given time period.
- **Paleoecology:** fossils that provide information on the interactions between organisms in a community and the ecosystem and how these interactions change through geological time
- **Taphonomy:** fossils that are extremely well preserved, including preservation of soft tissues that are not commonly fossilized, or organisms that are rarely fossilized and are of particular significance
- **Endangered:** rare and/or geographically localized fossils that are at risk of vandalism, exploitation, or destruction

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 (SVP) 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 field survey, along with a geologic literature review, is necessary to determine the paleontological potential of a given area (SVP 2010). Paleontological sensitivity and potential are defined as follows:

- **High:** rock units with high potential for fossil occurrences are those where fossils have previously been recovered and are likely to contain additional fossil resources. These include most sedimentary units that are middle Holocene or older, along with some volcaniclastic units and low-grade metamorphic rocks. Sedimentary rock units that have higher potential for paleontological sensitivity are fine-grained sandstones, silt, clay, mudstone, and limestone. Rock units with large clasts may have lower potential due to the likelihood of destruction of remains before fossilization occurs.
- **Low:** rock units with low potential for fossil occurrences are those that have not produced fossil remains and have a low likelihood for fossil recovery in the future.

- **Undetermined:** rock units with undetermined potential for fossil occurrences are those that have little to no exposure or have not been adequately studied. A field survey is required to determine mitigation measures for these rock units.
- **No:** rock units with no potential for fossil occurrences include igneous and high-grade metamorphic rocks. These rock units do not require mitigation with respect to paleontological resources.

City of Walnut

Building Code

Development in the City of Walnut (City) is required to adhere to the building standards of the Los Angeles County Building Code, which the City has adopted and amended into Section 2.04.020 of the Walnut City Code. In turn, Title 26 of the Los Angeles County Code adopts by reference with specific modifications, the 2016 CBC. However, as stated above, the DSA is responsible for the review and certification of the construction of education or classroom-related buildings for compliance with the building standards published in Title 24 of the California Code of Regulations, and to ensure that the work of construction has been performed in accordance with the approved plans and specifications, for the protection of life and property. Mt. SAC falls under the jurisdiction of the DSA.

Grading Requirements

Chapter 2.40, Title 2 of the City of Walnut Municipal Code, contains guidelines and restrictions regarding hauling of earth materials, including haul routes, access roads, signage, vehicle inspection, notification of hauling activities, dust control, debris on roadways, load limits, damage to streets, and street repairs. The City has established these requirements to control excavation, grading, and earthwork construction (including fills and embankments) and establishes administrative requirements for issuance of permits, approval of plans, and inspection of grading construction in accordance with the requirements for grading and excavation contained in the Los Angeles County Building Code, as adopted and modified by City ordinance. The City's grading requirements in Section 2.04.010 of the Walnut Municipal Code also include landscaping and drainage requirements to prevent erosion. These grading requirements would apply to grading activities associated with non-exempt structures (non-education or non-classroom structures).

Memorandum of Agreement Between the City of Walnut and Mt. SAC

The City of Walnut filed lawsuits related to the environmental documentation and approval of the Mt. SAC Physical Education Project (PEP) and West Parcel Solar Project. In April 2018, Mt. SAC and the City of Walnut entered into a Memorandum of Agreement (MOA) that established mutual understanding of the scope of work for the West Parcel, the Stadium (PEP) Project, parking structures, and future projects at Mt. SAC. The MOA is included in Appendix A of this Draft EIR. The PEP Phase 1 and West Parcel Site Improvements projects are under construction and are being implemented in accordance with the MOA. With respect to future projects, the City agrees that its authority to review and approve grading plans for all future Mt. SAC exempt education facilities will be administrative review and approval of grading/drainage plans by the City's Building Official upon the submission of the complete grading application and such review and approval will be pursuant to technical design and construction standards of on-site improvements which affect grading and drainage.

4.6.2 METHODS AND RESULTS

Geotechnical

Project-specific geotechnical reports were prepared for the following proposed 2018 EFMP projects, which are being evaluated at a project-specific level in this Draft EIR: (1) Parking Structure R and Tennis Courts, (2) Parking Structure S and West Temple Avenue Pedestrian Bridge, and (3) Student Center and Central Campus Infrastructure. These geotechnical reports involved the following tasks, which are further described and included in Appendix F of this Draft EIR:

- Site reconnaissance
- Evaluation of seismic conditions for the subject location
- Drilling, sampling, and logging of hollow stem auger borings to investigate subsurface conditions
- Drilling additional hollow stem auger borings to perform percolation tests
- Laboratory testing of soil samples obtained from subsurface explorations to determine their physical and engineering properties
- Geotechnical analysis of data obtained

Conclusions and recommendations for foundation and site grading were developed based on this information are included in each site-specific geotechnical report.

Paleontological Resources Records Search

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 Los Angeles County Natural History Museum (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).

Online records and literature searches were conducted to determine if any additional fossil localities have been recorded in or near the campus.

Results of the LACM and Paleobiology Database records search are detailed in Table 4.6-1 below.

TABLE 4.6-1
FOSSIL LOCALITIES NEAR THE PROJECT SITE

Locality Number	Resource Type	Taxa	Formation	Proximity to Area of Potential Effect	Depth
LACM 8014	Vertebrate Fossils	*Bison sp.* (bison)	Qoa	Outside (~5 miles from APE)	Unknown
LACM 1728	Vertebrate Fossils	*Equus sp.* (horse) *Camelops sp.* (camel)	Qoa	Outside (~5 miles from APE)	15-20 feet below surface
LACM 6171	Vertebrate Fossils	*Ganolytes sp.* (herring)	Tp	Outside (~0.5 mile from APE)	Unknown
LACM 7153	Vertebrate Fossils	*Sygnathus emeritus* (pipefish)*	Tp	Outside (~1.5 miles from APE)	Unknown
LACM 7190	Vertebrate Fossils	*Ganolytes sp.* (herring) *Etringus sp.* (herring) Bathylagidae (deep sea smelt) Myctophidae (lantern fish) Carangidae (jack)	Tp	Outside (~2 miles from APE)	Unknown
PaleoDB 186045	Vertebrate Fossils	*Zanteclites hubbsi* (grunion) *Lompoquia retropes* (drumfish) *Lembicus meiklejohni** (herring) *Sternbergia waitei** (fish) *Tunita sp.* (mackerel)	Tp	Outside (~2 miles from APE)	unknown

*holotype specimen, published
Source: (McLeod 2018, paleobiodb.org)

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.

Pedestrian Survey

Psomas conducted a pedestrian survey of the APE on September 14, 2018. The purpose of the survey was to identify paleontological resources within the APE. The survey consisted of walking along roadways and non-vegetated areas. The ground was inspected for evidence of prehistoric or historic use through the presence/absence of material culture. Paleontological resources were searched for by inspecting the geologic features observed during the survey. A field notebook and a digital camera were used to record survey conditions. Copies of the field notes and digital photographs are on file at the Psomas Orange County Office. The results of the survey were as follows:

The undeveloped area west of the facilities and operations buildings on Bonita Drive and south of the baseball and softball fields (Reservoir Hill) is undisturbed and has outcrops of the Yorba Member of the Puente Formation visible at the surface. Visibility is high (approximately 75 percent) on the north slope of the hill and along the pathway extending up the hill. The south slope is covered with dense vegetation. Rounded cobbles and boulders originating from the Yorba Member are visible throughout the area.

- The proposed circulation improvement areas south of Temple Avenue, along and east of Bonita Drive, are disturbed but partially undeveloped. Visibility is high along the walkways and there are outcrops of the Yorba Member in the slopes on either side.
- The area south of Temple Avenue and east of Bonita Drive is an active construction site and was not surveyed on foot.
- The proposed circulation improvement areas in the northeast portion of the campus (Farm Precinct) are disturbed and developed in most areas south of Farm Drive. The areas north of Farm Drive, including the hill in the northeast, are partially undisturbed and have visible outcrops of the La Vida and Soquel Members of the Puente Formation on the southern slope. The surface at the top of the hill is artificial fill littered with debris. The area surrounding the water tank is fenced and was not surveyed.
- The remaining areas in the northwest and southwest of the campus where demolition of existing building and construction of new buildings is proposed have been completely developed with existing buildings, sidewalks, lawns and other landscaping and native surface visibility is zero (0) percent.

No paleontological resources were observed in any of the areas surveyed.

4.6.3 ENVIRONMENTAL SETTING

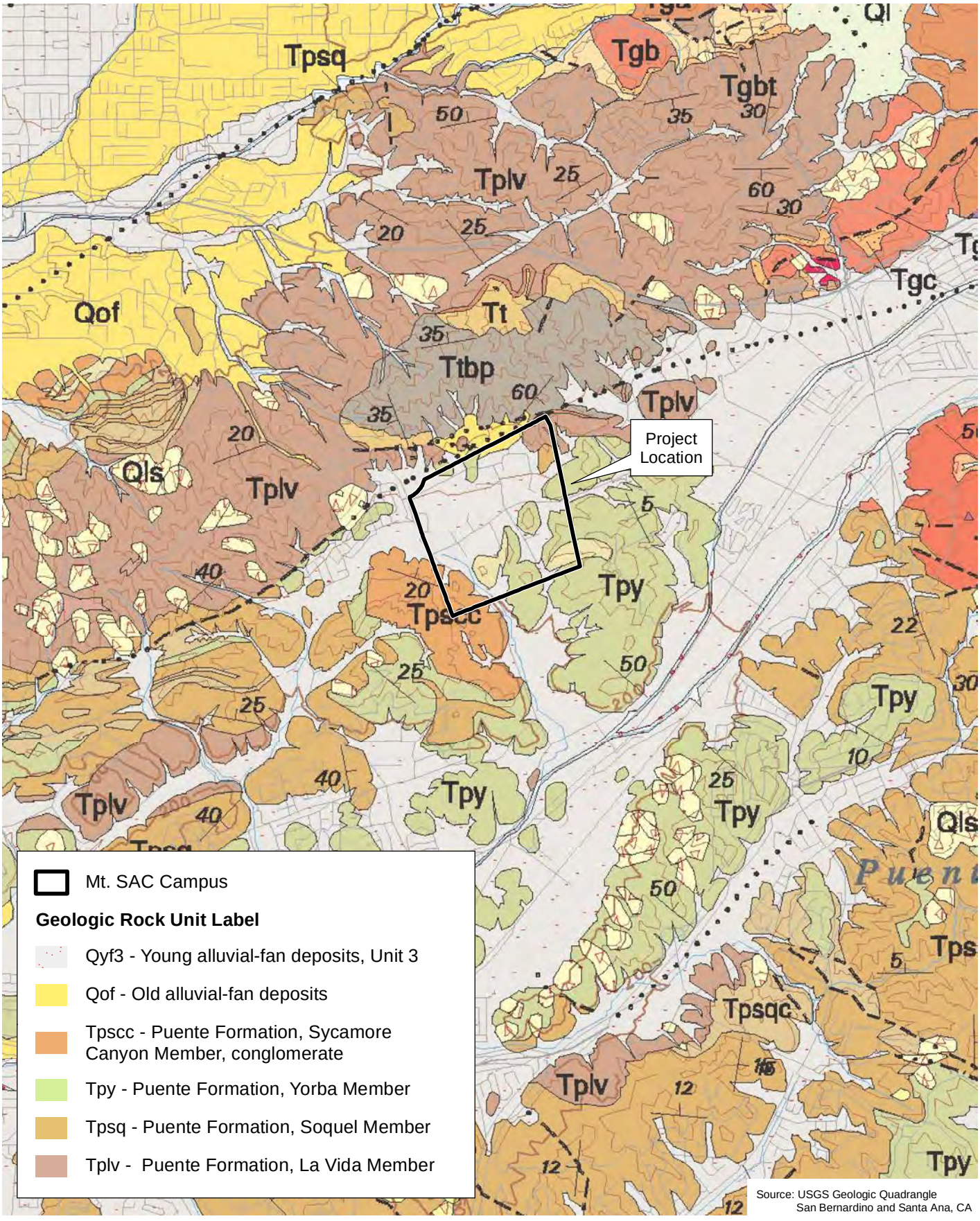
Geology and Soils

Regional Geology

Mt. SAC is located in the San Jose Hills along the western edge of the Pomona Valley within the Transverse Ranges geomorphic province of California and along the northern terminus of the Peninsular Ranges Province. The Pomona Valley is located at the junction of the two major convergent fault systems: (1) northwest-trending high angle strike-slip faults of the San Andreas system projecting from the northern terminus of the Peninsular Ranges Province, and (2) east-trending low-angle reverse or reverse-oblique faults bounding the south margin of the Transverse Ranges. The Pomona Valley basin is bound to the north by the San Jose fault and to the southwest by the Chino-Central Avenue fault. These two fault systems do not exhibit significant evidence of surface movement within Holocene time (0–11,700 years before present) and are not considered active based on current geologic information. The San Jose and Chino-Central Avenue faults are considered Late Quaternary age faults, having exhibited displacement and movement within the past approximately 130,000 years (Converse Consultants 2017a-c).

Local Geology

Mt. SAC is located within an alluvial basin surrounded by hillsides consisting of sedimentary bedrock of the Monterey (Puente) Formation. No faults are found beneath or project through Mt. SAC. The campus is mainly underlain by fill soils (Af) placed during previous site grading operations, natural alluvial soils (Qal), and sedimentary bedrock of the Puente Formation (Tpss). The nearby hillsides have been mapped as (Tmy)-Yorba Shale Member consisting of thinly bedded, diatomaceous, semi-siliceous clay shale, siltstone and minor sandstone, and Sycamore Canyon Formation consisting of light gray sandstone that includes conglomerate and siltstone (Tscs). In general, the underlying geologic and soil materials would adequately support the proposed improvements (Converse Consultants 2017a-c). Exhibit 4.6-2, Geologic Map, depicts the geologic units underlying Mt. SAC.



Source: USGS Geologic Quadrangle
San Bernardino and Santa Ana, CA

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Geologic Map

Exhibit 4.6-2

Mt. SAC 2018 Educational and Facilities Master Plan EIR

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Mt. San Antonio College

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 (refer to Exhibit 4.6-2).

Puente Formation (Tp)

The Puente Formation contains a wide range of rock types including coarse-grained feldspathic sandstones, conglomerates, and laminated shales that were deposited in a progradational submarine fan environment. It has been subdivided into four lithologically distinct members, which are present within the campus and described below. These La Vida and Soquel members have been alternatively placed within the contemporaneous Monterey Formation by Dibblee (2001).

The La Vida Member (Tplv) is a predominantly dark gray and red shale that lies unconformably over the Topanga Formation. In areas to the north, it also overlies the El Modeno Volcanics, which have been dated at 13.7 +/- 1.6 Ma (Critelli et al. 1995). Fossils common to the La Vida Member include articulated fish, shark and ray teeth, crustaceans, and foraminifera. Numerous marine mammals have been found during previous excavations in the La Vida Member. These include both toothed and baleen whales, dugongs, and desmostylids.

The Soquel Member (Tpsq) is a predominantly well-lithified, coarse-grained, buff to yellow sandstone, with minor interbeds of dark reddish-brown shale. Fewer fossils have been found in the Soquel Member, but foraminifera date to the Mohinian Stage (13.5-7.5 Ma). A bentonite bed within the Soquel Member has been dated at 9 Ma (Critelli et al. 1995).

The Yorba Member (Tpy) is a predominantly gray siltstone, with some sandy beds, localized conglomerates, and lime concretions in a turbidity flow (Schoellhamer et al. 1981). Fossils from the Yorba Member include articulated fish, shark and ray teeth, crustaceans, foraminifera, and the holotype of a hexactinellid sponge (Rigby and Albi 1996). Foraminifera from the Yorba Member have been dated as upper Mohnian (13.5-7.5Ma) to lower Delmontian (7.5-2.9Ma).

The base of the Sycamore Canyon Member (Tpscc) is predominantly coarse-grained sandstone and pebble conglomerate with siltstone interbeds in a turbidity flow. Higher in the section, the sediments are finer grained sand and siltstone (Schoellhamer et al. 1981). Few diagnostic fossils have been recovered from the Sycamore Canyon Member, but it has been dated to latest Miocene (>5.3Ma) based on fossils in underlying and overlying beds (Schoelhamer et al. 1981; Yerkes et al. 2005).

Quaternary Young Alluvial Fan Deposits, Unit 3 (Qyf_3)

The sand and gravel of the Quaternary young alluvial fan deposit, unit 3 underlies the majority of the of the campus. Because of its young age (i.e., very late Holocene or modern), the potential for yielding significant paleontological resources is very low.

Quaternary Old Alluvial Fan Deposits (Qof)

The Quaternary old alluvial fan deposits are present at the surface in the northeastern portion of the campus, between the hills at the extreme northeast and Parking Lot H and may be

encountered during deeper excavations in the remainder of the low-lying portions of the campus. These sediments consist of loosely consolidated alluvial gravel, sand, and silt originating from the San Jose Hills. These sediments increase in age with depth, perhaps to early-late Pleistocene (older than 100,000 years) age. Elsewhere in the Los Angeles Basin, fossils are known from pit excavations for roads, housing projects, and quarries in similar deposits (Miller 1971). Remains of extinct Ice Age animals (such as mastodons, mammoths, horses, bison, camels, tapirs, sabertooth cats, sloths) have been located during earth-moving activities in these formations. The potential for yielding significant paleontological resources is moderate.

Faulting and Seismicity

As with all of Southern California, Mt. SAC is within a seismically active region. No major or active faults are mapped within the boundaries of the campus, nor is any portion of the campus located in an Alquist-Priolo Fault Rupture Hazard Zone. The geologic structure of Southern California is dominated by northwest-trending faults associated with the San Andreas system. The Pomona Valley Basin is bounded to the north by the San Jose fault and to the southwest by the Chino-Central Avenue faults. These two faults show no evidence of surface movement within Holocene time, and they are not considered active based on current geologic information (Converse Consultants 2017a-c). The San Jose and Chino-Central Avenue faults are considered Late Quaternary and exhibited displacement and movement within the past 738,000 years. The closest known faults to Mt. SAC with demonstrable surface expressions are the San Jose fault, approximately 0.5 mile to the north, and the Chino-Central Avenue (Elsinore) fault, approximately 4.3 miles to the east. They are both known to be seismically active and are known to have ruptured the ground surface in historic time. Also, within the Southern California region are a number of west-trending, low-angle reverse (thrust) faults that are similarly active.

The San Jose fault is along the southern flank of the San Jose Hills, and the Chino and Central Avenue faults trend northwest along the southwest portion of the Chino Basin. The Chino and Central Avenue faults lie along the northeast edge of the Puente Hills. The Chino and Central Avenue faults are considered part of the Elsinore fault, which is one of the major right lateral strike-slip faults of the Peninsular Ranges geomorphic province. The Elsinore fault splits near Prado Dam into the Chino-Central Avenue and Whittier faults. The Chino-Central Avenue faults are two separate fault strands that strike northwest. The Chino fault dips southwest and is at least 11 miles in length. The Central Avenue fault is about 5 km in length and concealed by younger alluvial deposits. The Chino and Central Avenue faults converge southward into the much larger Elsinore fault system.

The July 29, 2008, Chino Hills earthquake was a magnitude 5.5 earthquake event that caused moderate ground shaking and minor damage to some Mt. SAC buildings. The earthquake epicenter was located approximately 15 miles southeast of the campus beneath the Chino Hills and at a depth of approximately 9.1 miles below ground surface.

Table 4.6-2, Summary of Regional Faults, shows the nearest faults to Mt. SAC and the expected maximum magnitude earthquake expected on each fault. According to the geotechnical study reports prepared for Parking Structure R and Tennis Courts, Parking Structure S and West Temple Avenue Pedestrian Bridge, and the Student Center and Central Campus Infrastructure, the seismic hazards for the Pomona Basin are high. The Pomona Basin is bound by active regional faults on all sides and underlain by alluvial sediments and buried thrust faults. The ongoing seismic hazard for the Pomona Basin was illustrated by the 1971 San Fernando, 1987 Whittier Narrows, 1991 Sierra Madre, 1994 Northridge, and 2008 Chino Hills earthquakes (Converse Consultants 2017a-c).

TABLE 4.6-2
SUMMARY OF REGIONAL FAULTS

Fault Name and Section	Maximum Moment Magnitude (Mmax)
San Jose	6.4
Chino-Central Ave. (Elsinore)	6.7
Elysian Park Blind Thrust	6.7
Puente Hills Blind Thrust	7.3
Sierra Madre	7.2
Whittier	6.8
Cucamonga	6.9
Clamshell-Sawpit	6.5
Raymond	6.5
Verdugo	6.9
Elsinore-Glen Ivy	6.8
Compton Thrust	6.8
Hollywood	6.4
San Jacinto – San Bernardino	6.7
San Andreas -1857 Rupture	7.4
San Andreas – Mojave	7.4
Newport-Inglewood (LA Basin)	7.1
San Andreas – San Bernardino	7.5
San Andreas – Southern	7.2
Cleghorn	6.7
Sierra Madre (San Fernando)	6.7
Source: Converse Consultants, 2017a-c.	

Seismic Hazard Zones

Liquefaction is the loss of soil strength or stiffness due to a buildup of water pressure between soil particles during severe ground shaking. Liquefaction hazard areas are areas where historic occurrence of liquefaction, or local geological, geotechnical, and groundwater conditions, indicate a potential for permanent ground displacements such that mitigation would be required. This condition is associated primarily with loose (low density), saturated, fine- to medium-grained, cohesionless soils that often make up alluvial materials. According to the recently adopted 2018 *City of Walnut General Plan*, Public Safety Element, Mt. SAC is generally subject to seismically-induced liquefaction (Walnut 2018). The CGS also identifies a large area of the campus within a Liquefaction Hazard Zone (CGS 2018).

Earthquake-induced landslide areas are located in the northern, northeastern, and southern portions of the campus, see Exhibit 4.6-1. These are areas where previous occurrence of landslide movement or local topographic, geological, or geotechnical and subsurface water conditions indicate a potential for permanent ground displacements (Converse Consultants 2017a).

Groundwater

According to groundwater data available from the California Department of Water Resources, California Geological Survey, and boring logs in the proposed Project vicinity, there is evidence of relatively shallow groundwater on the campus (CGS 2018). Local zones of groundwater and groundwater seepage were also encountered in borings for the Student Center and Central Campus Infrastructure (at a depth of 47.5 feet below the ground surface [bgs]), for Parking Structure R and Tennis Courts (at depths of 20 to 60 feet bgs), and for Parking Structure S and West Temple Avenue Pedestrian Bridge (at depths of 23 to 36.8 feet bgs). The geotechnical reports conclude that groundwater and groundwater seepage could be expected during deep excavations on campus (Converse Consultants 2017a, 2017b, 2017c). These observations reflect site conditions at the time of the investigation and do not preclude changes in local groundwater conditions; localized seepage due to variations in rainfall, heavy irrigation, damaged structures (pipes, etc.); or altered site drainage pattern(s).

Paleontological Resources

As identified under the results of the pedestrian survey, surficial deposits composed of Pleistocene and Holocene alluvial deposits within the Miocene Puente Formation are found in the hills within the APE for the proposed 2018 EFMP. No fossil localities were found during the LACM and PaleoBiology records search that lie within the APE, 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.

4.6.4 THRESHOLDS OF SIGNIFICANCE

According to Appendix G of the California Environmental Quality Act (CEQA) Guidelines, a project will normally have a significant adverse environmental impact related to geology and soils if it will:

- Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:
    - 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?
    - Strong seismic ground shaking.
    - Seismic-related ground failure, including liquefaction.
    - Landslides.
- Result in substantial soil erosion or the loss of topsoil.
- 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.
- 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.

- Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water.

- Directly or indirectly destroy a unique paleontological resource or site or unique geological feature.

Mt. SAC 2016 CEQA Thresholds of Significance

To the extent the following thresholds of significance are applicable to the proposed 2018 EFMP, 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;
CGS: California Geologic Survey; CEQA: California Environmental Quality Act; DSA: Division of the State Architect; FMP: Facilities Master Plan; MMP: Mitigation Monitoring Plan				

4.6.5 ENVIRONMENTAL IMPACTS

Impact Analysis

Threshold 6.1(i)	**Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving 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?**

2018 Educational and Facilities Master Plan (Phases 1A, 1B, and 2) and Project-Specific

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 (Converse Consultants 2017a-c). 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 2018 EFMP. No mitigation is required.

Level of Significance Prior to Mitigation

No Impact.

Recommended Mitigation Measures

No significant impacts were identified and mitigation is not required.

Level of Significance After Mitigation

No Impact.

Threshold 6.1(ii)	**Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking?**

2018 Educational and Facilities Master Plan (Phases 1A, 1B, and 2)

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. As discussed previously, 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 (Converse Consultants 2017a-c, Walnut 2018). The possibility of ground acceleration or shaking on any part of the campus, including any areas to be developed in the future under the proposed 2018 EFMP, is similar to that for all of Southern California and is considered a potentially significant impact. However, implementation of MM GEO-1 requires site-specific geotechnical

studies (in accordance with the DSA's Geohazard Report Requirements) to determine appropriate site and building designs, which would reduce potential impacts related to soil and geologic constraints to less than significant levels. MM GEO-2 requires structural design and construction to be completed in accordance with the recommendations of the geotechnical study. The DSA will 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 and MM GEO-2.

Level of Significance Prior to Mitigation

Potentially significant.

Recommended Mitigation Measures

MM GEO-1 and MM GEO-2.

Level of Significance After Mitigation

Less than significant.

Project-Specific

Parking Structure R and Tennis Courts, Parking Structure S and West Temple Avenue Pedestrian Bridge, and Student Center and Central Campus Infrastructure

The project-specific geotechnical study reports prepared for Parking Structure R and Tennis Courts, and Parking Structure S and West Temple Avenue Pedestrian Bridge, and the Student Center and Central Campus Infrastructure conclude that, given the proximity of the campus to fault zones within 50 miles of the campus, in conjunction with known damages associated with both the 1971 San Fernando earthquake (6.7 maximum moment magnitude [Mw]) and the 1994 Northridge earthquake (6.7 Mw), intense ground shaking may occur in the future. The possibility of ground acceleration or shaking on campus, including the areas to be developed and/or improved, is considered similar to that for all of Southern California and is considered a potentially significant impact. The geotechnical study reports also conclude that building on all three proposed improvement sites is geotechnically feasible provided all recommendations, including concurrence with State building code requirements and accepted industry standards, are implemented during design, grading, and construction. Implementation of MM GEO-2 requires that recommendations from the geotechnical study reports are included in site preparation and building design specifications to ensure that potential impacts associated with strong seismic ground shaking are less than significant at each proposed development site. Additionally, grading activities and would be conducted in compliance with current CBC and City of Walnut grading requirements per MM GEO-3. The CBC specifies that all proposed structures should be able to (1) resist minor earthquakes without damage, (2) resist moderate earthquakes without structural damage but with some nonstructural damage, and (3) resist major earthquakes without collapse but with some structural as well as nonstructural damage.

Bookstore

Due to the proximity of the proposed Bookstore site to the proposed Student Center and Central Campus Infrastructure site, geologic and seismic conditions at the Bookstore site are expected to be similar to those at the Student Center site. However, a site-specific geotechnical study would have to be prepared for the Bookstore, as required by MM GEO-1. In addition, as stated in MM

GEO-2, building design, grading and construction associated with the Bookstore would also be required to comply with recommendations identified in the geotechnical study prepared for the Bookstore.

Sand Volleyball Courts and Parking Lot W Reconstruction

While the proposed Sand Volleyball Courts and Parking Lot W Reconstruction may not require a geohazard report, the restroom building would require preparation of a geohazard report for review and approval by the DSA (DSA 2015b). Construction of the proposed Sand Volleyball Courts and Parking Lot W Reconstruction would be subject to limited DSA review but would still require compliance with current CBC and City of Walnut grading requirements (MM GEO-3).

Thus, for this proposed Project, implementation of MM GEO-1, MM GEO-2, and MM GEO-3 and compliance with applicable local and State regulatory requirements would reduce potential impacts from strong seismic ground shaking to less than significant levels.

Level of Significance Prior to Mitigation

Potentially significant.

Recommended Mitigation Measures

MM GEO-1, MM GEO-2, and MM GEO-3.

Level of Significance After Mitigation

Less than significant.

Threshold 6.1(iii)	**Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction?**

2018 Educational and Facilities Master Plan (Phases 1A, 1B, and 2)

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, 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 CBC). Project-specific geotechnical and geologic investigations are required for projects implementing the proposed 2018 EFMP (refer to MM GEO-1). Typical remedial measures to address liquefaction include, but are not limited to: excavation and removal or re-compaction of potentially liquefiable soils, if possible; in-situ densification of liquefiable soils using 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). 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 seismically induced liquefaction is less than significant.

Level of Significance Prior to Mitigation

Potentially significant.

Recommended Mitigation Measures

MM GEO-1.

Level of Significance After Mitigation

Less than significant.

Project-Specific

Student Center and Central Campus Infrastructure and Bookstore

According to the geotechnical study report prepared for the proposed Student Center and Central Campus Infrastructure, based on the site-specific liquefaction analysis, the Student Center site would not be at risk for ground failure from liquefaction (Converse Consultants 2017c). While site conditions at the Bookstore site may be similar to those at the Student Center site due to proximity, a site-specific geotechnical study would have to be prepared for the Bookstore site, as per MM GEO-1. Compliance with the recommendations of the site-specific geotechnical study for the Bookstore site (MM GEO-2) would avoid the hazards associated with liquefaction.

Parking Structure R and Tennis Courts and Parking Structure S and West Temple Avenue Pedestrian Bridge

The sites proposed for development of Parking Structure R and Tennis Courts and Parking Structure S and West Temple Avenue Pedestrian Bridge may be subject to liquefaction (Converse Consultants 2017a, 2017b). The project-specific geotechnical study reports included design and construction recommendations to alleviate potential impacts related to liquefaction. These include over-excavation and re-compaction of areas underlain by alluvial soils, use of structural fill, subgrade preparation, and foundation and pavement design that accounts for static and differential settlements. Implementation of the recommended design methods would reduce potential project-related impacts related to liquefaction to less than significant levels. Therefore, implementation of MM GEO-2, requiring that recommendations from the geotechnical study reports be included in site preparation and building design specifications, would reduce potential impacts associated with seismic-related ground failure to less than significant levels.

Sand Volleyball Courts and Parking Lot W Reconstruction

As stated above, the proposed Sand Volleyball Courts and Parking Lot W Reconstruction may not require a geohazard report, but the restroom building would require preparation of a geohazard report for review and approval by the DSA (DSA 2015b). Compliance with MM GEO-1 and MM GEO-2 for the restroom building would prevent hazards associated with liquefaction. Construction of the proposed Sand Volleyball Courts and associated restroom facility would also be subject to compliance with current CBC.

Level of Significance Prior to Mitigation

Potentially significant for Bookstore, Parking Structure R and Tennis Courts, Parking Structure S and West Temple Avenue Pedestrian Bridge.

Less than significant for Student Center and Central Campus Infrastructure.

Recommended Mitigation Measures

MM GEO-1 and MM GEO-2.

Level of Significance After Mitigation

Less than significant.

Threshold 6.1(iv)	**Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving landslides?**

2018 Educational and Facilities Master Plan (Phases 1A, 1B, and 2)

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 (Walnut 2018). As shown on Exhibit 4.6-1, Seismic Hazard Zone Map, a small area along the northern campus boundary in the vicinity of Bonita Avenue and Edinger Way is designated as a landslide hazard area. This area is near the site for the proposed School of Continuing Education and Adult Education buildings, and the potential for landslides is a potentially significant impact that requires remediation. Similarly, the proposed water tanks and roads at the northeastern corner and emergency access road at the southern section would be located in or near landslide hazard areas and would present a potentially significant impact. Implementation of MM GEO-1, requiring site-specific geotechnical studies to determine appropriate site and building designs for the proposed School of Continuing Education, Adult Education, and water tanks, and MM GEO-2, which requires compliance with the recommendations of site-specific geotechnical studies, would reduce these potential impacts to less than significant levels. In addition, these buildings, site improvements, and roads would be required to comply with current CBC and City of Walnut grading requirements (MM GEO-3).

Level of Significance Prior to Mitigation

Potentially significant.

Recommended Mitigation Measures

MM GEO-1, MM GEO-2, and MM GEO-3.

Level of Significance After Mitigation

Less than significant.

Project-Specific

Parking Structure R and Tennis Courts, Parking Structure S and West Temple Avenue Pedestrian Bridge, Student Center and Central Campus Infrastructure, Bookstore, and Sand Volleyball Courts and Parking Lot W Reconstruction

According to the recently adopted 2018 *City of Walnut General Plan*, Public Safety Element, most of the locations for project-specific evaluation are outside a designated seismically induced landslide area (Walnut 2018), except for one small hillside area near the Parking Structure R and Tennis Courts site that is designated as having a risk of seismically induced landslides. The geotechnical study report for the Student Center and Central Campus Infrastructure indicates the site has a gently sloping topography and is not subject to landslide hazards (Converse Consultants 2017c). The geotechnical study reports for Parking Structure S and West Temple Avenue Pedestrian Bridge and Parking Structure R and Tennis Courts indicate the potential for seismically induced landslides to affect these sites is considered to be very low (Converse Consultants 2017a, 2017b). The hillside slope near the proposed Parking Structure R and Tennis Courts will be excavated and removed to create a level building pad. In the absence of significant ground slopes, the planned improvements will not be exposed to landslide hazards (Converse Consultants 2017a). Therefore, the potential for landslides associated with the specific Phase 1A and 1B projects would be less than significant after mitigation.

Level of Significance Prior to Mitigation

Less than significant.

Recommended Mitigation Measures

None.

Level of Significance After Mitigation

Less than significant.

Threshold 6.2	**Would the project result in substantial soil erosion or the loss of topsoil?**

2018 Educational and Facilities Master Plan (Phases 1A, 1B, and 2) and Project-Specific

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 National Pollutant Discharge Elimination System (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 as discussed in Section 4.9, Hydrology and Water Quality, of this Draft EIR. In addition to the requirements of the NPDES General Construction Permit, MM HYD-2 in Section 4.9, Hydrology and Water Quality, requires that individual projects incorporate 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, MM HYD-2 and City of Walnut grading requirements (MM GEO-3) 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.

Level of Significance Prior to Mitigation

Potentially significant.

Recommended Mitigation Measures

MM HYD-2 and MM GEO-3.

Level of Significance After Mitigation

Less than significant.

Threshold 6.3	**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-site or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?**

2018 Educational and Facilities Master Plan (Phases 1A, 1B, and 2)

Liquefaction and Landslides

The potential for liquefaction and landslides is addressed in Thresholds 6.1(iii) and 6.1(iv) above. Impacts associated with landslides would be less than significant with implementation of MM GEO-1 and MM GEO-2; and potential impacts related to liquefaction would be reduced to less than significant with implementation of MM GEO-1 and MM GEO-2 requiring site-specific geotechnical studies and incorporating geotechnical recommendations into site and building designs.

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. As no significant slopes or embankments are within the development areas of the proposed 2018 EFMP, the potential for lateral spreading is considered negligible and no impacts would occur.

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 proposed 2018 EFMP, as discussed below, identify that the potential for subsidence and collapse should be factored into

the determinations of construction equipment types and grading techniques (Converse Consultants 2017a-c). 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.

Level of Significance Prior to Mitigation

Potentially significant for liquefaction, landslides, subsidence, and collapse.

Recommended Mitigation Measures

MM GEO-1 and MM GEO-2.

Level of Significance After Mitigation

Less than significant.

Project-Specific

Parking Structure R and Tennis Courts, Parking Structure S and West Temple Avenue Pedestrian Bridge, Student Center and Central Campus Infrastructure, Bookstore, and Sand Volleyball Courts and Parking Lot W Reconstruction

Liquefaction and Landslides

The potential for liquefaction and landslides is addressed in Thresholds 6.1iii, 6.1iv, and 6.3 above. Impacts associated with landslides would be less than significant. According to the geotechnical study reports prepared for the proposed improvements, the Student Center and Central Campus Infrastructure site would not be at risk for ground failure from liquefaction. However, the sites proposed for development of Parking Structure R and Tennis Courts and Parking Structure S and West Temple Avenue Pedestrian Bridge may be subject to liquefaction. Potential impacts related to liquefaction would be reduced to less than significant with implementation of MM GEO-1 and MM GEO-2 requiring that recommendations from the geotechnical study reports be included in site preparation (e.g., over-excavation and recompaction, use of structural fill, and subgrade preparation) and building design specifications (e.g., foundation and pavement design) to reduce impacts related to liquefaction to less than significant levels.

Lateral Spreading

As discussed above, no significant slopes or embankments are within the development areas of Parking Structure R and Tennis Courts, Parking Structure S and West Temple Avenue Pedestrian Bridge, the Student Center and Central Campus Infrastructure; therefore, the potential for lateral spreading is considered negligible and no impacts would occur (Converse Consultants 20178a-c). Similarly, no significant slopes or embankments are present at the sites for the Bookstore and the Sand Volleyball Courts and Parking Lot W Reconstruction. No impacts would occur.

Subsidence and Collapse

As discussed above, subsidence 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 geotechnical study reports prepared for the Student Center and Central Campus Infrastructure, Parking Structure R and Tennis Courts, and Parking Structure S and West Temple Avenue Pedestrian Bridge identify that the potential for subsidence and collapse should be factored into the determinations of construction equipment types and grading techniques (Converse Consultants 2017a-c). Therefore, impacts are considered to be significant and implementation of MM GEO-2 requiring that recommendations from the geotechnical study reports be included in site preparation and building design specifications would reduce potential impacts related to subsidence and collapse to less than significant levels.

Geohazard reports would be prepared to address the potential for lateral spreading, subsidence, collapse, and other geologic hazards (MM GEO-1); and recommendations in the reports would be incorporated into the structural design and construction of the Bookstore and restroom building associated with the Sand Volleyball Courts and Parking Lot W Reconstruction (MM GEO-2). Construction of the proposed Bookstore and Sand Volleyball Courts and Parking Lot W Reconstruction, would also be subject to compliance with current CBC and City of Walnut grading requirements (MM GEO-3).

Level of Significance Prior to Mitigation

Potentially significant for the Bookstore and restroom building associated with Sand Volleyball Courts and Parking Lot W Reconstruction.

Less than significant for the Student Center and Central Campus Infrastructure, Parking Structure R and Tennis Courts, and Parking Structure S and West Temple Avenue Pedestrian Bridge.

Recommended Mitigation Measures

MM GEO-1, MM GEO-2 and MM GEO-3.

Level of Significance After Mitigation

Less than significant.

Threshold 6.4	**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?**

2018 Educational and Facilities Master Plan (Phases 1A, 1B, and 2)

Expansive soils are materials that, when subject to a constant load, are prone to expand when exposed to water. The geotechnical study reports prepared for the Student Center and Central Campus Infrastructure, Parking Structure R and Tennis Courts, and Parking Structure S and West Temple Avenue Pedestrian Bridge identify that the potential for encountering expansive soils varies from very low to moderate throughout the campus (Converse Consultants 2017a-c). Therefore, impacts are considered to be less than significant for these projects. For other projects in the proposed 2018 EFMP, including the proposed Bookstore and restroom building associated with Sand Volleyball Courts and Parking Lot W Reconstruction, implementation of MM GEO-1 requiring site-specific geotechnical studies to determine appropriate site and building designs and incorporation of the recommendations in the reports (e.g., removal of expansive soils; prevention of mixing expansive soils with other soils; use of non-expansive soil for compacted fills and backfills; reinforcement of slabs, foundations, and pavements; and lime treatment of subgrade

soils) (MM GEO-2) would reduce potential impacts related to expansive soils to less than significant levels. Individual projects would also be subject to compliance with current CBC, as reviewed and certified by the DSA.

Level of Significance Prior to Mitigation

Potentially significant.

Recommended Mitigation Measures

MM GEO-1 and MM GEO-2.

Level of Significance After Mitigation

Less than significant.

Project-Specific

Parking Structure R and Tennis Courts, Parking Structure S and West Temple Avenue Pedestrian Bridge, and Student Center and Central Campus Infrastructure

Laboratory testing of soils underlying Parking Structure R and Tennis Courts, Parking Structure S and West Temple Avenue Pedestrian Bridge, and the Student Center and Central Campus Infrastructure determined that on-site soils have a varied potential for expansion, from very low for the Student Center to low to moderate for the parking structures (Converse Consultants 2017a-c). Therefore, impacts are considered to be significant, and implementation of MM GEO-2 requiring that recommendations from the geotechnical study reports be included in site preparation and building design specifications would reduce potential impacts related to expansive soils to less than significant levels.

The geotechnical study report for the Student Center and Central Campus Infrastructure indicates site soils have very low expansion potential but includes expansive soil mitigation recommendations that on-site clayey soils (i.e., Expansion Index higher than 20) should not be re-used for compaction within 2 feet below proposed foundations or for retaining wall backfill and should be removed (Converse Consultants 2017c).

The geotechnical study reports for the proposed Parking Structure R and Tennis Courts and Parking Structure S and West Temple Avenue Pedestrian Bridge indicate site soils have low to moderate expansion potential, and medium to high expansion potential could occur in fine-grained silt and clay materials. The reports include expansive soil mitigation recommendations that potentially expansive silts and clays should not be mixed with other soils; soil expansion potential should be verified after grading in areas where slabs, footings, and pavement would be placed; on-site clayey soils should not be re-used for compaction within 2 feet below proposed foundations or for retaining wall backfill; 2 feet of underlying soils should be removed and replaced with non-expansive sandy soil materials; reinforced footings and thicker concrete slabs with moisture barriers shall be used; and upper 2 feet of subgrade soils should be treated with lime (Converse Consultants 2017a, 2017b).

Bookstore and Sand Volleyball Courts and Parking Lot W Reconstruction

For the Bookstore and the restroom building associated with Sand Volleyball Courts and Parking Lot W Reconstruction, geohazard reports would have to be prepared to determine the potential

for soil expansion (MM GEO-1), and the recommendations in the reports would be incorporated into the structural design and construction (MM GEO-2). Construction of the proposed Bookstore and Sand Volleyball Courts and Parking Lot W Reconstruction would also be subject to compliance with current CBC.

Level of Significance Prior to Mitigation

Potentially significant for Parking Structure R and Tennis Courts, Parking Structure S and West Temple Avenue Pedestrian Bridge, and Bookstore.

Less than significant for Student Center and Central Campus Infrastructure and Sand Volleyball Courts and Parking Lot W Reconstruction.

Recommended Mitigation Measures

MM GEO-1 and MM GEO-2.

Level of Significance After Mitigation

Less than significant.

Threshold 6.5	**Would the project have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?**

2018 Educational and Facilities Master Plan (Phases 1A, 1B, and 2) and Project-Specific

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.

Level of Significance Prior to Mitigation

No impact.

Recommended Mitigation Measures

No impacts were identified and mitigation is not required.

Level of Significance After Mitigation

No impact.

Threshold 6.6	**Directly or indirectly destroy a unique paleontological resource or site or unique geological feature?**

2018 Educational and Facilities Master Plan (Phases 1A, 1B, and 2)

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 2018 EFMP 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 (Qyf_3 or Qof). This is a potentially significant impact. Implementation of MM GEO-4 for proposed 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-4 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.

Level of Significance Prior to Mitigation

Potentially significant.

Recommended Mitigation Measures

MM GEO-4.

Level of Significance After Mitigation

Less than significant.

Project-Specific

Student Center and Bookstore

Excavation activities associated with development of the Student Center, Bookstore, and related central campus infrastructure improvements would extend into Quaternary Younger Alluvial Fan sediments (Qya_3) and may encounter Quaternary Older Alluvium (Qoa) at greater depths. Excavations into Qya_3 are unlikely to impact sensitive paleontological resources. Deeper excavations (greater than 15 feet) may potentially encounter Qoa sediments and impact potentially sensitive paleontological resources. Implementation of MM GEO-4 would reduce potential impacts to paleontological resources to a less than significant level.

Parking Structure R and Tennis Courts

Grading and excavation activities associated with development of Parking Structure R and Tennis Counts are currently in progress as part of the PEP and have been addressed in a previous EIR. No further impacts to paleontological resources are associated with this project.

Parking Structure S and Pedestrian Bridge

Excavation activities associated with development of Parking Structure S and Pedestrian Bridge along Temple Avenue would extend into Quaternary Younger Alluvial Fan sediments (Qya_3) and may encounter Quaternary Older Alluvium (Qoa) and the Sycamore Canyon Member of the Puente Formation at greater depths. Excavations into Qya_3 are unlikely to impact sensitive paleontological resources. Deeper excavations (greater than 10 feet) may potentially encounter Qoa sediments and impact potentially sensitive paleontological resources. Implementation of MM GEO-4 would reduce potential impacts to paleontological resources to less than significant.

Sand Volleyball Courts and Parking Lot W Reconstruction

Little to no excavation is required for construction of the Sand Volleyball Courts and Parking Lot W Reconstruction, which would be located on a site that is currently developed with a surface parking lot. No impacts to sensitive paleontological resources would occur, and no mitigation is required.

Level of Significance Prior to Mitigation

Potentially significant for the Student Center, Bookstore, and Parking Structure S and Pedestrian Bridge.

Less than significant for Parking Structure R and Tennis Courts and Sand Volleyball Courts and Parking Lot W Reconstruction.

Recommended Mitigation Measures

MM GEO-4.

Level of Significance After Mitigation

Less than significant for all projects.

4.6.6 CUMULATIVE IMPACTS

Geology and soil impacts are generally site-specific, and there is, typically, little if any cumulative relationship between the development of a project and development within a larger cumulative area such as campus-wide or city-wide development. For example, development on the campus would not alter geologic events or soil features/characteristics (such as ground shaking, seismic intensity, or soil expansion) in areas adjacent to or outside campus; therefore, the proposed 2018 EFMP and individual projects would not affect the level of intensity at which a seismic event on an adjacent site is experienced. However, individual project development and future development in the area may expose more persons to seismic hazards.

Projects implementing the proposed 2018 EFMP, including Phase 1A, 1B, 2, and 3; previously approved campus projects and any foreseeable future projects would be required to comply with the applicable State and local requirements such as the CBC and the City of Walnut grading requirements (MM GEO-3). Future development under the proposed 2018 EFMP would also be required to have site-specific geotechnical investigations prepared to identify the geologic and seismic characteristics of a site and to provide recommendations for engineering design and construction to ensure the structural integrity of proposed development (MM GEO-1); these recommendations would be incorporated into project design (MM GEO-2). Compliance of individual projects with the recommendations of the applicable geotechnical investigation and compliance with the CBC and City of Walnut grading requirements would prevent hazards associated with unstable soils, landslide potential, lateral spreading, liquefaction, soil collapse, expansive soil, soil erosion, and other geologic issues.

Paleontological resources impacts are site-specific with regard to any given resource. For this analysis, impacts that may be considered cumulative relate to impacts that would occur with implementation of all components of the proposed 2018 EFMP, including previously approved projects and Phase 3 projects as defined in Section 4.0.2 of this Draft EIR. Therefore, the

cumulative study area for paleontological resources is defined as areas within Mt. SAC boundaries.

Implementation of the Phase 3 of the proposed 2018 EFMP and previously approved projects on campus would also require grading and excavation that could potentially affect paleontological resources. The cumulative effect of these projects would contribute to the continued loss of subsurface paleontological resources if these resources are not protected upon discovery. CEQA requirements for protecting paleontological resources are applicable to development at Mt. SAC. If subsurface paleontological resources are protected upon discovery as required by law, impacts to those resources would be less than significant. As indicated above, given the moderate potential for encountering paleontological resources in certain areas, and the mitigation measures that will be imposed and enforced throughout construction, the contribution of potential impacts from proposed development, including the Phases 1A, 1B, and 2 projects, to the cumulative destruction of subsurface paleontological resources throughout the campus would be less than significant. As such, implementation of the proposed 2018 EFMP would not result in a cumulatively considerable contribution to a significant cumulative impact to paleontological resources. Therefore, the proposed Project would not result in a cumulatively considerable contribution to a significant cumulative impact related to geology and soils, and no additional mitigation is required.

4.6.7 MITIGATION MEASURES

Phases 1A, 1B, and 2 and Project-Specific

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 Prior to the approval of project plans by the Division of the State Architect (DSA), recommendations from the *Geotechnical Study Report Proposed Parking Structure at Parking Lot S Mt. San Antonio College Walnut, California* (October 23, 2017), *Geotechnical Study Report Proposed Student Center Building Mt. San Antonio College 1100 North Grand Avenue Walnut, California 91789* (October 5, 2017), and *Geotechnical Study Report Proposed Lot R Tennis and Parking Structure Mt. San Antonio College 1100 North Grand Avenue Walnut, California* (December 1, 2017) prepared by Converse Consultants 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.

MM GEO-3 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-4 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.

4.6.8 REFERENCES

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4.7 GREENHOUSE GAS EMISSIONS

This section identifies and discusses the proposed Project's potential to have adverse effects related to greenhouse gas (GHG) emissions and examines GHG impacts that would potentially occur during construction and operation of the proposed Mt. SAC 2018 Educational and Facilities Master Plan (2018 EFMP).

The South Coast Air Quality Management District (SCAQMD) submitted a comment letter in response to the Notice of Preparation (NOP). The letter identified recommended analysis methodologies and significance thresholds as well as guidance for developing mitigation measures. The letter also provided guidance for the alternatives analysis and a source for information on permits. This letter is included in Appendix A of this Draft this Draft Environmental Impact Report (EIR).

4.7.1 GLOBAL CLIMATE CHANGE AND GREENHOUSE GASES

Climate change is a recorded change in the average weather of the earth measured by variables such as wind patterns, storms, precipitation, and temperature. Increasing GHG emissions have led to an anthropogenic[1] warming trend of the earth's average temperature, which is causing changes in the earth's climate. GHG emissions are primarily associated with (1) the burning of fossil fuels during motorized transport, electricity generation, consumption of natural gas, industrial activity, manufacturing, and other activities; (2) deforestation; (3) agricultural activity; and (4) solid waste decomposition. This increasing temperature phenomenon is known as "global warming", and the climatic effect is known as "climate change" or "global climate change".

GHGs are atmospheric gases and clouds within the atmosphere that influence the earth's temperature by absorbing most of the infrared radiation that rises from the sun-warmed surface and that would otherwise escape into space. This process is commonly known as the "Greenhouse Effect". GHGs are emitted by natural processes and human activities. The earth's surface temperature averages about 58 degrees Fahrenheit (°F) because of the Greenhouse Effect. Without it, the earth's average surface temperature would be somewhere around an uninhabitable 0°F. Anthropogenic GHG emissions enhance the Greenhouse Effect by absorbing radiation from other atmospheric GHGs that would otherwise escape into space, thereby trapping more radiation in the atmosphere and causing temperatures to increase.

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), sulfur hexafluoride (SF_6), and nitrogen trifluoride (NF_3). CO_2 is the most important anthropogenic GHG. The global atmospheric concentration of CO_2 has increased from a pre-industrial (roughly 1750) value of about 280 parts per million (ppm) to 379 ppm in 2005, primarily due to fossil fuel use, with land use change providing a significant but smaller contribution. The annual growth rate in CO_2 concentrations continues to increase, with a larger annual CO_2 concentration growth rate during the ten-year period between 1995 and 2005 than since the beginning of continuous direct measurements in 1960. In December 2018, the concentration measured at Mauna Loa, Hawaii was 409.7 ppm (ESRL 2019).

[1] Caused or produced by humans.

GHGs are global pollutants and are therefore unlike air pollutants such as ozone (O_3), particulate matter, and toxic air contaminants (TACs), which are pollutants of regional and local concern. While pollutants with localized air quality effects have relatively short atmospheric lifetimes (generally on the order of a few days), GHGs have relatively long atmospheric lifetimes, ranging from one year to several thousand years. Long atmospheric lifetimes allow for GHGs to disperse around the globe. In addition, GHG impacts are global, as opposed to the localized air quality effects of criteria air pollutants and TACs.

GHGs vary widely in the power of their climatic effects; therefore, climate scientists have established a unit called a global warming potential (GWP). The GWP of a gas is a measure of both potency and lifespan in the atmosphere as compared to CO_2. For example, since CH_4 and N_2O are approximately 25 and 298 times more powerful than CO_2 (respectively) in their ability to trap heat in the atmosphere, they have GWPs of 25 and 298, respectively (CO_2 has a GWP of 1). Carbon dioxide equivalent (CO_2e) is a quantity that enables all GHG emissions to be considered as a group despite their varying GWP. The GWP of each GHG is multiplied by the prevalence of that gas to produce CO_2e.

Global warming in California is anticipated to impact resources, including, but not limited to, public health, energy, water resources, sea level and flooding, agriculture, forestry, and ecosystems.

4.7.2 REGULATORY SETTING

There have been a number of regulatory actions and activities, especially at the State level, that pertain to GHG emissions and climate change. The following section provides a summary of key regulatory programs intended to reduce GHG emissions in California.

Mt. SAC

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.

Federal

On December 7, 2009, the U.S. Environmental Protection Agency (USEPA) Administrator signed two distinct findings regarding GHGs under Section 202(a) of the Clean Air Act:

- **Endangerment Finding:** The Administrator finds that the current and projected concentrations of the six key well-mixed greenhouse gases—carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6)—in the atmosphere threaten the public health and welfare of current and future generations.
- **Cause or Contribute Finding:** The Administrator finds that the combined emissions of these well-mixed greenhouse gases from new motor vehicles and new motor vehicle engines contribute to the greenhouse gas pollution which threatens public health and welfare.

These findings do not themselves impose any requirements on industry or other entities. However, this action is a prerequisite to finalizing the USEPA's proposed GHG emission standards for light-duty vehicles, which were jointly proposed by the USEPA and the Department of Transportation's National Highway Safety Administration (NHTSA) on September 15, 2009 (USEPA 2009).

On August 28, 2012, the USEPA and the NHTSA announced a joint final rule to reduce GHG emissions and to improve fuel economy for new cars and trucks sold in the United States. The rule applies to passenger cars, light-duty trucks, and medium-duty passenger vehicles, covering model years 2012 through 2016. This was followed up on October 15, 2012, when the agencies issued a Final Rulemaking with standards for model years 2017 through 2025. The rules require these vehicles to meet an estimated combined average emissions level of 295 grams of CO_2 per mile by 2012, decreasing to 250 grams per mile by 2016, and finally to an average industry fleet-wide level of 163 grams per mile in model year 2025. The 2016 standard is equivalent to 35.5 miles per gallon (mpg), and the 2025 standard is equivalent to 54.5 mpg if the levels were achieved solely through improvements in fuel efficiency.

The agencies expect, however, that a portion of these improvements will be made through improvements in air conditioning leakage and the use of alternative refrigerants, which would not contribute to fuel economy. These standards would cut GHG emissions by an estimated 2 billion metric tons and 4 billion barrels of oil over the lifetime of the vehicles sold under the program (model years 2017–2025). The combined USEPA GHG standards and NHTSA Corporate Average Fuel Economy (CAFE) standards resolve previously conflicting requirements under both federal programs and the standards of the State of California and other states that have adopted the California standards (NHTSA 2012).

State

Executive Order S-3-05

On June 1, 2005, Governor Arnold Schwarzenegger signed Executive Order S-3-05, which proclaims that California is vulnerable to the impacts of climate change. It declares that increased temperatures could reduce snowpack in the Sierra Nevada Mountains; could further exacerbate California's air quality problems; and could potentially cause a rise in sea levels. In an effort to avoid or reduce the impacts of climate change, Executive Order S-3-05 establishes a goal of 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.

Assembly Bill 32, the California Global Warming Solutions Act of 2006

As described in the March 2009 LRDP Amendment EIR, AB 32, the California Global Warming Solutions Act of 2006—signed by Governor Arnold Schwarzenegger in September 2006 and codified as Sections 38500–38599 of the *California Health and Safety Code*—is the primary State regulation relative to GHG emissions. AB 32 requires that statewide GHG emissions be reduced to 1990 levels by 2020.

The California Air Resources Board Scoping Plan

The California Air Resources Board (CARB) approved a *Climate Change Scoping Plan* as required by AB 32 in 2008; this plan is required to be updated every five years. The *Climate Change Scoping Plan* proposes a "comprehensive set of actions designed to reduce overall carbon GHG emissions in California, improve our environment, reduce our dependence on oil, diversify our energy sources, save energy, create new jobs, and enhance public health" (CARB 2008). The *Climate Change Scoping Plan* has a range of GHG reduction actions that 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.

The *Climate Change Scoping Plan* calls for a "coordinated set of solutions" to address all major categories of GHG emissions. Transportation emissions will be addressed through a combination of higher standards for vehicle fuel economy; implementation of the Low Carbon Fuel Standard; and greater consideration for reducing trip length and generation through land use planning and transit-oriented development. Buildings, land use, and industrial operations will be encouraged and, sometimes, required to use energy more efficiently. Utility energy supplies will change to include more renewable energy sources through implementation of the Renewables Portfolio Standard. This will be complemented with emphasis on local generation, including rooftop photovoltaics and solar hot water installations. Additionally, the *Climate Change Scoping Plan* emphasizes opportunities for households and businesses to save energy and money through increasing energy efficiency. It indicates that substantial savings of electricity and natural gas will be accomplished through "improving energy efficiency by 25 percent" (CARB 2008).

The *Climate Change Scoping Plan* identifies a number of specific issues. Most relevant to the proposed 2018 EFMP, it identifies the potential of using the green building framework as a mechanism that could enable GHG emissions reductions in other sectors (e.g., electricity, natural gas), noting that green buildings "exceed minimum energy efficiency standards, decrease consumption of potable water, reduce solid waste during construction and operation, and incorporate sustainable materials. Combined, these measures can also contribute to healthy indoor air quality, protect human health, and minimize impacts to the environment".

The board approved the final *First Update to the Climate Change Scoping Plan* on May 22, 2014. The first update describes California's progress toward 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". Specifically, "if California realizes the expected benefits of existing policy goals (such as 12,000 megawatts [MW] of renewable distributed generation by 2020, net zero energy homes after 2020, existing building retrofits under AB 758, and others) it could reduce emissions by 2030 to levels squarely in line with those needed in the developed world and to stay on track to reduce emissions to 80 percent below 1990 levels by 2050". This first update retains from the October 2013 draft the recalculated 1990 GHG emissions level of 431 million metric tons of carbon dioxide equivalent ($MMTCO_2e$), as well as the 509 $MMTCO_2e$ 2020 "business as usual" or No Action Taken (NAT) condition (CARB 2014). Thus, under CARB's most current document, reducing the "business as usual" or NAT condition of 509 $MMTCO_2e$ to the 1990 emissions level of 431 $MMTCO_2e$ will require a reduction of 78 $MMTCO_2e$, or approximately a 15.3 percent reduction (compared to a 28.5 percent reduction as set forth in the original Scoping Plan but not directly comparable because of the change in methodology).

On April 29, 2015, Governor Brown issued EO B-30-15 identifying a goal of establishing a midterm GHG reduction target for California of 40 percent below 1990 levels by 2030. CARB was directed to update the AB 32 Scoping Plan to reflect the 2030 target. The proposed second update to the Scoping Plan, entitled *The 2017 Climate Change Scoping Plan Update – The Proposed Strategy For Achieving California's 2030 Greenhouse Gas Target* was released on January 20, 2017. Public workshops were held in January, February, and March 2017. A final scoping plan update was scheduled for the second quarter of 2017, with CARB Board consideration in June 2017, but to date these events have not occurred (CARB 2017).

Senate Bill 375

Signed September 30, 2008, Senate Bill (SB) 375 provides for a new planning process to coordinate land use planning and regional transportation plans (RTPs) and funding priorities to help California meet the GHG reduction goals established in AB 32. SB 375 requires Metropolitan Planning Organizations (MPOs), including the Southern California Association of Governments (SCAG), to incorporate a Sustainable Communities Strategy (SCS) in their RTPs that will achieve GHG emission reduction targets set by CARB. There are two mutually important facets to SB 375: reducing vehicle miles traveled (VMT) and encouraging more compact, complete, and efficient communities for the future (SCAG 2016).

CEQA Guidelines for Greenhouse Gas Emissions

At the direction of the State Legislature in SB 97 (Public Resources Code Section 21083.05), the California Natural Resources Agency (CNRA) adopted amendments to the State CEQA Guidelines that require evaluation of GHG emissions or the effects of GHG emissions. The amendments, in Section 15064.4, Determining the Significance of Impacts from Greenhouse Gas Emissions, and effective March 18, 2010, provide that:

> (a) The determination of the significance of greenhouse gas emissions calls for a careful judgment by the lead agency consistent with the provisions in Section 15064. A lead agency should make a good-faith effort, based to the extent possible on scientific and factual data, to describe, calculate, or estimate the amount of greenhouse gas emissions resulting from a project . . .
>
> (b) A lead agency should consider the following factors, among others, when assessing the significance of impacts from greenhouse gas emissions on the environment:

(1) The extent to which the project may increase or reduce greenhouse gas emissions as compared to the existing environmental setting;

(2) Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project;

(3) The extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of greenhouse gas emissions. Such requirements must be adopted by the relevant public agency through a public review process and must reduce or mitigate the project's incremental contribution of greenhouse gas emissions.

The amendments also add Section 15126.4(c), Mitigation Measures Related to Greenhouse Gas Emissions. Generally, this State CEQA Guidelines section requires lead agencies to consider feasible means, supported by substantial evidence and subject to monitoring or reporting, of mitigating the significant effects of GHG emissions. Potential measures to mitigate the significant effects of GHG emissions are identified, including those outlined in Appendix F, Energy Conservation, of the State CEQA Guidelines.

Executive Order B-30-15

On April 29, 2015, Governor Edmund Brown signed EO B-30-15, which ordered an interim statewide greenhouse gas emission reduction target to reduce greenhouse gas emissions to 40 percent below 1990 levels by 2030 is established in order to ensure California meets its target of reducing greenhouse gas 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 $MMTCO_2e$.

Senate Bill 350

SB 350, signed October 7, 2015, is the Clean Energy and Pollution Reduction Act of 2015. SB 350 implements some of the goals of EO B-30-15. The objectives of SB 350 are (California Legislative Information 2015):

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

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

The text of SB 350 sets a December 31, 2030, target for 50 percent of electricity to be generated from renewable sources.

Senate Bill 32/Assembly Bill 197

SB 32, signed September 8, 2016, implements a goal of EO B-30-15. Under SB 32, in "adopting rules and regulations to achieve the maximum technologically feasible and cost-effective greenhouse gas emissions reductions," CARB must ensure that statewide greenhouse gas emissions are reduced to 40 percent below the 1990 level by 2030. SB 32's findings state that CARB will “achieve the state’s more stringent greenhouse gas emission reductions in a manner that benefits the state’s most disadvantaged communities and is transparent and accountable to the public and the Legislature.” AB 197, a companion to SB 32, adds two members to the CARB and requires measures to increase transparency about GHG emissions, climate policies, and GHG reduction actions.

Title 24 Energy Efficiency Standards

The Energy Efficiency Standards for Residential and Nonresidential Buildings (Title 24, Part 6 of the *California Code of Regulations* [CCR]) were established in 1978 in response to a legislative mandate to reduce California’s energy consumption. The current applicable standards are the 2016 Standards, effective January 1, 2017. The Energy Efficiency Standards are updated on an approximately three-year cycle. The 2019 code will go into effect on January 1, 2020, and will continue to improve upon the 2016 standards of new construction, additions, and alterations of residential and nonresidential buildings.

Title 24 Green Building Standards

The 2016 California Green Building Standards Code (24 CCR 11), also known as the CALGreen code, contains mandatory requirements for new residential and nonresidential buildings (including buildings for retail, office, public schools and hospitals) throughout California (CBSC 2018a). The 2016 CALGreen Code was effective January 1, 2017. The development of the CALGreen Code is intended to (1) cause a reduction in greenhouse gas (GHG) emissions from buildings; (2) promote environmentally responsible, cost effective, healthier places to live and work; (3) reduce energy and water consumption; and (4) respond to the directives by the Governor. In short, the code is established to reduce construction waste; make buildings more efficient in the use of materials and energy; and reduce environmental impact during and after construction.

The CALGreen Code contains requirements for construction site selection, stormwater control during construction, construction waste reduction, indoor water use reduction, material selection, natural resource conservation, site irrigation conservation, and more. The code provides for design options, allowing the designer to determine how best to achieve compliance for a given site or building condition. The code also requires building commissioning, which is a process for the verification that all building systems, like heating and cooling equipment and lighting systems, are functioning at their maximum efficiency. Beyond the mandatory requirements, optional Tier 1 status can be achieved by complying with voluntary measures for energy and water efficiency, material conservation, and other design features. Examples of Tier 1 requirements are 15 percent less energy use in residential construction than required by existing regulations and 12 percent less indoor water use in non-residential construction. Tier 2 status can be achieved by complying with additional voluntary measures; example requirements are 30 percent less energy use in residential construction and 20 percent less indoor water use in non-residential construction.

California Air Pollution Control Officers Association

The California Air Pollution Control Officers Association (CAPCOA) is the association of Air Pollution Control Officers representing all 35 local air quality agencies throughout California. CAPCOA is not a regulatory body but has been an active organization in providing guidance in addressing the CEQA significance of GHG emissions and climate change as well as other air quality issues.

The August 2010 CAPCOA publication *Quantifying Greenhouse Gas Mitigation Measures: A Resource for Local Government to Assess Emission Reductions from Greenhouse Gas Mitigation Measures* provides guidance on the quantification of project-level mitigation of GHGs associated with land use, transportation, energy use, and other related project areas. The mitigation measures quantified in the report generally correspond to measures previously discussed in CAPCOA's earlier reports: *CEQA and Climate Change* (2008) and *Model Policies for Greenhouse Gases in General Plans* (2009) (CAPCOA 2010). The guidance includes detailed procedures on the definition of "business as usual" emissions and the approaches to assessing and calculating the GHG emission reductions associated with project design features and mitigation measures. The methodologies of this publication are used in the California Emissions Estimator Model (CalEEMod) that is used to calculate the GHG emissions in this analysis.

Regional

Southern California Association of Governments

As previously discussed, SB 375 specifically required Metropolitan Planning Organizations (MPOs), including SCAG, to incorporate an SCS in their RTPs that will achieve GHG emission reduction targets set by CARB. In June 2012, CARB accepted SCAG's determination that the *2012–2035 Regional Transportation Plan/Sustainable Communities Strategy* (RTP/SCS) would meet the region's GHG reduction target. SCAG's SCS is now included in its 2016–2040 RTP/SCS, which was adopted by SCAG on April 7, 2016. The goals and policies of the RTP/SCS that reduce vehicle miles traveled (VMT) focus on transportation and land use planning that include building infill projects; locating residents closer to where they work and play; and designing communities so there is access to high-quality transit service. The 2016–2040 RTP/SCS is expected to reduce per capital transportation emissions by 8 percent by 2020 and by 18 percent by 2035 (SCAG 2016).

South Coast Air Quality Management District

As previously discussed in Section 4.2, Air Quality, of this Draft EIR, air quality in Los Angeles County is regulated by the SCAQMD, the agency principally responsible for comprehensive air pollution control in the South Coast Air Basin (SoCAB), which includes Los Angeles County. To that end, the SCAQMD, a regional agency, works directly with SCAG, County transportation commissions, and local governments and cooperates actively with all federal and State government agencies. The SCAQMD develops rules and regulations; establishes permitting requirements for stationary sources; inspects emissions sources; and enforces such measures through educational programs or fines, when necessary.

Beginning in April 2008, the SCAQMD convened a Working Group to provide guidance to local lead agencies on determining significance for GHG emissions in their CEQA documents. The Working Group was scheduled to meet once per month. On December 5, 2008, the SCAQMD Governing Board adopted its staff proposal for an interim CEQA GHG significance threshold of

10,000 $MTCO_2e$ per year ($MTCO_2e$/yr)[2] for industrial projects where the SCAQMD is the lead agency. In September 2010, the Working Group presented a revised tiered approach to determining GHG significance for residential and commercial projects (SCAQMD 2010). These proposals have not yet been considered by the SCAQMD Board.

At Tier 1, GHG emissions impacts would be less than significant if the proposed Project qualifies under a categorical or statutory CEQA exemption. At Tier 2, for projects that do not meet the Tier 1 criteria, the GHG emissions impact would be less than significant if the proposed Project is consistent with a previously adopted GHG reduction plan that meets specific requirements.[3] At Tier 3, the Working Group proposes extending the 10,000 $MTCO_2e$/yr screening threshold currently applicable to industrial projects where the SCAQMD is the lead agency, described above, to other lead agency industrial projects. For residential and commercial projects (that is, non-industrial projects), the Working Group proposes the following Tier 3 screening values: either (1) a single 3,000 $MTCO_2e$/yr threshold for all land use types or (2) separate thresholds of 3,500 $MTCO_2e$/yr for residential projects, 1,400 $MTCO_2e$/yr for commercial projects, and 3,000 $MTCO_2e$/yr for mixed-use projects. These screening values were developed from a survey of CEQA projects. It is estimated that projects with emissions above these values would produce 90 percent of the anticipated GHG emissions from residential/commercial projects and projects below the screening level would contribute 10 percent or less of the regional GHG emissions from land development. Therefore, a project with emissions less than the applicable screening value would be considered to have less than significant GHG emissions. Projects with emissions greater than the Tier 3 screening values would be analyzed at Tier 4 by one of three methods:

1. **A Percent Emission Reduction Target.** This method is used by the Sacramento Metropolitan and San Joaquin Valley Air Districts and the City of San Diego. The SCAQMD Working Group made no recommendation relative to this method.
2. **Early Implementation of Applicable AB 32 Scoping Plan Measures.** The Working Group assumes implementation of AB 32 measures would be incorporated in method 3 below.
3. **Efficiency Targets.** On the project level, 2020 GHG emissions should not exceed 4.8 $MTCO_2e$/year per service population (SP) where SP is project residents plus employees. Further, 2035 GHG emissions should not exceed 3.0 $MTCO_2e$/year per SP (SCAQMD 2010).

Projects with GHG emissions not meeting the Tier 4 targets would be required to provide mitigation in the form of real, quantifiable, and verifiable offsets to achieve the target thresholds. The offsets may be achieved through project design features, other on-site methods, or by off-site actions, such as energy efficiency upgrade of existing buildings.

In summary, to date, the SCAQMD Board has adopted an interim CEQA significance threshold for GHGs for industrial projects where the SCAQMD is the lead agency and continues to consider

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2 GHG emissions are commonly expressed as $MTCO_2e$. Larger quantities of emissions, such as on the world or State scale, are expressed in $MMTCO_2e$.

3 The plan must (a) quantify GHG emissions, both existing and projected over a specified time period, resulting from activities within a defined geographic area; (b) establish a level, based on substantial evidence, below which the contribution to GHG emissions from activities covered by the plan would not be cumulatively considerable; (c) identify and analyze the GHG emissions resulting from specific actions or categories of actions anticipated within the geographic area; (d) specify measures or a group of measures, including performance standards, that substantial evidence demonstrates, if implemented on a project-by-project basis, would collectively achieve the specified emissions level; (e) establish a mechanism to monitor the plan's progress toward achieving the level and to require amendment if the plan is not achieving specified levels; and (f) be adopted in a public process following environmental review (State CEQA Guidelines, Section 15183.5).

screening levels under CEQA for residential, commercial, and mixed-use projects. This proposed screening and mitigation proposal from SCAQMD remains a work in progress; the Working Group has not convened since the fall of 2010. As of fall 2018, the proposal has not been considered or approved for use by the SCAQMD Board. Thus, no GHG significance thresholds are approved for use in the SoCAB for non-industrial projects.

City of Walnut

The 2018 City of Walnut General Plan (2018 WGP) was recently adopted in May 2018. In the Conservation, Open Space, and Recreation Element, the 2018 WGP outlines goals to promote the reduction of GHG emissions. Goal COR-10, as detailed below, specifically focuses on GHG emissions reductions (City of Walnut 2018):

> Goal COR-10: Clean local air quality and reduced greenhouse gas emissions.
>
> > Policy COR-10.1—Climate Change Laws: Find creative means to comply with State laws addressing climate change.
> >
> > Policy COR-10.2—Coordination: Assure the City provides updated data to the Southern California Regional Governments to assist in updates to the Sustainable Communities Strategies and Regional Transportation Plan.
> >
> > Policy COR-10.3—Rooftop Solar Projects: Streamline solar panel permits for small-scale residential and commercial business roof-top projects by removing discretionary planning permits or allowing approval over the counter.
> >
> > Policy COR-10.4—Solar Energy Systems: Encourage the use of solar energy systems or any other technology that similarly reduces the use of power from the grid in residential and commercial uses.
> >
> > Policy COR-10.5—Green Buildings: Require LEED or similar building efficiency certifications for all new public facilities and buildings, and encourage similar green building certifications for private development projects.
> >
> > Policy COR-10.6—Minimize Air Quality Impacts: Minimize air quality impacts of new development projects on established uses.
> >
> > Policy COR-10.7—Air Quality Goals: Ensure that land use and transportation plans support air quality goals, with new development projects reducing vehicle miles traveled and vehicle trips.
> >
> > Policy COR-10.8—Education Programs: Partner with regional agencies to establish public education programs that provide information on ways to reduce and control emissions and make clean air choices.
> >
> > Policy COR-10.9—Tree Plantings: Pursue tree planting programs with species that can help with carbon sequestration.
> >
> > Policy COR-10.10—Alternative Fuels: Prioritize alternative fuel vehicles for City use. Incorporate alternative fuel charging stations into public and private development projects.

4.7.3 METHODS

Existing and proposed 2018 EFMP GHG emissions were calculated by using CalEEMod version 2016.3.2 (CAPCOA 2017). CalEEMod is a computer program accepted by the SCAQMD that can be used to estimate criteria pollutant and GHG emissions associated with land development projects in California. CalEEMod has separate databases for specific counties and air districts. The Los Angeles County database was used for the proposed Project. The model calculates emissions of carbon monoxide (CO); sulfur dioxide (SO_2); respirable particulate matter less than 10 micrometers in diameter (PM10); fine particulate matter less than 2.5 micrometers in diameter (PM2.5); the O_3 precursors volatile organic compounds (VOC) and oxides of nitrogen (NOx); and the GHG emissions of Bio-CO_2, NBio-CO_2, Total CO_2, CH_4, N_2O, and CO_2e. For this analysis, the results are expressed in $MTCO_2e$/yr. Please see Section 4.2, Air Quality, of this Draft EIR, for discussion of the CalEEMod inputs, adjustments, outputs, and other characteristics for construction-related and operational emissions.

4.7.4 ENVIRONMENTAL SETTING

Existing GHG Emissions

Table 4.7-1 compares the magnitude of GHG emissions on the global, national, State, and regional (i.e., Los Angeles County) and local (campus) scales. CO_2e emissions are commonly expressed as metric tons of carbon dioxide equivalent ($MTCO_2e$); larger quantities of emissions, such as on the State or world scale, are expressed as million metric tons of carbon dioxide equivalent ($MMTCO_2e$). Metric tons may also be stated as "tonnes". The CO_2e for a gas is derived by multiplying the tons of the gas by the associated GWP, such that $MMTCO_2e$ = (million metric tons of a GHG) x (GWP of the GHG). For example, the GWP for CH_4 is 21. This means that emission of 1 million metric ton of CH_4 is equivalent to the emissions of 21 million metric tons of CO_2.

TABLE 4.7-1
COMPARISON OF WORLDWIDE GREENHOUSE GAS EMISSIONS

Area and Data Year	Annual GHG Emissions ($MMTCO_2e$)
World (2012)	46,049
United States (2016)	6,511
California (2016)	429
Los Angeles County, Unincorporated (2010)	8
Mt. SAC Campus (2016)	0.06
GHG: greenhouse gas; $MMTCO_2e$: million metric tons of carbon dioxide equivalent. Source: WRI 2015; USEPA 2018; CARB 2018; DRP 2015a	

The United States contributes approximately 14.72 percent of worldwide GHG emissions per year; California contributes approximately 0.93 percent; the County contributes approximately 0.02 percent; and Mt. SAC contributes approximately 0.0001 percent. The most common GHG is CO_2, which constitutes approximately 84 to 85 percent of all GHG emissions in the United States and California. The primary contributors to California GHG emissions are (1) transportation, (2) electric power production from both in-state and out-of-state sources, and (3) industrial uses.

Existing development at the main campus includes 16 institutional buildings totaling approximately 243,571 square feet (sf) and four residential halls comprising 256 units/1,024 total dorm beds (four beds per unit). GHG emissions are generated on an annual basis by area sources, energy sources, mobile sources, solid waste disposal, and water and wastewater transportation and treatment. Area source emissions are generated by the operation of landscape maintenance equipment and the use of consumer products. Energy sources are generated by the consumption of natural gas for heating, hot water, and cooking and the generation of electricity. Mobile source emissions are generated by the vehicles traveling to and from the campus. Solid waste disposal generates GHG emissions through transportation and processing of solid waste and release of CH_4 at landfills. GHGs for water supply, distribution, and treatment and wastewater treatment result from the electricity required for the processes.

The current annual GHG emissions generated by the existing campus operations were estimated in 2018 CAP. The estimated existing GHG emissions are shown in Table 4.7-2. As shown, mobile sources are the primary source of GHG emissions associated with the existing campus operations. According to the Traffic Impact Analysis prepared for the proposed 2018 EFMP (included in Appendix J and summarized in Section 4.14, Transportation/Traffic of this Draft EIR), the existing campus operations generate an average of 4,732 vehicle trips per day.

TABLE 4.7-2
ESTIMATED EXISTING ANNUAL GREENHOUSE GAS EMISSIONS

Source	Emissions $MTCO_2e$/year
Scope 1[a]	13,227
Scope 2[b]	9,431
Scope 3	41,220
Total – Existing Operational	**63,778**

MTCO2e/yr: metric tons of carbon dioxide per year

[a] Scope 1 includes direct emissions from owned or controlled sources, such as natural gas combusted on campus, campus fleet, agricultural sources, and refrigerants

[b] Scope 2 includes electricity purchased for the campus.

[c] Scope 3 includes solid waste as well as all student, faculty, and staff transportation.

Source: Mt. SAC 2018.

4.7.5 THRESHOLDS OF SIGNIFICANCE

According to Appendix G of the State CEQA Guidelines, a proposed Project will normally have a significant adverse environmental impact related to GHG emissions if it will:

- Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.
- Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

CEQA Section 21068 defines a "significant effect on the environment" as a substantial, or potentially substantial, adverse change in the environment. With respect to global climate change, no one project can individually create a direct impact on what is a global problem (i.e., no project will, by itself, raise the temperature of the planet).

However, the emissions generated by a project may be "cumulatively considerable", meaning "that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects" (State CEQA Guidelines, Section 15065[a][3]). Section 15064(h)(3) of the State CEQA Guidelines adds that a lead agency may determine that a project's incremental contribution to a cumulative effect is not cumulatively considerable if the Project will comply with the requirements in a previously approved plan or mitigation program (including, but not limited to, water quality control plan, air quality attainment or maintenance plan, integrated waste management plan, habitat conservation plan, natural community conservation plan, plans or regulations for the reduction of greenhouse gas emissions) that provides specific requirements that will avoid or substantially lessen the cumulative problem within the geographic area in which the Project is located.

Generally, the evaluation of an impact under CEQA requires measuring data from a proposed Project against a "threshold of significance" (State CEQA Guidelines, Section 15064.7). Furthermore, "when adopting thresholds of significance, a lead agency may consider thresholds of significance previously adopted or recommended by other public agencies or recommended by experts, provided the decision of the lead agency to adopt such thresholds is supported by substantial evidence" (State CEQA Guidelines, Section 15064.7[c]). For GHG emissions and global warming, there is not, at this time, one established, universally agreed-upon threshold of significance by which to measure an impact.

Mt. SAC 2016 CEQA Thresholds of Significance

To the extent the following thresholds of significance are applicable to the proposed Project, they shall be applied to determine the proposed 2018 EFMP'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	CO^2EQ 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 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 MT/Year CO^2EQ 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.	CalEPA 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 the latest approved FMP MMP (i.e., as conditions of approval) to reduce GHG regional emissions

CO_2EQ: carbon dioxide equivalent; CalEPA: California Environmental Protection Agency; CARB: California Air Resources Board; g/l: grams per liter; GHG: greenhouse gas; FMP: Facilities Management Plan; MM: Mitigation Measure; MMP: Mitigation Monitoring Program; MT/Year CO_2EQ; metric tons of carbon dioxide equivalent

The Mt. SAC thresholds are consistent with the SCAQMD's Tier 3 recommendation for a threshold of 3,000 $MTCO_2e$ operational threshold per year, with an amortization of construction emissions over 30 years. This approach will be used in this analysis.

4.7.6 ENVIRONMENTAL IMPACTS

Impact Analysis

Threshold 6.1	**Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?**

2018 Educational and Facilities Master Plan (Phases 1A, 1B, and 2) and Project-Specific

Construction and Operational Emissions

Construction and operational emissions of CO_2e were calculated by using CalEEMod Version 2016.3.2, as described in Section 4.2, Air Quality, of this Draft EIR. Construction assumptions are described in Section 4.2 and in Appendix C. The results are output in $MTCO_2e$ per year. Construction emissions would be associated with vehicle engine exhaust from construction equipment, vendor trips, and worker commuting trips.

Because construction emissions are temporary and there are few measures for mitigation of construction GHG emissions, the SCAQMD has recommended amortizing construction emissions over the life of a project and adding the value to operational emissions. A common value for project life is 30 years (SCAQMD 2008). The SCAQMD-and MT.SAC-recommended practice is included in the proposed 2018 EFMP's GHG calculations.

Based on the proposed construction activities described in Section 4.2, Air Quality, 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, described above. The estimated amortized construction emissions per Mt. SAC and SCAQMD guidance is included with the operational emissions for the project-level analyses.

Sources of the operational GHG emissions attributed to the proposed Project include area, energy, mobile, water, and solid waste sources. The modeling inputs for operational emissions assume a 2022 buildout of Phases 1A and 1B, assuming the net operational uses.

The proposed 2018 EFMP would be designed to surpass the minimum standard of a LEED "Silver" New Construction (NC) rating, and to exceed California Building Code Title 24 energy efficiency requirements by 15 percent or greater (MM GHG-1), per Mt. SAC's 2018 CAP, Green Building Standard. The LEED silver standard was not included in quantification for the operational emissions, thereby providing a conservative presentation of GHG operational impacts. CalEEMod incorporates local energy emission factors. Mitigation measures in the model are based on CAPCOA's publication *Quantifying Greenhouse Gas Mitigation* Measures (CAPCOA 2010).

Estimated project-specific amortized construction and operational GHG emissions are shown in Tables 4.7-3 through 4.7-7. Per Mt. SAC's GHG threshold, site-specific projects that do not exceed the 3,000 $MTCO_2eq$ for annual operational and 30-year amortized construction emissions are considered less than significant.

TABLE 4.7-3
ESTIMATED ANNUAL GREENHOUSE GAS EMISSIONS FOR PARKING STRUCTURE R AND TENNIS COURTS

Source	Emissions ($MTCO_2e$/yr)
Construction Emissions	
2019	637
2020	267
Total Construction Emissions	904
Amortized Construction Emissions	30
Operational Emissions	
Area	<1
Energy	570
Mobile	103
Waste	235
Water	37
Total Operational Emissions	946
Total Annual Emissions	976
Mt. SAC Project Specific Threshold	**3,000**
Exceeds threshold?	**No**

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

Notes:

- Totals may not add due to rounding variances.
- Amortized construction emissions derived by dividing project-specific construction emissions by 30.
- Detailed calculations in Appendix C.
- Total annual emissions is the sum of amortized construction emissions and operational emissions.

TABLE 4.7-4
ESTIMATED ANNUAL GREENHOUSE GAS EMISSIONS FOR PARKING STRUCTURE S AND WEST TEMPLE AVENUE PEDESTRIAN BRIDGE

Source	Emissions ($MTCO_2e/yr$)
Construction Emissions	
2019	355
2020	552
Total Construction Emissions	907
Amortized Construction Emissions	30
Operational Emissions	
Area	<1
Energy	178
Mobile	<1
Waste	<1
Water	<1
Total Operational Emissions	178
Total Annual Emissions	208
Mt. SAC Project Specific Threshold	**3,000**
Exceeds threshold?	**No**

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

Notes:

- Totals may not add due to rounding variances.
- Amortized construction emissions derived by dividing project-specific construction emissions by 30.
- Detailed calculations in Appendix C.
- Total annual emissions is the sum of amortized construction emissions and operational emissions.

TABLE 4.7-5
ESTIMATED ANNUAL GREENHOUSE GAS EMISSIONS FOR STUDENT CENTER AND CENTRAL CAMPUS INFRASTRUCTURE

Source	Emissions ($MTCO_2e$/yr)
Construction Emissions	
2019	383
2020	709
2021	797
2022	68
Total Construction Emissions	1,956
Amortized Construction Emissions	65
Operational Emissions	
Area	<1
Energy	553
Mobile	766
Waste	98
Water	82
Total Operational Emissions	1,499
Total Annual Emissions	1,565
Mt. SAC Project Specific Threshold	**3,000**
Exceeds threshold?	**No**

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

Notes:

- Totals may not add due to rounding variances.
- Amortized construction emissions derived by dividing project-specific construction emissions by 30.
- Detailed calculations in Appendix C.
- Total annual emissions is the sum of amortized construction emissions and operational emissions.

TABLE 4.7-6
ESTIMATED ANNUAL GREENHOUSE GAS EMISSIONS FOR BOOKSTORE

Source	Emissions ($MTCO_2e$/yr)
Construction Emissions*	
2019	357
2021	758
2022	813
Total Construction Emissions	1,929
Amortized Construction Emissions	64
Operational Emissions	
Area	<1
Energy	166
Mobile	329
Waste	29
Water	24
Total Operational Emissions	549
Total Annual Emissions	613
Mt. SAC Project Specific Threshold	**3,000**
Exceeds threshold?	**No**

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

Notes:

- Construction emissions also includes demolition activities for Building 9C, Veteran's Core, and Miracle Mile.
- Totals may not add due to rounding variances.
- Amortized construction emissions derived by dividing project-specific construction emissions by 30.
- Detailed calculations in Appendix C.
- Total annual emissions is the sum of amortized construction emissions and operational emissions.

TABLE 4.7-7
ESTIMATED ANNUAL GREENHOUSE GAS EMISSIONS FOR SAND VOLLEYBALL COURTS AND PARKING LOT W RECONSTRUCTION

Source	Emissions ($MTCO_2e$/yr)
Construction Emissions	
2019	82
2020	114
2021	195
Total Construction Emissions	7
Amortized Construction Emissions	82
Operational Emissions	
Area	<1
Energy	<1
Mobile	59
Waste	<1
Water	<1
Total Operational Emissions	59
Total Annual Emissions	67
Mt. SAC Project Specific Threshold	**3,000**
Exceeds threshold?	**No**

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

Notes:

- Totals may not add due to rounding variances.
- Amortized construction emissions derived by dividing project-specific construction emissions by 30.
- Detailed calculations in Appendix C.
- Total annual emissions is the sum of amortized construction emissions and operational emissions.

As shown in Tables 4.7-3 through 4.7-7, the GHG emissions from the individual projects associated with the proposed 2018 EFMP would be generated from energy and mobile sources. As noted above, Mt. SAC has established interim GHG thresholds related to project-level emissions from land use projects. The threshold for combined amortized construction and operational emissions is 3,000 $MTCO_2e$/yr per project. The GHG emissions for the individual project components associated with the 2018 EFMP would all be less than the 3,000 $MTCO_2e$/yr threshold, with implementation of MM GHG-1, which requires that all major capital projects (10,000 square feet and above) be designed to outperform Title 24, Part 6 Energy Efficiency Standards by a minimum of 15%.

The new buildings recommended to be developed on campus by the proposed 2018 EFMP would be more energy efficient than the existing buildings, including the buildings to be demolished. Additionally, Mt. SAC plans to add 4 to 6.5 megawatts of electrical generating capacity via alternative energy strategies to the extent feasible (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). However, because site-specific designs are only available for some of the proposed 2018 EFMP structures, the emission reductions from solar energy were not deducted from operational emissions, thereby providing a conservative analysis.

In an effort to reduce campus energy use and lessen the environmental impact of campus buildings, Mt. SAC would incorporate other green building strategies which may include, but are not limited to, the following, as discussed 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:** 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.
>
> **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.

Therefore, the emissions shown in Tables 4.7-3 through 4.7-7 present a conservative estimate of GHG emissions generated from the proposed 2018 EFMP.

Level of Significance Prior to Mitigation

Potentially significant.

Recommended Mitigation Measures

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%.

Level of Significance After Mitigation

Less than significant.

Threshold 6.2	**Would the project conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gas emissions?**

2018 Educational and Facilities Master Plan (Phases 1A, 1B, and 2) and Project-Specific

Consistency with Statewide and Regional Policies

Statewide plans and regulations such as GHG emissions standards for vehicles are being implemented at the statewide level, and compliance at the master plan or project level is not

addressed. Therefore, the proposed 2018 EFMP does not conflict with those plans and regulations.

SB 375 is being addressed at the State and regional level, and the principles of SB 375 are incorporated in the adopted SCAG 2016–2040 RTP/SCS. As discussed in Section 4.10, Land Use and Planning, the proposed 2018 EFMP is consistent with the compact and efficient land use development goals of SB 375 and the RTP/SCS and would not conflict with SB 375 or the policies proposed by SCAG. The goals of the 2016 RTP/SCS remain unchanged from those adopted in the 2012 RTP/SCS (SCAG 2016).

As discussed above, the principal overall State plan and policy adopted for the purpose of reducing GHG emissions is AB 32. The quantitative goal of AB 32 is to reduce GHG emissions to 1990 levels by 2020. As noted above, the 2006 CAT Report and CARB's Scoping Plan were developed to direct the State to reduce GHG emissions to 1990 levels. The strategies from the 2006 CAT Report and measures from CARB's Scoping Plan are applicable to State, regional, and local agencies in the development of plans to reduce GHG emissions but are not applicable to each and every new general development project. However, strategies and measures have been implemented at the State level with the Title 24 Energy Standards and the CalGreen Code and at the local level with the City's C&D Recycling and Reuse Ordinance and its adoption of the CalGreen Code and Title 24 Energy Efficiency Standards.

As described in detail under Threshold 6.1, new buildings 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 and under Threshold 6-1. Therefore, the new buildings recommended to be developed in the proposed 2018 EFMP would be more energy efficient than the existing buildings, including the buildings to be demolished. Additionally, over time, additional GHG-reducing control measures are likely to be introduced and implemented by various governmental agencies. Some of these measures are likely to further reduce the proposed Project's GHG emissions. The proposed 2018 EFMP would be developed in phases and would utilize the most current technologies and best practices available and feasible at the time of each phase of development. Moreover, as buildings, roads, or other components of the proposed Project are updated or replaced over time, they would be subject to the then-existing requirements for GHG emissions reductions, including those set forth to ensure compliance with EO S-3-05 or any applicable interim policy, and would use then-existing technologies and best practices to achieve applicable emissions reductions. These technologies could include retrofitting buildings so that they are more energy efficient or even result in net-zero emissions; increased use of low-carbon biofuels or zero-emission vehicles; and/or procurement of electricity from renewable sources. Further, 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 2018 EFMP would not impede the policies described in CARB's Scoping Plan Update, or others, that will help achieve established goals.

CARB's Scoping Plan determined that implementing AB 32 in accordance with the Scoping Plan would put California on a path to meet the 2050 emissions goals of EO S-3-05 (CARB 2008). According to the Scoping Plan Update, additional statewide actions may be needed to continue reducing emissions and meet the 2050 goals in the face of anticipated population and economic growth (CARB 2014). CARB is moving forward with a second update to the Scoping Plan to reflect the 2030 target established in EO B-30-15. Because the proposed 2018 EFMP would reduce emissions consistent with AB 32 and would continue to incorporate additional emissions-reducing measures that may be required by future laws or policies, it would not impede

the achievement of EO S-3-05's 2050 goals, EO B-30-15's 2030 goals, or other interim goals that may be established.

The Mt. SAC campus is within the City of Walnut. The recently adopted 2018 WGP addresses goals and policies for reduction of GHG emissions for government practices and for the City's residential and commercial uses. Although the recently adopted 2018 WGP does not apply to the proposed 2018 EFMP, the individual projects associated with the proposed 2018 EFMP would be consistent with the recently adopted 2018 WGP goals and policies related to greenhouse gas emissions and climate change, as described in Section 4.7.2, Regulatory Setting. Mt. SAC's 2018 CAP presents goals and policies related to energy efficiency, alternative forms of energy, and the development of green buildings. The GHG reduction measures detailed in 2018 CAP are consistent with the recently adopted 2018 WGP goals and policies for GHG reduction.

Consistency with the Mt. SAC 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 2018 EFMP is a long-range plan that employs the concept of Integrated Systems Approach in all future building design projects in order to achieve a sustainable product. Specifically, this Draft EIR analyses several projects at a "project-level" under the proposed Project. These projects include Parking Structure R and Tennis Courts, Parking Structure S and West Temple Avenue Pedestrian Bridge, Student Center and Central Campus Infrastructure, Bookstore, and Sand Volleyball Courts and Parking Lot W Reconstruction. For each of these projects, the sustainable building strategies identified in the 2018 CAP were reviewed and implemented as part of the Integrated Systems Approach, to the extent feasible. A similar process would be required for future projects to be implemented by the proposed 2018 EFMP.

The following sustainable strategies/practices would be implemented during the 10-year planning period for the proposed 2018 EFMP:

- Design new construction to United States Green Building Council's (USGBC's) Leadership in Energy and Environmental Design (LEED)[4] 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;
- Including 10 percent recycled content in building materials, where feasible;

[4] 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.

- Including 10 percent regional content in building materials, where feasible;
- Installing 30–40 percent more efficient water saving sinks;
- Installing 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;
- Specification of No-VOC (emit no volatile organic compounds) interior finishes;
- Ensuring 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;
- Specification of light colored paving materials to prevent heat island effect; and
- Commissioning, enhanced commissioning, and retro-commissioning of buildings.

Most of the above-mentioned energy emission savings were not quantified in the GHG analysis presented in this Section.

Mobile Source Emissions Reduction Strategies

Implementation of the proposed 2018 EFMP would support the reduction of mobile source emissions through implementation of transportation and transit-related projects.

As part of the proposed 2018 EFMP, a Transit Center is proposed for development on campus which would improve bus access to and from campus by providing a centralized drop-off and pick-up location that is central to the campus and with easy pedestrian access.

The proposed 2018 EFMP includes improvements to pedestrian walkways, sidewalks, Miracle Mile promenade, pedestrian bridges/tunnel that would facilitate access to campus building 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 the 2018 CAP and noted in Section 3.5.8, Sustainable Practices/Energy of this Draft EIR, 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. Implementation of the proposed 2018 EFMP would support the goals of the 2018 CAP.

Solid Waste Reduction Strategies

With implementation of the 2018 proposed 2018 EFMP, 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 City of Walnut and, related to the proposed 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). Further, the Mt. SAC Climate Action Plan includes solid waste reduction strategies to achieve a Net Zero Waste goal by year 2050.

The California Department of Resources, Recycling, and Recovery—also known as CalRecycle—recommends a 50 percent diversion rate for non-construction solid waste through source

reduction, recycling, and composting. Pre-sorting and tracking of waste materials will allow the college to better understand its waste stream and monitor its diversion strategies. Mt. SAC's climate action planning process is helping the college to set waste diversion goals and strategies. Its recommendations may 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 which is willing to achieve a 95 percent landfill diversion rate. Most hauling agencies achieve a 50 percent diversion rate. However, more are becoming well-informed about sustainable practices that keep waste out of landfills;
- Sort waste onsite 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 onsite for use onsite and build a well-designed composting site in the Farm Precinct;
- Require the hauling agency to provide records by weight, type, and destination; and
- Include a recycling/reuse/waste management center in the recommended new Reuse Depot (described in Chapter 10: *Facilities Recommendations* facility and design this facility to accommodate recycling and reuse events for the college and community
- Increase the requirement for construction projects to 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 proposed 2018 EFMP:

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

Water Conservation Strategies

According to the proposed 2018 EFMP, the college's water use includes on-campus domestic uses, landscape irrigation, athletic field irrigation, pasture and rangeland irrigation, and wildlife sanctuary uses. As part of the proposed Project, the college would continue to employ the following campus programs to optimize water conservation: Technology-based Conservation; Effective Landscaping Design Standards; and Ongoing Maintenance Programs. The proposed Project would implement the following sustainable strategies/practices during the planning period for the proposed 2018 EFMP:

- Reduce stormwater, sewer discharge and water pollution
- Sustainable landscaping practices
- Improved irrigation systems

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

- Specification of stormwater saving strategies, where feasible
- Continued use of native and drought-tolerant landscaping
- Installing 30–40 percent more efficient water saving sinks
- Installing 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
- Reduce water use per student from the 2014 baseline by 50 percent by 2030.

In summary, because the proposed Project would be developed in accordance with the 2018 CAP, which is also consistent with Statewide efforts to reduce greenhouse gas emissions, the proposed 2018 EFMP would not conflict with an applicable plan, policy or regulation for the purpose of reducing the emissions of GHGs. The impact would be less than significant; no mitigation is required.

Level of Significance Prior to Mitigation

Less than significant.

Recommended Mitigation Measures

No significant impacts were identified and mitigation is not required.

Level of Significance After Mitigation

Less than significant.

4.7.7 CUMULATIVE IMPACTS

As noted above, it is accepted as very unlikely that any individual development project would have GHG emissions of a magnitude to directly impact global climate change; therefore, any impact would be considered on a cumulative basis. As described above, the net increase from the proposed projects would be less than Mt. SAC's GHG threshold of significance for each project. The proposed 2018 EFMP provides a long-range development plan with a series of individual projects. As discussed previously, the proposed Project would be developed in accordance with the goals established under the campus Climate Action Plan and consequently would not conflict with an applicable plan, policy, or regulation for the purpose of reducing the emissions of GHGs. Because the development of the projects envisioned under the proposed 2018 EFMP would be consistent with the GHG reduction goals under the 2018 CAP and the projects would be less than the site-specific thresholds, the proposed projects would not result in a cumulatively considerable contribution to a significant cumulative impact related to GHGs.

4.7.8 MITIGATION MEASURES

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%.

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4.8 HAZARDS AND HAZARDOUS MATERIALS AND WILDFIRE

This section describes the potential adverse impacts to human health and the environment resulting from exposure to hazards and hazardous materials on campus as well as exposure to wildfire hazards.

In the Notice of Preparation (NOP) comment letter submitted by the South Coast Air Quality Management District (SCAQMD), a potential mitigation measure regarding compliance with SCAQMD's Rule 403 related to Fugitive Dust and asbestos emissions was identified.

The County of Los Angeles Fire Department also submitted an NOP comment letter and stated that potential impacts related to fuel modification for Very High Fire Hazard Severity Zones, or Fire Zone 4, should be addressed.

Both NOP comment letters are included in Appendix A of this Draft EIR.

4.8.1 REGULATORY SETTING

Federal

Environmental Protection Agency

The United States Environmental Protection Agency (USEPA) is a federal agency tasked with implementing certain federal regulations. With respect to hazardous materials, these include the generation, transportation, treatment, storage, and disposal of hazardous waste under the Resource Conservation and Recovery Act (RCRA) and Toxic Substances Control Act (TSCA), as discussed below. These laws impose "cradle-to-grave" regulatory systems for handling hazardous waste in a manner that protects human health and the environment. The USEPA is also responsible for the Accidental Release Prevention Program and Emergency Planning and Community Right-to-Know Act.

Toxic Substances Control Act

The Toxic Substances Control Act (TSCA) of 1976 (15 *United States Code* [USC] 2601) gives the USEPA the ability to track 75,000 industrial chemicals currently produced or imported into the United States. The USEPA repeatedly screens these chemicals and requires reporting or testing of those that may pose an environmental or human health hazard. The USEPA also has the ability to ban the manufacture and import of chemicals that pose an unreasonable risk. The USEPA tracks thousands of new chemicals that are developed each year with either unknown or dangerous characteristics. The production, importation, use, and disposal of these toxic substances is regulated by the USEPA, as necessary, to protect human health and the environment.

Resource Conservation and Recovery Act

The RCRA is the public law that creates the framework for the proper management of hazardous and non-hazardous solid waste. The law describes the waste management program mandated by Congress that gave USEPA authority to develop the RCRA program. The term RCRA is often used interchangeably to refer to the law, regulations, and USEPA policy and guidance. Under RCRA, the USEPA established a comprehensive regulatory program to ensure that hazardous waste is managed safely from "cradle to grave," meaning from the time it is created; while it is transported, treated, and stored; and until it is disposed.

Accidental Release Prevention Program

Title 40, Part 68 of the *Code of Federal Regulations* (CFR) is the federal Accidental Release Prevention Program that lists regulated toxic and flammable substances and sets requirements concerning the prevention of accidental releases. It sets threshold quantities of regulated substances at which owners or operators of a stationary source are required to prepare Risk Management Plans. These Risk Management Plans must contain an assessment of the risks for accidental release, prevention measures, emergency response procedures, employee training, record keeping, and incident investigations.

Emergency Planning and Community Right-To-Know Act

The Emergency Planning and Community Right-to-Know Act (EPCRA) of 1986 was created to help communities plan for chemical emergencies. It also requires industry to report on the storage, use, and releases of hazardous substances to federal, state, and local governments. The Community-Right-to-Know provisions help increase the public's knowledge and access to information on chemicals at individual facilities, their uses, and releases into the environment.

State

Division of the State Architect

The Division of the State Architect (DSA) reviews construction projects under its jurisdiction for Title 24 compliance. The majority of DSA's plan review and construction oversight focuses on new construction and alteration projects for California school and community college districts. The DSA has oversight for structural safety of school facilities and is governed by the provisions of the Field Act contained in the California Education Code sections 17280, et seq. for K–12 and 81130, et seq. for community colleges. The Field Act imposes important requirements on California schools that are not present in other types of construction approval processes.

California Health and Safety Code

"Hazardous waste" is any hazardous material that is abandoned, discarded or recycled, as defined by Sections 25117 and 25124 of the *California Health and Safety Code.* In addition, hazardous waste may occasionally be generated by actions that change the composition of previously nonhazardous materials. The criteria used to characterize a material as hazardous include ignitability, toxicity, corrosivity, reactivity, radioactivity, or bioactivity.

California Occupational Safety and Health Administration

The California Occupational Safety and Health Administration (CalOSHA) is responsible for enforcing State health and safety standards and implementing federal OSHA regulations. CalOSHA has regulations to protect worker safety during potential exposure to lead and asbestos under Title 8 of the *California Code of Regulations* (Section 1529, Asbestos and Section 1532.1, Lead). Asbestos is regulated as a potential worker safety hazard under the authority of the CalOSHA. These rules and regulations prohibit emissions of asbestos from asbestos-related demolition or construction activities, require medical examinations and monitoring of employees engaged in activities that could disturb asbestos, specify precautions and safe work practices that must be followed to minimize the potential for release of asbestos fibers, and require notice to federal and local government agencies prior to beginning renovation or demolition that could disturb asbestos. Demolition that could result in the release of asbestos and lead must be conducted according to CalOSHA standards. These standards were developed to protect the

general population and construction workers from respiratory and other hazards associated with exposure to these materials. Young children, the elderly, and people in poor health may be more susceptible to adverse health effects from exposure to asbestos released to the environment.

California Hazardous Waste Control Act

The California Hazardous Waste Control Act (HWCA), as found in the *California Health and Safety Code* (see Division 20, Chapter 6.5, Article 2, Section 25100, et seq.) authorizes the California State Department of Toxic Substances Control (DTSC) and local Certified Unified Program Agencies (CUPA) to regulate facilities that generate or treat hazardous waste. The HWCA authorizes CUPAs to perform the following actions:

- Conduct inspections of any factory, plant, construction site, waste disposal site, transfer station, establishment, or any other place or environment where hazardous wastes are stored, handled, processed, disposed of, or being treated to recover resources
- Maintain records of compliance with the Hazardous Waste Control Act
- Require hazardous waste generators as provided herein, to pay inspection and administration fees to cover the costs of administering the provisions in this Act. Fees may include but shall not be limited to the costs of inspection, document development and processing, recordkeeping, enforcement activities, and informational materials development and distribution
- Issue authorization for on-site treatment of hazardous waste to persons eligible to operate pursuant to permit-by-rule, conditional authorization, or conditional exemption
- Enforce against violations of the HWCA

Executive Orders for Drought State of Emergency

In January 2014, California Governor Jerry Brown declared a drought state of emergency and directed State officials to take all necessary actions to make water immediately available. In April 2014, Governor Brown proclaimed a continued state of emergency and asked that the State strengthen its ability to manage water and habitat effectively in drought conditions. In response to the increased threat of wildfire season, he called for streamlined contracting rules for the Governor's Office of Emergency Services and the California Department of Forestry and Fire Protection (CAL FIRE) to purchase equipment and allowed landowners to quickly clear brush and dead, dying, or diseased trees that increase fire danger.

California Accidental Release Prevention Program

The California Accidental Release Prevention Program (CalARP) merged the Federal Accidental Release Prevention Program and California Risk Management and Prevention Program to eliminate the need for two separate programs addressing the prevention of accidental releases of regulated toxic and flammable substances. Businesses using regulated substances exceeding a threshold quantity are evaluated under this program to determine the potential for and impacts of accidental releases. Depending on the potential hazards, business owners may be required to develop and submit a Risk Management Plan.

California Building Code

The California Building Code (also known as the "California Building Standards Code" or CBC) is promulgated under the *California Code of Regulations*, Title 24 (Parts 1 through 12) and is

administered by the California Building Standards Commission. The 2016 CBC is the most current version. Title 24 sets forth the fire, life safety, and other building-related regulations applicable to any structure fit for occupancy statewide for which a building permit is sought. Title 24 establishes general standards for the design and construction of buildings. It is the role of the DSA to ensure that plans, specifications, and construction comply with the building code (Title 24).

California Environmental Protection Agency

The California Environmental Protection Agency (CalEPA) was formed in 1991 as the State's primary environmental authority. CalEPA has a mission to ensure public health, environmental quality, and economic vitality while working to restore, protect, and enhance the environment. CalEPA oversees several state agencies, including these agencies that handle hazardous materials: Air Resources Board (asbestos) and the Department of Toxic Substances Control (lead and polychlorinated biphenyls).

South Coast Air Quality Management District

The South Coast Air Quality Management District regulates exposure to asbestos. Because it is a hazardous air pollutant, asbestos is subject to regulation by the SCAQMD under Rule 1403. The purpose of Rule 1403 is to specify work practice requirements to limit asbestos emissions from building demolition and renovation activities, including the removal and associated disturbance of asbestos-containing materials (ACM).

California Department of Transportation/California Highway Patrol

Hazardous materials are routinely transported in the region by truck or rail. The U.S. Department of Transportation (USDOT), Office of Hazardous Materials Safety prescribes strict regulations for the safe transportation of hazardous materials, as outlined in Title 49 of the *Code of Federal Regulations* and implemented by Title 13 of the *California Code of Regulations* (CCR). Transportation of hazardous materials along any city or state roadways within or near the campus is also subject to all hazardous materials transportation regulations established by the California Highway Patrol pursuant to the *California Vehicle Code*. In addition, universal waste handlers are subject to Title 22 of the CCR (Section 66273.30 through Section 66273.39 and Section 66273.70 through Section 66273.77) which identify standards for hazardous waste handlers and authorization requirements for universal waste handlers who treat hazardous wastes.

California Department of Public Health

The California Department of Public Health (CDPH) has a primary mission to protect the public's health. By statutory definition, biohazardous materials include biohazardous laboratory wastes and biologic specimens such as human or animal tissue, as defined by Section 117635 of the *California Health and Safety Code.* Biohazardous medical waste is generally regulated in the same manner as hazardous waste, except that special provisions apply to storage, disinfection, containment, and transportation. The Medical Waste Management Program of CDPH enforces the Medical Waste Management Act and regulations related to environmental health and laboratory services.

Local

Los Angeles County Fire Department

At the local level, the Health Hazardous Materials Division (HHMD) of the Los Angeles County Fire Department (LACoFD), has the primary responsibility for hazardous waste enforcement (LACoFD 2018). In 1997, HHMD became a Certified Unified Program Agency (CUPA) to administer the following programs within Los Angeles County: the Hazardous Waste Generator Program, the Hazardous Materials Release Response Plans and Inventory Program, the California Accidental Release Prevention Program (CalARP), the Aboveground Storage Tank Program, and the Underground Storage Tank Program.

In compliance with applicable State and federal regulations, Mt. SAC has developed a Laboratory Safety and Chemical Hygiene Plan, which directs operations in laboratories on campus related to the use, handling, storage, and disposal of hazardous wastes and materials.

City of Walnut Municipal Code

Fire Protection

As identified in the 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 (CFC) and the unadopted sections of the California Fire Code found in the 2015 International Fire Code.

Mt. San Antonio College Campus Emergency Response and Evacuation Plan

The purpose of the Campus Emergency Response and Evacuation Plan is to preserve life, protect property, and maintain the continuity of college operations (Mt. SAC 2018). The Plan includes emergency response procedures and indicates that Mt. SAC 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. The Plan also identifies procedures for annual emergency response and evacuation drill testing, reporting emergencies, and obtaining assistance from student health services for emergencies. Evacuation procedures are included, and emergency assembly areas are identified on a map. "Shelter in place" procedures are also identified for certain emergencies.

4.8.2 ENVIRONMENTAL SETTING

Previous Use of Hazardous Materials on Campus

Historic Use of the Campus

Approximately 100 years ago, the land that Mt. SAC now occupies was part of Rancho La Puente, a sprawling 48,000-acre ranch in San Gabriel Valley. The area was known for its fertile land and agriculture. In addition, the Mt. SAC campus was formerly occupied by the United States Department of Defense as a U.S. Naval Hospital. However, after the U.S. Naval Hospital was decommissioned, Mt. SAC signed a two-year lease in July 1946 with the State of California for the land and temporary buildings. Mt. SAC purchased the property in 1948, at which time new buildings were constructed on campus.

Asbestos/Lead/PCBs

Asbestos, a naturally occurring fibrous material, was used for years in many building materials for its fire-proofing and insulating properties. While the use of asbestos in the manufacture of most building materials has not been fully prohibited by law, the use of asbestos, for the most part, has voluntarily been discontinued since the late 1970s. Loose insulation, ceiling panels, flooring tiles, and brittle plaster are potential sources of friable (easily crumbled) asbestos. Nonfriable asbestos is generally bound to other materials such that it does not become airborne under normal conditions. Any activity that involves cutting, grinding, or drilling during demolition can release friable asbestos fibers unless proper precautions are taken. Inhalation of airborne fibers is the primary mode of asbestos entry into the body, which makes friable materials the greatest potential health risk.

Lead is a naturally occurring metallic element. Among its numerous uses and sources, lead can be found in paint, water pipes, solder in plumbing systems, soils around buildings, and structures painted with lead-based paint (LBP). In 1978, the Consumer Products Safety Commission banned paint and other surface coating materials containing lead. Because of its toxic properties, lead is regulated as a hazardous material. Inorganic lead is also regulated as a toxic air contaminant (TAC).

Institutional buildings throughout campus were constructed beginning in the 1940s to 2019 (refer to Table 3-1 in Section 3.0, Project Description, of this Draft EIR). Given the age of the older buildings, particularly those built before the 1980s, they may have had asbestos-containing materials (ACMs) and lead-based products used during construction. Transite pipe is also located on campus; transite pipe is an asbestos-cement product used in some utility lines. The use of asbestos to manufacture transite pipe was phased out in the 1980s.

Polychlorinated biphenyls (PCBs) are a class of organic compounds known as chlorinated hydrocarbons and were widely used for many applications, especially as dielectric fluids in transformers and capacitors and coolants. PCBs were also used as plasticizers and additives in lubricating and cutting fluids. Due to PCB's toxicity and classification as persistent organic pollutants, PCB production was banned by the United States Congress in 1976. Products made before 1977 that may contain PCBs include old fluorescent lighting fixtures and electrical devices (PCBs were used as coolant in electrical equipment), PCB capacitors, and old microscope and hydraulic oils. PCBs are no longer commercially made in the United States, but many electric transformers and capacitors once filled with PCBs are still in service. Buildings and supporting electrical equipment on campus were initially constructed in the 1940s; PCBs may be present in research labs and on-campus electrical equipment.

Campus Operations

Virtually all buildings on campus contain commercial products (e.g., cleaners, copier toners) that could qualify as “hazardous materials” under regulatory definitions. Facilities planning and management (e.g., grounds, transportation, maintenance, custodial services, pest management) use a wide variety of commercial products formulated with hazardous materials. These include fuels, cleaners and degreasers, solvents, paints, lubricants, pesticides and herbicides, adhesives, and sealers.

Various types and amounts of non-household-type hazardous materials are used in teaching laboratories, a limited number of research laboratories, aeronautics, transportation garage, and the tractor farm. To comply with the USEPA’s Environmental Planning and Community Right-to-Know Act (EPCRA), the campus is required to report to federal, State and local governments on

the storage, use, and release of hazardous chemicals that equal or exceed identified thresholds (quantities).

To reduce the potential for exposure to airborne chemicals, workers take standard precautions, such as working under fume hoods when using chemicals that could present exposure hazards. Proper use of fume hoods keeps indoor laboratory toxic air contaminants within acceptable limits.

Elemental mercury, an insoluble liquid metal, is commonly used primarily in laboratory equipment, such as thermometers and monometers (used for measuring pressure) and electrical equipment. Other hazardous materials used on campus in limited quantities include, but are not limited to aerosol cans, chemicals used for photography, solvents, paints, and acids.

Small quantities of medical wastes are currently generated on campus at the Health Center, and athletic training facilities, including "sharps" (e.g., needles, syringes with needles); and biohazardous wastes (e.g., fluid blood, fluid blood products). In addition, activity with the animal studies programs on campus generates limited quantities of animal biohazardous materials.

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. Additional hazardous materials associated with aeronautics, the transportation garage, and the tractor farm are stored in 55 gallon drums and other underground and above ground 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.

Fire Hazards

Based on the CalFire Fire Hazard map, the campus is not located in a Very High Fire Hazard Severity Zone (VHFHSV) (CalFire 2011). The nearest area designated as VHFHSV is located approximately 0.2 mile to the north of the northern campus boundary, north of existing residential uses in the Timberline residential development.

4.8.3 THRESHOLDS OF SIGNIFICANCE

According to Appendix G of the California Environmental Quality Act (CEQA) Guidelines, a proposed Project will normally have a significant adverse environmental impact related to hazards and hazardous materials if it will:

- Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.
- 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.
- Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter-mile of an existing or proposed school.
- 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?

- Be 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?
- Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.
- Expose people or structures to a significant risk of loss, injury, or death involving wildland fires.

Additionally, according to Appendix G of the CEQA Guidelines, a proposed Project will normally have a significant adverse environmental impact related to wildfire if it is located in or near state responsibility areas or lands classified as very high fire hazard severity zones, and would:

- Substantially impair an adopted emergency response plan or emergency evacuation plan.
- 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.
- 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.
- Expose people or structures to significant risks, including downslope or downstream flooding or landslide, as a result of runoff, post-fire slope instability, or drainage changes.

Mt. SAC 2016 CEQA Thresholds of Significance

To the extent the following thresholds of significance are applicable to the proposed Project, they shall be applied to determine the proposed 2018 EFMP'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.	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.
Cal/OSHA: California Occupational Safety and Health Administration; CalEPA; California Environmental Protection Agency, DSA: Division of the State Architect; LACoFD: Los Angeles County Fire Department				

4.8.4 ENVIRONMENTAL IMPACTS

Impact Analysis

Threshold 8.1	**Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?**
Threshold 8.2	**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?**

2018 Educational and Facilities Master Plan (Phases 1A, 1B, and 2)

Construction Activities

Construction associated with implementation of the proposed 2018 EFMP would involve demolition or renovation of existing buildings; demolition of existing infrastructure, including utility lines; and, construction of new buildings, parking facilities, athletic facilities, and site improvements/infrastructure. Buildings constructed before the 1980s have the potential to contain ACMs and/or lead-based paint in the building materials. In addition, transite pipes containing ACMs are also being removed in connection with a separate project on the Mt. SAC campus. Therefore, there is a potential for asbestos and lead release during demolition. 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.

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 2018 EFMP would result in the development of laboratories and other research facilities that would use, store, or require the transportation and disposal of hazardous materials as described above. Major construction in Phase 1A and 1B of the proposed 2018 EFMP includes the new Makerspace and Science facilities, while in Phase 2, major construction includes the new Technical Education facility and major renovations include two existing science facilities. Each of these facilities would accommodate specialized laboratories and classrooms. 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 these buildings have not been determined (such as 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 upon implementation of proposed 2018 EFMP. 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, while other hazardous materials associated with aeronautics, the transportation garage, and the tractor farm would continue to be stored in 55 gallon drums and other underground and above ground 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, vehicle maintenance, and fine arts.

In addition, routine operations throughout the campus 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 2018 EFMP, 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.

Level of Significance Prior to Mitigation

Less than significant.

Recommended Mitigation Measures

No significant impacts were identified, and mitigation is not required.

Level of Significance After Mitigation

Less than significant.

Project-Specific

Parking Structure R and Tennis Courts, Parking Structure S and West Temple Avenue Pedestrian Bridge, Student Center and Central Campus Infrastructure, Bookstore, and Sand Volleyball Courts and Parking Lot W Reconstruction

Construction Activities

As previously indicated, existing buildings to be demolished during construction of the project-specific level projects (Student Center and Central Campus Infrastructure, Bookstore, Parking Structure R and Tennis Courts, Parking Structure S and West Temple Avenue Pedestrian Bridge, and Sand Volleyball Courts and Parking Lot W Reconstruction) have the potential to contain ACMs and/or lead-based paint in the building materials. Transite pipes containing ACMs would also be removed. Lead-based paint was banned in 1978, and ACMs were banned in construction products beginning in 1989. Therefore, there is a potential for asbestos and lead release during demolition. 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.

Similar to the analysis presented for the proposed 2018 EFMP, construction activities for the projects being evaluated at a project-specific level under Phases 1A and 1B would primarily involve demolition/removal of existing structures, facilities and utility infrastructure, construction of new buildings, and roadway and parking improvements. During construction activities for the projects being evaluated at a project-specific level (Student Center and Central Campus Infrastructure, Bookstore, Parking Structure R and Tennis Courts, Parking Structure S and West Temple Avenue Pedestrian Bridge, and Sand Volleyball Courts and Parking Lot W Reconstruction), 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. However, these materials are common to typical construction activities and do not pose a significant risk of upset or hazard to the public or environment, and a less than significant impact would occur.

Operation

Implementation of the project-specific uses includes construction of a Student Center, Bookstore, Parking Structure R and Tennis Courts, Parking Structure S and West Temple Avenue Pedestrian Bridge, and Sand Volleyball Court and Parking Lot W Reconstruction. None of these recommended uses would involve laboratory/research facility or any type of facility that would require the transportation and disposal of hazardous materials.

The projects being evaluated at a project-specific level (Student Center and Central Campus Infrastructure, Bookstore, Parking Structure R and Tennis Courts, Parking Structure S and West Temple Avenue Pedestrian Bridge, and Sand Volleyball Court and Parking Lot W Reconstruction) would not involve development of any facilities which would routinely handle, use, or dispose of hazardous materials on campus or have the potential for an accidental release of hazardous materials. In addition, routine operations throughout the campus would continue, including regular

building and landscape maintenance that uses 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.

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.

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 would ensure the hazard to the public or the environment associated with reasonably foreseeable upset and accident conditions would be less than significant.

Level of Significance Prior to Mitigation

Less than significant.

Recommended Mitigation Measures

No significant impacts were identified, and mitigation is not required.

Level of Significance After Mitigation

Less than significant.

Threshold 8.3	**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?**

2018 Educational and Facilities Master Plan (Phases 1A, 1B, and 2)

The Mt. SAC Child Development Center (Buildings 70 through 72) on campus provides child care to children of college students, staff, 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 above in Thresholds 8.1 and 8.2, major construction in Phase 1A and 1B of the proposed 2018 EFMP includes the new Makerspace and Science facilities, while in Phase 2, major construction includes the new Technical Education facility and major renovations include two existing science facilities. All these facilities would accommodate specialized laboratories and classrooms. It is not anticipated that any operations in these buildings 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 in Threshold 8.2, laboratory-related hazardous materials would be stored in laboratories in designated secured areas designed to prevent accidental release to the environment, while other hazardous materials associated with aeronautics, the transportation garage, and the tractor farm would continue to be stored in 55 gallon drums and other underground and above ground

containers. Collegewood Elementary School would be within 0.25 miles of a portion of the campus, which would include a new Fine Arts building and an Auditorium (recommended for Phase 3 of the proposed Project). A 0.25-mile radius around the International School of Montessori would also overlap a portion of the campus which would include the new Auditorium, new Parking Structure B, and a portion of the existing Performing Arts Center (recommended for Phase 2 of the proposed Project) on the western side of campus. The on-campus Child Development Center is currently in operation and would continue as a child care center. The Child Development Center is surrounded by several on-campus uses, including the Business and Computer Technology facility, and several buildings associated with the agricultural science program, including the main Agricultural Science building. While the recommended major and minor renovations associated with the proposed 2018 EFMP 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, in summary, the recommended uses such as the Science, Makerspace, and Technical Education facilities 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.

Level of Significance Prior to Mitigation

Less than significant.

Recommended Mitigation Measures

No significant impacts were identified, and mitigation is not required.

Level of Significance After Mitigation

Less than significant.

Project-Specific

Parking Structure R and Tennis Courts, Parking Structure S and West Temple Avenue Pedestrian Bridge, Student Center and Central Campus Infrastructure, Bookstore, and Sand Volleyball Courts and Parking Lot W Reconstruction

The projects being evaluated at a project-specific level (Student Center and Central Campus Infrastructure, Bookstore, Parking Structure R and Tennis Courts, Parking Structure S and West Temple Avenue Pedestrian Bridge, and Sand Volleyball Court and Parking Lot W Reconstruction) are typical uses on a college campus and would not involve emission or handling of hazardous materials. These uses are typical of a college campus and do not involve laboratories or uses that require the use of hazardous materials. As indicated above under Thresholds 8.1 and 8.2, routine operations throughout the campus would continue, including regular building and landscape maintenance that use some hazardous materials such as standard cleaning products and pesticides or herbicides which would continue with implementation of these projects being evaluated at a project-specific level. These uses are not located with 0.25 mile of the off-site schools (Collegewood Elementary School and International School of Montessori). However, the Student Center and Central Campus Infrastructure, Bookstore, and Parking Structure S and West Temple Avenue Pedestrian Bridge would be located within the 0.25-mile radius of the Mt. SAC

Child Development Center. As noted above, the on-campus Child Development Center is currently in operation and would continue as a child care center. This child care center is already in proximity to campus uses, including the Business and Computer Technology and Agricultural Science facilities, and the other recommended major and minor renovations associated with the proposed 2018 EFMP would likely not involve the use of hazardous materials that are not already used on the campus.

Level of Significance Prior to Mitigation

Less than significant.

Recommended Mitigation Measures

No significant impacts were identified, and mitigation is not required.

Level of Significance After Mitigation

Less than significant.

Threshold 8.4	**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?**

2018 Educational and Facilities Master Plan (Phases 1A, 1B, and 2) and Project-Specific

Research on the Department of Toxic Substances Control 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) and is included as Appendix G of this Draft EIR. 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 2018 EFMP 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 from implementation of the proposed 2018 EFMP, and no mitigation is required.

Level of Significance Prior to Mitigation

Less than significant.

Recommended Mitigation Measures

No significant impacts were identified, and mitigation is not required.

Level of Significance After Mitigation

Less than significant.

Threshold 8.5	**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?**

2018 Educational and Facilities Master Plan (Phases 1A, 1B, and 2) and Project-Specific

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. No impact would result, and no mitigation is required.

Level of Significance Prior to Mitigation

No impact.

Recommended Mitigation Measures

No significant impacts were identified, and mitigation is not required.

Level of Significance After Mitigation

No impact.

Threshold 8.6	**Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?**

2018 Educational and Facilities Master Plan (Phases 1A, 1B, and 2)

Mt. SAC has a Campus Emergency Response and Evacuation Plan (Mt. SAC 2018) 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 2018). While development of the proposed 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 components of the proposed Project 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 proposed Project, 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 2018). The City does not have an adopted emergency response plan or emergency evacuation plan.

Construction of new buildings and improvements under the proposed 2018 EFMP 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, and mitigation is not required.

Level of Significance Prior to Mitigation

Less than significant.

Recommended Mitigation Measures

No significant impacts were identified, and mitigation is not required.

Level of Significance After Mitigation

Less than significant.

Project-Specific

Parking Structure R and Tennis Courts, Parking Structure S and West Temple Avenue Pedestrian Bridge, Student Center and Central Campus Infrastructure, Bookstore, and Sand Volleyball Courts and Parking Lot W Reconstruction

As indicated above, a Campus Emergency Response and Evacuation Plan exists for Mt. SAC. The Emergency Assembly Map identifies several assembly areas throughout the campus, including two that would be affected by the projects being evaluated at a project-specific level (Student Center and Central Campus Infrastructure, Bookstore, Parking Structure R and Tennis Courts, Parking Structure S and West Temple Avenue Pedestrian Bridge, and Sand Volleyball Court and Parking Lot W Reconstruction), specifically, the Student Center/Bookstore/Central Campus Infrastructure and Parking Structure R and Tennis Courts would each directly impact one assembly area. Six assembly areas surround the assembly area impacted by the Student Center and Central Campus Infrastructure and Bookstore, while two assembly areas in close proximity to the assembly area are impacted by Parking Structure R and Tennis Courts. As

indicated above, the Department of Police and Campus Safety would ensure that alternate assembly areas would be identified to replace the impacted assembly areas and/or ensure that existing assembly areas can meet the needs of the campus.

As stated above, first responders to critical incidents on campus include the Mt. San Antonio College Police and Campus Safety Officers and the Los Angeles County Sheriff's Department or the Los Angeles County Fire Department. 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, and mitigation is not required.

Level of Significance Prior to Mitigation

Less than significant.

Recommended Mitigation Measures

No significant impacts were identified, and mitigation is not required.

Level of Significance After Mitigation

Less than significant.

Threshold 8.7	**Would the project expose people or structures to a significant risk of loss, injury, or death involving wildland fires?**
Threshold 8.8	**Would the project substantially impair an adopted emergency response plan or emergency evacuation plan?**
Threshold 8.9	**Would the project, 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?**
Threshold 8.10	**Would the project 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?**
Threshold 8.11	**Would the project expose people or structures to significant risks, including downslope or downstream flooding or landslide, as a result of runoff, post-fire slope instability, or drainage changes?**

2018 Educational and Facilities Master Plan (Phases 1A, 1B, and 2) and Project-Specific

As previously described, the Mt. SAC campus is not within a designated VHFHSZ as defined by CalFire. As discussed in Section 3.0, Project Description, and Section 4.3, Biological Resources, of this Draft 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 proposed 2018 EFMP would be constructed to meet current building and fire codes, and the buildings would be sprinklered accordingly. Implementation of the proposed 2018 EFMP 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 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 2018 EFMP 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.

Level of Significance Prior to Mitigation

No impact.

Recommended Mitigation Measures

No significant impacts were identified, and mitigation is not required.

Level of Significance After Mitigation

Less than significant.

4.8.5 CUMULATIVE IMPACTS

The cumulative study area associated with hazardous materials is typically site-specific except where past, present, and/or recommended land uses would impact off-site land uses and persons or where past, present, or foreseeable future development in the surrounding area would cumulatively expose a greater number of persons to hazards (e.g., hazardous materials and/or waste contamination). The cumulative study area is the Mt. SAC campus because all phases of development, including Phase 3 of the proposed 2018 EFMP would occur on the campus. As described in Section 4.0, Phase 3 includes new buildings for Fine Arts and Adult Education and major renovations to the existing Technology Center (Building 28AB), College Services (Building 6 and 23), and Student Services (Building 9B) facilities. These uses are currently on-going in different locations on campus; therefore, there would be no new or additional uses of hazardous materials associated with these buildings beyond what is already occurring on campus.

As discussed under Thresholds 8.1 and 8.2, past, existing, and recommended land uses would not result in an environmental hazard related to the transport, use, or disposal of hazardous materials or the potential for accidental release of hazardous materials. The proposed Project (Phases 1A, 1B, and 2) and cumulative development (Phase 3) would be required to comply with applicable local, State, and federal requirements concerning hazardous materials. Therefore, the proposed 2018 EFMP would not contribute to any potential significant cumulative hazardous materials impacts.

While the campus would continue to use varying amounts and types of hazardous materials in day-to-day activities and operations associated with existing and recommended future uses, the

campus would continue to comply with all applicable laws and regulations concerning the use, storage, transportation, and/or exposure of hazardous materials, as well as with existing campus procedures to reduce potential impacts. The Mt. SAC campus would continue to comply with applicable federal, State, and local hazardous materials regulations and would be subject to existing and future enforcement by the appropriate regulatory agencies. For these reasons, the proposed 2018 EFMP would not result in a cumulatively considerable contribution to a significant cumulative impact related to hazardous materials.

4.8.6 MITIGATION MEASURES

No significant impacts related to hazards and hazardous materials have been identified. Thus, no mitigation measures are required.

4.8.7 REFERENCES

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4.9 HYDROLOGY AND WATER QUALITY

The information in this section is based on the Preliminary Low Impact Development Report (LID) For Mt. SAC Parking Structure [S] (September 14, 2018) prepared by BkF Engineers (BkF), Preliminary Low Impact Development Report (LID) For Mt. SAC Student Center (September 27, 2018) prepared by BkF, Storm Water Low Impact Development (LID) Report Athletic Complex East Storm Water Improvements (August 30, 2018) prepared by Psomas (included in Appendix H), and other available information as referenced in this section for the proposed Mt. SAC 2018 Educational and Facilities Master Plan (proposed 2018 EFMP).

The City of Walnut (City) submitted a Notice of Preparation (NOP) comment letter that requested, per the 2018 Memorandum of Agreement (MOA) between the City and Mt. SAC in relation to the West Parcel Site Improvements project and the Physical Education Project (PEP Phase 1, 2), that this Draft Environmental Impact Report (EIR) describe the authorities of Mt. SAC and the City under the MOA. Specifically, in relation to hydrology and water quality, the City requested recognition in this Draft EIR of the City's grading/drainage administrative review and permit authority, as applicable, as well as other terms of the MOA regarding notification and consultation for future projects. Refer to Section 4.6 Geology and Soils of this Draft EIR for a detailed discussion.

The California Department of Transportation (Caltrans) submitted an NOP comment letter that stated that stormwater runoff is a sensitive issue for Los Angeles and Ventura counties. Caltrans further noted that the proposed 2018 EFMP project (1) needs to be designed to discharge clean run-off water, (2) could incorporate green design elements that can capture stormwater, and (3) that incorporating measures such as permeable paving, landscaping and trees to reduce urban water runoff should be considered.

Both NOP comment letters are included in Appendix A of this Draft EIR.

4.9.1 REGULATORY SETTING

Federal

Clean Water Act

In 1972, the Federal Water Pollution Control Act (Clean Water Act or CWA) was amended to require National Pollutant Discharge Elimination System (NPDES) permits for the discharge of pollutants to "waters of the United States"[1] from any point source.[2] Final regulations regarding stormwater discharges were issued on November 16, 1990, and require that municipal separate storm sewer system (MS4) discharges and industrial (including construction) stormwater discharges to surface waters be regulated by an NPDES permit. MS4s are a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, manmade channels, or storm drains), and are owned or operated by a public body that has jurisdiction over disposal of sewage, industrial wastes, stormwater, or other wastes. MS4s are designated or used for collecting or conveying storm-water only (i.e., not wastewater or combined sewage). NPDES permit requirements relevant to the proposed 2018 EFMP are discussed later in this section.

[1] "Waters of the United States" include all waters that have, are, or may be used in interstate or foreign commerce (including sightseeing or hunting), including all waters subject to the ebb and flow of the tide and all interstate waters, including interstate wetlands (*Code of Federal Regulations,* Title 33, Section 328.3).

[2] Point sources are discrete water conveyances, such as pipes or man-made ditches.

Water quality standards consist of designated beneficial uses for a particular water body (e.g., wildlife habitat, agricultural supply, commercial fishing) and the water quality criteria necessary to support those uses. Water quality criteria are set concentrations or levels of constituents (e.g., lead, suspended sediment, and fecal coliform bacteria) or narrative statements that represent the quality of water that support a particular use. When designated beneficial uses of a particular water body are being compromised due to changes in water quality, Section 303(d) of the Clean Water Act requires identifying and listing that water body as "impaired"; and, under Section 303(d) of the Clean Water Act, it is placed on a list of impaired waters for which a total maximum daily load (TMDL) must be developed for the impairing pollutant(s).

For point sources, including stormwater, the load allocation is referred to as a "Wasteload Allocation", whereas for non-point sources, the allocation is referred to simply as a "Load Allocation". Once established, the TMDL allocates the loads (or concentrations) among current and future pollutant sources to the water body.

The CWA requires that the State Water Resources Control Board (SWRCB) and Regional Water Quality Control Boards (RWQCBs) conduct a Water Quality Assessment that addresses the condition of its surface waters (required in Section 305(b) of the CWA) and that provides a list of impaired waters (required in Section 303(d) of the CWA); this Water Quality Assessment is then submitted to the U.S. Environmental Protection Agency (USEPA) for review and approval. The Water Quality Assessment integrates the requirements of Sections 305(b) and 303(d) of the CWA and is referred to as the "Integrated Report". The 2014/2016 California Integrated Report (Clean Water Act Section 303(d) List / 305(b) Report) list was approved by the SWRCB on October 3, 2017, and the USEPA approved the Report on April 6th, 2018 (SWRCB 2018).

State/Regional

California Porter-Cologne Act

California's Porter-Cologne Water Quality Control Act of 1970 (Porter-Cologne Act) grants the SWRCB and the RWQCBs the power to protect surface water and groundwater quality and is the primary vehicle for implementing California's responsibilities under the CWA. The Porter-Cologne Act grants the SWRCB and the RWQCBs authority and responsibility to adopt plans and policies, to regulate discharges of waste to surface and groundwater, to regulate waste disposal sites, and to require cleanup of discharges of hazardous materials and other pollutants.

Each RWQCB must formulate and adopt a Water Quality Control Plan (known as a Basin Plan) for its region. The Basin Plan must conform to the policies set forth in the Porter-Cologne Act and established by the SWRCB in its State Water Policy. The Basin Plan establishes beneficial uses for surface and groundwater in the region and sets forth narrative and numeric water quality standards to protect those beneficial uses.

The RWQCBs are also authorized to enforce discharge limitations, to take actions to prevent violations of these limitations from occurring, and to conduct investigations to determine the status of the quality of any of the waters of the State. Civil and criminal penalties are also applicable to persons who violate the requirements of the Porter-Cologne Act or any SWRCB/RWQCB orders.

California Toxics Rule

The Clean Water Act also requires states to adopt water quality standards for receiving water bodies and to have those standards approved by the USEPA. Water quality standards consist of designated beneficial uses for a particular receiving water body (e.g., wildlife habitat, agricultural

supply, fishing), along with the water quality criteria necessary to support those uses. Water quality criteria are prescribed concentrations, levels of constituents, or narrative statements that represent the quality of water that supports a particular use. Because the State of California was unable to develop these standards for priority toxic pollutants, the USEPA promulgated the California Toxics Rule (CTR) in 1992 (*Code of Federal Regulations* [CFR], Title 40, Section 131.38), which fills this gap.

National Pollutant Discharge Elimination System Program

As discussed above, the NPDES permit program stems from the federal Clean Water Act. In the State of California, this program is administered by the RWQCBs. There are nine RWQCBs in the State of California. These boards have the mandate to develop and enforce water quality objectives and implementation plans within their regions. If discharges from industrial, municipal, and other facilities go directly to surface waters, those project applicants must obtain permits from the applicable RWQCB. An individual NPDES permit is specifically tailored to a facility. A general NPDES permit covers multiple facilities within a specific activity category such as construction activities. The proposed 2018 EFMP (proposed Project) is located within the jurisdiction of the Regional Water Quality Control Board (RWQCB) Region 4 (Los Angeles Region) regulates stormwater quality under authorities of the Federal CWA and California's Porter-Cologne Water Quality Control Act. The RWQCB issues National Pollutant Discharge Elimination System (NPDES) permits to dischargers of municipal and industrial stormwater runoff and operators of large construction sites (City of Walnut 2018a)

Municipal Separate Storm Sewer System Permit

On November 8, 2012, the RWQCB adopted Order R4-2012-0175 (Waste Discharge Requirements for Municipal Separate Storm Sewer System) (MS4) Discharges within Coastal Watersheds of Los Angeles County (MS4 Permit). Order R4-2012-0175 became effective on December 28, 2013, and serves as the NPDES permit for coastal watershed stormwater and non-stormwater discharges originating from the Los Angeles County Region. The permit covers the land areas in the Los Angeles County Flood Control jurisdiction, unincorporated areas of Los Angeles County, and 84 cities within the County of Los Angeles. The City of Walnut is included in the MS4 Permit as a permittee under Order R4-2012-0175. In coordination with permittees under MS4 Permit, RWQCB staff perform annual performance reviews and evaluations of the City's stormwater management program and NPDES compliance activities (City of Walnut 2018a).

The Los Angeles RWQCB has issued Order No. 01-182 (amended April 14, 2011) and adopted NPDES Permit No. CAS004001 (December 10, 2012) for municipal stormwater and urban runoff discharges within the County of Los Angeles and the incorporated cities therein, except the City of Long Beach. In compliance with the permit, Los Angeles County has implemented a stormwater quality management program, entitled the Standard Urban Stormwater Mitigation Plan (SUSMP), with the goal of achieving the requirements of the permit and reducing the amount of pollutants in stormwater and urban runoff (Psomas 2016).

On April 30, 2003, as part of Phase II, the SWRCB issued a General Permit for the Discharge of Stormwater from Small MS4s (WQ Order No. 2003-0005-DWQ) to provide permit coverage for smaller municipalities (population less than 100,000), including non-traditional Small MS4s covering facilities such as military bases, public campuses, prisons, and hospital complexes. The Phase II Small MS4 General Permit covers Phase II Permittees statewide. On February 5, 2013, the Phase II Small MS4 General Permit (WQ Order No. 2013-0001-DWQ) was adopted and became effective on July 1, 2013. Attachment B of WQ Order No. 2013-0001-DWQ lists

designated Non-Traditional Small MS4 Permittees. According to that attachment, Mt. SAC has not been specifically designated for permit coverage under Phase II and therefore is currently not required to obtain permit coverage (Psomas 2016).

Stormwater Quality Requirements

The City of Walnut is a permittee under the current Municipal Separate Storm Sewer System (MS4) Permit for Los Angeles County (Order No. R4-2012-0175). In order to comply with the updated MS4 Permit, a "Low Impact Development (LID) Standards Manual" was developed by the County (2014) in advance of the final permit that details actions for compliance with the LID regulations, such as land development policies pertaining to LID and hydromodification for new development and significant redevelopment projects (City of Walnut 2018a). The MS4 Permit, effective December 28, 2012, contains requirements that are necessary to improve efforts to reduce the discharge of pollutants in stormwater runoff to the maximum extent practicable and achieve water quality standards (City of Walnut 2018a).

Low Impact Design (LID) is a design approach that attempts to minimize the impacts a project has on its surroundings by mimicking the site's natural state as closely as possible. The County of Los Angeles has adopted a LID Ordinance, which requires stormwater quality mitigation for a larger number of development and redevelopment projects than is required under SUSMP. This includes requirements for the preservation of a site's predevelopment hydrology by minimizing the loss of natural hydrologic processes such as infiltration, evapotranspiration, and runoff detention. The basic principles of LID include the design to capture, store, filter, evaporate, detain, and/or infiltrate runoff as close to the source as possible. LID attempts to keep runoff on site, in pervious areas, to allow for localized detention, evaporation, and infiltration and deviates from the traditional design of drainage control devices which attempt to capture surface runoff into subsurface pipes as soon as possible and convey the runoff away from the site (City of Walnut 2018a).

Hydromodification and Flow Control

The MS4 Permit also requires priority projects to identify Hydrologic Conditions of Concern (HCOCs) associated with a project. All Designated projects located within natural drainage systems that have not been improved or drainage systems that are tributary to a natural drainage system are required to implement hydromodification controls. Projects may be exempt from implementation of hydromodification control measures where assessments of downstream channel conditions and proposed discharge hydrology indicate adverse hydromodification effects to beneficial uses of natural drainage systems are unlikely.

Construction General Permit

The State Water Resources Control Board (SWRCB) has approved a Construction General Permit, which was adopted September 2, 2009, became effective July 1, 2010, and was amended July 17, 2012. Projects that disturb one or more acres of soil, or projects that disturb less than one acre but are part of a larger collective development plan that in total would disturb one or more acres, are required to obtain coverage under the Construction General Permit for discharges of stormwater associated with construction activity (Psomas 2016).

The Construction General Permit requires the development and implementation of a Stormwater Pollution Prevention Plan (SWPPP). The SWPPP should contain a site map, which shows the construction site perimeter; existing and proposed buildings, lots, roadways, and stormwater collection and discharge points; general topography both before and after construction; and

drainage patterns across the proposed Project. The SWPPP is required to list the Best Management Practices (BMPs) the proposed Project will utilize to protect stormwater runoff quality and identify the placement of those BMPs. Additionally, the SWPPP must contain a visual monitoring program, a chemical monitoring program for "non-visible" pollutants, and a sediment monitoring plan if the site discharges directly to a water body listed on the USEPA Section 303(d) list for sediment (Psomas 2016).

General Waste Discharge Requirements for Construction Non-Stormwater Discharges

If construction dewatering or discharges from other specific construction activities (e.g., water line testing, sprinkler system testing) are required, a proposed Project must comply with the requirements of General Waste Discharge Requirements (General WDRs) for Short-Term Groundwater-Related Discharges and De Minimus Wastewater Discharges to Surface Waters in the San Jose Creek/San Gabriel River Watershed. The General WDRs include provisions mandating notification, testing, and reporting of dewatering and testing-related discharges, and contain numeric and performance-based effluent limits depending upon the type of discharge. The General WDRs authorize such construction-related activities so long as all conditions of the permit are fulfilled.

Los Angeles Region Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties

The Water Quality Control Plan for the Los Angeles Region (Basin Plan)[3] is designed to preserve and enhance water quality and protect the beneficial uses of all regional waters (LARWQCB 2018). Specifically, the Basin Plan designates beneficial uses for surface and ground waters, sets narrative and numerical objectives to be attained or maintained for the protection of the designated beneficial uses and to conform to the State's antidegradation policy, and describes implementation programs to protect all waters in the Los Angeles Region Basin, including San Jose Creek and San Gabriel River (LARWQCB 2011). In the Basin Plan, specific criteria are provided for the larger designated water bodies within the region in addition to general criteria or guidelines for ocean waters, bays and estuaries, inland surface waters, and groundwater. In general, the narrative criteria require that degradation of water quality does not occur due to increases in pollutant loads that will adversely impact the designated beneficial uses of a water body. Water quality criteria apply within receiving waters as opposed to applying directly to runoff; therefore, water quality criteria from the Basin Plan are utilized as benchmarks for comparison in the quantitative assessments.

The Mt. SAC campus is located within the San Gabriel Watershed and is part of the San Gabriel River Watershed Management Area. Surface flow from the proposed Project enters the municipal storm drain system which outlets into the San Gabriel River and ultimately discharges into the Pacific Ocean (City of Walnut 2014). Table 4.9-1 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.

[3] The California Regional Water Quality Control Board, Los Angeles Region, adopted the Basin Plan on June 13, 1994. The Basin Plan was updated September 11, 2014 to include approved amendments.

TABLE 4.9-1
BENEFICIAL USES FOR RECEIVING WATER

Beneficial Uses	San Jose Creek (Reach 2)	San Gabriel River (Reach 3)
Municipal and Domestic Supply (MUN)	P*	P*
Industrial Service Supply (IND)	-	-
Industrial Process Supply (PROC)	-	-
Agricultural Supply (AGR)	-	-
Groundwater Recharge (GWR)	I	I
Freshwater Replenishment (FRSH)	-	-
Navigable Waters (NAV)	-	-
Hydropower Generation (POW)	-	-
Commercial and Sport Fishing (COMM)	-	-
Aquaculture (AQUA)	-	-
Warm Freshwater Habitat (WARM)	I	I
Cold Freshwater Habitat (COLD)	-	-
Inland Saline Water Habitat (SAL)	-	-
Estuarine Habitat (EST)	-	-
Estuarine Habitat (EST)	-	-
Marine Habitat (MAR)	-	-
Wildlife Habitat (WILD)	E	E
Biological Habitat (BIOL)	-	-
Rare, Threatened or Endangered Species (RARE)	-	-
Migration of Aquatic Organisms (MIGR)	-	-
Spawning, Reproduction and Development Waters (SPWN)	-	-
Shellfish Habitat (SHEL)	-	-
Water Contact Recreation (REC-1)	Pm	Im
Limited Water Contact Recreation (LREC-1)	-	-
Non-contact Water Recreation (REC-2)	I	I
High Flow Suspension	Yav	Yav

E: Existing beneficial use.

P: Potential beneficial use.

I: Intermittent beneficial use

E, P, and I shall be protected as required

a: Waterbodies are listed multiple times if they cross hydrologic areas or subarea boundaries. Beneficial use designations apply to all tributaries to the indicated waterbody, if not listed separately.

k: Public access to reservoir and its surrounding watershed is prohibited by Los Angeles County Department of Public Works.

m: Access prohibited by Los Angeles County Department in the concrete-channelized areas.

u: This reservoir is covered and thus inaccessible.

y: Currently dry and no plans for restoration.

av: The High Flow Suspension only applies to water contact recreational activities associated with the swimmable goal as expressed in the federal Clean Water Act section 101(a)(2) and regulated under the REC-1 use, non-contact water recreation involving incidental water contact regulated under the REC-2 use, and the associated bacteriological objectives set to protect those activities Water quality objectives set to protect (1) other recreational uses associated with the fishable goal as expressed in the federal Clean Water Act section 101(a)(2) and regulated under the REC-1 use and (2) other REC-2 uses (e.g., uses involving the aesthetic aspects of water) shall remain in effect at all times for waters where the (ad) footnote appears.

* Asterisked MUN designations are designated under SB 88-63 and RB 89-03.

Source: (LARWQCB 2011)

As identified in Table 4.9-1 above, the beneficial uses for waterbodies in the Los Angeles Region and the beneficial uses of San Jose Creek and San Gabriel River are:

MUN: Uses of water for community, military, or individual water supply systems

AGR: Uses of water for farming, horticulture, or ranching

PROC: Uses of water for industrial activities that depend primarily on water quality

IND: Uses of water for industrial activities that do not depend primarily on water quality

GWR: Uses of water for natural or artificial recharge of ground water for purposes of future extraction, maintenance of water quality, or halting of saltwater intrusion into freshwater aquifers

FRSH: Uses of water for natural or artificial maintenance of surface water quantity or quality

NAV: Uses of water for shipping, travel, or other transportation by private, military, or commercial vessels

POW: Uses of water for hydropower generation

COMM: Uses of water for commercial or recreational collection of fish, shellfish, or other organisms

AQUA: Uses of water for aquaculture or mariculture operations

WARM: Uses of water that support warm water ecosystems

COLD: Uses of water that support cold-water ecosystems

SAL: Uses of water that support inland saline water ecosystems

EST: Uses of water that support estuarine ecosystems

WET: Uses of water that support wetland ecosystems

MAR: Uses of water that support marine ecosystems

WILD: Uses of water that support terrestrial ecosystems

BIOL: Uses of water that support designated areas or habitats

RARE: Uses of water that support habitats necessary, at least in part, for the survival and successful maintenance of plant or animal species established under State or federal law as rare, threatened, or endangered

MIGR: Uses of water that support habitats necessary for migration, acclimatization between fresh and salt water, or other temporary activities by aquatic organisms, such as anadromous fish

SPWN: Uses of water that support high quality aquatic habitats suitable for reproduction and early development of fish

SHELL: Uses of water that support habitats suitable for the collection of filter-feeding shellfish for human consumption, commercial, or sports purposes

REC-1: Uses of water for recreational activities involving body contact with water, where ingestion of water is reasonably possible

LREC-1: Uses of water for recreational activities involving body contact with water, where full REC-1 use is limited by physical conditions

REC-2: Uses of water for recreational activities involving proximity to water, but not normally involving body contact with water, where ingestion of water is reasonably possible

High Flow Suspension: The High Flow Suspension shall apply to water contact recreational activities associated with the swimmable goal as expressed in the federal Clean Water Act section 101(a)(2) and regulated under the REC-1 use, non-contact water recreation involving incidental water contact regulated under the REC-2 use, and the associated bacteriological objectives set to protect those activities

Standard Urban Stormwater Mitigation Plan (SUSMP) and Los Angeles County Department of Public Works Hydrology Manual (2006)

The Los Angeles County Department of Public Works Hydrology Manual (2006) contains the SUSMP that applies to development and re-development projects within Los Angeles County. The SUSMP includes TMDLs for pollutants in CWA Section 303(d) and contains Best Management Practices (BMPs) for managing stormwater quality during construction projects. The Los Angeles County Department of Public Works Hydrology Manual also contains design techniques for storm drain systems (City of Walnut 2018a).

Walnut Municipal Code

Article IV, Standard Urban Stormwater Mitigation Plan

Walnut Municipal Code Article IV, Standard Urban Stormwater Mitigation Plan, requires new development and significant redevelopment projects (as described in the NPDES permit) to prepare a Standard Urban Stormwater Mitigation Plan (SUSMP). 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).

4.9.2 METHODS

Project-specific LID reports were prepared for the following proposed 2018 EFMP projects, which are being evaluated at a project-specific level in this Draft EIR: (1) Parking Structure R and Tennis Courts, (2) Parking Structure S and West Temple Avenue Pedestrian Bridge, and (3) Student Center and Central Campus Infrastructure. These LID reports describe the permanent stormwater BMPs that will be incorporated into the proposed Project in order to mitigate the impacts of pollutants in stormwater runoff. Conclusions and recommendations for BMPs developed based on this information are included in each site-specific LID report.

4.9.3 ENVIRONMENTAL SETTING

Following is a discussion of existing hydrology and water quality conditions pertinent to the analysis presented in this section.

Existing Drainage Patterns

Regional

The Mt. SAC campus is located within the San Gabriel River Watershed, discharging to San Jose Creek prior to discharging to Reach 3 of the San Gabriel River, and located within the San Gabriel River Watershed Management Area (SGRWMA) (City of Walnut 2015). Approximately 93 percent of the City of Walnut drains to the south, due to the topography and location of the San Jose Hills, and is tributary to the San Jose Creek. Stormwater and non-stormwater runoff is captured by catch basins and carried through a network of storm drains and open channels to multiple outfalls connected to San Jose Creek. San Jose Creek transports runoff approximately 12 miles to its convergence point with San Gabriel River Reach 3, which ultimately drains to the Pacific Ocean (City of Walnut 2015).

Mt. San Antonio College Campus

The Mt. SAC campus encompasses approximately 418.44 acres of existing development. Implementation of the proposed 2018 EFMP (Phases 1A, 1B, and 2) would increase impervious surfaces on site; however, the overall development would be similar in nature to existing conditions and include upgrades and improvements to existing infrastructure.

Surface flows contained within streets are conveyed to surrounding public streets. The existing campus storm drain infrastructure is designed to collect and convey stormwater to the public drainage system. Following the topography, campus infrastructure generally drains southward and conveys stormwater to several public main lines: an 84-inch reinforced concrete pipe (RCP) public main located in Grand Avenue, an 84-inch RCP public main located in Bonita Drive, and a 60-inch RCP storm drain located in Temple Avenue and Mt SAC Way. Existing stormwater runoff is gathered by a network of catch basins, area drains, and storm drains and directed into five main public storm drain lines that ultimately discharge to Snow Creek at the southwest end of campus (Psomas 2016). The western portions of campus generally drain to Snow Creek in the Wildlife Sanctuary. The system serving the eastern portions of campus generally drains to an unnamed tributary of Snow Creek that discharges into an existing 60-inch to 81-inch public storm drainage pipe.

Existing Water Quality

The campus, including the areas to be developed as part of the proposed 2018 EFMP, is currently developed with various uses associated with the college. Each of the receiving waterbodies identified above is listed on the CWA Section 303(d) list of impaired water bodies and/or those that have an associated TMDL (as further discussed above under Regulatory Setting). Table 4.9-2 provides an overview of the listed impairments and applicable TMDLs for each waterbody.

TABLE 4.9-2
RECEIVING WATERS, 303(D) LISTED IMPAIRMENTS, AND APPLICABLE TOTAL MAXIMUM DAILY LOADS

Water Body	303(d) Listed Impairments	Applicable TMDLs
San Jose Creek	Ammonia, Coliform Bacteria, pH, Total Dissolved Solids, Toxicity	N/A
San Gabriel River Reach 3	Indicator Bacteria	N/A
TMDL: total maximum daily load Source: BkF 2018; City of Walnut 2016		

Groundwater

The City of Walnut, and the Mt. SAC campus, is within the service area of the Walnut Valley Water District (WVWD). The WVWD service area includes all of the City of Diamond Bar together with portions of the cities of Walnut, Industry, West Covina, and Pomona and the eastern portion of the unincorporated Rowland Heights area. WVWD's service area encompasses approximately 29 square miles with 26,836 service connections (WVWD 2018).

WVWD operates two water distribution systems including the potable water distribution system and the recycled water distribution system. Groundwater underlying the WVWD's service area is of poor quality and is not presently used for the potable water supply system. However, approximately 30 to 40 percent of the total quantity of recycled water currently used is derived from the local, non-potable groundwater. WVWD uses a total of six wells to pump groundwater; one well pumps from the Spadra Basin and five wells pumping from the Puente Basin (City of Walnut 2018a).

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 and has a long history of producing groundwater for its own use. Reactivating three on-campus wells, developing additional groundwater wells, and implementing aggressive strategies to conserve water are the key elements of the college's water use optimization strategy. The college's water use includes on-campus domestic uses, landscape irrigation, athletic field irrigation, pasture and rangeland irrigation, and wildlife sanctuary uses. The college employs campus programs including technology-based conservation, effective landscaping design standards, and ongoing maintenance programs to optimize water conservation.

On-Site Groundwater Elevation

Based on groundwater data available from the California Department of Water Resources, California Geological Survey, and boring logs near the proposed 2018 EFMP site, there is evidence of relatively shallow groundwater underlying the campus. The site-specific geotechnical studies for the individual projects associated with the proposed 2018 EFMP indicate some areas of the campus have relatively shallow or perched[4] groundwater, although no springs or perennial stream flow in local drainages was observed based on older topographic maps (CGS 2018). These observations reflect site conditions at the time of the investigation and do not preclude

[4] Isolated from the larger underlying groundwater aquifer by geologic or soil conditions

changes in local groundwater conditions, localized seepage due to variations in rainfall, heavy irrigation, damaged structures (pipes, etc.), or altered site drainage pattern(s).

Soil Conditions

As discussed in Section 4.6, Geology and Soils, the Mt. SAC campus is located within an alluvial basin surrounded by hillsides consisting of sedimentary bedrock of the Monterey (Puente) Formation. The project-specific proposed 2018 EFMP sites (Bookstore, Parking Structure R and Tennis Courts, Parking Structure S and West Temple Avenue Pedestrian Bridge, Sand Volleyball Courts and Parking Lot W Reconstruction, and Student Center and Central Campus Infrastructure) are mainly underlain by fill soils (Af) placed during previous site grading operations, natural alluvial soils (Qal), and sedimentary bedrock of the Puente Formation (Tpss).The nearby hillsides have been mapped as (Tmy)-Yorba Shale Member consisting of thinly bedded, diatomaceous, semi-siliceous clay shale, siltstone and minor sandstone, and (Tscs) Sycamore Canyon Formation consisting of light gray sandstone that includes conglomerate and siltstone (Converse Consultants 2017a–c).

4.9.4 THRESHOLDS OF SIGNIFICANCE

According to Appendix G of the California Environmental Quality Act (CEQA) Guidelines, a Project will normally have a significant adverse environmental impact related to hydrology and water quality if it will:

- Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality.
- Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the Project may impede sustainable groundwater management of the basin
- 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 surface,, 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 off site;
    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
- In flood hazard, tsunami, or seiche zones, risk release of pollutants due to Project inundation
- Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan

Mt. SAC 2016 CEQA Thresholds of Significance

To the extent the following thresholds of significance are applicable to the proposed 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
Hydrology/Water Quality	Adequate facilities Water quality Erosion or exceed the capacity of the 2012 Utility Infrastructure Master Plan or 2016 Campuswide Stormwater Analysis	Non-compliance with an applicable SWPPP Non-compliance with an applicable WQMP	DPW's Hydrology Manual NPDES – SWPPP – WQMP regulations	Case studies Unless there are unusual circumstances, no additional mitigation for hydrology and water quality beyond that included in the latest approved FMP MMP.
CEQA: California Environmental Quality Act; DPW: Los Angeles County Department of Public Works; NPDES: National Pollution Discharge Elimination System; SWPPP: Stormwater Pollution Prevention Plan' WQMP: Water Quality Management Plan.				

4.9.5 ENVIRONMENTAL IMPACTS

Impact Analysis

Threshold 9.1	**Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade water quality?**

2018 Educational and Facilities Master Plan (Phases 1A, 1B, and 2)

Construction-Related Water Quality

Construction associated with the implementation of the proposed 2018 EFMP would primarily involve demolition/removal of existing structures, facilities, and utility infrastructure; construction of new buildings; and roadway and parking improvements. 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 [TSS] 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 2018 EFMP 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, for applicable proposed 2018 EFMP projects.

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.

Operational Water Quality

Development associated with the proposed 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 proposed 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 (refer to Exhibits 3-42, 3-43a–c, 3-44, 3-46a–c, 3-48, 3-50a-d, 3-51, and 3-52, in Section 3.0, Project Description, of this Draft EIR).

The anticipated pollutants of concern that may be generated on site as identified in Table 4.9-2, including 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 proposed 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 2018 EFMP 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 for individual proposed 2018 EFMP development projects to ensure compliance is maintained with all applicable NPDES requirements at the time of the proposed Project 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.

With implementation of MM HYD-1, the final BMP system for each individual project on campus as part of the proposed 2018 EFMP 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 for each development project and through preparation of final Water Quality Management Plans (WQMPs) for each development project; therefore, implementation of MM HYD-1 would reduce impacts related to water quality to less than significant levels.

Level of Significance Prior to Mitigation

Potentially significant.

Recommended Mitigation Measures

MM HYD-1 would reduce potentially significant impacts.

Level of Significance After Mitigation

Less than significant.

Project-Specific

Bookstore and Sand Volleyball Courts and Parking Lot W Reconstruction

Construction-Related Water Quality

Construction associated with implementation of the proposed 2018 EFMP would involve demolition/removal of existing buildings and infrastructure; construction of new buildings, parking structures, tennis courts, and Sand Volleyball Courts and Parking Lot W Reconstruction. Potential construction-related water quality impacts resulting from implementation of the individual projects associated with Phases 1A and 1B would be the same as identified above for the proposed 2018 EFMP, discussed above. The stormwater management system improvements for the Central Campus Precinct, which includes the Bookstore, are shown in Exhibit 3-52, Central Campus Precinct–Utility Plan in Section 3.0, Project Description, of this Draft EIR

As with implementation of the proposed 2018 EFMP, compliance with the Construction General Permit would ensure impacts to receiving waters from non-stormwater flows during construction are less than significant. No additional mitigation is required.

Operational Water Quality and Hydromodification

Potential operational water quality impacts resulting from implementation of Phases 1A and 1B projects, including the types of pollutants and receiving water bodies, would generally be the same as identified above for the proposed 2018 EFMP; the anticipated pollutants of concern that may be generated on site would result in a significant impact. However, implementation of MM HYD-2 requires that each of the individual projects incorporate permanent stormwater management features that would 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, as discussed previously.

Additionally, as previously identified, the individual projects associated with Phases 1A and 1B of the proposed 2018 EFMP have been determined to be exempt from hydromodification requirements since they discharge to concrete-lined channels. Therefore, no adverse hydromodification impacts to natural drainage systems would occur.

Parking Structure R and Tennis Courts

The proposed utility and infrastructure improvements are illustrated in Exhibits 3-43a-c, Parking Structure R and Tennis Courts – Utility Plan and 3-46a-c, Parking Structure R and Tennis Courts – Civil Paving and Grading Plan. In addition, the stormwater management system improvements for the South Temple Avenue Precinct is shown in Exhibit 3-51, South Temple Avenue Precinct - Stormwater Plan. Table 4.9-3 summarizes the Stormwater Quality Design Volume (SWQDv) for the implementation of the Parking Structure R and Tennis Courts project. The Parking Structure R and Tennis Courts project consists of approximately 50 percent impervious ground surface cover under existing conditions. Development of the proposed parking structure would increase

the amount of impervious surface area to 85 percent. In accordance with Chapter 12.84 of the Los Angeles County Municipal Code, the Parking Structure R and Tennis Courts project is determined to be a Designated Project and, therefore, is required to retain 100 percent of the SWQDv on site or provide biotreatment for 1.5 times the SWQDv. Thus, the entire development site must meet the requirements of the County of Los Angeles LID Manual, regardless of existing hydrologic conditions (Psomas 2018).

TABLE 4.9-3
PROPOSED HYDROLOGIC SUMMARY: 85TH PERCENTILE STORM EVENT-PARKING STRUCTURE R, PHASE 1A

		85th Percentile Storm Event				
	Area	Impervious	Time of Concentration	Q	SWQDv	SWQDv (treatment flow increased by 1.5) *
Sub- Area	(acres)	(%)	(min)	(cfs)	(ft^3)	(ft^3)
A	11.13	0.76	28	2.30	28,692	N/A
B	16.04	0.85	26	3.64	45,336	
C	2.55	0.85	24	0.603	7,214	10,821
E	1.93	1.00	22	0.518	6,267	N/A
F	0.80	1.00	15	0.256	2,592	
TOTAL	**32.45**			**7.317**	**93,708**	

Q: quantity
SWQDv: stormwater quality design volume
Min: minutes
cfs: cubic feet per second
ft^3: cubic foot
*Treatment flow is increased 1.5 times for biofiltration design per Los Angeles County LID guidelines.
Source: Psomas 2018

Based on the percolation testing performed at the Parking Structure R and Tennis Courts site, infiltration has been selected as the most feasible method for handling stormwater generated by the design storm (Psomas 2018). The exploratory boring located nearest the proposed detention basin has an average percolation rate of 1.81 inch per hour (in/hr). The exploratory boring located nearest the proposed Structure R and Tennis Courts bioswales has an average percolation rate of 0.54 in/hr (Psomas 2018). In addition to infiltration BMPs, source control measures are identified to be implemented for this specific project to prevent pollutants from contacting stormwater runoff or prevent discharge of contaminated stormwater runoff to the storm drain system and/or receiving waters. This includes a combination of source control measures of structural-type and non-structural-type to optimize pollution prevention. Implementation of the LID BMPs would prevent the potential for on-site flooding through the capture and detention of stormwater runoff and would prevent off-site flooding because there would be no increase to the discharge volumes entering the off-site storm drain system or the tributary water bodies.

The final BMP system for Parking Structure R and Tennis Courts project would be sized and the outlet structures designed to ensure that the post-development stormwater runoff and flows comply with the applicable requirements. This would occur during final design of this development project and through preparation of Final WQMPs for this specific project. Therefore, water quality impacts related to the Parking Structure R and Tennis Courts project would be reduced to less

than significant levels with implementation of MM-HYD-2 requiring implementation of recommended BMPs.

Parking Structure S and West Temple Avenue Pedestrian Bridge (including associated South Temple Avenue Green Corridor Improvements)

In accordance with Chapter 12.84 of the Los Angeles County Municipal Code, the Parking Structure S and West Temple Avenue Pedestrian Bridge project is determined to be a Designated Project and, therefore, is required to retain 100 percent of the SWQDv on site or provide biotreatment for 1.5 times the SWQDv. Thus, the entire development site must meet the requirements of the County of Los Angeles LID Manual, regardless of existing hydrologic conditions. The Parking Structure S and West Temple Avenue Pedestrian Bridge project site is currently a fully developed parking lot covered in asphalt pavement. No off-site drainage areas discharge stormwater onto the project site in the pre-project condition. The existing parking Lot S has an average slope of 2.2 percent draining from the north edge of the parking lot to the south edge, as illustrated in Exhibit 3-47 Parking Structure S and West Temple Avenue Pedestrian Bridge – Demolition Plan. Drainage sheet flows along the existing ground contours and is discharged at the driveway entrances on Stadium Way. As shown in Exhibit 3-44 Parking Structure S and West Temple Avenue Pedestrian Bridge – Utility Plan, Exhibit 3-48 Parking Structure S and West Temple Avenue Pedestrian Bridge – Grading and Drainage Plan, and Exhibit 3-51, South Temple Avenue Precinct – Stormwater Plan, following development of the proposed parking structure, stormwater runoff at the roof level of the new parking structure would drain toward a series of inlet grates which would convey the captured stormwater through internal storm drain pipes within the parking structure and discharge the flow into an underground storm drain pipe on the west side of the parking structure (BkF 2018a). Additional landscaped areas proposed along Temple Avenue, Bonita Avenue, and Stadium Way would serve to capture surface flows and allow for infiltration.

As shown in Table 4.9-4, Pre- and Post-Development Pervious and Impervious Surface Area – Parking Structure S and West Temple Avenue Pedestrian Bridge, Phase 1A, there would be an increase in impervious surfaces with development of Parking Structure S and West Temple Avenue Pedestrian Bridge from 67 percent to 80.8 percent.

TABLE 4.9-4
PRE- AND POST-DEVELOPMENT PERVIOUS AND IMPERVIOUS SURFACE AREA-PARKING STRUCTURE S AND WEST TEMPLE AVENUE PEDESTRIAN BRIDGE, PHASE 1A

Condition	Impervious Area (Acres)	Pervious Area (Acres)	Total Area (Acres)	Percent Impervious (%)
Pre-Project	2.59	1.27	3.86	67%
Post-Project	3.12	0.74	3.86	80.8%

The increase in pervious surface area would result in a corresponding increase in the volume of stormwater runoff. However, LID BMPs would be implemented, including the use of a biofiltration basin to the west where the SWQDv would be treated and released through an underdrain into the proposed storm drain and stormwater planter. Implementation of the LID BMPs would also prevent the potential for on-site flooding through the capture and detention of stormwater runoff and would prevent off-site flooding because there would be no increase to the discharge volumes entering the off-site storm drain system or the tributary water bodies.

The final BMP system for the Parking Structure S and West Temple Avenue Pedestrian Bridge project would be sized and the outlet structures designed to ensure that the post-development stormwater runoff and flows comply with the applicable requirements. This would occur during final design for this development project and through preparation of Final WQMPs for this development project. Therefore, water quality impacts related to the Parking Structure S and West Temple Avenue Pedestrian Bridge project would be reduced to less than significant levels with implementation of MM HYD-2 requiring implementation of recommended BMPs.

Student Center and Central Campus Infrastructure

As with the Parking Structure R and Tennis Courts and Parking Structure S and West Temple Avenue Pedestrian Bridge projects, the proposed Student Center and Central Campus Infrastructure site is also determined to be a Designated Project; therefore, the project site is required to retain 100 percent of the SWQDv on site or provide biotreatment for 1.5 times the SWQDv. As shown on Exhibit 3-49, Student Center and Central Campus Infrastructure – Demolition Plan, the existing Student Center and Central Campus Infrastructure site is currently occupied by three wood frame with exterior plaster buildings (buildings 17, 18, and 19B), one wood frame with wood board and batten siding with red brick (building 19A), one concrete masonry unit with brick veneer building (building 19C), and four wood framed and sided modular type buildings (modulars 16A, 16B, 16C, and 16D), pedestrian walkways, and landscaped areas. The existing project area has an average slope of 6.1 percent, draining in the southerly direction (BkF 2018b). Existing drainage is captured within landscape area drains and piped into an underground storm drain system. Following project construction, stormwater runoff at the roof level of the new Student Center building will tie into the proposed storm drain pipes within the Student Center building and discharge the runoff into an underground storm drain pipe on the west side of the Student Center site as illustrated in Exhibit 3-42, Student Center and Central Campus Infrastructure – Utility Plan, 3-50a-c, Student Center and Central Infrastructure – Grading and Drainage Plan and 3-52, Central Campus Precinct - Utility Plan. An underground infiltration system will be installed to treat the 12,869 cubic feet (cf) of SWQDv (BkF 2018a). The runoff would then be routed to underground storm capture infiltration vaults to the south where the SWQDv will be retained on site while additional overflow would be discharged through an emergency outlet that would discharge into the existing storm drain system to the south of the Student Center site. Additionally, implementation of the LID BMPs would prevent the potential for on-site flooding through the capture and detention of stormwater runoff and would prevent off-site flooding because there would be no increase to the discharge volumes entering the off-site storm drain system or the tributary water bodies.

The final BMP system for the Student Center and Central Campus Infrastructure project would be sized and the outlet structures designed to ensure that the post-development stormwater runoff and flows comply with the applicable requirements. This would occur during final design for this development project and through preparation of Final WQMPs for this development project. Therefore, water quality impacts related to the Student Center and Central Campus Infrastructure would be reduced to less than significant levels with implementation of MM HYD-2 requiring implementation of recommended BMPs.

Future development associated with implementation of the proposed 2018 EFMP would result in an increase in impervious area and would allow for less groundwater recharge when compared to existing conditions. However, the proposed 2018 EFMP and individual projects 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. Due to the surface water quality regulations identified above, the proposed 2018 EFMP would not substantially degrade groundwater quality interfere with groundwater quality.

Level of Significance Prior to Mitigation

Potentially significant.

Recommended Mitigation Measures

MM HYD-2 would reduce potentially significant impacts.

Level of Significance After Mitigation

Less than significant.

Threshold 9.2:	**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?**

2018 Educational and Facilities Master Plan (Phases 1A, 1B, and 2) and Project-Specific

As previously discussed, Mt. SAC purchases all of its potable water on a wholesale basis from 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. Future development associated with implementation of the proposed 2018 EFMP would result in an increase in impervious area and would allow for less groundwater recharge when compared to existing conditions. However, the proposed 2018 EFMP and individual projects 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 2018 EFMP would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the proposed 2018 EFMP 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.

Level of Significance Prior to Mitigation

Less than significant.

Recommended Mitigation Measures

No significant impacts were identified, and mitigation is not required.

Level of Significance After Mitigation

Less than significant.

Threshold 9.3 (i):	**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 result in substantial erosion or siltation on or off site?**
Threshold 9.3(ii):	**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 substantially increase the rate or amount of surface runoff in a manner which would result in flooding on or off site?**
Threshold 9.3(iii):	**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 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?**
Threshold 9.3(iv):	**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 impede or redirect flood flows?**

2018 Educational and Facilities Master Plan (Phases 1A, 1B, and 2) and Project-Specific

As previously discussed, surface stormwater runoff flows are collected by storm drain inlets at various locations around the campus and conveyed through underground storm drainage pipes. Surface flows contained within streets are conveyed to surrounding public streets. As discussed previously, the existing campus storm drain infrastructure is designed to collect and convey stormwater to the public drainage system. Following the topography, campus infrastructure generally drains southward and conveys stormwater to several public main lines: an 84-inch RCP public main located in Grand Avenue, an 84-inch RCP public main located in Bonita Drive, and a 60-inch RCP storm drain located in Temple Avenue and Mt SAC Way. 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 drain 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. Further, Mt. SAC is in the process of improving its stormwater management system.

In addition, a hydrology analysis would be required for each new building and site project 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 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.

No direct impacts to on-campus drainages would occur with implementation of the proposed 2018 EFMP including the individual projects proposed during Phases 1A and 1B. Further, development

of the proposed 2018 EFMP would not result in flooding on the site, or impede or redirect flood flows. During development of the Parking Structure F and North Bonita Pedestrian Bridge Replacement and East Temple Pedestrian Bridge project in Phase 2, associated improvements to the grading and drainage in the vicinity of the Temple Avenue Pedestrian Tunnel would be completed to address flooding that occurs during large storm events. Further, the improvements recommended in the proposed 2018 EFMP related to drainage infrastructure improvements would be implemented to prepare for future development in this area. The Temple Avenue Green Corridor project would serve to beautify the public frontage of the campus along both sides of Temple Avenue and would also development of BMPs such as bioswales and filtration planters to treat stormwater runoff. Additionally, the Farm Road project, intended to provide better separation between public and service traffic, would also provide stormwater benefits through the introduction of more green, pervious surfaces.

The amount of impervious surface on campus would increase with the proposed 2018 EFMP and would be associated with an increase in the rate and amount of runoff from the campus as discussed under Thresholds 9.1 and 9.2. LID BMPs would be designed to capture and treat the entire stormwater quality for the proposed 2018 EFMP site and ensure that the stormwater volumes discharging to the off-site storm drain system would not exceed existing conditions. Implementation of the LID BMPs would prevent the potential for on-site flooding through the capture and detention of stormwater runoff and would prevent off-site flooding because there would be no increase to the discharge volumes leaving the campus through the off-site storm drain system or the tributary water bodies.

The potential for increase in erosion and sedimentation with implementation of the proposed 2018 EFMP would also be less than significant during construction and operation. As identified previously, all individual projects recommended in the proposed 2018 EFMP would be required to comply with the Construction General Permit which would include implementation of an SWPPP and associated erosion- and sediment-control BMPs. Post-development sedimentation would be lower than pre-development concentration, since additional urbanized landscaping, impervious surfaces, and BMPs would reduce suspended sediment in runoff compared to the undeveloped existing condition illustrated in Exhibit 3-38, Existing Stormwater System.

With initial development on campus, backbone infrastructure, including storm drain lines, was installed to serve the anticipated future development. Existing (Exhibit 3-38 Existing Stormwater System) and proposed storm drain lines (Exhibits 3-42, 3-43a-c, 3-44, 3-46a-c, 3-48, 3-50a-d, 3-51, and 3-52) that would serve the proposed 2018 EFMP are shown on the Exhibits in Section 3.0, Project Description, of this Draft EIR. As described in Section 3.0, Project Description, the backbone infrastructure would be protected in place during construction and operation. Based on available information, it is not anticipated that upgrades to the backbone infrastructure would be required to implement facilities recommended in the proposed 2018 EFMP. However, as identified in the proposed 2018 EFMP, an update to Mt. SAC's Campus Utilities Infrastructure Plan will be prepared to ensure that essential services and systems would have enough capacity and would be available in time for the new facilities that will depend on them. In addition, a hydrology analysis would be required for each new building and site project 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 recommended in the proposed 2018 EFMP 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.

As discussed previously, LID BMPs would be implemented for individual development projects associated with the proposed 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, the conceptual storm drain plans and water quality treatment BMP 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 proposed 2018 EFMP 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 throughout this Draft 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 related to storm drain facilities would be less than significant.

Level of Significance Prior to Mitigation

Less than significant.

Recommended Mitigation Measures

No significant impacts were identified, and mitigation is not required.

Level of Significance After Mitigation

Less than significant.

Threshold 9.4:	**In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?**

2018 Educational and Facilities Master Plan (Phases 1A, 1B, and 2) and Project-Specific

According to the recently adopted *2018 City of Walnut General Plan's* (WGP) Public Safety Element, Figure PS-6: *Flood Hazards*, as based on the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps for the City of Walnut (Map Panel No. 06037C1725F and 06037C1695F), the Mt. SAC campus is not located within a 100-year flood hazard area designated by FEMA. In addition, the City of Walnut, including the Mt. SAC campus, does not lie within a dam inundation area, per the Los Angeles County All-Hazard Mitigation Plan (City of Walnut 2018b). Further, implementation of the proposed 2018 EFMP does not include a housing element. Therefore, implementation of the proposed 2018 EFMP and individual projects associated with Phases 1A and 1B would not result in impacts related to placing housing or structures within a 100-year flood hazard area.

The Puddingstone Reservoir is located 3 miles to the northeast; and, due to the intervening topography, the inundation area would not affect the campus (City of Walnut 2018b). Therefore, the proposed 2018 EFMP and individual projects associated with Phases 1A and 1B would not expose people or structures to a significant risk of loss, injury, or death involving flooding as a result of the failure of a levee or dam. The campus is located approximately 25 miles northeast of the Pacific Ocean and, therefore, would not be subject to inundation by tsunami. No impacts related to seiches or tsunamis would occur. Due to the City of Walnut's topography, adjacent

hillsides north of the project site may be susceptible to mudflow (City of Walnut 2018b). However, implementation of the proposed 2018 EFMP and individual projects associated with Phases 1A and 1B, which involves development on the existing campus, does not involve any uses that would cause inundation by mudflow; therefore, impacts would be less than significant.

Level of Significance Prior to Mitigation

Less than significant.

Recommended Mitigation Measures

No significant impacts were identified, and mitigation is not required.

Level of Significance After Mitigation

Less than significant.

Threshold 9.5:	**Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?**

2018 Educational and Facilities Master Plan (Phases 1A, 1B, and 2) and Project-Specific

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 2014). Table 4.9-1 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 Are. Implementation of the proposed 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 2018).

In addition, Implementation of the proposed 2018 EFMP would be required to comply with the Los Angeles County Department of Public Works Hydrology Manual (2006), including the SUSMP that applies to development and re-development projects within Los Angeles County. The SUSMP `includes TMDLs for pollutants in CWA Section 303(d) and contains Best Management Practices (BMPs) for managing stormwater quality during construction projects and design techniques for storm drain systems (City of Walnut 2018a).

In addition, development of the proposed 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 2018 EFMP would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan

Level of Significance Prior to Mitigation

Less than significant.

Recommended Mitigation Measures

No significant impacts were identified, and mitigation is not required.

Level of Significance After Mitigation

Less than significant.

4.9.6 CUMULATIVE IMPACTS

The geographic scope for hydrology and water quality includes watersheds draining to San Jose Creek/San Gabriel River Watershed. Past projects in the City of Walnut have converted undeveloped and agricultural land to urban uses resulting in residential and employment population increases and associated hydrologic and water quality impacts. The contribution of these past projects to area growth is also reflected in the recently adopted 2018 *City of Walnut General Plan* (WGP). The proposed 2018 EFMP and other new development anticipated in the WGP would result in changes to on-site land uses, primarily the conversion of undeveloped vacant land to urban uses. Such land conversion would result in increased impervious surfaces and would increase the amount and velocity of surface runoff. The provision of drainage system improvements sized to accommodate anticipated increase in stormwater flow, as a component of each individual project including the proposed 2018 EFMP, would ensure that project-specific impacts would be less than significant. With on-site stormwater detention systems, as described further above, the drainage from the proposed 2018 EFMP would not exceed existing conditions.

The surface runoff water quality from the campus with implementation of the proposed 2018 EFMP and associated LID/treatment and hydromodification BMPs, both during construction and post-development, would comply with adopted regulatory requirements that are designed by the Los Angeles RWQCB to ensure that regional development does not adversely affect water quality and flow durations of receiving streams. These regulatory requirements include the MS4 Permit requirements, Construction General Permit requirements, and TMDLs. Any future urban development occurring in the San Jose Creek/San Gabriel River Watershed must also comply with these requirements. Therefore, cumulative impacts on surface water quality of receiving waters from the proposed 2018 EFMP and future urban development in the San Jose Creek/San Gabriel River Watershed are addressed through compliance with the MS4 Permit requirements, Construction General Permit requirements, and TMDLs, which are intended to protect the beneficial uses of the receiving waters. Based on compliance with these requirements designed to protect beneficial uses, cumulative water quality and hydromodification impacts would be less than significant.

Therefore, the proposed 2018 EFMP would not result in a cumulatively considerable contribution to a significant cumulative impact related to hydrology or water quality within the San Jose Creek San Gabriel River Watershed.

4.9.7 MITIGATION MEASURES

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.

MM HYD-2 Prior to the issuance of a grading permits for the Bookstore, Sand Volleyball Courts and Parking Lot W Reconstruction, Parking Structure R and Tennis Courts, Parking Structure S and West Temple Avenue Pedestrian Bridge, and Student Center and Central Campus Infrastructure projects, recommendations from the *Preliminary Low Impact Development Report (LID) For Mt SAC Parking Structure [S]* (September 14, 2018) prepared by BkF*, Preliminary Low Impact Development Report (LID) For Mt. SAC Student Center* (September 27, 2018) prepared by BkF, and *Storm Water Low Impact Development (LID) Report Athletic Complex East Storm Water Improvements* (August 30, 2018) prepared by Psomas shall be included in the site preparation and building design specifications.

4.9.8 REFERENCES

BkF Engineers (BkF). 2018a (September 14). *Preliminary Low Impact Development Report (LID) For Mt SAC Parking Structure.* Newport Beach, CA: BkF.

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———. 2018b (May 9, adopted). *City of Walnut General Plan* (Public Safety Element). Walnut, CA: the City. http://www.cityofwalnut.org/home/showdocument?id=12022.

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4.10 LAND USE AND PLANNING

Information presented in this section is based on field reconnaissance; review of aerial photographs; relevant State, local, and regional planning documents and regulations identified in this section. Documents related to the preservation of biological resources are discussed in Section 4.3, Biological Resources, of this Draft Environmental Impact Report (EIR).

During the Notice of Preparation (NOP) comment period, the City of Walnut (City) indicated that the Draft EIR should describe the authority and responsibilities of the Mt. San Antonio Community College District (Mt. SAC) and the City under the Memorandum of Agreement (MOA) and include a copy of the MOA in the Draft EIR. Also, the City indicated that compliance with the provisions of the MOA should be evaluated in the Draft EIR. The MOA is included in Appendix A of this Draft EIR, and the evaluation of the proposed 2018 Educational and Facilities Master Plan's (2018 EFMP's) compliance with the MOA provided in this section. It is noted however that the MOA states it is an agreement "in principle" and is subject to a formal and comprehensive written settlement agreement approved by the governing bodies of Mt. SAC and the City, which has not yet occurred.

The Southern California Association of Governments (SCAG) requested a copy of the environmental documentation at the start of the public comment period and a consistency analysis with the *2016–2040 Regional Transportation Plan/Sustainable Communities Strategy* (2016–2040 RTP/SCS) goals, strategies, and growth forecasts. The requested consistency analysis is provided in this section.

Both NOP comment letters are included in Appendix A of this Draft EIR.

4.10.1 REGULATORY SETTING AND RELATED PLANNING PROGRAMS

State

Regulation of Local Agencies

California Government Code (CGC) Section 53094 states:

(a) Notwithstanding any other provision of this article, this article does not require a school district to comply with the zoning ordinances of a county or city unless the zoning ordinance makes provision for the location of public schools and unless the city or county has adopted a general plan.

(b) Notwithstanding subdivision (a), the governing board of a school district, that has complied with the requirements of Section 65352.2 of this code and Section 21151.2 of the Public Resources Code, by a vote of two-thirds of its members, may render a city or county zoning ordinance inapplicable to a proposed use of property by the school district. The governing board of the school district may not take this action when the proposed use of the property by the school district is for non-classroom facilities, including, but not limited to, warehouses, administrative buildings, and automotive storage and repair buildings.

Relevant to Mt. SAC, on September 5, 2018, the City of Walnut Planning Commission adopted PC Resolution No. 18-12 recommending that the City Council adopt Zoning Code Amendment (ZCA) No. 2018.01, Zone Change (ZC) No. 2018-02, and Negative Declaration (ND) No. 2018-01 to establish the School and Public Institution Ordinance and Zone(s) for consistency with the recently adopted 2018 *City of Walnut General Plan* (2018 WGP). On January 9, 2019, The ZCA and ZC were presented to the Walnut City Council for review and the Council moved to continue the item until the settlement agreement between Mt. SAC and the City of Walnut is approved and enforceable. As noted above, at this time the settlement agreement has not been finalized or approved by the governing bodies Mt. SAC and the City. Relevant components of the ZCA and ZC are discussed below under the City of Walnut. With adoption of the ZCA and ZC, which involves zoning the portion of the Mt. SAC campus east of Grand Avenue as Schools and Public Institutional zone, Mt. SAC would be required to comply with established zoning regulations. For educational facilities, the Mt. SAC Board of Trustees may exempt Mt. SAC from the City's zoning requirements, pursuant to the provisions of CGC Section 53094(b).

Division of the State Architect

The State of California Department of General Services Division of the State Architect (DSA) issued policy PL 18-01 on November 26, 2018 which provides clarification of the requirements for DSA approval of plans and certification of construction for state-owned, state-leased or privately-owned towers and poles used for communication, antenna, and equipment mounted on the towers, poles, and buildings.

Regional

With respect to regional planning, SCAG is the Metropolitan Planning Organization (MPO) for six counties: Los Angeles, Orange, San Bernardino, Riverside, Ventura, and Imperial. The region encompasses a population exceeding 19 million persons in an area of more than 38,000 square miles. As the designated MPO, the federal government mandates SCAG to research and draw up plans for transportation, growth management, hazardous waste management, and air quality. Among other responsibilities, SCAG reviews EIRs for projects of regional significance for consistency with approved regional plans (SCAG 2018a). SCAG uses Section 15206 of the State CEQA Guidelines to determine if a proposed Project is regionally significant (SCAG 2018b).

Mt. SAC's service area covers 189 square miles, and approximately 40 percent of students reside outside this service area (Mt. SAC 2018a). The recommended development and campus improvements under the proposed Project have the potential to cause significant effects (e.g., generating traffic or contributing to pollutant emissions) on the environment that could extend beyond the City of Walnut where the proposed Project would be located. Thus, the proposed Project is considered regionally significant.

As such, the regional plan that is most relevant to the proposed 2018 EFMP is SCAG's 2016–2040 RTP/SCS, approved on April 7, 2016. In addition to meeting federal and State transportation planning requirements, the 2016–2040 RTP/SCS (an update to the 2012 RTP/SCS) includes a chapter to comply with California's Senate Bill (SB) 375 mandate for a regional SCS. Per SB 375, the RTP/SCS must outline growth strategies that better integrate land use and transportation planning and help reduce the State's greenhouse gas emissions from cars and light trucks.

The 2016–2040 RTP/SCS highlights regional changes that have affected the development of the plan since the 2012–2035 RTP/SCS, including the region's fluid and dynamic demographic and housing market; the passage of the Moving Ahead for Progress in the 21st Century Act (MAP-21); State legislation on transportation funding; the rapid advancement of new technologies such as real-time traveler information, on-demand shared mobility services enabled by smartphone applications, or ride-sourcing, car share, and bike share; and the State's continued emphasis on reducing greenhouse gas (GHG) emissions. The 2016–2040 RTP/SCS was also developed with recognition of the progress the region has made since preparation of the 2012–2035 RTP/SCS. The goals of the 2016–2040 RTP/SCS have remained unchanged since the 2012–2035 RTP/SCS. The 2016–2040 RTP/SCS is expected to reduce per capita transportation emissions by 8 percent by 2020 and by 18 percent by 2035 (SCAG 2016).

The 2016–2040 RTP/SCS identifies "High Quality Transit Areas" (HQTAs), which are places where people live in compact communities and have ready access to a multitude of safe and convenient transportation alternatives to driving alone—including walking and biking, taking the bus, light rail, commuter rail, the subway, and/or shared mobility options. The overall land use pattern in the 2016–2040 RTP/SCS focuses jobs and housing in the region's designated HQTAs that have been identified in the region. The RTP/SCS assumes that 46 percent of new housing and 55 percent of new employment locations developed between 2012 and 2040 will be located within HQTAs, which comprise only three percent of the total land area in the SCAG region. As shown in Exhibit 4.10-1, Mt. SAC is wholly within a HQTA that extends along Temple Avenue.

Local

Mt. San Antonio College

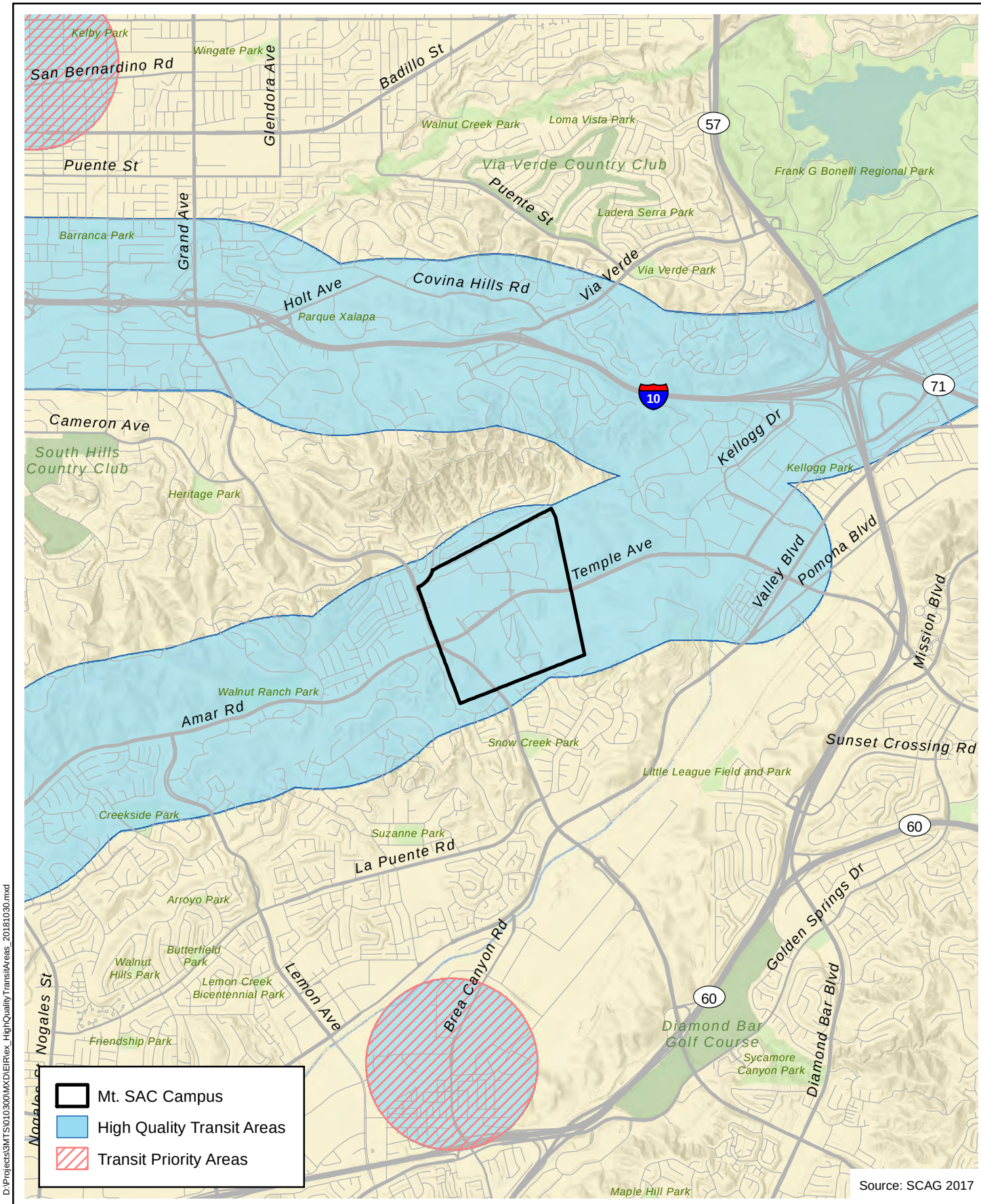
2008–2009 Educational Master Plan

Educational Master Plans (EMPs) consider the current space and personnel status for a campus and project future needs in both categories. The current Educational Master Plan (EMP) for Mt. SAC is the 2008–2009 Educational Master Plan, which was developed for the purpose of projecting the college's programs and services needs to the year 2020.

The 2008–2009 EMP serves as the foundation for Mt. SAC's other planning activities. The EMP looks at the demographic characteristics and economic conditions of the existing and projected population and enrollment. This information is then translated to program changes, service needs, staffing requirements, and space qualifications. Based on these, the EMP makes recommendations on the educational programs and services and facilities needed to meet enrollment and personnel projections, improvements to spaces and facilities (including new facilities, modifications to existing facilities, and maintenance needs), and refinements to the planning and research process. The EMP specifically provides the information on enrollment and personnel projections and program and space needs for use in Mt. SAC's Facilities Master Plan. The 2008–2009 projected an enrollment (headcount) of 31,984 students by fall 2020 (Mt. SAC. For comparison, Mt. SAC's student enrollment in fall 2017 was 37,864 students.

The 2015 Addendum to the 2008–2009 EMP addresses the Agricultural Sciences Department instructional programs at The Farm. It looks at existing enrollment and projected growth, identifies department facilities and needs, evaluates instructional programs, acknowledges emergent issues in agriculture, and provides recommendations to strengthen the programs and improve facilities (Mt. SAC 2015).

The proposed 2018 EFMP is intended to replace the 2008-2009 EMP.



Source: SCAG 2017

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High Quality Transit and Transit Priority Areas

Exhibit 4.10-1

Mt. SAC 2018 Educational and Facilities Master Plan EIR

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Facilities Master Plans

Facilities Master Plans (FMPs) were previously prepared for Mt. SAC in 2002, 2005, 2008 and 2012, and each of these FMPs was subject to environmental review pursuant to the California Environmental Quality Act (CEQA). The *Mt. San Antonio College 2012 Facilities Master Plan Campus Final Program EIR* (SCH 2002041161) was certified by the Board of Trustees in December 2013. Subsequently, the Board of Trustees approved the 2015 Facilities Master Plan Update (2015 FMPU) in October 2016. As further described in Section 3.3, Project Background, of this Draft EIR. The 2015 FMPU revised the land plan included in the 2012 FMP, to further define prior projects that had not been constructed, to provide future facilities corresponding to the college enrollment projections prepared by the California Community College Chancellor's Office, and to evaluate several new projects not included in the 2012 FMP (Mt. SAC 2016a, 2016b). The *2015 Facilities Maser Plan Update and Physical Education Project Final Subsequent/Program/Project EIR* (FMPU/PEP 2016 SEIR) evaluated the 2015 FMPU at a program-level, and Phases 1 and 2 of the Physical Education Projects (PEP) at a project-level (Mt. SAC 2016a).

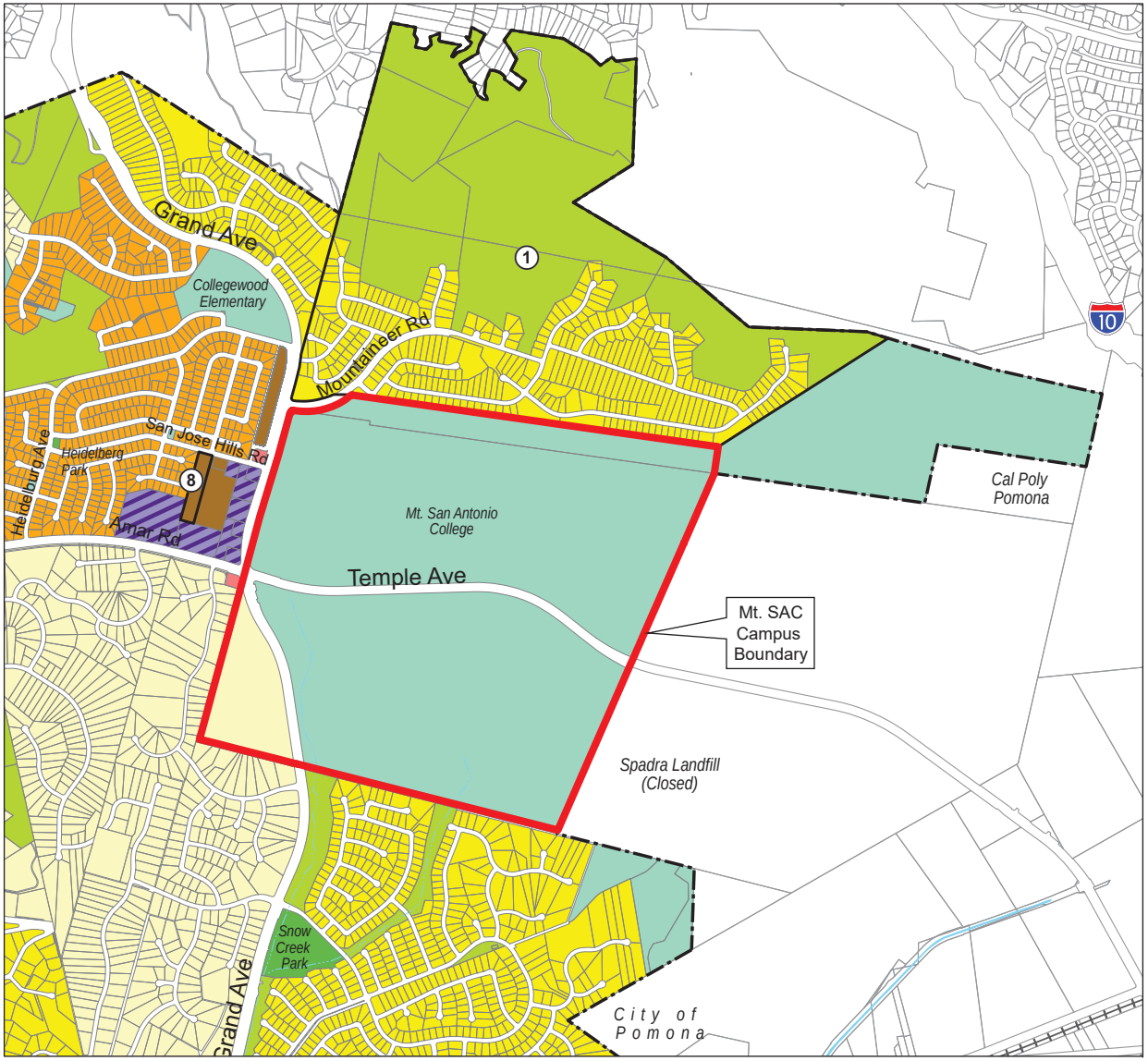
The current 2015 FMPU anticipates the development of new facilities; expansion, renovation, and demolition of existing facilities; and various campus improvements that include a library, learning resources, campus center, a student center, renovation and expansion of various buildings, a public transportation center, fire training academy, instructional buildings, a parking structure, soccer restrooms, West Parcel solar and retail, wildlife sanctuary improvements, two water towers, drives and parking, reclaimed water storage, Phases 1 and 2 of the PEP, a pedestrian overcrossing at Bonita Drive and Temple Avenue, an emergency communication tower, and demolition of the Hilmer Lodge Stadium/auxiliary buildings. The 2015 FMPU anticipated that the campus would have 1,552,072 assignable square feet (asf) and approximately 2.0 million gross square feet (gsf) by the projected buildout year of 2025. It should be noted that the proposed 2018 EFMP includes various projects anticipated in the 2015 FMPU.

City of Walnut General Plan

The recently adopted 2018 *City of Walnut General Plan* (2018 WGP) was subject to a comprehensive update and the new 2018 WGP was adopted on May 9, 2018. The update acknowledged the need for coordination with Mt. SAC on-campus development projects and compatibility with adjacent land uses. The recently adopted 2018 WGP establishes a vision for the City and serves as the City's policy framework for decision-making related to land use, growth and development, safety, and open space conservation. It reflects the values of residents, business owners, and elected officials and includes a comprehensive strategy to achieve its vision (Walnut 2018a). The recently adopted 2018 WGP consists of seven chapters that correspond to the elements required by State law.[1]

The Land Use Plan in the recently adopted 2018 WGP includes a Schools and Public Institutional (SPI) land use designation for public and quasi-public uses such as schools (public and private), colleges, universities, libraries, fire and police stations, water reservoir sites, and the City Hall complex. The campus area occupied by Mt. SAC east of Grand Avenue is designated as SPI and the campus area west of Grand Avenue is designated as Very Low Density Residential. Exhibit 4.10-2 shows the land use designations for areas on and near the campus.

[1] The seven elements mandated by State law are Land Use, Circulation, Housing, Conservation, Open Space, Noise, and Safety.



Specific Plans

1. Specific Plan No. 1
2. Walnut Grove Senior Housing Specific Plan
3. Specific Plan No. 3
4. Francesca Mixed Use Specific Plan
5. Walnut Esplanade
6. Snow Creek Village Specific Plan
7. West Valley Specific Plan
8. San Jose Hill Road Residential Specific Plan
9. Specific Plan Required

Land Use Designations

- Very Low Density (0.5 to 2.0 DU/AC)
- Low Density (2.1 to 4.0 DU/AC)
- Low Medium Density (4.1 to 6.0 DU/AC)
- Medium Density (6.1 to 14.0 DU/AC)
- Walnut Hills Mixed Use (14.0 to 28.0 DU/AC)
- West Valley Mixed Use (14.0 to 28.0 DU/AC)
- Mt. SAC Mixed Use (14.0 to 28.0 DU/AC)
- Commercial
- Industrial
- Parks and Recreation
- Open Space
- Schools and Public Institutional
- Specific Plans

Base Map Features

- City Boundary
- Creeks
- Railroad
- San Jose Creek

Source: MIG, Inc. and City of Walnut, 2018.
Date: May 2018

Feet
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Source: City of Walnut 2018

Existing General Plan and Land Use Plan

Exhibit 4.10-2

Mt. SAC 2018 Educational and Facilities Master Plan EIR

PSOMAS

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Goals and policies in the recently adopted 2018 WGP that address Mt. SAC include:

Policy C-2.4: Safe Routes to School Plan
Work with school districts to develop a Safe Routes to School plan, creating a plan for each school in Walnut to expand on school safety programs. Encourage Mt. San Antonio College and Cal Poly Pomona to also plan for safer bicycle and pedestrian access by college students, staff, and faculty. Measures can include evaluation of streets around schools and improvements to student drop-off and pick-up zones. Identify engineering, enforcement, education, and evaluation improvements that maximizes pedestrian safety.

Policy C-5.5: Higher Education Connectivity
Consult with transit agencies, Mt. San Antonio College, and Cal Poly Pomona to continue to invest in transit amenities and programs that encourage increased transit ridership by students, staff, and faculty.

Policy COR-2.5 Ecological Reserve and Sanctuary
Coordinate with Mt. San Antonio College and Cal Poly Pomona to preserve, enhance, and promote the Mt. SAC Wildlife Sanctuary and the Voorhis Ecological Reserve.

Policy COR-8.2: Local Artists
Work with the community, local schools, Mt. San Antonio College, and local artists to design and implement artistic and cultural features throughout the City and on public properties.

Goal CFI-10 - Managed growth of Mt. San Antonio College and Cal Poly Pomona that provides benefits to both the City and these institutions

Policy CFI-10.2: Higher Education
Support Mt. San Antonio College's and Cal Poly Pomona's comprehensive education programs to promote continuing education and career advancement while minimizing negative impacts on surrounding neighborhoods.

Policy CFI-10.2: Supportive Relationships
Encourage Mt. San Antonio College and Cal Poly Pomona to conduct transparent and open processes for allowing community input on decisions related to campus growth and facility and infrastructure improvements.

Policy CFI-10.3: College Development
Continue to enforce City Zoning Code regulations, City General Plan guidelines, and State and land use law as they may pertain to any proposed development or expansion associated with Mt. San Antonio College and Cal Poly Pomona.

Policy CFI-10.4: Minimizing Campus Impacts
Consult with Mt. San Antonio College and Cal Poly Pomona to identify, minimize, or mitigate potential impacts of campus development projects on adjoining residential neighborhoods.

Policy CFI-10.5: Joint Education Programs
Explore opportunities for City consultation with Mt. San Antonio College and Cal Poly Pomona to implement joint projects that would mutually benefit the City and these institutions.

Policy PS-3.1: Earthquake Preparedness
Conduct earthquake preparedness education campaigns in coordination with regional and State agencies, as well as local school districts and colleges. Education campaigns should

engage with the whole community and target public behavior changes around earthquake preparedness.

The implementing actions of the City also include working with outside agencies such as Mt. SAC to support continuing education efforts, reduce impact to surrounding communities, explore infrastructure needs and possible joint projects, and preserve, enhance, and promote the Mt. SAC Wildlife Sanctuary. Following is a description of the Figures of the General Plan that include information relevant to Mt. SAC.

- **Figure LCD-11: Community Design Plan** shows a Major Gateway at the intersection of Grand Avenue and Temple Avenue and a Minor Gateway at the eastern City boundary at Temple Avenue. A Historical/Cultural Landmark is also located near the southeastern corner of Grand Avenue and Temple Avenue (Mt. SAC Wildlife Sanctuary) and two Creek Corridors east of Temple Avenue (Snow Creek and a tributary).
- **Figure C-2: Street Classification** designates Grand Avenue and Temple Avenue (east of Grand Avenue) as Major Arterials.
- **Figure C-8: Trails Plan and Figure COR-4: Trails Plan** shows a proposed trail on the west side of Grand Avenue from Temple Avenue to Snow Creek Drive.
- **Figure C-9: Collision Types** shows collisions on Grand Avenue, Temple Avenue, and other City streets that occurred between 2003 and 2012.
- **Figure COR-1: Open Spaces and Natural Resources** shows the Mt. SAC Wildlife Sanctuary near the southeast corner of Grand Avenue and Temple Avenue, with Snow Creek running southerly from Temple Avenue, through the sanctuary, and roughly parallel to and east of Grand Avenue. Another creek/channel runs southerly from the southeastern section of the campus toward Snow Creek Park. The eastern edge of the campus north of Temple Avenue is also designated as a Significant Ecological Area in Figure COR-1.
- **Figure COR-2: Historical and Culturally Significant Sites** identifies the Mt. SAC Wildlife Sanctuary, which is also listed in Table COR-2: Historical and Culturally Significant Sites, as a 10-acre nature preserve located at 1100 North Grand Avenue and established in 1964 to preserve natural habitat in the City.
- **Figure CFI-1: Water Districts** shows the campus is served by the Three Valleys Municipal Water District.
- **Figure CFI-3: Schools** identifies the campus area east of Grand Avenue as the Mt. SAC campus.
- **Figure PS-1: Sheriff Station Accessibility** shows that the campus is 2 to 5 miles from the Walnut/Diamond Bar Sheriff Station.
- **Figure PS-2: Fire Station Boundaries** shows that the campus is 1 to 3 miles from Los Angeles County Fire Station No. 146.
- **Figure PS-4: Seismic Hazards** shows liquefaction and landslide hazards on various portions of the site.
- **Figure PS-5: Hazardous Materials** shows Mt. SAC as a large quantity generator and the presence of three small quantity generators and one large quantity generator at the northwest corner of Grand Avenue and Temple Avenue (Walnut 2018a).

City of Walnut Planning and Zoning Ordinance

Chapter 6.08 of Title 6, Planning and Zoning, of the Walnut Municipal Code includes the City's Zoning Provisions, which regulate development in the City. It establishes zones in a zoning map and includes development standards (e.g., building setbacks, building height, yards, vision clearance, lot area), permitted principal, accessory, and conditional uses; parking requirements; sign standards; and reviews, licenses, and permits needed to comply with the applicable zone. Based on the current Zoning Map, the area occupied by Mt. SAC east of Grand Avenue is zoned as Residential Planned Development (RPD)–61,700–0.6 DU with a Civic Center Overlay and the area west of Grand Avenue and south of Temple Avenue is zoned RPD–28,500–1.3 DU. The number after the zone is the minimum lot area and the suffix is the allowable overall net acre density (Walnut 2018b). Chapter 6.24, RPD Residential Planned Development Zone of the Code includes the permitted uses and guidelines for the RPD zone.

As noted previously, as part of the consistency zoning process (i.e., to make the zoning code consistent with the recently adopted 2018 WGP), the City is proposing the creation of an SPI zone, including development standards; permitted, conditionally permitted, and prohibited uses, and other regulations for the SPI zone. Relevant to the proposed 2018 EFMP, the campus area east of Grand Avenue is proposed to be rezoned to SPI. The proposed ZCA and ZC were recommended by the Walnut Planning Commission to the City Council for approval on September 5, 2018 (Walnut 2018c). On January 9, 2019, The ZCA and ZC were presented to the Walnut City Council for review and the Council moved to continue the item until the settlement agreement between Mt. SAC and the City of Walnut is approved. At this time the settlement agreement has not been finalized and has not been presented for approval by the governing bodies of Mt. SAC and the City.

Table 4.10-1 identifies the permitted, conditionally permitted and prohibited uses in this zone.

TABLE 4.10-1
PERMITTED, CONDITIONALLY PERMITTED, AND PROHIBITED USES IN SCHOOLS AND PUBLIC INSTITUTIONAL ZONE

Entitlement	Uses and Activities
Permitted Uses	• City buildings and facilities (i.e., City Hall, Teen Center) • County, State and Federal buildings and facilities • Libraries and museums • Fire and Police Stations • Public schools, colleges, universities and related classroom facilities • Public transit centers/transportation facilities, including city park-and-ride lots • Pedestrian bridges (in connection with a public use) • Utility infrastructure/facilities • Parking facilities • Wildlife preserves • Other similar types of public facilities and related amenities on publicly owned land • Emergency operations and facilities equipment
Conditional Use Permit (CUP)[a]	• Open-air market activities, such as a cooperatively sponsored farmer(s) market(s), concerts or food trucks • Energy-generating infrastructure/facilities, including but not limited to, solar and wind powered farms • Auditoriums, concert halls, theaters, convention or conference centers • Student and faculty housing • Complementary childcare facilities serving principal public, governmental or educational facilities • Complementary commercial retail, restaurant, or office facilities and buildings serving principal public, governmental or educational facilities • Other non-classroom facilities, including but not limited to, warehouses, administrative buildings, and automotive storage and repair buildings • Sports complexes, such as stadiums
Prohibited Uses	• Uses not specifically listed, except when a use is similar to, and not detrimental to, uses and activities specified, subject to Planning Commission review and approval

[a] Does not apply to classroom facilities exempt from City zoning pursuant to applicable state law.

Source: City of Walnut 2018d

In summary, proposed development standards applicable to non-classroom facilities on campus include:

- Site development plan review by the Planning Commission
- Maximum building height of 3 stories and no more than 35 feet
- Setbacks of 20 feet from public rights-of-way, 25 feet from residential properties, 300 feet between residential properties and on-campus parking facilities (including, but not limited to, parking garages or transit centers but excluding surface parking lots and public utility services [e.g., water pump stations and electrical substations])
- Compliance with landscaping standards for water efficient landscaping and off-street parking requirements in the Walnut Municipal Code
- Screening from public views or enclosure of trash receptacles, mechanical equipment and other utilities
- A community theme for walls, fences, screening and enclosures, as approved by the Community Development Department
- Improvement of public sidewalks and filling of gaps in pedestrian accessibility
- Compliance with requirements for areas visible from the public right-of-way, telecommunication and emergency operations equipment, and sign regulations in the Walnut Municipal Code (Walnut 2018e)

Memorandum of Agreement Between the City of Walnut and Mt. SAC

The City of Walnut filed lawsuits related to the environmental documentation and approval of the Mt. SAC Physical Education Project (Phases 1, 2) (PEP) and West Parcel Solar Project. On April 12, 2018, Mt. SAC and the City of Walnut entered into a Memorandum of Agreement (MOA) that established mutual understanding of the scope of work for the West Parcel, the Stadium (PEP) project, parking structures, and future projects at Mt. SAC. The MOA is included in Appendix A of this Draft EIR. The West Parcel Site Improvements and PEP (Phase 1) projects are under construction and are being implemented in accordance with the MOA. With respect to parking structures and future projects, key provisions of the MOA are summarized below:

<u>Parking Structures</u>

- The Master Plan will not include a parking structure in existing Parking Lot A; surface parking is allowed.
- Any parking structure will maintain a setback of no less than 400 feet from the nearest single-family residential property and Mt. SAC will “meet and confer” with the City to evaluate the potential impacts of the parking project on nearby residents.
- Mt. SAC will consider the location of a parking project near the Mt. SAC Transit Center and will evaluate the benefits of prioritizing the siting of future parking structures in proximity to the Mt. SAC Transit Center and along Temple Avenue.

<u>Future Projects</u>

- Mt. SAC will notify the City in writing regarding commencement and/or implementation of either Master Plan project or Master Plan Updates and adoption of any Government Code

Section exemption (including but not limited to Sections 53091 and 53094) pursuant to the timing agreed to in the MOA.

- The City and Mt. SAC will meet and confer on substantive planning and development projects that impact both parties, including but not limited to: Mt. SAC projects included in the proposed 2018 EFMP and FMP updates; FMPs and FMPUs, future Mt. SAC projects, updates to the City's General Plan, City zoning changes affecting the Mt. SAC campus, and City long range development plans.
- The City agrees that Mt. SAC has its own municipal separate storm sewer systems (MS4) permitting authority under a statewide permit. The City further agrees that its authority to review and approve grading plans for all future Mt. SAC exempt education facilities will be administrative review and approval of grading/drainage plans by the City's Building Official upon the submission of the complete grading application and such review and approval will be pursuant to technical design and construction standards of on-site improvements which affect grading and drainage.
- To allow for improved coordination, the City and Mt. SAC will re-establish quarterly meeting, and will conduct additional informal consultations/notifications prior to formal notice and publicity of new projects, events, etc.

As noted above, the MOA is a document that sets forth the mutual understanding of Mt. SAC and the City with respect to the above subject matters. The MOA is an "agreement in principle" and is not binding or enforceable until the governing bodies of both Mt. SAC and the City approve the settlement agreement, which has not yet occurred.

4.10.2 ENVIRONMENTAL SETTING

Mt. SAC Campus

The Mt. SAC campus encompasses 418.44 acres located north and south of Temple Avenue east of Grand Avenue, with the "West Parcel" located west of Grand Avenue and south of Amar Road/Temple Avenue. Mountaineer Road and Edinger Way form the northern boundary of the campus and the eastern boundary is consistent with the City of Walnut's eastern boundary. Exhibit 4.10-3 provides an aerial photograph of the campus and surrounding areas.

Exhibit 3-3 in Section 3.0, Project Description, depicts the current land use zones at Mt. SAC. With respect to physical development, the campus is currently developed with various educational (e.g., classrooms, class laboratories, athletics facilities) and support uses (offices, library, assembly and meeting rooms, child care, audiovisual, radio and television facilities), as allowed by the 2015 FMPU. Primary educational buildings and uses are located north of Temple Avenue and east of Grand Avenue on approximately 160 acres of gently sloping terrain. Agriculture buildings, facilities, and uses ("The Farm") are located on gently sloping and hilly areas covering approximately 70 acres, at the northeastern section of campus. The 10-acre wildlife sanctuary and an additional 16 acres of open space are located south of Temple Avenue near Grand Avenue, with a surface parking lot and athletic facilities located on a relatively flat 91-acre portion of campus area south of Temple Avenue and east of Grand Avenue. In addition, the southeastern section of campus (approximately 26 acres of hilly terrain) is preserved as a Land Use Management and Grazing Area. The campus areas west of Grand Avenue are undeveloped and include an area preserved as habitat for sensitive plant and animal species (Mt. SAC 2018a).

Aerial Source: Esri, DigitalGlobe 2017

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Aerial Photograph

Exhibit 4.10-3

Mt. SAC 2018 Educational and Facilities Master Plan EIR

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The existing buildings on campus include classroom buildings, art center, art gallery, performing arts center, gymnasium, café, bookstore, student services buildings, administrative offices, science buildings, planetarium, technology center, wellness center, central plant, greenhouses, conservatory, child development complex, barns, swine pens, vivarium, athletics buildings, storage buildings, and other support structures. Existing outdoor facilities include baseball, softball, soccer, and football fields, golf practice facility, amphitheater, wildlife sanctuary, rose garden, cactus pasture, equine pastures, other pastures, and surface parking lots. A network of internal roads and pathways provides access to various campus facilities.

Existing on-campus development is summarized in Table 4.10-1 and further discussed in Section 3.2, Environmental Setting. Additional discussion of existing structures and facilities on campus is provided in Chapter 7 of the proposed 2018 EFMP.

Surrounding Land Uses

As shown on Exhibit 4.10-3, east of Grand Avenue single-family residential uses are adjacent to the campus to the north (Timberline development), south and southwest (Snow Creek). The City of Walnut eastern boundary is also the eastern boundary of the campus. The California Polytechnic University – Pomona (Cal Poly Pomona) is located east of campus, north of Temple Avenue; undeveloped land within Cal Poly Pomona abuts the campus. The closed Spadra Landfill is located east of campus, south of Temple Avenue.

The area west of the campus across Grand Avenue between Temple Avenue and the northwest corner of Temple Avenue and San Jose Hills Road is developed with various commercial and office uses. The DJ Plaza strip mall at the southwest corner and the Campus Corner strip mall at the northwest corner of San Jose Hills and Temple Avenue. Single-family detached units within The Willows development are located west of campus, with a two-story office building at the southwest corner of Grand Avenue and Amar Road/Temple Avenue. The Mt. SAC retail center is located west of campus, across Grand Avenue and north of Temple Avenue, and includes a gas station, restaurants, and various retail and service shops. Northwest of campus across Temple Avenue and Kem Way are multi-family attached units (triplexes).

Other uses in the general vicinity of the campus include a grocery store, apartments, and single-family homes to the west, the San Jose Hills to the north, agriculture uses and a parking lot at CalPoly Pomona farther east, and commercial uses on Valley Boulevard farther south.

4.10.3 THRESHOLDS OF SIGNIFICANCE

According to Appendix G of the State CEQA Guidelines, a proposed Project will normally have a significant adverse environmental impact related to land use and planning if it would:

- Physically divide an established community.
- Cause a significant environmental effect due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.

Mt. SAC 2016 CEQA Thresholds of Significance

To the extent the following thresholds of significance are applicable to the proposed 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
Land Use/Planning	FMPs Campus Zoning Districts	Inconsistency with the District Land Use Plan (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; 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

4.10.4 ENVIRONMENTAL IMPACTS OF THE PROPOSED PROJECT

Impact Analysis

Threshold 10.1	**Would the proposed project physically divide an established community?**

2018 Educational and Facilities Master Plan (Phases 1A, 1B, and 2) and Project-Specific

Exhibit 3-3 represents the Recommended Land Use Plan in the proposed 2018 EFMP. The structures and facilities proposed for construction, renovation, and demolition, as well as infrastructure and roadway improvements that are recommended in the proposed 2018 EFMP are discussed in greater detail in Section 3.0, Project Description. The proposed Project and Phase 1A and 1B would be limited to improvements within the Mt. SAC campus boundaries and would not physically impact the Timberline, Snow Creek, The Willows, and other residential developments near campus. Thus, the proposed Project will not divide an established community. No impact would occur.

Level of Significance Prior to Mitigation

No impact.

Recommended Mitigation Measures

No significant impacts were identified, and mitigation is not required.

Level of Significance After Mitigation

No impact.

Threshold 10.2	**Would the proposed 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?**

2018 Educational and Facilities Master Plan (Phases 1A, 1B, and 2) and Project-Specific

As discussed previously, a number of regulations and land use-related planning programs are relevant to development and operation at the Mt. SAC campus. The proposed 2018 EFMP's consistency with these programs is discussed below. Since the proposed Project would replace the 2015 FMPU (and the 2008–2009 Educational Master Plan), consistency between the proposed 2018 EFMP and the 2015 FMPU is not necessary.

Memorandum of Agreement

Mt. SAC has also committed to stabilizing the West Parcel site and the solar project has been eliminated from the 2018 EFMP. Mt. SAC will look for more efficient uses once the site is stabilized. Mt. SAC is currently proceeding with the West Parcel Site Improvements project as described in Section 4.0, Introduction to the Environmental Analyses, of this Draft EIR. The proposed multi-level parking structure in Parking Lot A was eliminated from the proposed 2018 EFMP, but the MOA allows Mt. SAC to consider alternate parking facilities near the proposed Mt.

SAC Transit Center and along Temple Avenue. Currently recommended parking structures are discussed in Section 3.5.4, Vehicular Circulation and Parking, of this Draft EIR. The proposed 2018 EFMP does not recommend any modifications to the West Parcel site and would, therefore, be consistent with the mutual understanding of Mt. SAC and the City under the MOA.

City of Walnut General Plan

The State's rule for a General Plan consistency determination states that "an action, program, or project is consistent with the General Plan if it, considering all aspects, will further the objectives and policies of the General Plan and not obstruct their attainment" (OPR 2017).

The recently adopted 2018 WGP subject to 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. The proposed 2018 EFMP 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 proposed 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 2018 EFMP is consistent with the land use designation for the campus.

As identified in Table 4.10-2, the proposed 2018 EFMP would be consistent with relevant goals and policies in the recently adopted 2018 WGP.

TABLE 4.10-2
GENERAL PLAN CONSISTENCY ANALYSIS OF PROPOSED 2018 EFMP

General Plan Goal or Policy	Consistency of Proposed 2018 EFMP
Policy C-2.4: Safe Routes to School Plan Work with school districts to develop a Safe Routes to School plan, creating a plan for each school in Walnut to expand on school safety programs. Encourage Mt. San Antonio College and Cal Poly Pomona to also plan for safer bicycle and pedestrian access by college students, staff, and faculty. Measures can include evaluation of streets around schools and improvements to student drop-off and pick-up zones. Identify engineering, enforcement, education, and evaluation improvements that maximizes pedestrian safety.	**Consistent.** The proposed 2018 EFMP includes circulation improvements that would improve vehicle, pedestrian and bicycle safety throughout the campus through the (re)construction of sidewalks, access driveways, pedestrian paths, Miracle Mile promenade, bike lanes, biking and hiking trails, pedestrian bridges and tunnel to maximize accessibility and safety.
Policy C-5.5: Higher Education Connectivity Consult with transit agencies, Mt. San Antonio College, and Cal Poly Pomona to continue to invest in transit amenities and programs that encourage increased transit ridership by students, staff, and faculty.	**Consistent.** Mt. SAC is working with Foothill Transit to construct an on-campus Transit Center to promote greater transit use as discussed in the proposed 2018 EFMP and evaluated as a separate environmental document.
Policy COR-2.5 Ecological Reserve and Sanctuary Coordinate with Mt. San Antonio College and Cal Poly Pomona to preserve, enhance, and promote the Mt. SAC Wildlife Sanctuary and the Voorhis Ecological Reserve	**Consistent.** The proposed 2018 EFMP preserves the Mt. SAC Wildlife Sanctuary and adjacent open space along Snow Creek. Minor improvements to the wildlife sanctuary are related to access security; and audio capabilities, as recommended by the proposed 2018 EFMP, are intended to enhance the open space values of the sanctuary.
Policy COR-8.2: Local Artists Work with the community, local schools, Mt. San Antonio College, and local artists to design and implement artistic and cultural features throughout the City and on public properties.	**Consistent.** The proposed 2018 EFMP includes the provision of public art in new and renovated buildings and outdoor spaces. Indoor art and outdoor public art opportunity sites have been identified throughout campus, as shown in the proposed 2018 EFMP. A Public Arts Plan would be

TABLE 4.10-2
GENERAL PLAN CONSISTENCY ANALYSIS OF PROPOSED 2018 EFMP

General Plan Goal or Policy	Consistency of Proposed 2018 EFMP
	incorporated into Mt. SAC's Design Guidelines and Campus Landscape Plan and works of art would be added to new and renovated buildings and outdoor spaces.
Goal CFI-10 - Managed growth of Mt. San Antonio College and Cal Poly Pomona that provides benefits to both the City and these institutions	**Consistent.** The proposed 2018 EFMP serves as a planning document to manage growth within Mt. SAC and has been developed to address projected increases in enrollment and the needs of students, faculty, and staff.
Policy CFI-10.2: Higher Education Support Mt. San Antonio College's and Cal Poly Pomona's comprehensive education programs to promote continuing education and career advancement while minimizing negative impacts on surrounding neighborhoods.	**Consistent.** The proposed 2018 EFMP has been designed to minimize negative impacts on the surrounding neighborhoods, as discussed in this Draft EIR.
Policy CFI-10.2: Supportive Relationships Encourage Mt. San Antonio College and Cal Poly Pomona to conduct transparent and open processes for allowing community input on decisions related to campus growth and facility and infrastructure improvements.	**Consistent.** The proposed 2018 EFMP was developed with input from students, faculty, and staff, and residents of the surrounding communities through the Master Plan Steering Task Force, Community Facilities Plan Advisory Committee, and college and community meetings (see Chapter 1 of the proposed 2018 EFMP). This Draft EIR, which analyzes the impacts of the proposed 2018 EFMP, is also subject to public review.
Policy CFI-10.3: College Development Continue to enforce City Zoning Code regulations, City General Plan guidelines, and State and land use law as they may pertain to any proposed development or expansion associated with Mt. San Antonio College and Cal Poly Pomona.	**Consistent.** The proposed 2018 EFMP is consistent with the recently adopted 2018 City of Walnut General Plan and Planning and Zoning Ordinance and with the RTP/SCS, as discussed in this section.
Policy CFI-10.4: Minimizing Campus Impacts Consult with Mt. San Antonio College and Cal Poly Pomona to identify, minimize, or mitigate potential impacts of campus development projects on adjoining residential neighborhoods.	**Consistent.** Mt. SAC has actively coordinated with the City on the proposed 2018 EFMP and invited their review of the proposed 2018 EFMP to minimize the impacts of campus development projects on adjoining residential neighborhoods.
Policy CFI-10.5: Joint Education Programs Explore opportunities for City consultation with Mt. San Antonio College and Cal Poly Pomona to implement joint projects that would mutually benefit the City and these institutions.	**Consistent.** Mt. SAC continues to coordinate and maintain communications with the City and Cal Poly Pomona to explore potential joint projects.
Policy PS-3.1: Earthquake Preparedness Conduct earthquake preparedness education campaigns in coordination with regional and State agencies, as well as local school districts and colleges. Education campaigns should engage with the whole community and target public behavior changes around earthquake preparedness.	**Consistent.** Mt. SAC has an emergency management and preparedness program that includes emergency procedures, emergency response, emergency notifications, testing/drills, and evacuation procedures that would provide safety, emergency preparation, communications, and the necessary emergency services.
Source: City of Walnut 2018a (goals and policies)	

In general, the proposed 2018 EFMP would be consistent with the way the campus is portrayed in various figures and tables of the 2018 WGP. The proposed Project does not recommend any improvements to the northeastern and southeastern corners of the intersection of Temple and Grand Avenues, which has a Major Gateway designation; nor are any improvements recommended for the northwestern and southwestern corners of Temple Avenue and the City limits, which has a Minor Gateway designation. Recommended improvements along Temple Avenue include sidewalks, bike lanes, pedestrian bridges, removal of on-street parking, grading and drainage improvements, and new access driveways, which would not conflict with gateway monumentation that may be installed at recommended gateway locations refer to Figure LCD-11: Community Design Plan).

Recommended improvements to the Mt. SAC Wildlife Sanctuary include minor improvements including access and installation of permanent audio equipment. No improvements to Snow Creek are recommended and improvements near the creek tributary to Snow Creek include a Healthy Living Loop (hiking and biking trail) and emergency access on an existing dirt road. The proposed 2018 EFMP does not recommend any improvements to the designated Significant Ecological Area, although recommended water tanks may be located at the edge of this area. Therefore, the proposed Project would not conflict with Figure COR-1, Open and Natural Resources, or Figure COR-2, Historical and Culturally Significant Sites and Table COR-2 Historical and Culturally Significant Sites reflecting historical and cultural sites.

No changes are recommended to the street classification of Grand Avenue and Temple Avenue (east of Grand Avenue), which are designated as Major Arterials. Improvements on and near Temple Avenue include the proposed Parking Structure S and West Temple Avenue Pedestrian Bridge, a new access driveway into Parking Structure S, bike lanes, removal of on-street parking, grading and drainage improvements along Temple Avenue, and enhanced sidewalks on both sides of Temple Avenue. Improvements on Grand Avenue include sidewalk completion, bike lanes, and driveway improvements. These would not affect the designation of Temple Avenue or Grand Avenue as Major Arterials. Thus, no conflict with Figure C-2: Street Classification would occur. Also, no improvements on the west side of Grand Avenue is recommended, where a trail is proposed in Figure C-8 and Figure COR-4: Trails Plan.

No conflict with the recently adopted 2018 WGP would occur with the proposed 2018 EFMP. Impacts on designated Gateways, Wildlife Sanctuary, Significant Ecological Area, and Major Arterials would be less than significant and no mitigation is required.

Planning and Zoning Ordinance

Per Section 53094 of the California Government Code, Mt. SAC may exempt itself from compliance with the zoning regulations of the City for educational facilities, and the exemption may apply prospectively or retroactively to such projects. Thus, the proposed 2018 EFMP does not conflict with the City's Planning and Zoning Ordinance.

As discussed previously, the City is undertaking a zoning consistency process to create an SPI zone that would apply to the Mt. SAC campus and other schools and public institutional uses in the City, consistent with its SPI land use designation in the General Plan. While the ZCA and ZC have not been approved by the City Council, it is anticipated that approval would occur in 2019.

Once the ZCA and ZC are approved, the campus would be zoned SPI, and the District would have to comply with the City's Planning and Zoning Ordinance for non-classroom facilities consistent with CDC Section 53094, unless another zoning exemption is applicable. Consistency

of the proposed 2018 EFMP with the proposed development standards for the SPI zone is discussed below.

Table 4.10-3 identifies the permitted, conditionally permitted, and prohibited uses and activities for the proposed SPI zone. As shown, colleges would be permitted uses in the SPI zone and, thus the proposed Project, which will maintain the use of Mt. SAC as a community college, would be a permitted use. In addition, specific improvements under the proposed 2018 EFMP (such as the proposed Student Center facility, sand volleyball courts and tennis courts, Science facility, Bookstore facility, Makerspace facility, Library/Learning Resource facility, Student Services North facility, Technical Education facility, Campus Safety facility, School of Continuing Education facility, parking structures and parking lot reconfiguration, building renovations and demolitions, pedestrian bridges, landscaping, public art and signs, and utility infrastructure and roadway improvements) would be allowed on campus since libraries, related classroom facilities, parking facilities, pedestrian bridges, and related amenities are permitted uses in the proposed SPI Zone. Also, the proposed Auditorium, Fire Training facility, Reuse Depot, and maintenance and transportation building and theater renovations are permitted subject to conditional use permits. As noted above, to the extent such projects are educational facilities, Mt. SAC may exempt itself form conditional use permit requirements.

Table 4.10-3 identifies the development standards for the proposed SPI zone. The proposed 2018 EFMP's compliance with these standards is provided in the last column.

TABLE 4.10-3
CONSISTENCY OF PROPOSED 2018 EFMP WITH DEVELOPMENT STANDARDS FOR SPI ZONE

Development Feature	Development Standard	Proposed 2018 EFMP Consistency
Site Development Plan Review	All development shall be submitted for Site Plan and Architectural Review by the Planning Commission	**Consistent.** Non-educational projects that are not otherwise exempt from City zoning regulations would be constructed to implement the proposed 2018 EFMP would be submitted to the City for Site Plan and Architectural Review
Building Height	3 stories maximum and 35 feet maximum	**Consistent.** The proposed 2018 EFMP recommends the construction of multi-story buildings but does not specify the maximum number of stories for the majority of new buildings at this time. Compliance with this standard, as applicable, would be verified during the Site Plan and Architectural Review by the City. For those individual projects associated with the proposed 2018 EFMP that are being evaluated on a project-specific level, specific analysis is provided below. The Student Center (and Central Campus Infrastructure) and Bookstore would each have 3 stories and exceed the 35-foot height maximum; however, these structures would be exempt from City of Walnut zoning requirements in accordance with CGC Section 53094(b)

TABLE 4.10-3
CONSISTENCY OF PROPOSED 2018 EFMP WITH DEVELOPMENT STANDARDS FOR SPI ZONE

Development Feature	Development Standard	Proposed 2018 EFMP Consistency
		because they are considered to be classroom facilities. Parking Structure S (and West Temple Avenue Pedestrian Bridge) would have 4 levels. The fourth level (rooftop) is +34'-0" and t44-foot stair roof enclosure. Parking Structure R and Tennis Courts would have 2 levels and the tennis courts would be on the second level of Parking Structure R, with a surrounding fence 30 feet tall and 32-foot stair/elevator enclosure and 26-foot high bleacher roof. The Sand Volleyball Courts and Parking Lot W Reconstruction would be at grade.
Setback from public rights-of-way	20 feet minimum	**Consistent.** The existing and proposed 2018 EFMP structures are located more than 20 feet from Temple Avenue and Grand Avenue.
Setback from residential property lines	25 feet	**Consistent.** The existing and proposed 2018 EFMP structures are located more than 25 feet from residential property lines.
Setback from residential zone	300 feet minimum for parking facilities (including parking garages and transit centers) but excluding surface parking lots and public utility services (water pump stations and electrical substations)	**Consistent.*** The proposed 2018 EFMP does not recommend a parking structure or transit center within 300 feet of existing residential uses. Parking Structure A has been eliminated from the 300-foot setback area from residential uses to the north.
Landscaping	Comply with Division 1 of Article XVI and Article XX of the Walnut Municipal Code	**Consistent.** Projects that would be constructed to implement the proposed 2018 EFMP would be designed to comply with the Walnut Municipal Code, unless exempt from such compliance under the CGC.
Areas visible from public right-of-way	Comply with Section 25-18 of the Walnut Municipal Code	**Consistent.** Projects that would be constructed to implement the proposed 2018 EFMP would be designed to comply with the Walnut Municipal Code, unless exempt from such compliance under the CGC.
Trash receptacles, mechanical equipment and other utilities	Must be screened from public view or reasonable screened or enclosed in a decorative feature	**Consistent.** Trash receptacles, mechanical equipment are not recommended along Temple Avenue and Grand Avenue and recommended utilities will be placed underground.
Walls, fences, enhancements, screening and enclosures	Must incorporate a community theme and subject to review and approval of the Community Development Department	**Consistent.** Walls, fences, enhancements, screening and enclosures that would be constructed as part of projects that implement the proposed 2018 EFMP would be subject to review

TABLE 4.10-3
CONSISTENCY OF PROPOSED 2018 EFMP WITH DEVELOPMENT STANDARDS FOR SPI ZONE

Development Feature	Development Standard	Proposed 2018 EFMP Consistency
		and approval of the Community Development Department, unless exempt from such compliance under the CGC.
Public Sidewalks	Must be improved and/or added to fill gaps in pedestrian accessibility	**Consistent.** The proposed 2018 EFMP includes the provision of sidewalks along both sides of Temple Avenue and Grand Avenue at the campus boundaries.
Telecommunication and Emergency Operations Equipment	Comply with Section 6.88, Wireless Telecommunication Facilities, of the Walnut Municipal Code	**Consistent.** Projects that would be constructed to implement the proposed 2018 EFMP would be designed to comply with the Walnut Municipal Code, unless exempt from such compliance under the CGC.
Signs	Comply with Section 6.92, Signs, of the Walnut Municipal Code	**Consistent.** Signs that would be constructed to implement the proposed 2018 EFMP would be designed to comply with the Walnut Municipal Code, unless exempt from such compliance under the CGC.
* The MOA between the City and the District establishes a setback of 300 feet.		
Source: City of Walnut 2018d and 2018e		

The proposed 2018 EFMP non-classroom facilities would be in compliance with the development standards for the SPI zone, once it is approved by the Walnut City Council unless otherwise exempt from such compliance under the CGC. Also, individual projects recommended under the proposed 2018 EFMP would be reviewed during the Site Plan and Architectural Review for compliance with the development standards for the SPI zone and applicable regulations in the Walnut Municipal Code, unless otherwise exempt from such compliance under the CGC. No conflict with the City's Planning and Zoning Ordinance would occur.

RTP/SCS

As discussed above, due to the size of Mt. SAC's service area, the potential increase in development on campus (net increase of 544,195 square feet), and the proposed 2018 EFMP's potential for regional impacts, the proposed Project would be considered regionally significant. The proposed Project's consistency with the nine goals of SCAG's 2016–2040 RTP/SCS is addressed in Table 4.10-4. As shown, the proposed 2018 EFMP would be consistent with the 2016–2040 RTP/SCS.

TABLE 4.10-4
CONSISTENCY OF PROPOSED 2018 EFMP WITH REGIONAL TRANSPORTATION PLAN/SUSTAINABLE COMMUNITIES STRATEGY

RTP/SCS Goal	Specific Plan Consistency
Goal 1 - Align the plan investments and policies with improving regional economic development and competitiveness.	**Consistent.** The proposed 2018 EFMP would meet the educational needs of residents in the region and indirectly improve economic development and competitiveness through the creation of a more educated workforce for the region.
Goal 2 - Maximize mobility and accessibility for all people and goods in the region.	**Consistent.** This is a broad goal that is outside the proposed 2018 EFMP's scope. At the local level, the proposed Project includes on-campus individual projects that would improve vehicle, transit, pedestrian, and bicyclist accessibility on campus through roadway, access driveway, Miracle Mile promenade (pedestrian corridor), sidewalk, bike lane, bus parking, and pedestrian bridge/tunnel projects that would be built on site.
Goal 3 - Ensure travel safety and reliability for all people and goods in the region.	**Consistent.** In addition to internal circulation improvements, the proposed 2018 EFMP includes improvements on Grand Avenue and Temple Avenue as discussed in Section 3.5.4, Vehicular Circulation and Parking that would improve vehicle, transit, pedestrian, and bicyclist safety and access, as well as promote the use of alternative transportation in the region.
Goal 4 - Preserve and ensure a sustainable regional transportation system.	**Consistent.** The proposed 2018 EFMP would maintain Grand Avenue and Temple Avenue as Major Arterials in the City of Walnut. On-campus circulation and access improvements would also contribute to a more sustainable and productive regional transportation system.
Goal 5 - Maximize the productivity of our transportation system.	**Consistent.** The proposed 2018 EFMP includes improvements to roadways, access driveway, Miracle Mile promenade, sidewalk, bike lane, parking, and pedestrian bridge/tunnel projects to provide efficient circulation on and near campus. This is discussed further in Section 3.0, Project Description, and Section 4.14, Transportation/Traffic, of this Draft EIR.
Goal 6 - Protect the environment and health of our residents by improving air quality and encouraging active transportation (non-motorized transportation, such as bicycling and walking).	**Consistent.** Proposed 2018 EFMP implementation would maximize the protection of the environment and the improvement of air quality by encouraging active transportation. The proposed Project recommends a "Healthy Living Loop" that would provide a publicly-accessible route around campus that would encourage walking, jogging, and bicycling, and would support healthy living educational experiences. It includes the construction of sidewalks, bike lanes, and trails to encourage biking and walking on and near campus. It also includes roadway, access driveway, Miracle Mile promenade, parking structures, and pedestrian bridge/tunnel projects to provide easy access to the different areas and facilities on campus. The proposed 2018 EFMP also recommends the Temple Avenue Green Corridor that includes enhancements for pedestrian circulation by providing enhanced sidewalks on both sides of Temple Avenue for the full length of Mt. SAC's property. As discussed

TABLE 4.10-4
CONSISTENCY OF PROPOSED 2018 EFMP WITH REGIONAL TRANSPORTATION PLAN/SUSTAINABLE COMMUNITIES STRATEGY

RTP/SCS Goal	Specific Plan Consistency
	in Section 4.3, Air Quality, various individual projects associated with the proposed 2018 EFMP would improve air quality by promoting walking and biking on and near campus.
Goal 7 - Actively encourage and create incentives for energy efficiency, where possible.	**Consistent.** As discussed in Section 3.5.8 of this Draft EIR, the campus has committed to implementation of sustainable measures detailed in Mt. SAC's 2018 Climate Action Plan (2018 CAP). Specifically, the campus would implement sustainable building practices discussed in Section 3.5.8 and implementation of the proposed 2018 EFMP would not impede implementation of the 2018 CAP.
Goal 8 - Encourage land use and growth patterns that facilitate transit and non-motorized transportation.	**Consistent.** The proposed 2018 EFMP recommends the improvement of existing facilities at Mt. SAC on an area that is currently developed with existing structures and infrastructure as discussed in Section 3.4, Project Background. Mt. SAC is working with Foothill Transit to construct an on-campus Transit Center to promote greater transit use as discussed in the proposed 2018 EFMP. The proposed Project also includes the construction of sidewalks, bike lanes, pedestrian bridges/tunnel, Miracle Mile promenade, and trails to provide pedestrian connectivity to encourage walking and biking instead of vehicle use.
Goal 9: Maximize the security of the regional transportation system through improved system monitoring, rapid recovery planning, and coordination with other security agencies.	**Not Applicable.** The goal is applicable to Caltrans, the several county transportation departments, the California Highway Patrol and other law enforcement agencies in the region.
Policy 1: Transportation investments shall be based on SCAG's adopted regional Performance Indicators.	**Not Applicable.** The policy is applicable to SCAG's implementation of the RTP/SCS.
Policy 2: Ensuring safety, adequate maintenance and efficiency of operations on the exiting multimodal transportation system should be the highest RTP/SCS priorities for any incremental funding in the region.	**Not Applicable.** The policy is applicable to SCAG's implementation of the RTP/SCS.
Policy 3: RTP/SCS land use and growth strategies in the RTP/SCS will respect local input and advance smart growth initiatives.	**Not Applicable.** The policy is applicable to SCAG's implementation of the RTP/SCS.
Policy 4: Transportation demand management (TDM) and active transportation will be focus areas, subject to Policy 1.	**Not Applicable.** The policy is applicable to SCAG's implementation of the RTP/SCS.
Policy 5: HOV gap closures that significantly increase transit and rideshare usage will be supported and encouraged, subject to Policy 1.	**Not Applicable.** The policy is applicable to SCAG's implementation of the RTP/SCS.
Policy 6: The RTP/SCS will support investments and strategies to reduce non-recurrent congestion and demand for single occupancy vehicle use, by leveraging advanced technologies.	**Not Applicable.** The policy is applicable to SCAG's implementation of the RTP/SCS.

TABLE 4.10-4
CONSISTENCY OF PROPOSED 2018 EFMP WITH REGIONAL TRANSPORTATION PLAN/SUSTAINABLE COMMUNITIES STRATEGY

RTP/SCS Goal	Specific Plan Consistency
Policy 7: The RTP/SCS will encourage transportation investments that result in cleaner air, a better environment, a more efficient transportation system and sustainable outcomes in the long run.	**Not Applicable.** The policy is applicable to SCAG's implementation of the RTP/SCS.
Policy 8: Monitoring progress on all aspects of the Plan, including the timely implementation of projects, programs, and strategies, will be an important and integral component of the Plan.	**Not Applicable.** The policy is applicable to SCAG's implementation of the RTP/SCS.
Source (goals and policies): SCAG 2016.	

To achieve these goals, SCAG has included a wide range of land use and transportation strategies in the 2016–2040 RTP/SCS. These strategies within the regional context are provided as guidance for lead agencies when considering projects. Although a consistency analysis for these strategies is not required, it is important to note that the proposed 2018 EFMP effectively implements many of these strategies. Applicable strategies are discussed below.

Land Use Strategies

- *Reflect the changing population and demands*
  The proposed 2018 EFMP has been developed with consideration of the existing and projected student headcount, existing services and facilities, the economy and other issues affecting higher education, and existing and future needs of students, faculty, and staff, and responds to anticipated changes in demand for Mt. SAC's services.
- *Combating gentrification and displacement*
  The proposed 2018 EFMP recommends development of existing buildings and facilities on campus, to improve accessibility, efficiency, and service provisions. Buildings to be demolished are mainly older and temporary structures that would be replaced with permanent and improved facilities to better serve students and staff as well as encourage new students to choose to attend Mt. SAC. Therefore, the proposed 2018 EFMP does not promote gentrification. Proposed Project improvements would be confined to the campus boundaries and would, therefore, not displace existing residents or households in the area.
- *Focus new growth around transit*
  As previously discussed, the Mt. SAC Transit Center identified in the proposed 2018 EFMP is a separate project being completed in coordination with Foothill Transit and would be constructed in the center of campus. The Mt. SAC Transit Center was approved by the Mt. SAC Board of Trustees in December 2018 and was evaluated in a project-specific Initial Study/Negative Declaration pursuant to CEQA. Improvements associated with the proposed 2018 EFMP are recommended near the Mt. SAC Transit Center, thus facilitating an increase in transit ridership.
- *Transit Oriented Development, HQTAs, and Local Air Quality Impacts*
  Exhibit 4.10-1 shows High Quality Transit Areas (HQTAs) in the region. Mt. SAC is located in an HQTA, but it is located in a Transit Priority Area (which is an area within 0.5-mile of a major transit stop) (SCAG 2018c). The proposed 2018 EFMP includes a number of site improvements that would provide alternatives to vehicle use, including new sidewalks, bike lanes, walking trails, Miracle Mile promenade, bus parking, and pedestrian

bridges/tunnel, which would improve the mobility options of people on or near Mt. SAC and reduce potential air quality impacts. Additionally, the Mt. SAC Transit Center would be located within a central area of the campus.

- *Plan for Growth Around Livable Corridors*
  Mt. SAC is not located along a commercial strip but Temple and Grand Avenues are Major Arterials. The proposed 2018 EFMP recommends increased development along these arterials and would include projects to improve mobility options on and near campus. These include sidewalks, bike lanes, promenade, biking and hiking trails, Miracle Mile promenade improvements, and pedestrian bridges/tunnel that would increase walking and biking on and near campus. In addition, the Healthy Living Loop and Temple Avenue Green Corridor would promote active transportation options.

- *Provide More Options for Short Trips*
  The Mt. SAC Transit Center underwent a separate environmental review and was approved for development in late 2018. The Mt. SAC Transit Center would be constructed within a central portion of the campus. Development of various improvement projects associated with buildout of the proposed 2018 EFMP (e.g., sidewalks, bike lanes, promenade, biking and hiking trails, Miracle Mile improvements, bus stops, bus parking, and pedestrian bridges/tunnel) would increase the use of transit services, and walking and biking options for short trips within, to, and from Mt. SAC.

- *Support Local Sustainability Planning*
  The proposed 2018 EFMP is consistent with the recently adopted 2018 WGP*,* which serves as the local planning document for the City. Mt. SAC has also developed the 2018 Climate Action Plan (2018 CAP) that outlines the strategies and measures that would promote sustainability in Mt. SAC operations. Consistency of the proposed 2018 EFMP with the 2018 CAP is discussed in Section 4.7, Greenhouse Gas Emissions, of this Draft EIR.

- *Protect Natural and Farm Lands*
  The proposed 2018 EFMP includes the preservation of the Land Management and Athletics area at the southeastern section of campus, the Wildlife Sanctuary /Open Space area east of Grand Avenue, and a Land Management area preserved as habitat for sensitive plant and animal species on the West Parcel. The Agricultural area (The Farm) in the northeastern section of campus would also preserve some areas as open space.

Transportation Strategies

- *Preserve our Current System*
  The proposed 2018 EFMP recommends improvements (e.g., sidewalks and bike lanes) on Temple and Grand Avenues but will preserve these roads as Major Arterials.

- *Manage Congestion*
  The proposed 2018 EFMP includes roadway and access driveway improvements on and near campus to improve vehicular and pedestrian circulation. In addition, Section 4.14, Transportation/Traffic, of this Draft EIR discusses potential impacts to area roadways and intersections and recommends mitigation measures to reduce traffic impacts. As further discussed in Section 4.14, Transportation/Traffic, the proposed 2018 EFMP does not require a Congestion Management Plan analysis.

- *Transportation Demand Management (TDM) and Transportation System Management (TSM)*
  The proposed 2018 EFMP includes a number of TDM measures including the provision of bike lanes and bike racks, bus stops and bus parking, preferential parking for carpool

and vanpool vehicles, and passenger pick-up and drop-off areas, as discussed in Section 4.14, Transportation/Traffic, of this Draft EIR.

- *Promote Safety and Security*
  The recommended roadway improvements in the proposed 2018 EFMP have been designed to promote vehicle and pedestrian safety by providing complete connections between various buildings and facilities; and vehicle and pedestrian traffic separation through the Miracle Mile pedestrian promenade, and pedestrian bridges and tunnel; and easy access from parking structures and lots to campus buildings and facilities.

- *Completing Our System: Transit*
  As indicated previously, the Mt. SAC Transit Center, which was approved by the Mt. SAC Board of Trustees in December 2018 and was evaluated in a project-specific Initial Study/Negative Declaration pursuant to CEQA, would improve bus access to and from campus by providing a centralized drop-off and pick-up location that is central to the campus and with easy pedestrian access.

- *Completing Our System: Passenger Rail*
  Mt. SAC is not located in an area with nearby passenger rail services; however, Mt. SAC is actively working with Foothill Transit on the development of the Mt. SAC Transit Center, which will ultimately provide connections to the Los Angeles County Metro Gold Line stations planned for La Verne and Pomona.

- *Regional Trips Strategies*
  The recommended improvements associated with buildout of the proposed 2018 EFMP and individual projects would not affect the Regional Greenway Network, the Regional Bikeway Network, and the California Coast Trail Access. However, the proposed Project includes a Temple Avenue Green Corridor that would enhance pedestrian circulation through enhanced sidewalks on both sides of Temple Avenue for the full length of Mt. SAC's property. Completion of sidewalks are also proposed on Grand Avenue, and bike lanes and biking and hiking trails are proposed on and near campus.

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

- *Short Trips Strategies*
  As indicated, new sidewalks, bike lanes, improvements to the Miracle Mile promenade, pedestrian bridges/tunnel, and biking and hiking trails are proposed on the Mt. SAC campus to encourage alternative methods of transportation for short trips between on-campus uses and to adjacent commercial and residential uses.

- *Education/Encouragement Strategies*
  As detailed in Mt. SAC's 2018 CAP and noted in Section 3.5.8, Sustainable Practices/Energy of this Draft EIR, 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. Implementation of the proposed 2018 EFMP would support the goals of the 2018 CAP.

- *Completing Our System: Highways and Arterials*
  The proposed 2018 EFMP does not recommend new highways or arterials on or near campus and recommended improvements on Temple and Grand Avenues would not change their classification as Major Arterials. While the proposed Project would not directly

support the completion of the planned transportation system, it would also not hinder future improvements to be undertaken by the City or other agencies with appropriate jurisdiction.

- *Completing Our System: Regional Express Lane Network*
  No regional express lanes are near Mt. SAC, and the proposed 2018 EFMP does not recommend changes to the regional express lane network or planned express network on the Interstate 10. Strategies related to the regional express lane network do not apply to proposed Project. While the proposed 2018 EFMP would not directly support the completion of the planned transportation system, it would also not hinder future improvements to be undertaken by the City or other agencies with appropriate jurisdiction.
- *Completing Our System: Goods Movement*
  Mt. SAC is not located near the regional freight corridor system, including the regional railroad system and regional truck routes. Strategies related to goods movement do not apply to the proposed 2018 EFMP.
- *Meeting Airport Demand*
  Mt. SAC is not located near an airport and the proposed 2018 EFMP would not generate a demand for air transportation. Strategies related to airport demand do not apply to the proposed Project.
- *Mobility Innovations*
  The proposed 2018 EFMP does not specifically promote the use of zero-emissions vehicles, neighborhood electric vehicles, car-sharing services, and ride sourcing nor does it prohibit their use or operation. Mt. SAC currently has electric vehicle charging stations at limited locations and will provide future electric vehicle charging stations in parking structure and parking lots in accordance with applicable building regulations.
- *Anticipating Car-To-Car Communication and Automated Vehicle Technologies*
  The proposed 2018 EFMP does not specifically address car-to-car communication and automated vehicle technologies. Strategies related to these technologies do not apply to the proposed Project.

In summary, the proposed 2018 EFMP would not conflict with any of the land use and transportation strategies in the 2016–2040 RTP/SCS. Consistency with SCAG's growth forecasts is provided in Section 4.12, Population and Housing, of this Draft EIR.

Level of Significance Prior to Mitigation

Less than significant.

Recommended Mitigation Measures

No significant impacts were identified, and mitigation is not required.

Level of Significance After Mitigation

Less than significant.

4.10.5 CUMULATIVE IMPACTS

The geographic context for the analysis of cumulative land use impacts is the City of Walnut. The analysis accounts for anticipated cumulative growth within the City, as represented by implementation of development allowed by the recently adopted 2018 WGP outlined in Table LCD-3: Land use Plan Buildout, included in the Land Use and Community Design Chapter, and development of the recently approved and pending projects identified in Table 4-1, Cumulative Project List, in Section 4.0 of this Draft EIR. The recently adopted 2018 WGP anticipates the development of 1,776 new dwelling units in the City, along with an increase in the resident population by 5,813 persons, and the development of 243,570 square feet of new commercial and industrial uses (Walnut 2018a). Various residential and non-residential uses and public facilities are proposed within the City and the Mt. SAC service area that would lead to new development, redevelopment, and increasing urbanization on campus and in the surrounding areas. New development on vacant areas and underutilized lots would lead to an intensification of housing development, commercial and industrial land uses, and public and institutional uses in the City. The redevelopment of existing land uses is also anticipated in the recently adopted 2018 WGP. Consistent with 2018 WGP goals and policies relative to both development and preservation of open space resources, growth would occur in areas of the City determined to be more suitable for development.

The conversion of existing land uses on campus resulting from implementation of the proposed 2018 EFMP, individual projects under the proposed 2018 EFMP, and cumulative development would occur within the provisions of the 2018 WGP and Planning and Zoning Ordinance, as applicable. All future development in the City would be reviewed for consistency with adopted land use plans and policies by the City of Walnut, including 2018 WGP policies and zoning requirements, the requirements of CEQA, the state Zoning and Planning Law, and the State Subdivision Map Act, all of which require findings of plan and policy consistency prior to approval of entitlements for development. Future development in the City would also be governed by City policies, implementation measures, and programs to ensure orderly urban development.

Therefore, it can be assumed that through compliance with these regulations, future development would be consistent with adopted land use goals and policies and compatible with existing land uses. However, even if the cumulative impact of these individual projects would be significant, the proposed 2018 EFMP's contribution to such cumulative land use impacts is less than significant and thus, is not cumulatively considerable because (1) development allowed by the proposed 2018 EFMP would not change the type of development allowed on campus; (2) the proposed Project is consistent with the 2018 WGP goals and policies as identified through the analysis presented in this section; (3) individual projects implemented under the proposed 2018 EFMP would be subject to review and approval by the City, as applicable; and (4) with implementation of project-specific mitigation measures, the proposed 2018 EFMP and individual projects associated with the proposed 2018 EFMP would not result in significant cumulative land use impacts on- or off-campus.

4.10.6 MITIGATION MEASURES

No significant adverse impacts related to land use and planning have been identified. Thus, no mitigation measures are required.

4.10.7 REFERENCES

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4.11 NOISE

This section provides background information on noise and community noise assessment criteria; presents existing noise levels at locations on in the vicinity of the Mt. SAC campus; and examines noise impacts that would potentially occur during construction and operation of the proposed *project.* No comment letters addressing noise were received in response to the Notice of Preparation (NOP) for this Draft Environmental Impact Report.

4.11.1 NOISE BASICS AND TERMINOLOGY

"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. Although the terms "sound" and "noise" are often used synonymously, perceptions of sound and noise are highly subjective (Caltrans 2013a). The effects of noise on people can include general annoyance, interference with speech communication, sleep disturbance, and, in the extreme, hearing impairment.

Decibels and Frequency

In its most basic form, a continuous sound can be described by its frequency or wavelength (pitch) and its amplitude (loudness). Frequency is expressed in cycles per second, or hertz. Frequencies are heard as the pitch or tone of sound. High-pitched sounds produce high frequencies; low-pitched sounds produce low frequencies. Sound pressure levels are described in units called the decibel (dB).

Decibels are measured on a logarithmic scale that quantifies sound intensity in a manner similar to the Richter scale used for earthquake magnitudes. A doubling of the energy of a noise source, such as doubling of traffic volume, would increase the noise level by 3 dB.

Perception of Noise and A-Weighting

A typical noise environment consists of a base of steady "background" noise that is the sum of many distant and indistinguishable noise sources. Superimposed on this background noise is the sound from individual local sources. The local sources can vary from an occasional aircraft or train passing by, to intermittent periods of sound (such as amplified music), to virtually continuous noise from, for example, traffic on a major highway.

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 or dB[A]) approximates the frequency response of the average healthy ear when listening to most ordinary, everyday sounds. When people make relative judgments of the loudness or annoyance of a sound, their judgments correlate well with the A-weighted sound levels of those sounds. Therefore, the "A-weighted" noise scale is used for measurements and standards involving the human perception of noise.

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. Table 4.11-1 shows the relationship of various noise levels in dBA to commonly experienced noise events.

TABLE 4.11-1
NOISE LEVELS FOR COMMON EVENTS

Common Outdoor Activities	Noise Level (dBA)	Common Indoor Activities
	110	Rock Band
Jet Flyover at 300 m (1,000 ft)	100	
Gas Lawn Mower at 1 m (3 ft)	90	
Diesel Truck at 15 m (50 ft) at 80 km/hr (50 mph)	80	Food Blender at 1 m (3 ft); Garbage Disposal at 1 m (3 ft)
Noisy Urban Area; Daytime Gas Lawn Mower at 30 m (100 ft)	70	Vacuum Cleaner at 3 m (10 ft)
Commercial Area; Heavy Traffic at 90 m (300 ft)	60	Normal Speech at 1 m (3 ft)
Quiet Urban Area Daytime	50	Large Business Office; Dishwasher in Next Room
Quiet Urban Area Nighttime	40	Theater; Large Conference Room (Background)
Quiet Suburban Area Nighttime	30	Library
Quiet Rural Area Nighttime	20	Bedroom at Night; Concert Hall (Background)
	10	Broadcast/Recording Studio
Lowest Threshold of Human Hearing	0	Lowest Threshold of Human Hearing
dBA: A-weighted decibels; m: meter; ft: feet; km/hr: kilometers per hour; mph: miles per hour. Source: Caltrans 2013a		

Two noise sources do not “sound twice as loud” as one source. As stated above, a doubling of noise sources results in a noise level increase of 3 dBA. It is widely accepted that (1) the average healthy ear can barely perceive changes of a 3 dBA increase or decrease; (2) a change of 5 dBA is readily perceptible; and (3) an increase (decrease) of 10 dBA sounds twice (half) as loud (Caltrans 2013a). In community situations, noise exposure and changes in noise levels occur over a number of years, unlike the immediate comparison made in a field study situation. The generally accepted level at which changes in community noise levels become “barely perceptible” typically occurs at values greater than 3 dBA.

Noise Propagation

From the source to the receiver, noise changes both in level and frequency spectrum. The most obvious change is the decrease in noise level as the distance from the source increases. The manner in which noise reduces with distance depends on the factors described below.

Geometric spreading from point and line sources. Sound from a small localized source (approximating a “point” source) radiates uniformly outward as it travels away from the source in a spherical pattern. For point sources, such as heating, ventilation, and air conditioning (HVAC) units or construction equipment, the sound level attenuates (or drops off) at a rate of 6 dBA for each doubling of the distance (i.e., if the noise level is 70 dBA at 25 feet, it is 64 dBA at 50 feet). Vehicle movement on a road makes the source of the sound appear to emanate from a line (line source) rather than a point when viewed over some time interval. The sound level attenuates or drops off at a rate of 3 dBA per doubling of distance for line sources.

Ground absorption. To account for ground-effect attenuation (absorption), two types of site conditions are commonly used in noise prediction: soft site and hard site conditions. Hard sites (i.e., sites with a reflective surface between the source and the receiver, such as parking lots or

smooth bodies of water) receive no excess ground attenuation, and the changes in noise levels with distance (drop-off rate) are simply the geometric spreading of the source. Soft sites are sites that have an absorptive ground surface (e.g., soft dirt, grass, or scattered bushes and trees) and receive an excess ground attenuation value of 1.5 dBA per doubling of distance.

Atmospheric effects. Wind speed will bend the path of sound to "focus" (increase) it on the downwind side and make a "shadow" (reduction) on the upwind side of the source. At short distances, the wind has minor influence on the measured sound level. For longer distances, the wind effect becomes appreciably greater. Temperature gradients create effects similar to those of wind gradients, except that they are uniform in all directions from the source. On a sunny day with no wind, temperature decreases with altitude, giving a shadow effect for sound. On a clear night, temperature may increase with altitude, focusing sound on the ground surface.

Shielding by natural and man-made features, noise barriers, diffraction, and reflection. A large object in the path between a noise source and a receiver can significantly attenuate noise levels at that receiver location. The amount of attenuation provided by this "shielding" depends on the size of the object and the frequencies of the noise levels. Natural terrain or landform features as well as man-made features (e.g., buildings and walls) can significantly alter noise levels. For a noise barrier to work, it must be high enough and long enough to block the view from the receiver to a road or to the noise source. Effective noise barriers can reduce outdoor noise levels at the receptor by up to 15 dB.

Noise Descriptors

Several rating scales (or noise "metrics") exist to analyze effects of noise on a community. These scales include the equivalent noise level (L_{eq}), the community noise equivalent level (CNEL), and the day-night average sound level (DNL or L_{dn}). Average noise levels over a period of minutes or hours are usually expressed as dBA L_{eq}, which is the equivalent noise level for that period of time. The period of time averaging may be specified; for example, $L_{eq(3)}$ would be a 3-hour average. When no period is specified, a one-hour average is assumed. Noise of short duration (i.e., substantially less than the averaging period) is averaged into ambient noise during the period of interest. Thus, a loud noise lasting 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, L_{dn} was developed to account for human sensitivity to nighttime noise. L_{dn} represents the 24-hour average sound level with a penalty for noise occurring at night. The L_{dn} computation divides the 24-hour day into two periods: daytime (7:00 AM to 10:00 PM) and nighttime (10:00 PM to 7:00 AM). The nighttime sound levels are assigned a 10 dBA penalty prior to averaging with daytime hourly sound levels. CNEL is similar to L_{dn} except that it separates a 24-hour day into 3 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.

Several statistical descriptors are often used to describe noise, including L_{max}, L_{min}, and $L_{\%}$. L_{max} and L_{min} are respectively the highest and lowest A-weighted sound levels that occur during a noise event. The $L_{\%}$ signifies the noise level that is exceeded x percent of the time; for example, L_{10} denotes the level that was exceeded 10 percent of the time.

Sound Power and Sound Pressure Levels

The noise levels described above and in most of this section are sound pressure levels. However, sound power is often used to describe stationary noise sources. Sound power describes the total sound energy emitted by a source, also in decibels; sound power does not change with distance. Typical sound power levels range from 0 dB (threshold) to 160 dB (jet engine). Sound pressure level can be calculated from sound power level if the distance to sound source and directivity factor are known.

Groundborne Vibration

In contrast to airborne noise, groundborne vibration is not a common environmental problem. Some common sources of groundborne vibration are construction activities such as blasting, pile driving, and operating heavy earth-moving equipment. Trains and similar rail vehicles can also produce vibration. It is unusual for vibration from sources such as buses and trucks to be perceptible.

In quantifying vibration, the peak particle velocity (ppv) is most frequently used to describe vibration impacts and is typically measured in inches per second (in/sec). Vibration levels that may cause annoyance to humans are described using the vibration decibel (VdB). Typically, groundborne vibration generated by man-made activities attenuates rapidly with distance from the source.

4.11.2 REGULATORY SETTING

Federal

Federal Transit Administration

The Federal Transit Administration (FTA)'s *Transit Noise and Vibration Impact Assessment* (2006) provides criteria for acceptable levels of groundborne vibration based on the relative perception of a vibration event for vibration-sensitive land uses, as shown in Table 4.11-2. These levels represent those land uses that would potentially experience vibration induced annoyance at nearby uses.

TABLE 4.11-2
GROUNDBORNE VIBRATION AND NOISE IMPACT CRITERIA – HUMAN ANNOYANCE

Land Use Category	Max Lv (VdB)[a]	Description
Workshop	90	Distinctly felt vibration. Appropriate to workshops and non-sensitive areas
Office	84	Felt vibration. Appropriate to offices and non-sensitive areas.
Residential – Daytime	78	Barely felt vibration. Adequate for computer equipment.
Residential – Nighttime	72	Vibration not felt, but groundborne noise may be audible inside quiet rooms.

Lv: vibration velocity level in decibels; VdB: vibration decibels

[a] As measured in 1/3-octave bands of frequency over the frequency ranges of 8 to 80 Hz.

Source: Caltrans 2013b.

The FTA has also established levels for which cosmetic structural damage impact criteria may occur (see Table 4.11-3).

TABLE 4.11-3
GROUNDBORNE VIBRATION AND NOISE IMPACT CRITERIA – STRUCTURAL DAMAGE

Building Category	PPV (in/sec)	VdB
I. Reinforced concrete, steel, or timber (no plaster)	0.5	102
II. Engineered concrete and masonry (no plaster)	0.3	98
III. Nonengineered timber and masonry buildings	0.2	94
IV. Buildings extremely susceptible to vibration damage	0.12	90

PPV: peak particle velocity; VdB: vibration decibels

[a] As measured in 1/3-octave bands of frequency over the frequency ranges of 8 to 80 Hz.

Source: Caltrans 2013b

State

California Department of Transportation

In Caltrans' *Transportation and Construction Vibration Guidance Manual* (September 2013), it is identified that human response to blast vibration and air overpressures from blasting is difficult to quantify. Ground vibration and air overpressures can be felt at levels that are well below those required to produce any damage to structures. The duration of the event has an effect on human response, as does the frequency. Events are of short duration, 1–2 seconds, for millisecond-delayed blasts. Typically, the longer the event and the higher the frequency, the more adverse the effect on human response. Factors such as frequency of occurrence, fright or "startle factor," level of personal activity at the time of the event, health of the individual, time of day, orientation of the individual (standing up or lying down), the perceived importance of the blasting operation, and other political and economic considerations also affect human response (Caltrans 2013b).

Although the duration of an event affects human response, some researchers have found that fewer blasts of a longer duration are preferable to many blasts with shorter durations. There would be fewer times of perceived disturbance. Fixed locations such as quarries may be able to take advantage of this. Construction projects, however, usually have constraints such as smaller volumes of material to be blasted and sequence of the work that would preclude this.

In reviewing the above responses, one must distinguish between the average individual and those who may reside at either end of the human response spectrum. At one end are persons who might perceive some financial benefit or common good from the Project. Although they may not appreciate the inconvenience of the blasting, unless they are physically damaged in some manner, they may not complain. At the other end of the spectrum, individuals who do not want the Project to take place may be disturbed by the slightest inconvenience and will generally make their feelings known (Caltrans 2013b).

California Code of Regulations

Title 24 of the *California Code of Regulations,* also known as the *California Building Standards Code* or, more commonly, as the *California Building Code*, establishes building standards applicable to all occupancies throughout the state. Section 1207.11.2 requires that residential structures, other than detached single-family dwellings, be designed to prevent the intrusion of

exterior noise so that the interior noise attributable to exterior sources shall not exceed 45 dBA CNEL in any habitable room. Section 1207.12 states, "if interior allowable noise levels are met by requiring that windows be unopenable or closed, the design for the structure must also specify a ventilation or air-conditioning system to provide a habitable interior requirement. The ventilation system must not compromise the dwelling unit or guest room noise reduction".

City of Walnut

The City of Walnut has established guidelines and standards in the General Plan related to noise.

General Plan Noise Element

The City of Walnut is affected by several different sources of noise, including automobile traffic, commercial activity, and periodic nuisances such as construction, loud parties, and other events. The Noise Element of the General Plan is intended to identify these sources and provide objectives and policies that ensure that noise from these sources does not create an unacceptable noise environment (Walnut 1978). The Noise Element contains guidelines for noise-compatible land use for long-term operations, as shown in Table 4.11-4.

The Noise Element of the General Plan acknowledges in its Objectives that noise-sensitive uses such as single- and multi-family residential land uses, as well as special land uses (hospitals, rest homes, long-term medical care, libraries, churches, schools, and outdoor recreational areas), should be quiet. Commercial and industrial land uses are allowed a greater level of noise exposure.

To achieve these Objectives, the City has adopted day and nighttime noise limits for each of these land uses. They are shown in Table 4.11-4.

TABLE 4.11-4
CITY OF WALNUT NOISE LEVELS BY LAND USE

Zone	Day (Maximum) 7 a.m. – 10 p.m.	Night (Maximum) 10 p.m. – 7 a.m.
Single Family Residential	60 dBA	45 dBA
Multifamily Residential	60 dBA	50 dBA
Commercial	65 dBA	55 dBA
Industrial	70 dBA	65 dBA
Source: City of Walnut General Plan Noise Element, 1978.		

4.11.3 METHODS

Noise Measurements

Short-term noise levels were measured by Psomas on September 27, 2018 using a Larson Davis Laboratories Model 831 (LD 831) integrating sound level meter. The microphone was mounted approximately five feet above the ground and equipped with a windscreen during all measurements. The meter was calibrated before and after use with a Larson Davis Model CAL200 acoustical calibrator to ensure that the measurements would be accurate. The sound level meter was programmed to record noise levels in "slow" mode in A-weighted form. The duration of short-term measurements, typically about 20 minutes, was determined by the

variability of the noise source; noise was measured until the average noise level was relatively steady and representative of one hour of monitoring.

Traffic Noise

As previously described, decibels are measured on a logarithmic scale as a function of the energy of the source. For traffic noise on the roadways proximate to the campus, the noise level varies with the traffic volume, speed, and mix of different types of vehicles. To estimate traffic noise level increases due to development of the proposed project, changes in traffic noise levels were calculated from the traffic volumes for existing and future scenario with the proposed 2018 EFMP, as provided in the project Traffic Impact Analysis included in Appendix J of this Draft EIR (Psomas 2019). This method assumes that changes in traffic speed and mix are negligible for the various scenarios because of local road characteristics.

The noise levels adjacent to roadways in the project traffic study area were estimated using the Federal Highway Administration's (FHWA's) Highway Traffic Noise Prediction Model (RD-77-108). The FHWA model determines a predicted noise level through a series of adjustments to a reference sound level. These adjustments account for traffic flows, speed, truck mix, varying distances from the roadway, length of exposed roadway, and noise shielding. The calculations do not take into account the effect of any noise barriers or topography that may affect ambient noise levels.

Construction and Operational Point Sources

The distance from the noise source to a receptor is a primary consideration in determining the actual noise level experienced at the receptor. Most reference noise levels are specified at a distance of 50 feet from the source. The calculation of noise from a point source, such as construction or HVAC equipment, at other distances uses the equation

$L_D = L_{50} – 20 \log (D/50)$, where

L_D is the noise level at a distance D from the noise source, and

L_{50} is the noise level at a distance of 50 feet from the source.

This equation is the mathematical expression for a noise level being reduced by 6 dBA for each doubling of distance from the source. Construction noise levels reported in the U.S. Environmental Protection Agency's (USEPA's) *Noise from Construction Equipment and Operations, Building Equipment, and Home Appliances* were used to estimate future construction noise levels for the Project (USEPA 1971). Typically, the estimated construction noise levels are governed primarily by equipment that produces the highest noise levels. Construction noise levels for each generalized construction phase (ground clearing/demolition, excavation, foundation construction, building construction, paving, and site cleanup) are based on a typical construction equipment mix for office, hotel, hospital, school, public works projects and do not include use of atypical, very loud, and vibration-intensive equipment (e.g., pile drivers).

Vibration

Vibration propagation is calculated using the following formula:

$$PPV_{equip} = PPV_{ref} \times (25/D)^n, \text{ where}$$

PPV_{equip} is the peak particle velocity (ppv) in inches per second (in/sec) adjusted for distance of the receiver from the source,

PPV_{ref} is the ppv in in/sec at the reference distance of 25 feet,

D is the distance from the source to the receiver, and

n is a value based on soil material (FTA 2006).

The Federal Transit Administration (FTA) Office of Planning's *Transit Noise and Vibration Impact Assessment* (FTA Impact Assessment) suggests using a value of 1.5 for n for all equipment (FTA 2006).

For vibration annoyance levels,

$$Lv(D) = Lv(25 \text{ ft}) - 20\log(D/25), \text{ where}$$

Lv(D) is the vibration level in VdB at the receiver,

Lv(25 ft) is the vibration level in VdB at the reference distance of 25 feet, and

D is the distance from the source to the receiver (FTA 2006).

4.11.4 ENVIRONMENTAL SETTING

Sensitive Noise Receptors

The State of California defines noise-sensitive receptors as those land uses that require serenity or are otherwise adversely affected by noise events or conditions. Schools, libraries, churches, hospitals, and residential uses make up the majority of these areas. According to the Mt. SAC 2016 CEQA Thresholds of Significance, noise-sensitive receptors do not include on-campus uses; therefore, the noise-sensitive receptors closest to the campus include residential uses to the north, south, west, and east of the campus.

Existing Noise Levels

As previously identified, ambient noise surveys to document the existing noise environment at various locations proximate to campus and at sensitive receptors in the vicinity were conducted on September 27, 2018. Noise measurements were taken along the primary roadways bordering the campus which include two locations along North Grand Avenue, Edinger Way and West Temple Avenue. The measurement data are summarized in Table 4.11-5; Appendix I of this Draft EIR includes instrument and measurement output data. The noise sources during these noise monitoring activities were primarily roadway traffic. It should be noted that the potential noise increases resulting from the proposed project related to increased traffic and mechanical equipment are addressed in this Draft EIR.

TABLE 4.11-5
EXISTING MEASURED DAILY NOISE LEVELS

Measurement Location*	Location, Description (Date/Time)	Noise Levels (dBA)			Primary Noise Source	Notes
		L_{eq}	L_{max}	L_{min}		
1	North Grand Avenue (north of Temple Avenue 9/27/18, 9:55-10:15 AM)	70.3	94.0	49.0	Traffic on North Grand	Background noise from the campus parking lot
2	South Grand Avenue (north of Stonybrook Drive 9/27/18, 10:45 -11:06 AM)	71.5	92.0	43.0	Traffic on South Grand	Light wind and rustling leaves
3	Temple Avenue (west of Pomona Drive 9/27/18, 11:34 - 11:55 AM)	67.4	83.0	53.0	Traffic on Edinger	Distant industrial noise
4	Edinger Way (west of Bonita Avenue 9/27/18, 12:23 -12:44 PM)	62.4	81.0	41.0	Slow traffic through parking lot	Pedestrians in parking lot

dBA: A-weighted decibels; L_{eq}: average noise level; L_{max}: maximum noise level; L_{min}: minimum noise level

4.11.5 THRESHOLDS OF SIGNIFICANCE

According to Appendix G of the State CEQA Guidelines, a project will normally have a significant adverse environmental impact related to noise if it would result in:

- Generate a substantial temporary 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.
- Generate a substantial 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.
- Generate excessive groundborne vibration or groundborne noise levels.
- 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, expose people residing or working in the project area to excessive noise levels.

Mt. San Antonio College 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 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 noise impact if construction occurs outside of permitted construction hours. Construction hours are defined in MM-5a in the latest approved FMP MMP, as 7 AM to 7 PM, Monday through Saturday, excluding	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 ascertain potential building damage if rough grading occurs within 50 feet of off-site buildings in sensitive receptor areas; MM-5a: All construction activities, except in emergencies or unusual circumstances, shall be limited to the hours of 7 am to 7 pm Monday-Saturday, excluding federal holidays. Staging areas for construction shall be located away from existing off-site residences. All

Environmental Topic in the CEQA Checklist	Impact	Mt. San Antonio Community College District Threshold of Significance	Agencies and Regulations	CEQA Procedures
		federal holidays, except for emergencies; A significant construction equipment vibration occurs for a site-specific project is 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. See Report 15-116; Site-specific projects that generate operational noise as measured at a residential property line greater than 55 dBA L_{eq} during the day from 7 am to 10 pm and 50 dBA L_{eq} during the night from 10 pm to 7 am have a significant noise impact. The maximum operational noise level shall not exceed 75 dBA L_{max} during the day or 70 dBA L_{max} during the night, nor should they exceed 55 dBA L_{eq} from 7 am to 10 pm and 50 dBA L_{eq} from 10 pm to 7 am. If the ambient noise levels are higher than the stated L_{eq} or L_{max} criteria, the L_{eq} and L_{max} criteria levels are increased to the ambient noise level. Noise levels below the stated criteria are not significant; Site-specific construction projects lasting more than one year, with site 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 noise impact if: (1) Construction occurs outside of permitted construction hours.		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)

Environmental Topic in the CEQA Checklist	Impact	Mt. San Antonio Community College District Threshold of Significance	Agencies and Regulations	CEQA Procedures
		(Construction hours are defined in MM-5a in the MMP) and; (2) L_{max} noise levels from 7 am to 7 pm are more than 90 dBA and less than 65 dBA L_{eq} at any off-site sensitive receptor property line and; (3) from 7 pm to 7 am, the L_{max} is more than 75 dBA and less than 55 dBA L_{eq} 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 L_{eq} during the day from 7 am to 10 pm and 50 dBA L_{eq} 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 L_{max} during the day or 70 dBA L_{max} 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 15-116)[5].		
CNEL: Community Noise Equivalent Level; dBA: A-weighted decibel FMP: Facilities Master Plan; L_{eq}: Equivalent Sound Level; L_{max}: Maximum Sound Level; MM: Mitigation Measure; MMP: Mitigation Monitoring Program; OPR: California Office of Planning and Research; PPV: peak particle velocity				

4.11.6 ENVIRONMENTAL IMPACTS

Impact Analysis

Threshold 11.1	**Would the project generate substantial temporary 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?**

2018 Educational and Facilities Master Plan (Phases 1A, 1B, and 2)

Construction noise is related primarily to the use of heavy equipment. Construction equipment can be considered to operate in two modes: stationary and mobile. The development of the proposed Project would entail construction activities which include noise generated from demolition, grading/excavation, and building construction activities. Construction activities are anticipated to occur at different times and locations within the Mt. SAC campus as part of the proposed 2018 EFMP. Construction would occur periodically throughout different portions of the campus up to buildout of the proposed 2018 EFMP in the year 2027.

Typical maximum noise levels generated by representative pieces of construction equipment are listed in Table 4.11-6.

TABLE 4.11-6
TYPICAL MAXIMUM CONSTRUCTION NOISE LEVELS

Equipment	Noise Level (dBA) at 50 ft	Acoustic Usage Factor
Auger Drill Rig	85	20%
Backhoe	80	40%
Blasting	94	1%
Chain Saw	85	20%
Clam Shovel	93	20%
Compactor (ground)	80–82	20%
Compressor (air)	80	40%
Concrete Mixer Truck	85	40%
Concrete Pump	82	20%
Concrete Saw	90	20%
Crane (mobile or stationary)	85	20%
Dozer	85	40%
Dump Truck	84	40%
Excavator	85	40%
Front-End Loader	80	40%
Generator (25 KVA or less)	70	50%
Generator (more than 25 KVA)	82	50%
Grader	85	40%
Hydra Break Ram	90	10%
In Situ Soil Sampling Rig	84	20%
Jackhammer	85	20%
Mounted Impact Hammer (hoe ram)	90	20%

TABLE 4.11-6
TYPICAL MAXIMUM CONSTRUCTION NOISE LEVELS

Equipment	Noise Level (dBA) at 50 ft	Acoustic Usage Factor
Paver	85	50%
Pile Driver, Impact (diesel or pneumatic)	95–101	20%
Pile Driver, Vibratory	95	20%
Pneumatic Tools	85	50%
Pumps	77	50%
Rock Drill	85	20%
Scraper	85	40%
Tractor	84	40%
Vacuum Excavator (vac-truck)	85	40%
Vibratory Concrete Mixer	80	20%
dBA: A-weighted decibels; ft: foot/feet; KVA: kilovolt amps. Sources: Thalheimer 2000; FTA 2006		

Construction activities are carried out in discrete steps, each of which has its own mix of equipment and, consequently, its own noise characteristics. These various sequential phases would change the character of the noise levels surrounding the construction site as work progresses. Construction noise levels reported in the U.S. Environmental Protection Agency's (USEPA's) *Noise from Construction Equipment and Operations, Building Equipment, and Home Appliances* were used to estimate future construction noise levels for the Project (USEPA 1971). Typically, the estimated construction noise levels are governed primarily by equipment that produces the highest noise levels. Construction noise levels for each generalized construction phase (ground clearing/demolition, excavation, foundation construction, building construction, paving, and site cleanup) are based on a typical construction equipment mix for office, hotel, hospital, school, public works construction projects 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 to these activities. The closest distance for which construction activities would occur from the property line of offsite uses is approximately 120 feet. The nearest noise sensitive uses are residences located to the north of the campus along Granite Wells Drive. Estimated noise levels attributable to the development of the proposed 2018 EFMP are at various distances shown in Table 4.11-7, Construction Noise Levels at Various Distances, and calculations are included in Appendix I.

TABLE 4.11-7
CONSTRUCTION NOISE LEVELS AT VARIOUS DISTANCES

Construction Phase	Construction Noise Levels at Various Distances (L_{eq} dBA)			
	dBA at 120 ft	dBA at 200 ft	dBA at 500 ft	dBA at 1,000 ft
Ground Clearing/Demolition	76	72	64	58
Excavation (Site Preparation)	81	77	69	63
Foundation Construction	70	66	58	52
Building Construction	79	75	67	61
Paving	81	77	69	63

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

Note: Noise levels from construction activities do not take into account attenuation provided by intervening structures. Noise levels are also based on all applicable equipment in use as opposed to the minimum required equipment.

Source: USEPA 1971.

Due to the numerous locations for which construction areas could occur under the proposed 2018 EFMP, estimates of off-site noise exposure is approximated based on the distance from the construction activities to offsite uses. Table 4.11-7 shows the noise levels for construction activities occurring at various distances to provide approximated noise exposure for discussion purposes. Actual noise exposure would depend on the location of each of the proposed 2018 EFMP projects and their proximity to offsite uses. As shown in Table 4.11-7, noise levels decrease substantially with distance from construction activities. Noise level reductions from intervening structures were not included.

Construction noise would also be generated on local roadways by workers commuting to and from the job site, construction material deliveries, and transport of soil to and from the campus. Heavy trucks transporting soil and other construction materials would generate the highest noise levels, and the highest number of trucks would occur during grading activities. Construction traffic would be routed from campus to the east along Temple Avenue to the State Route 57 (SR57). The addition of the project-generated truck traffic on these roadways would not comprise a substantial portion of the traffic along Temple Avenue and would temporarily increase noise levels by less than 1 dBA L_{eq}. The increase in overall traffic noise levels would be inaudible and would not be a substantial noise increase.

The nearest offsite noise sensitive uses are approximately 120 feet away. Noise attenuation due to this distance would result in noise level exposures of 8 dBA less than the values shown in Table 4.11-7 above. Construction activities are not anticipated to generate noise levels that have a maximum (L_{max}) of 90 dBA or greater at offsite land uses.

Mt. SAC uses a screening distance of 1,500 feet from offsite land uses to establish a noise limit threshold of 65 dBA L_{eq}. A distance of 1,500 feet from offsite land uses would encompass much of the proposed 2018 EFMP development area. Some proposed 2018 EFMP projects would entail a construction duration of more than one year. Based on Table 4.11-7 also shows that proposed Project average construction noise levels may be in excess of Mt. SAC's 65 dBA L_{eq} threshold at off-site sensitive receptors. Concurrent proposed 2018 EFMP projects that are developed in close proximity of the same offsite uses would result in greater cumulative noise exposure than the levels shown in Table 4.11-7. Consequently, noise associated with Project-related construction would potentially result in significant impacts. Mitigation measure (MM) NOI-1 is included to minimize noise associated with construction activities associated with the proposed Project. Noise

levels associated with MM NOI-1 would reduce noise levels through a combination of sound barriers, substitution of noisier equipment with less noisy equipment, delayed removal of existing sound barriers (existing buildings or walls), and use of noisier equipment to the least noise sensitive portions of the day. With implementation of MM NOI-1, impacts from construction would be reduced to levels less than the significance threshold, and would result in a less than significant noise impact.

Level of Significance Prior to Mitigation

Potentially significant impact.

Recommended Mitigation Measures

MM NOI-1

Level of Significance After Mitigation

Less than significant.

Project-Specific

Project-specific analyses were also conducted to determine whether the following individual proposed 2018 EFMP projects would exceed either the average (dBA L_{eq}) or maximum (L_{max}) construction noise thresholds.

Parking Structure R and Tennis Courts

Estimated noise levels attributable to the development of the proposed Parking Structure R and Tennis Courts are shown in Table 4.11-8, Construction Noise Levels, and calculations are included in Appendix I.

TABLE 4.11-8
PARKING STRUCTURE R AND TENNIS COURTS CONSTRUCTION NOISE LEVELS

Construction Phase	Construction Noise Levels (dBA L_{eq})			
	dBA at 2,510 feet	**dBA at 5,480 feet**	**dBA at 1,400 feet**	**dBA at 3,060 feet**
Ground Clearing/Demolition	50	43	55	48
Excavation (Site Preparation)	55	48	60	53
Foundation Construction	44	37	49	42
Building Construction	53	46	58	51
Paving	55	48	60	53
L_{eq} Significance Threshold	65	65	65	65
Exceeds L_{eq} Threshold?	No	No	No	No
All Construction Phases	**Construction Noise Levels** *(dBA L_{max})*			
L_{max} Levels	59	52	64	57
L_{max} Significance Threshold	90	90	90	90
Exceeds L_{max} Threshold?	No	No	No	No

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

Note: Noise levels from construction activities do not take into account attenuation provided by intervening structures. Noise levels are also based on all applicable equipment in use as opposed to the minimum required equipment.

Source: USEPA 1971.

Estimates of offsite noise exposure are approximated based on the distance from the construction activities to offsite uses.

As shown in Table 4.11-8, construction noise generated by the development of the proposed Parking Structure R and Tennis Courts would be below the significance thresholds developed for average construction noise (dBA L_{eq}) as well as for maximum noise levels (dBA L_{max}). Because construction noise levels would be below the significance thresholds for noise, the development of this Project-specific use would result in a less than significant noise impact to offsite uses and no mitigation measures are required.

Parking Structure S and West Temple Avenue Pedestrian Bridge

Estimated noise levels attributable to the development of the proposed Parking Structure S and West Temple Avenue Pedestrian Bridge are shown in Table 4.11-9, Construction Noise Levels, and calculations are included in Appendix I.

TABLE 4.11-9
PARKING STRUCTURE S AND WEST TEMPLE AVENUE PEDESTRIAN BRIDGE CONSTRUCTION NOISE LEVELS

	Construction Noise Levels (dBA L_{eq})			
Construction Phase	**dBA at 2,040 feet**	**dBA at 6,150 feet**	**dBA at 2,010 feet**	**dBA at 2,440 feet**
Ground Clearing/Demolition	52	42	52	50
Excavation (Site Preparation)	57	47	57	55
Foundation Construction	46	36	46	44
Building Construction	55	45	55	53
Paving	57	47	57	55
L_{eq} Significance Threshold	65	65	65	65
Exceeds L_{eq} Threshold?	No	No	No	No
All Construction Phases	**Construction Noise Levels** *(dBA L_{max})*			
L_{max} Levels	61	51	61	59
L_{max} Significance Threshold	90	90	90	90
Exceeds L_{max} Threshold?	No	No	No	No

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

Note: Noise levels from construction activities do not take into account attenuation provided by intervening structures. Noise levels are also based on all applicable equipment in use as opposed to the minimum required equipment.

Source: USEPA 1971.

Estimates of offsite noise exposure are approximated based on the distance from the construction activities to offsite uses.

As shown in Table 4.11-9, construction noise generated by the development of the proposed Parking Structure S and Pedestrian Bridge would be below the significance thresholds developed for average construction noise as well as maximum noise levels. Because construction noise levels would be below the significance thresholds for noise, the development of this Project-specific use would result in a less than significant noise impact to offsite uses and no mitigation measures are required.

Student Center and Central Campus Infrastructure

Estimated noise levels attributable to the development of the proposed Student Center and Central Campus Infrastructure are shown in Table 4.11-10, Construction Noise Levels and calculations are included in Appendix I.

TABLE 4.11-10
STUDENT CENTER AND CENTRAL CAMPUS INFRASTRUCTURE
CONSTRUCTION NOISE LEVELS

Construction Phase	Construction Noise Levels ($dBA\ L_{eq}$)			
	dBA at 1,060 feet	**dBA at 7,500 feet**	**dBA at 1,780 feet**	**dBA at 1,340 feet**
Ground Clearing/Demolition	57	40	53	55
Excavation (Site Preparation)	62	45	58	60
Foundation Construction	51	34	47	49
Building Construction	60	43	56	58
Paving	62	45	58	60
L_{eq} Significance Threshold	65	65	65	65
Exceeds L_{eq} Threshold?	No	No	No	No
All Construction Phases	**Construction Noise Levels** *(dBA L_{max})*			
L_{max} Levels	63	46	59	61
L_{max} Significance Threshold	90	90	90	90
Exceeds L_{max} Threshold?	No	No	No	No

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

Note: Noise levels from construction activities do not take into account attenuation provided by intervening structures. Noise levels are also based on all applicable equipment in use as opposed to the minimum required equipment.

Source: USEPA 1971.

Estimates of offsite noise exposure is approximated based on the distance from the construction activities to offsite uses.

As shown in Table 4.11-10, construction noise generated by the development of the proposed Student Center and Central Campus Infrastructure would be below the significance thresholds developed for average construction noise and maximum noise levels. Because construction noise levels would be below the significance thresholds for noise, the development of this Project-specific use would result in a less than significant noise impact to offsite uses and no mitigation measures are required.

Bookstore

Estimated noise levels attributable to the development of the proposed Bookstore are shown in Table 4.11-11, Construction Noise Levels and calculations are included in Appendix I.

TABLE 4.11-11
BOOKSTORE CONSTRUCTION NOISE LEVELS

Construction Phase	Construction Noise Levels (dBA L_{eq})			
	dBA at 1,360 feet	**dBA at 7,500 feet**	**dBA at 1,712 feet**	**dBA at 1,370 feet**
Ground Clearing/Demolition	55	40	53	55
Excavation (Site Preparation)	60	45	58	60
Foundation Construction	49	34	47	49
Building Construction	58	43	56	58
Paving	60	45	58	60
L_{eq} Significance Threshold	65	65	65	65
Exceeds L_{eq} Threshold?	No	No	No	No
All Construction Phases	**Construction Noise Levels** *(dBA L_{max})*			
L_{max} Levels	64	49	62	64
L_{max} Significance Threshold	90	90	90	90
Exceeds L_{max} Threshold?	No	No	No	No

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

Note: Noise levels from construction activities do not take into account attenuation provided by intervening structures. Noise levels are also based on all applicable equipment in use as opposed to the minimum required equipment.

Source: USEPA 1971.

Estimates of offsite noise exposure is approximated based on the distance from the construction activities to offsite uses. As shown in Table 4.11-11, construction noise generated by the development of the proposed Bookstore would be below the significance thresholds developed for average construction noise and maximum noise levels. Because construction noise levels would be below the significance thresholds for noise, the development of this Project-specific uses would result in a less than significant noise impact to offsite uses and no mitigation measures are required.

Sand Volleyball Courts and Parking Lot W Reconstruction

Estimated noise levels attributable to the development of the proposed Sand Volleyball Courts and Parking Lot W are shown for each component of the Project in Table 4.11-12, Construction Noise Levels and calculations are included in Appendix I.

TABLE 4.11-12
SAND VOLLEYBALL COURTS AND PARKING LOT W
RECONSTRUCTION CONSTRUCTION NOISE LEVELS

Construction Phase	Construction Noise Levels (dBA L_{eq})			
	dBA at 2,680 feet	**dBA at 7,060 feet**	**dBA at 1,390 feet**	**dBA at 1,210 feet**
Ground Clearing/Demolition	49	41	55	56
Excavation (Site Preparation)	54	46	60	61
Foundation Construction	43	35	49	50
Building Construction	52	44	58	59
Paving	54	46	60	61
L_{eq} Significance Threshold	65	65	65	65
Exceeds L_{eq} Threshold?	No	No	No	No
All Construction Phases	**Construction Noise Levels** *(dBA L_{max})*			
L_{max} Levels	55	47	61	62
L_{max} Significance Threshold	90	90	90	90
Exceeds L_{max} Threshold?	No	No	No	No

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

Note: Noise levels from construction activities do not take into account attenuation provided by intervening structures. Noise levels are also based on all applicable equipment in use as opposed to the minimum required equipment.

Source: USEPA 1971.

Estimates of offsite noise exposure is approximated based on the distance from the construction activities to offsite uses.

As shown in Table 4.11-12, construction noise generated by the development of the proposed Volleyball Courts and Parking Lot W would be below the significance thresholds developed for average construction noise and maximum noise levels. Because construction noise levels would be below the significance thresholds for noise, the development of this Project-specific use would result in a less than significant noise impact to offsite uses and no mitigation measures are required.

Level of Significance Prior to Mitigation

Less Than Significant Impact

Recommended Mitigation Measures

None

Level of Significance After Mitigation

Less Than Significant Impact

Threshold 11.2	**Would the project generate substantial 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?**

2018 Educational and Facilities Master Plan (Phases 1A, 1B, and 2) and Project-Specific

Long-term noise impacts resulting from the proposed project are addressed below and include traffic-related noise impacts to off-site uses, traffic-related noise impacts to on-site uses, and noise impacts from on-site activities.

Off-Site Traffic-Related Noise Impacts

Long-term, off-site noise impacts are associated with increased noise from traffic generated by the proposed project. The noise levels for roadways within the Project traffic study area were estimated using the FHWA Highway Traffic Noise Prediction Model (RD-77-108). The FHWA model determines a predicted noise level using a series of adjustments to a reference sound level. These adjustments account for traffic flows, speed, truck mix, varying distances from the roadway, length of exposed roadway, and noise shielding. The calculations do not take into account the effect of any noise barriers or topography that may affect ambient noise levels. To estimate noise level increases and impacts due to implementation of the proposed Project, noise levels were calculated from the traffic volumes provided for two scenarios included in the Project Traffic Report (included in Appendix J of this Draft EIR), as discussed below. A complete discussion of these traffic analysis scenarios is provided in Section 4.14, Transportation/Traffic, of this Draft EIR.

- **Existing Conditions Without Project.** This scenario refers to noise conditions for existing traffic volumes without construction of the fully-proposed 2018 EFMP. This scenario is shown in Table 4.11-18.
- **2027 Without/With Project.** This scenario refers to the noise conditions in 2027 without and with the proposed 2018 EFMP, assuming planned growth for the City by 2027. This scenario is shown in Table 4.11-13.

The noise increase “With-Project” represents how much the noise levels increase with project-generated traffic compared to the “Without-Project” conditions. The Project traffic analysis provided With-Project and Without-Project traffic volumes for all the roadway segments identified in the Project traffic study area. Noise level increases were calculated for the year 2027 with and without implementation of the proposed 2018 EFMP, and is shown in Tables 4.11-13, respectively. Appendix I includes traffic and noise data for all roadway segments.

TABLE 4.11-13
OFF-SITE TRAFFIC NOISE INCREASES FOR THE YEAR 2027

Intersection	Segment	CNEL at 100 feet from roadway centerline (dBA)			
		Without Project	With Project	Project Contribution	Potential Impact?
Amar Rd./Nogales St.	East Leg	72.3	72.4	0	No
Amar Rd./Nogales St.	West Leg	73.6	73.7	0	No
Amar Rd./Nogales St.	North Leg	56.5	56.5	0	No
Amar Rd./Nogales St.	South Leg	70.5	70.5	0	No
Amar Rd./Lemon Ave.	East Leg	71.4	71.4	0	No
Amar Rd./Lemon Ave.	West Leg	72.0	72.1	0	No
Amar Rd./Lemon Ave.	North Leg	58.9	58.9	0	No
Amar Rd./Lemon Ave.	South Leg	65.4	65.4	0	No
Amar Rd./Meadow Pass Rd.	East Leg	72.0	72.1	0	No
Amar Rd./Meadow Pass Rd.	West Leg	71.5	71.6	0	No
Amar Rd./Meadow Pass Rd.	North Leg	61.6	61.6	0	No
Amar Rd./Meadow Pass Rd.	South Leg	64.1	64.1	0	No
Temple Ave./Grand Ave.	East Leg	71.0	71.3	0	No
Temple Ave./Grand Ave.	West Leg	71.0	71.1	0	No
Temple Ave./Grand Ave.	North Leg	72.4	72.6	0	No
Temple Ave./Grand Ave.	South Leg	74.2	74.3	0	No
Temple Ave./Mt SAC Way	East Leg	70.5	70.8	0	No
Temple Ave./Mt SAC Way	West Leg	71.0	71.2	0	No
Temple Ave./Mt SAC Way	North Leg	63.1	63.6	1	No
Temple Ave./Mt SAC Way	South Leg	58.4	58.6	0	No
Temple Ave./Transit Center Access	East Leg	70.6	70.9	0	No
Temple Ave./Transit Center Access	West Leg	70.5	70.7	0	No
Temple Ave./Transit Center Access	North Leg	57.5	57.5	0	No
Temple Ave./Transit Center Access	South Leg	0	50.1	50	No
Temple Ave./Bonita Dr.	East Leg	72.6	72.9	0	No
Temple Ave./Bonita Dr.	West Leg	70.5	70.8	0	No
Temple Ave./Bonita Dr.	North Leg	63.8	64.6	1	No
Temple Ave./Bonita Dr.	South Leg	58.6	58.9	0	No
Temple Ave./Lot F Entrance	East Leg	72.7	73.0	0	No
Temple Ave./Lot F Entrance	West Leg	72.6	72.9	0	No
Temple Ave./Lot F Entrance	North Leg	54.1	54.6	1	No
Temple Ave./University Dr.	East Leg	73.5	73.8	0	No
Temple Ave./University Dr.	West Leg	72.7	73.0	0	No
Temple Ave./University Dr.	North Leg	65.9	65.9	0	No
Temple Ave./University Dr.	South Leg	47.4	47.4	0	No
Temple Ave./Campus Dr.	East Leg	72.9	73.0	0	No
Temple Ave./Campus Dr.	West Leg	73.7	74.0	0	No
Temple Ave./Campus Dr.	North Leg	70.8	71.0	0	No
Temple Ave./Campus Dr.	South Leg	61.4	61.4	0	No
Kellogg Dr./Campus Dr.	East Leg	64.0	64.0	0	No
Kellogg Dr./Campus Dr.	West Leg	67.0	67.2	0	No

TABLE 4.11-13
OFF-SITE TRAFFIC NOISE INCREASES FOR THE YEAR 2027

Intersection	Segment	CNEL at 100 feet from roadway centerline (dBA)			
		Without Project	With Project	Project Contribution	Potential Impact?
Kellogg Dr./Campus Dr.	North Leg	68.8	69.0	0	No
Kellogg Dr./Campus Dr.	South Leg	70.9	71.1	0	No
Temple Ave./Valley Blvd.	East Leg	72.0	72.1	0	No
Temple Ave./Valley Blvd.	West Leg	73.0	73.2	0	No
Temple Ave./Valley Blvd.	North Leg	71.5	71.5	0	No
Temple Ave./Valley Blvd.	South Leg	71.3	71.3	0	No
Temple Ave./Pomona Blvd.	East Leg	73.6	73.7	0	No
Temple Ave./Pomona Blvd.	West Leg	71.9	72.1	0	No
Temple Ave./Pomona Blvd.	North Leg	67.2	67.2	0	No
Temple Ave./Pomona Blvd.	South Leg	69.7	69.7	0	No
Temple Ave./Shell Driveway/SR-57 SB Ramps	East Leg	71.9	72.0	0	No
Temple Ave./Shell Driveway/SR-57 SB Ramps	West Leg	74.1	74.2	0	No
Temple Ave./Shell Driveway/SR-57 SB Ramps	North Leg	70.1	70.1	0	No
Temple Ave./Shell Driveway/SR-57 SB Ramps	South Leg	48.0	48.0	0	No
Temple Ave./SR-NB Ramps	East Leg	74.1	74.1	0	No
Temple Ave./SR-NB Ramps	West Leg	73.9	73.9	0	No
Temple Ave./SR-NB Ramps	North Leg	62.6	62.6	0	No
Temple Ave./SR-NB Ramps	South Leg	66.3	66.4	0	No
I-10 WB Ramps/Grand Ave.	East Leg	55.9	55.9	0	No
I-10 WB Ramps/Grand Ave.	West Leg	64.8	64.9	0	No
I-10 WB Ramps/Grand Ave.	North Leg	72.0	72.0	0	No
I-10 WB Ramps/Grand Ave.	South Leg	71.6	71.7	0	No
I-10 EB Ramps/Grand Ave.	West Leg	65.4	65.6	0	No
I-10 EB Ramps/Grand Ave.	North Leg	71.5	71.6	0	No
I-10 EB Ramps/Grand Ave.	South Leg	71.2	71.4	0	No
Holt Ave./Grand Ave.	East Leg	65.6	65.7	0	No
Holt Ave./Grand Ave.	West Leg	61.8	61.8	0	No
Holt Ave./Grand Ave.	North Leg	71.0	71.3	0	No
Holt Ave./Grand Ave.	South Leg	72.0	72.2	0	No
Cortez St./Grand Ave.	East Leg	4.8	4.8	0	No
Cortez St./Grand Ave.	West Leg	57.8	57.8	0	No
Cortez St./Grand Ave.	North Leg	71.9	72.2	0	No
Cortez St./Grand Ave.	South Leg	71.9	72.1	0	No
Cameron Ave./Barranca St.	East Leg	69.0	69.1	0	No
Cameron Ave./Barranca St.	West Leg	70.0	70.1	0	No
Cameron Ave./Barranca St.	North Leg	66.6	66.7	0	No
Cameron Ave./Grand Ave.	West Leg	66.0	66.1	0	No
Cameron Ave./Grand Ave.	North Leg	71.8	72.1	0	No
Cameron Ave./Grand Ave.	South Leg	73.0	73.3	0	No
Mountaineer Rd./Grand Ave.	East Leg	65.7	66.2	1	No
Mountaineer Rd./Grand Ave.	North Leg	73.3	73.5	0	No

TABLE 4.11-13
OFF-SITE TRAFFIC NOISE INCREASES FOR THE YEAR 2027

Intersection	Segment	CNEL at 100 feet from roadway centerline (dBA)			
		Without Project	With Project	Project Contribution	Potential Impact?
Mountaineer Rd./Grand Ave.	South Leg	72.3	72.5	0	No
San Jose Hills Rd./Grand Ave.	East Leg	62.5	63.2	1	No
San Jose Hills Rd./Grand Ave.	West Leg	63.6	63.6	0	No
San Jose Hills Rd./Grand Ave.	North Leg	72.3	72.5	0	No
San Jose Hills Rd./Grand Ave.	South Leg	72.4	72.6	0	No
La Puente Rd./Grand Ave.	East Leg	62.9	62.9	0	No
La Puente Rd./Grand Ave.	West Leg	68.9	68.9	0	No
La Puente Rd./Grand Ave.	North Leg	74.2	74.4	0	No
La Puente Rd./Grand Ave.	South Leg	74.4	74.5	0	No
Valley Blvd./Grand Ave.	East Leg	74.0	74.0	0	No
Valley Blvd./Grand Ave.	West Leg	74.7	74.7	0	No
Valley Blvd./Grand Ave.	North Leg	74.3	74.5	0	No
Valley Blvd./Grand Ave.	South Leg	73.6	73.8	0	No
Baker Pkwy/Grand Ave.	East Leg	4.8	4.8	0	No
Baker Pkwy/Grand Ave.	West Leg	60.8	60.8	0	No
Baker Pkwy/Grand Ave.	North Leg	73.5	73.7	0	No
Baker Pkwy/Grand Ave.	South Leg	73.6	73.8	0	No
Brea Canyon Rd./SR-60 WB Ramps/Grand Ave.	East Leg	63.7	64.1	0	No
Brea Canyon Rd./SR-60 WB Ramps/Grand Ave.	West Leg	59.2	59.3	0	No
Brea Canyon Rd./SR-60 WB Ramps/Grand Ave.	North Leg	73.7	73.9	0	No
Brea Canyon Rd./SR-60 WB Ramps/Grand Ave.	South Leg	73.3	73.4	0	No
CNEL: community noise equivalency level; dBA: A-weighted decibels.					

In summary, for all traffic analysis scenarios, the proposed Project would generate traffic that would contribute to increased noise levels along off-site roadways within the vicinity of the campus. Where the future noise levels would exceed 65 dBA CNEL, project-generated traffic noise increases would be 0 to 1 dBA, less than the 3 dBA threshold of significance. The only roadway which experiences noise levels which exceed a 3 dBA CNEL increase is the northern segment of the Temple Ave. and Transit Center Access intersection. This is due to the development of a new transit center within the center of campus. Noise level increases associated with travel along roadways at this intersection are not considered substantial because they would not expose off-campus land uses to excessive noise level increases due to the far distance between this road segment and the off-campus land uses. The proposed project would not result in significant long-term, traffic-related noise impacts to off-campus uses, and no mitigation is required.

Noise Impacts to Off-Campus Uses from On-Campus Activities

This section includes an analysis of noise impacts to off-campus uses resulting from on-campus operations activities. The primary onsite operations phase activities that have the potential to generate substantial levels of noise includes athletic facilities (volleyball and tennis courts), parking structures, and mechanical equipment.

On-Site Parking Structures

The proposed 2018 EFMP includes the development of Parking Structures B, F, R, and S. Noise associated with parking structures generally involve car engine starts, human speech, and tire squeals on pavement and infrequent car alarms. Parking Structure B is located closest to offsite noise sensitive uses and is approximately 500 feet away. To approximate noise levels anticipated by the proposed Project's parking structure, noise data from measurements of a theme park parking structure are used for this analysis. The Sound Level Meter (SLM) was positioned approximately 50 feet from the western side of the parking structure, away from other sources of noise, including roadway traffic. The measured noise level was 48 dBA L_{eq} and 77 dBA L_{max} at 50 feet. Noise levels from this parking structure was used to extrapolate noise exposure from the proposed Project's parking structures as shown in Table 4.11-14. As shown in this Table, noise levels at all the proposed parking structures would be below both the day and nighttime noise thresholds.

TABLE 4.11-14
PARKING STRUCTURE NOISE LEVELS

Construction Phase	Distance from Source	Average Noise Level (dBA L_{eq})	Maximum Noise Level (dBA L_{max})
Theme Park Parking Structure*	50	48	77
Parking Structure B	500	28	57
Parking Structure R	930	23	52
Parking Structure F	1,300	20	49
Parking Structure S	2,000	16	45
Noise Thresholds			
Day (7 AM to 10 PM)		55	75
Night (10 PM to 7 AM)		50	70
Exceeds Thresholds?		No	No

dBA: A-weighted decibels; L_{eq}: energy average; L_{max}: maximum.
* Note: Theme Park Parking Structure is provided for informational purposes.

Athletic Facilities

New athletic facilities proposed by the 2018 EFMP include new sand volleyball and tennis courts. The proposed sand volleyball courts, which would also have lighting, would be located internal to campus and would be more than 1,200 feet from the nearest offsite residential uses to the west of the campus. Noise associated with volleyball would occur from speech and cheers from both the players and spectators. Bleacher stands would be located at the sand volleyball courts. It is anticipated that upwards of 30 spectators may attend the volleyball games. Average noise levels are based on all 60 players and spectators speaking very loudly speaking while maximum noise levels are based on 60 players and spectators shouting. Noise generated by the players and spectators would be attenuated by the large distance between these athletic uses and the nearest residential uses. Noise levels from the use of volleyball courts and spectators are shown in Table 4.11-15.

TABLE 4.11-15
VOLLEYBALL NOISE LEVELS

Construction Phase	Distance from Source	Average Noise Level (dBA L_{eq})	Maximum Noise Level (dBA L_{max})
Volleyball Courts with 60 Players and Spectators	1,200	45	51
Noise Thresholds			
Day (7 am to 10 PM)		55	75
Night (10 PM to 7 am)		50	70
Exceeds Thresholds?		No	No
dBA: A-weighted decibels; L_{eq}: energy average; L_{max}: maximum.			

Noise levels associated with volleyball court usage would be below the 75 dBA L_{max} during the day and 70 dBA L_{max} during the night, nor would they exceed 55 dBA L_{eq} from 7 AM to 10 PM and 50 dBA L_{eq} from 10 PM to 7 AM. Therefore, the noise level increase due to sand volleyball games would be less than significant.

The proposed 2018 EFMP proposes to construct 9 tennis courts on the top of Parking Structure R. Noise associated with the tennis courts include player and referee voices as well as spectators. Bleacher seating accommodating approximately 450 spectators and lawn seating along the east edge of the tennis courts would be developed. Tennis court usage would occur during the day and nighttime. Tennis court voices may be heard as tennis players shout to opponents on the other end of the court. The distance between nearest offsite residences and the tennis courts would be approximately 1,100 feet. Average noise levels are based on all 450 spectators speaking loudly while maximum noise levels are based on 450 spectators shouting. As shown in Table 4.11-16, the average noise level (L_{eq}) from the tennis court at the nearest residences would be less than the noise level thresholds established for average and maximum noise levels. Therefore, tennis court noise would not substantially increase the ambient noise level and the impact would be less than significant.

TABLE 4.11-16
TENNIS MATCH NOISE LEVELS

Construction Phase	Distance from Source	Average Noise Level (dBA L_{eq})	Maximum Noise Level (dBA L_{max})
Tennis Courts with 450 Spectators	1,100	48	60
Noise Thresholds			
Day (7 AM to 10 PM)		55	75
Night (10 PM to 7 AM)		50	70
Exceeds Thresholds?		No	No
dBA: A-weighted decibels; L_{eq}: energy average; L_{max}: maximum.			

Heating, Ventilation, and Air Conditioning and Other Mechanical Equipment

New buildings constructed during Phases 1 and 2 would involve installation of HVAC equipment, cooling fans, or similar mechanical equipment at the individual buildings. The Project's facilities are required to comply with Section 3.40.050 Exterior noise standards identified in the City of Walnut's Municipal Code. Compliance with the City's exterior noise standards would result in

noise levels at offsite uses which are below Mt. SAC's significance thresholds for stationary sources of noise. As such, noise levels from on-campus mechanical equipment associated with Phases 1 and 2 would have a less than significant noise impact to off-campus properties and no mitigation is required.

Noise and Land Use Compatibility

The General Plan's Noise Element includes the noise compatibility guidelines shown in Table 4.11-4. These guidelines and applicable sections of the State Building Code are used to evaluate the compatibility of proposed new land uses with future ambient noise levels.

Exterior noise levels are primarily due to roadway vehicles and are shown in Table 4.11-13. Noise associated with year 2027 conditions would be 71 dBA CNEL along West Temple Avenue (between North Grand Avenue and Pomona Drive), 73 dBA CNEL along North Grand Drive (between West Temple Avenue and Edinger Way), and 74 dBA CNEL along North Grand Drive (between West Temple Avenue and Storybrook Drive). The proposed buildings associated with the proposed 2018 EFMP would be of conventional construction with mechanical ventilation or air conditioning, which would reduce exterior-to-interior noise by at least 20 dBA. Interior noise levels of the proposed new buildings would result in interior noise levels of 45 dBA or less which is suitable for residential and educational uses.

Level of Significance Prior to Mitigation

Less than Significant Impact

Recommended Mitigation Measures

None

Level of Significance After Mitigation

Less than Significant Impact

Threshold 11.3	**Would the project generate excessive groundborne vibration or groundborne noise levels?**

2018 Educational and Facilities Master Plan (Phases 1A, 1B, and 2) and Project-Specific

This analysis addresses potential vibration impacts during construction as there are no operations associated with proposed uses that would produce discernable vibration on or off campus. The nearest off-campus structures to the Project construction areas would be the residential uses to the north of the campus. Pile driving and blasting are generally the sources of the most severe vibration during construction. Pile driving would not be required during construction of proposed 2018 EFMP projects. Conventional construction equipment would be used. Table 4.11-17 summarizes typical vibration levels measured during construction activities for various vibration-inducing pieces of equipment at a distance of 120 feet which is from the campus to the nearest offsite noise sensitive use. Based on Table 4.11-17, vibration exposure at the nearest offsite uses at 120 feet would be below the significant impact threshold 0.040 ppv at offsite uses. Vibration generated by Project construction activities located further than 120 feet from offsite uses would be expected to result in lower levels of vibration exposure and likewise would result in less than significant vibration impacts.

TABLE 4.11-17
VIBRATION LEVELS FOR CONSTRUCTION EQUIPMENT

Equipment	ppv at 120 ft (in/sec)
Vibratory roller	0.020
Large bulldozer	0.008
Caisson drilling	0.008
Loaded trucks	0.007
Jackhammer	0.007
Small bulldozer	0.000
Mt. SAC Vibration Threshold	**0.040**
Project Exceeds Vibration Threshold?	**No**
ppv: peak particle velocity; ft: feet; in/sec: inches per second.	
Source: Caltrans 2013b; FTA 2006	

Level of Significance Prior to Mitigation

Less than Significant Impact

Recommended Mitigation Measures

None

Level of Significance After Mitigation

Less than Significant Impact

Threshold 11.4	**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?**

2018 Educational and Facilities Master Plan (Phases 1A, 1B, and 2) and Project-Specific

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.

Level of Significance Prior to Mitigation

No impact.

Recommended Mitigation Measures

None.

Level of Significance After Mitigation

No impact.

4.11.7 CUMULATIVE IMPACTS

Noise Generated by Traffic from the Project and Cumulative Growth

Cumulative traffic noise impacts are measured based on projected long-term future traffic noise level increases over existing conditions. This analysis considers the forecasted traffic volumes for scenarios that include approved and pending (not-approved) projects currently in process within the City of Walnut or adjacent communities that could impact traffic volumes within the study area, which is the 2027 scenario described. Long-term cumulative off-site impacts from traffic noise are measured as follows. First, a substantial cumulative noise increase would occur if future traffic noise levels increase by more than 3 dBA compared to existing conditions.

Table 4.11-18 shows the cumulative noise level increases associated with the proposed 2018 EFMP. With the exception of the northern segment of the Temple Ave. and Transit Center Access intersection, there is no substantial cumulative noise increase of more than 3 dBA between 2027 With-Project and the existing conditions. The increase in noise is due to the development of a new transit center within the center of campus. Noise level increases associated with travel along roadways at this intersection are not considered substantial and would not expose off-campus uses to excessive noise level increases due to far distances between this road segment and the off-campus uses. Therefore, the proposed Project would not result in a cumulatively considerable contribution to a significant cumulative impact due to traffic noise.

TABLE 4.11-18
CUMULATIVE TRAFFIC NOISE LEVELS

Intersection	Segment	CNEL at 100 feet from roadway centerline (dBA)			
		Existing Conditions	With Project	Cumulative Contribution	Potential Impact?
Amar Rd/Nogales St	East Leg	72.0	72.4	0	No
Amar Rd/Nogales St	West Leg	73.3	73.7	0	No
Amar Rd/Nogales St	North Leg	56.1	56.5	0	No
Amar Rd/Nogales St	South Leg	70.1	70.5	0	No
Amar Rd/Lemon Ave	East Leg	71.1	71.4	0	No
Amar Rd/Lemon Ave	West Leg	71.7	72.1	0	No
Amar Rd/Lemon Ave	North Leg	58.5	58.9	0	No
Amar Rd/Lemon Ave	South Leg	65.0	65.4	0	No
Amar Rd/Meadow Pass Rd	East Leg	71.7	72.1	0	No
Amar Rd/Meadow Pass Rd	West Leg	71.2	71.6	0	No
Amar Rd/Meadow Pass Rd	North Leg	61.2	61.6	0	No
Amar Rd/Meadow Pass Rd	South Leg	63.7	64.1	0	No
Temple Ave/Grand Ave	East Leg	70.8	71.3	0	No
Temple Ave/Grand Ave	West Leg	70.7	71.1	0	No
Temple Ave/Grand Ave	North Leg	72.2	72.6	0	No
Temple Ave/Grand Ave	South Leg	74.0	74.3	0	No
Temple Ave/Mt SAC Way	East Leg	70.4	70.8	0	No
Temple Ave/Mt SAC Way	West Leg	70.8	71.2	0	No

TABLE 4.11-18
CUMULATIVE TRAFFIC NOISE LEVELS

Intersection	Segment	CNEL at 100 feet from roadway centerline (dBA)			
		Existing Conditions	With Project	Cumulative Contribution	Potential Impact?
Temple Ave/Mt SAC Way	North Leg	63.1	63.6	1	No
Temple Ave/Mt SAC Way	South Leg	58.2	58.6	0	No
Temple Ave/Transit Center Access	East Leg	70.5	70.9	0	No
Temple Ave/Transit Center Access	West Leg	70.3	70.7	0	No
Temple Ave/Transit Center Access	North Leg	57.1	57.5	0	No
Temple Ave/Transit Center Access	South Leg	0	50.1	50	No
Temple Ave/Bonita Dr	East Leg	72.5	72.9	0	No
Temple Ave/Bonita Dr	West Leg	70.3	70.8	0	No
Temple Ave/Bonita Dr	North Leg	63.8	64.6	1	No
Temple Ave/Bonita Dr	South Leg	58.4	58.9	0	No
Temple Ave/Lot F Entrance	East Leg	72.6	73.0	0	No
Temple Ave/Lot F Entrance	West Leg	72.5	72.9	0	No
Temple Ave/Lot F Entrance	North Leg	54.1	54.6	1	No
Temple Ave/University Dr	East Leg	73.4	73.8	0	No
Temple Ave/University Dr	West Leg	72.6	73.0	0	No
Temple Ave/University Dr	North Leg	65.6	65.9	0	No
Temple Ave/University Dr	South Leg	47.3	47.4	0	No
Temple Ave/Campus Dr	East Leg	72.6	73.0	0	No
Temple Ave/Campus Dr	West Leg	73.6	74.0	0	No
Temple Ave/Campus Dr	North Leg	70.6	71.0	0	No
Temple Ave/Campus Dr	South Leg	61.0	61.4	0	No
Kellogg Dr/Campus Dr	East Leg	63.6	64.0	0	No
Kellogg Dr/Campus Dr	West Leg	66.8	67.2	0	No
Kellogg Dr/Campus Dr	North Leg	68.6	69.0	0	No
Kellogg Dr/Campus Dr	South Leg	70.7	71.1	0	No
Temple Ave/Valley Blvd	East Leg	71.8	72.1	0	No
Temple Ave/Valley Blvd	West Leg	72.8	73.2	0	No
Temple Ave/Valley Blvd	North Leg	71.1	71.5	0	No
Temple Ave/Valley Blvd	South Leg	70.9	71.3	0	No
Temple Ave/Pomona Blvd	East Leg	73.2	73.7	0	No
Temple Ave/Pomona Blvd	West Leg	71.7	72.1	0	No
Temple Ave/Pomona Blvd	North Leg	66.8	67.2	0	No
Temple Ave/Pomona Blvd	South Leg	69.3	69.7	0	No
Temple Ave/Shell Driveway/SR-57 SB Ramps	East Leg	71.5	72.0	0	No
Temple Ave/Shell Driveway/SR-57 SB Ramps	West Leg	73.8	74.2	0	No
Temple Ave/Shell Driveway/SR-57 SB Ramps	North Leg	69.7	70.1	0	No
Temple Ave/Shell Driveway/SR-57 SB Ramps	South Leg	47.6	48.0	0	No
Temple Ave/SR-NB Ramps	East Leg	73.7	74.1	0	No
Temple Ave/SR-NB Ramps	West Leg	73.6	73.9	0	No
Temple Ave/SR-NB Ramps	North Leg	62.2	62.6	0	No
Temple Ave/SR-NB Ramps	South Leg	66.0	66.4	0	No
I-10 WB Ramps/Grand Ave	East Leg	55.6	55.9	0	No

TABLE 4.11-18
CUMULATIVE TRAFFIC NOISE LEVELS

Intersection	Segment	CNEL at 100 feet from roadway centerline (dBA)			
		Existing Conditions	With Project	Cumulative Contribution	Potential Impact?
I-10 WB Ramps/Grand Ave	West Leg	64.3	64.9	1	No
I-10 WB Ramps/Grand Ave	North Leg	71.6	72.0	0	No
I-10 WB Ramps/Grand Ave	South Leg	71.2	71.7	0	No
I-10 EB Ramps/Grand Ave	West Leg	65.0	65.6	1	No
I-10 EB Ramps/Grand Ave	North Leg	71.2	71.6	0	No
I-10 EB Ramps/Grand Ave	South Leg	70.9	71.4	0	No
Holt Ave/Grand Ave	East Leg	65.3	65.7	0	No
Holt Ave/Grand Ave	West Leg	61.4	61.8	0	No
Holt Ave/Grand Ave	North Leg	70.9	71.3	0	No
Holt Ave/Grand Ave	South Leg	71.8	72.2	0	No
Cortez St/Grand Ave	West Leg	57.4	57.8	0	No
Cortez St/Grand Ave	North Leg	71.8	72.2	0	No
Cortez St/Grand Ave	South Leg	71.7	72.1	0	No
Cameron Ave/Barranca St	East Leg	68.7	69.1	0	No
Cameron Ave/Barranca St	West Leg	69.7	70.1	0	No
Cameron Ave/Barranca St	North Leg	66.3	66.7	0	No
Cameron Ave/Grand Ave	West Leg	65.7	66.1	0	No
Cameron Ave/Grand Ave	North Leg	71.7	72.1	0	No
Cameron Ave/Grand Ave	South Leg	72.9	73.3	0	No
Mountaineer Rd/Grand Ave	East Leg	65.6	66.2	1	No
Mountaineer Rd/Grand Ave	North Leg	73.1	73.5	0	No
Mountaineer Rd/Grand Ave	South Leg	72.1	72.5	0	No
San Jose Hills Rd/Grand Ave	East Leg	62.5	63.2	1	No
San Jose Hills Rd/Grand Ave	West Leg	63.2	63.6	0	No
San Jose Hills Rd/Grand Ave	North Leg	72.1	72.5	0	No
San Jose Hills Rd/Grand Ave	South Leg	72.2	72.6	0	No
La Puente Rd/Grand Ave	East Leg	62.5	62.9	0	No
La Puente Rd/Grand Ave	West Leg	68.5	68.9	0	No
La Puente Rd/Grand Ave	North Leg	74.0	74.4	0	No
La Puente Rd/Grand Ave	South Leg	74.2	74.5	0	No
Valley Blvd/Grand Ave	East Leg	73.5	74.0	0	No
Valley Blvd/Grand Ave	West Leg	74.3	74.7	0	No
Valley Blvd/Grand Ave	North Leg	74.1	74.5	0	No
Valley Blvd/Grand Ave	South Leg	73.4	73.8	0	No
Baker Pkwy/Grand Ave	West Leg	60.4	60.8	0	No
Baker Pkwy/Grand Ave	North Leg	73.3	73.7	0	No
Baker Pkwy/Grand Ave	South Leg	73.4	73.8	0	No
Brea Canyon Rd/SR-60 WB Ramps/Grand Ave	East Leg	63.6	64.1	0	No
Brea Canyon Rd/SR-60 WB Ramps/Grand Ave	West Leg	58.5	59.3	1	No
Brea Canyon Rd/SR-60 WB Ramps/Grand Ave	North Leg	73.4	73.9	0	No
Brea Canyon Rd/SR-60 WB Ramps/Grand Ave	South Leg	73.0	73.4	0	No

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

Vibration

Construction vibration is a local impact; as shown in Threshold 11-3, impacts are generally less than significant when the receptor is more than 25 feet from the vibration source. There are no identified projects anticipating construction concurrently with the proposed Project and within 50 feet of the sensitive receptors that could be affected by the proposed Project. As such, the proposed Project would not result in a cumulatively considerable contribution to a significant cumulative impact due to construction vibration.

Construction Noise

There would be a potential for significant cumulative construction noise impacts if construction from a cumulative project would occur near a sensitive receptor concurrently with project-related construction near that same receptor. Implementation of MM NOI-1 would ensure that noise levels from project-related construction activities would be less than 65 dBA L_{eq} at off-campus uses by identifying which construction areas could be developed concurrently and prescribing noise-reduction measures to reduce impacts to less than significant. Therefore, with implementation of NOI-1, Project-related construction noise impacts would be less than significant. Construction projects result in localized noise impacts. The majority of project-related campus development would occur within the campus, away from off-site uses. As such, noise associated with off-site construction activities would be substantially attenuated between each construction site. Consequently, impacts associated with cumulative construction noise would be less than significant. Therefore, the proposed Project would not result in a cumulatively considerable contribution to a significant cumulative impact due to construction noise.

4.11.8 MITIGATION MEASURES

MM NOI-1 Prior to the first grading permit, the Project Applicant shall prepare a Construction Noise Management Plan to ensure that noise levels from project-related construction activities do not exceed 65 dBA L_{eq} at off-campus uses. The Construction Noise Management Plan shall identify which construction areas could be developed concurrently such that noise from these project areas do not exceed the established noise limit. The Construction Noise Management Plan shall identify measures to reduce construction related noise to off-campus uses, including, but not limited to:

1. Use of erected sound barriers or existing structures to minimize noise transmission.
2. Phasing of construction activities at project areas such that noisier construction phases shall not occur concurrently.
3. Phasing of concurrent project areas such that multiple construction areas shall not be located in close proximity to the same offsite use.

4.11.9 REFERENCES

California Department of Transportation (Caltrans). 2013a (September) *Technical Noise Supplement to the Traffic Noise Analysis Protocol.* Sacramento, CA: Caltrans.

———. 2013b (September) *Transportation and Construction Vibration Guidance Manual.* Sacramento, CA: Caltrans.

Federal Transit Administration (FTA). 2006 (May). *Transit Noise and Vibration Impact Assessment* (prepared by Harris Miller Miller & Hanson Inc.) Burlington, MA: Harris Miller Miller & Hanson, Inc.

Mt. San Antonio Community College District (District). 2018a. *2018 Educational and Facilities Master Plan.* Walnut, CA: District.

Thalheimer, E. 2000. Construction Noise Control Program and Mitigation Strategy as the Central Artery/Tunnel Project. *Noise Control Engineering Journal* 48(5), Sep–Oct. Indianapolis, IN: Institute of Noise Control Engineering.

Walnut, City of. 2018 (May 9, adopted). *City of Walnut General Plan*, Public Safety Element. Walnut, CA: City of., 2018. http://www.cityofwalnut.org/home/showdocument?id=12022.

4.12 POPULATION AND HOUSING

The proposed Mt. San Antonio College (Mt. SAC) 2018 Educational and Facilities Master Plan (proposed 2018 EFMP) does not involve the development of housing or implementation of any uses or actions that would substantially increase population or employment in the region. Rather, the proposed 2018 EFMP would expand the capacity of Mt. SAC in order to accommodate the educational needs of the surrounding communities. This section summarizes existing and forecasted population, employment, and housing for the region and the Mt. SAC geographic boundaries and service area. This section also presents the existing and projected campus population information (students, faculty, and staff). The information in this section is based on information from the Southern California Association of Governments (SCAG) 2016–2040 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) Final Growth Forecast by Jurisdiction, the proposed Project, and other sources as cited in this section.

The Southern California Association of Governments (SCAG) provided a comment on the Notice of Preparation (NOP) and provided regional and local (City of Walnut) growth forecasts from the *2016–2040 Regional Transportation Plan/Sustainable Communities Strategy* (RTP/SCS). The NOP comment letter is provided in Appendix A of this Draft Environmental Impact Report (EIR). Further discussion of the 2016–2040 RTP/SCS is included in Section 4.9, Land Use and Planning, of this Draft EIR. Additionally, the City of Walnut provided a comment on the NOP related to evaluation of the Medium and High Growth Scenarios. The NOP comment letter is provided in Appendix A of this Draft Environmental Impact Report (EIR) and further discussion of the Medium Growth Scenario is included in Section 5.0, Alternatives, of this Draft EIR.

4.12.1 REGULATORY SETTING

California Public Resources Code

Under Section 21080.09(b) of the *California Public Resources Code*, the environmental effects relating to changes in enrollment are to be considered for each campus or medical center of public higher education in the EIR prepared for the long-range development plan.

California Public Resources Code Section 21080.09(d) states the following:

> Compliance with this section satisfies the obligations of public higher education pursuant to this division to consider the environmental impact of academic and enrollment plans as they affect campuses or medical centers, provided that any such plans shall become effective for a campus or medical center only after the environmental effects of those plans have been analyzed as required by this division in a long range development plan environmental impact report or tiered analysis based upon that environmental impact report for that campus or medical center, and addressed as required by this division.

4.12.2 ENVIRONMENTAL SETTING

Mt. SAC Geographic Boundaries and Service Area

Mt. SAC is a community college intended to serve the higher education needs of the local communities. The college serves nearly 20 communities and over one million residents in the San Gabriel Valley. Among other factors, the population growth in surrounding communities influences the demand for higher educational facilities and long-term campus planning. In other words, the proposed 2018 EFMP would expand the capacity of Mt. SAC to accommodate the needs of the surrounding population.

The Mt. SAC geographic boundaries are depicted on Exhibit 4.12-1, encompass approximately 189 square miles in the southeastern portion of Los Angeles County, and include the following 12 cities: Baldwin Park, City of Industry, Covina, Diamond Bar, Glendora, Irwindale, La Puente, La Verne, Pomona, San Dimas, Walnut, and West Covina. In addition, a number of unincorporated communities are within the Mt. SAC boundaries: Avocado Heights, Bassett, Bonita, Charter Oak, Hacienda Heights, Rowland Heights, and Valinda.

The Mt. SAC service area includes the following 18 cities that surround the campus where 40 percent of Mt. SAC students reside: Alhambra, Arcadia, Azusa, Chino, Chino Hills, Claremont, El Monte, Fontana, La Habra, Montclair, Monterey Park, Ontario, Rancho Cucamonga, Rosemead, San Gabriel, Temple City, Upland, and Whittier. Mt. SAC's service area is depicted on Exhibit 4.12-2.

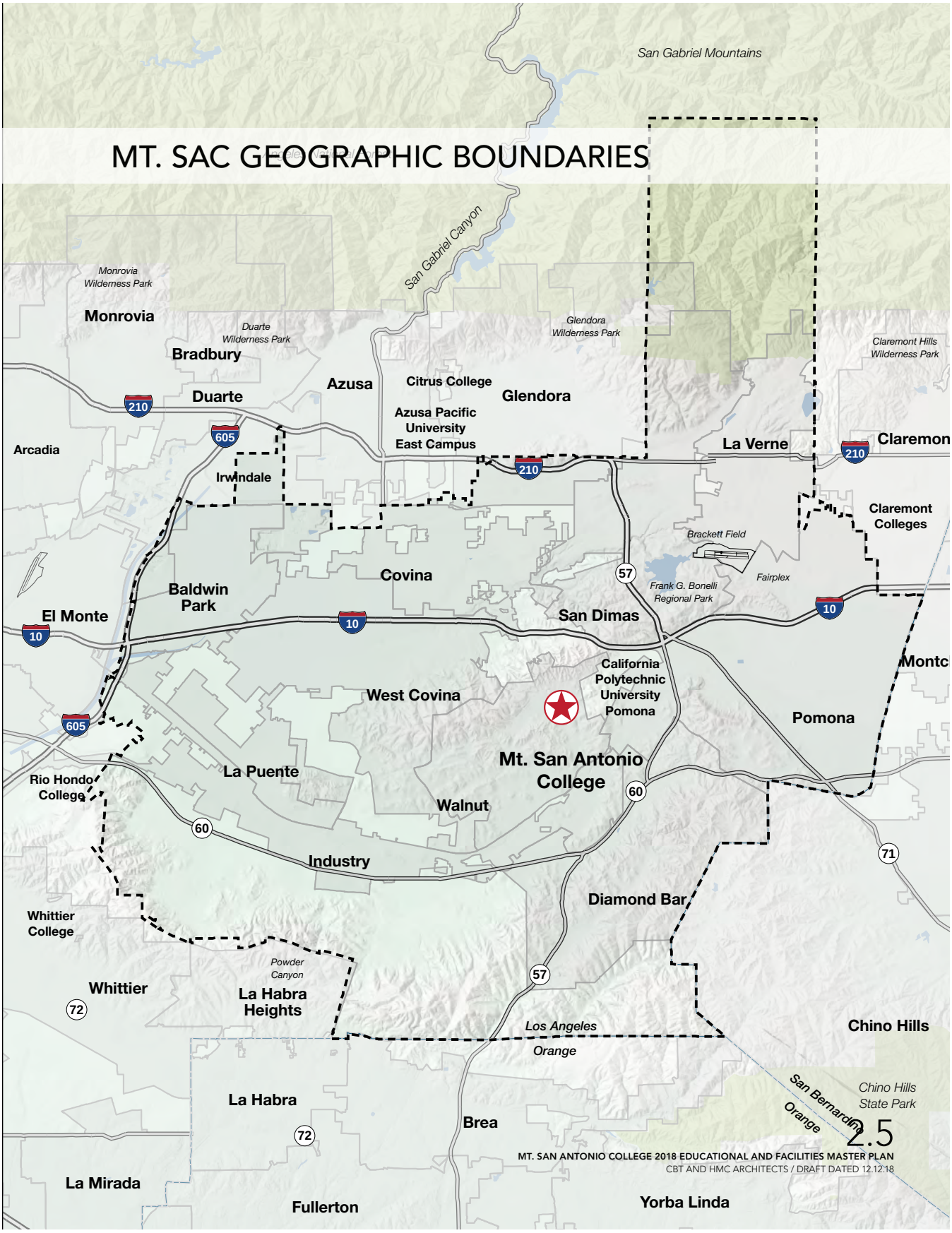
Existing and Projected Population and Employment

The SCAG RTP/SCS depends on an accurate and credible forecast for future growth in population, housing, and employment. The integrated growth forecast at the regional and small geographic area level is the basis for developing the RTP/SCS. In developing regional growth forecasts, SCAG coordinates extensively with counties and cities to gain local input on the integrated population, household, and employment growth forecast. The demographic and growth forecasts provided in the 2016–2040 RTC/SCS are the currently adopted population, housing, and employment forecasts for the six-county region, including Los Angeles County. SCAG's 2016–2040 regional population and employment growth forecasts for the cities within Mt. SAC's geographic boundaries and service area and Los Angeles County are shown in Table 4.12-1. Existing (2018) population information is also presented. As shown, it is expected that the population in the Mt. SAC geographic boundaries will increase by approximately 11.5 percent between 2018 and 2040, similar to the projected increase in Los Angeles County (approximately 12.0 percent). It is projected that the population increase in the cities comprising the Mt. SAC service area will be approximately 19.6 percent.

TABLE 4.12-1
EXISTING AND PROJECTED POPULATON

	Population[c]						
	2012	2018 (Existing)[c]	2020	2027 (estimate)	2035	2040	Percent Increase from 2018 to 2040
Population							
Mt. SAC Geographic Boundaries[a]	625,500	640,606	649,300	671,850	694,400	714,400	11.5
Mt. SAC Service Area[b]	1,479,800	1,545,549	1,553,900	1,669,650	1,785,400	1,848,500	19.6
Los Angeles County	9,922,600	10,283,729	10,326,200	10,735,650	11,145,100	11,514,800	12.0

[a] Inclusive of the cities of Baldwin Park, Covina, Diamond Bar, Glendora, Industry, Irwindale, La Puente, La Verne, Pomona, San Dimas, Walnut, and West Covina.
[b] Inclusive of the cities of Alhambra, Arcadia, Azusa, Chino, Chino Hills, Claremont, El Monte, Fontana, La Habra, Montclair, Monterey Park, Ontario, Rancho Cucamonga, Rosemead, San Gabriel, Temple City, Upland, and Whittier.
[c] SCAG 2016 for 2012 and 2020, 2035, and 2040 projections; DOF 2018 for 2018 (existing); estimate for 2027, the horizon year for the proposed 2018 EFMP.



Source: CBT and HMC Architects 2018

Mt. SAC Geographic Boundaries

Exhibit 4.12-1

Mt. SAC 2018 Educational and Facilities Master Plan EIR

N W E S

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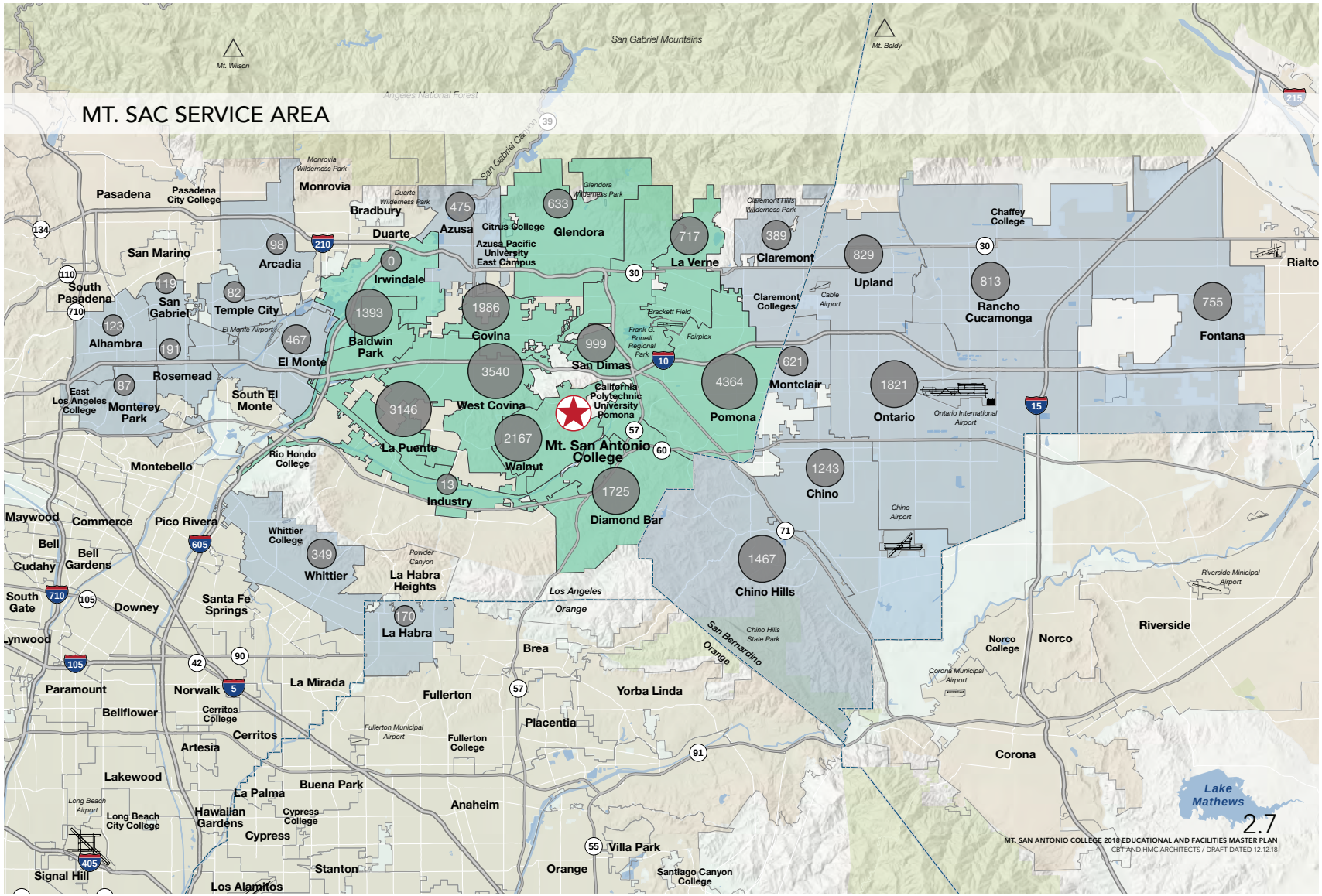

Source: CBT and HMC Architects 2018

Mt. SAC Service Area

Exhibit 4.12-2

Mt. SAC 2018 Educational and Facilities Master Plan EIR

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Housing

As discussed above, Mt. SAC students live in the cities and communities in Mt. SAC's geographic boundaries and service area. Mt. SAC does not provide on-campus student housing, and students commute to the campus. The City of Walnut 2013–2021 Housing Element describes the large student and faculty population within the City and surrounding cities as contributing to the local economy and to housing demand, noting that in 2011, 3,785 college/graduate students resided within the City of Walnut and represented approximately 13 percent of the total population within the City of Walnut (Walnut 2014).

Mt. San Antonio College Student Population

As discussed in Section 3.5.2, Growth Projections, of this Draft EIR, a college's enrollment is most often described as either unduplicated student headcount[1] or full-time equivalent student[2] (FTES). As shown in Table 4.12-2, both measures show growth at Mt. SAC between 2012–2013 and 2017–2018 (annually and during the fall semesters. It should be noted that the annual headcount data presented in Table 4.12-2 are for the entire year and should not be interpreted as the number of students on campus at any one time or day because the schedule of classes and extracurricular activities vary throughout an academic year. For reference, the total number of FTES during the fall semester 2017 was 13,185, and the fall semester headcount was 37,864 students.

TABLE 4.12-2
MT. SAC ANNUAL UNDUPLICATED HEADCOUNT AND FULL-TIME EQUIVALENT STUDENTS

	Annual		Fall	
Year	Unduplicated Headcount	FTES	Unduplicated Headcount	FTES
2012–2013	53,827	30,531	34,017	12,628
2013–2014	54,357	30,859	34,365	12,597
2014–2015	57,472	31,837	35,280	12,670
2015–2016	59,341	32,154	35,606	12,708
2016–2017	61,962	32,668	36,220	12,813
2017–2018	66,293	33,945	37,864	13,185
Source: CCCCO 2018a; CCCCO 2018b				

Typically, when unemployment increases, as it did during the recession, community college enrollment increases because people seek degrees and certificates to qualify them for employment. As expected, Mt. SAC enrollment increased during the recession. Similarly, community college enrollment can be expected to decline as the economy recovers. However, during the years of recent economic recovery Mt. SAC continued to grow in both credit and noncredit enrollment, while enrollment at many other colleges remained stable or declined.

[1] The total of unique individuals who enrolled in the college in a given period. Each student is counted once; the number of units in which they are enrolled is not relevant to this count. It should be noted that headcount data is for the entire year and should not be interpreted as the number of students on campus at any one time or day because the schedule of classes and extracurricular activities vary throughout an academic year.

[2] The total hours attended by one or more students, divided by 525. One FTES is equal to one student taking a course load of 15 units for two semesters.

Although both Mt. SAC's unduplicated student headcount and FTES have increased, they did not increase proportionately. Between 2012–2013 and 2017–2018, the annual student headcount increased almost twice as much as FTES due to an increase in part-time students. Unduplicated student headcount increased approximately 23 percent compared to an approximately 11.2 percent increase in FTES. This disparity indicates a decline in the average FTES per student, or student unit load.

In fall 2012, 56 percent of students attending Mt. SAC lived within its official geographic boundaries. Between fall 2012 and fall 2015, an additional 1,670 students who lived within Mt. SAC boundaries enrolled, and this percentage increased to 58 percent. The increase in Mt. SAC's unduplicated student headcount is largely attributed to the increase in enrollment of students from within the Mt. SAC's geographic boundaries (Mt. SAC 2018a).

Faculty and Staff

As shown in Table 4.12-3, as of October 2018, Mt. SAC had 4,497 total employees (faculty and staff). It should also be noted that Mt. SAC is the largest employer in the City of Walnut, representing approximately 49 percent of the employment in the City in 2017 (Walnut 2017).

TABLE 4.12-3
FACULTY AND STAFF – OCTOBER 2018

Employee Type	Employee Count
Managers	122
Full-time Faculty[a]	431
Adjunct Faculty[b]	2,204
Classified Staff[c]	647
Temporary Staff[d]	1,093
Total	4,497

[a] Includes regular (those who have tenure) and contract (those hired on a year to year basis, prior to achieving tenure) faculty who are hired as full-time employees.
[b] Faculty who teach less than 60 percent of a full workload.
[c] Includes both classified and journey-level classified staff per California School Employees Association Chapter 262 and Chapter 651, respectively.
[d] Includes: (1) temporary employees hired to perform a service for the District, upon the completion of which, the service required or similar services will not be extended or needed on a continuous basis; (2) temporary employees with specialized knowledge (not generally required of, or found within, the existing classified service) and hired for a defined project, and (3) temporary employees hired to replace any classified employee who is temporarily absent from duty or to fill a vacancy in any classified position.

Source: Mt. SAC 2018b.

4.12.3 THRESHOLDS OF SIGNIFICANCE

Thresholds Addressed in this Draft EIR

According to Appendix G of the California Environmental Quality Act (CEQA) Guidelines, a proposed Project will normally have a significant adverse environmental impact on population and housing if it will:

- Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through the extension of roads or other infrastructure)
- Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere

4.12.4 ENVIRONMENTAL IMPACTS

Impact Analysis

Development of individual projects being evaluated at a project-specific level in this Draft EIR, or development of any future projects identified in the proposed 2018 EFMP, does not include housing or an increase in population growth. Therefore, this analysis of population and housing impacts considers the ten-year horizon year anticipated by the proposed 2018 EFMP at a program-level; no project-specific level analysis is required.

Threshold 11.1	**Would the project induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through the extension of roads or other infrastructure)?**

2018 Educational and Facilities Master Plan (Phases 1A, 1B, and 2) and Project-Specific

The student data portfolio presented in the proposed 2018 EFMP culminates in a projection of Mt. SAC's growth. Mt. SAC's vision for expanding and improving its facilities during the ten-year horizon period is informed in part by this long-range growth forecast. Mt. SAC projects that during the proposed 2018 EFMP horizon period, its annual growth rate will range between 0.18 and 1.22 percent, with a mid-point of 0.75 percent. Table 4.12-4 presents the projected increases in FTES and student headcount between 2018 and 2027 based on the medium (0.75 percent) and high (1.22 percent) growth rates. With implementation of the proposed 2018 EFMP, it is expected that the number of FTES would increase from between 13,311 and 13,498 students in fall 2018 to between 14,237 and 15,055 students in fall 2027; and the unduplicated headcount would increase from approximately 37,864 students in fall 2017 to between 40,802 and 42,745 students in fall 2027 (based on estimated medium and high growth rates). Based on the estimated growth forecasts for the fall semesters, between 2018 and 2027 there would be an increase in enrollment of between 926 and 1,557 FTES at Mt. SAC.

TABLE 4.12-4
MT. SAC ENROLLMENT GROWTH FORECAST
(FALL SEMESTERS)

Fall	Full-time Equivalent Students (FTES) Projections		Future Unduplicated Headcount Projections	
	Medium Growth Rate 0.75%	High Growth Rate 1.22%	Medium Growth Rate 0.75%	High Growth Rate 1.22%
2018	13,311	13,498	38,148	38,326
2019	13,411	13,663	38,434	38,794
2020	13,511	13,830	38,722	39,267
2021	13,613	13,999	39,013	39,746
2022	13,715	14,170	39,305	40,231
2023	13,818	14,343	39,600	40,722
2024	13,921	14,518	39,897	41,218
2025	14,026	14,695	40,196	41,721
2026	14,131	14,874	40,498	42,230
2027	14,237	15,055	40,802	42,745

As shown in Table 4.12-5, it is also expected that the employees (faculty and staff) would increase accordingly from approximately 4,497 total employees in fall 2018 to between 4,810 and 5,016 employees in fall 2027 (based on estimated medium and high growth rates). This would represent an increase of between 313 to 519 employees from fall 2018 to fall 2027.

TABLE 4.12-5
MT. SAC FACULTY AND STAFF GROWTH FORECAST
(FALL SEMESTERS)

Fall	Future Faculty and Staff Projections	
	Medium Growth Rate 0.75%	High Growth Rate 1.22%
2019	4,531	4,552
2020	4,565	4,607
2021	4,599	4,664
2022	4,633	4,721
2023	4,668	4,778
2024	4,703	4,836
2025	4,738	4,895
2026	4,774	4,955
2027	4,810	5,016
Source: Mt SAC 2018b.		

As shown in Table 4.12-1, it is projected that the population in the cities within the Mt. SAC geographic boundaries and service area will increase by 155,345 individuals between 2018 and 2027. As shown in Table 4.12-4, at the high growth rate, the estimated increase in student

enrollment (headcount) at Mt. SAC during the fall semester from 2018 to 2027 would be 4,419 individuals (approximately 2.8 percent of the anticipated growth within the Mt. SAC geographic boundaries and service area over ten years). Even if all of these individuals were new to Mt. SAC's geographic boundaries and service area, this would not represent a substantial increase in the population and would be within the growth projections for the cities within the Mt. SAC geographic boundaries as projected in the SCAG 2016–2040 RTP/SCS Growth Forecast. Additionally, as identified above, more than 50 percent of Mt. SAC's students already live within the college's geographic boundaries. Therefore, the increase in student enrollment and employment at Mt. SAC would not represent a direct corresponding increase in population.

Mt. SAC does not currently offer any residential housing options, nor would any residential units be constructed with implementation of the proposed 2018 EFMP that would result in a direct increase in population in the City of Walnut or the area. Further, Mt. SAC serves the population within its geographic boundaries and service area; the increased capacity at Mt. SAC that is anticipated by the proposed 2018 EFMP would accommodate the projected growth in the area.

Therefore, implementation of the proposed 2018 EFMP would not induce substantial population growth, directly or indirectly.

Level of Significance Prior to Mitigation

Less than significant.

Recommended Mitigation Measures

No significant impacts were identified, and mitigation is not required.

Level of Significance After Mitigation

Less than significant.

Threshold 11.2	**Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?**

2018 Educational and Facilities Master Plan (Phases 1A, 1B, and 2) and Project-Specific

There is currently no housing at Mt. SAC. Therefore, implementation of the proposed 2018 EFMP would have no impact related to the displacement of people or housing necessitating the need for construction of replacement housing elsewhere.

Level of Significance Prior to Mitigation

No impact.

Recommended Mitigation Measures

No impacts were identified, and mitigation is not required.

Level of Significance After Mitigation

No impact.

4.12.5 CUMULATIVE IMPACTS

The cumulative study area for population, housing, and employment would include the cities and communities within the Mt. SAC geographic boundaries and service area, including the City of Walnut, and is based on the use of the 2016–2040 RTP/SCS Growth Forecast by Jurisdiction. Development of the proposed 2018 EFMP and other projects in the cumulative study area would lead to increases in population. However, as discussed above, assuming the conservative high growth rate for Mt. SAC, the estimated increase in on campus population during the fall semester (students, faculty, and staff) would be approximately 4,938 individuals over the proposed 2018 EFMP ten-year horizon period. As discussed above, this would not represent a substantial amount of the future population growth anticipated in the cities within the Mt. SAC geographic boundaries and service area.

Further, the anticipated enrollment increase for the proposed 2018 EFMP ten-year horizon period would be accommodated by not only the proposed on-campus projects identified for Phases 1A, 1B, and 2, but also by facilities planned for Phase 3 (beyond the ten-year horizon period) and previously approved projects at Mt. SAC. No additional enrollment or employee growth would be associated with cumulative projects at Mt. SAC and Phase 3 of the proposed 2018 EFMP. No significant cumulative adverse impacts related to substantial population, housing, or employment growth and displacement would occur with implementation of the proposed 2018 EFMP. The proposed 2018 EFMP would not result in a cumulatively considerable contribution to a significant cumulative impact.

4.12.6 MITIGATION MEASURES

No mitigation measures are required.

4.12.7 REFERENCES

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4.13 PUBLIC SERVICES AND RECREATION

Existing condition information presented in this section is based on coordination with affected public service agencies in relation to the proposed Mt. SAC 2018 Educational and Facilities Master Plan (proposed 2018 EFMP) being addressed in this Draft Environmental Impact Report (EIR):

Specific references are identified within the subsection for each respective issue. This section addresses the following public services; the service provider is noted parenthetically:

- Fire Protection and Emergency Services (Los Angeles County Fire Department)
- Police Protection (Los Angeles County Sheriff's Department)
- Schools (Baldwin Park Unified School District (USD), Bassett USD, Bonita USD, Charter Oak USD, Covina Valley USD, Hacienda/La Puente USD, Pomona USD, Rowland USD, Walnut Valley USD, and West Covina USD)
- Other Public Facilities (Mt. SAC Library)
- Parks, Athletics Facilities, and Recreation (City of Walnut, Mt. SAC, Los Angeles County)

The County of Los Angeles Fire Department submitted an NOP comment letter regarding public services and recreation. The comment identified applicable code and ordinance requirements related to fire and life safety that may be applicable to the proposed 2018 EFMP. This comment letter is included in Appendix A of this Draft EIR.

4.13.1 REGULATORY SETTING

State

Division of the State Architect

The Division of the State Architect (DSA) performs fire and life safety reviews of K–12 public schools, community colleges, and state essential services buildings. For the individual projects associated with the proposed 2018 EFMP, design and construction plans will be submitted to the DSA for fire and life safety review and approval and to the County of Los Angeles as the Local Fire Authority (LFA) for concurrence and approval, to the extent required, as discussed below.

Local

Local Fire Authority

DSA is the authority having jurisdiction for construction projects of public schools (K–12) and community colleges, and recognizes that the LFA is inherently more familiar than DSA with the water supply infrastructure within its jurisdiction and operational procedures used in response to a fire emergency. Prior to submitting a fire access site plan to DSA as part of a project submittal, the design professional (DP) is responsible for determining if a project location is within a designated hazardous fire area, and compliance with C.C.R. Title 19 and Title 24 requirements associated with water supply (fire flow) and fire department emergency access. The DP must contact the LFA to obtain information pertaining to hazardous fire area location, and water supply availability. When fire department access and water supply requirements cannot be achieved, the design professional must submit proposed design alternates to the local fire authority (LFA) for review and acceptance.

County of Los Angeles General Plan Safety Element

The County of Los Angeles Safety Element (LACDRP 2015) includes policies to reduce threats to people and property from wildland and urban fire hazards:

- Policy S 3.4: Reduce the risk of wildland fire hazards through the use of regulations and performance standards, such as fire-resistant building materials, vegetation management, fuel modification, and other fire hazard reduction programs.
- Policy S 3.5: Encourage the use of low-volume and well-maintained vegetation that is compatible with the area's natural vegetative habitats.

The County of Los Angeles Safety Element includes policies to provide effective County emergency response management capabilities:

- Policy S 4.2: Support County emergency providers in reaching their response time goals.
- Policy S 4.3: Coordinate with other County and public agencies, such as transportation agencies, and health care providers on emergency planning and response activities and evacuation planning.
- Policy S 4.4: Encourage the improvement of hazard prediction and early warning capabilities.
- Policy S 4.5: Ensure that there are adequate resources, such as sheriff and fire services, for emergency response.

County of Los Angeles General Plan Public Services and Facilities Element

The County of Los Angeles General Plan Public Services and Facilities Element (County of Los Angeles 2015) includes policies related to effective service and facilities planning and maintenance:

- Policy PS/F 1.1: Discourage development in areas without adequate public services and facilities.
- Policy PS/F 1.2: Ensure that adequate services and facilities are provided in conjunction with development through phasing or other mechanisms.
- Policy PS/F 1.5: Focus infrastructure investment, maintenance, and expansion efforts where the General Plan encourages development.

The County of Los Angeles Public Services and Facilities Element includes policies related to early care and educational facilities:

- Policy PS/F 7.1: Encourage the joint use of school sites for community activities and other appropriate uses.
- Policy PS/F 7.2: Proactively work with school facilities and education providers to coordinate land use and facilities planning.
- Policy PS/F 7.3: Encourage adequate facilities for early care and education.

County of Los Angeles Municipal Code – Title 32, Fire Code

Title 32 – Fire Code establishes regulations affecting or relating to structures, processes, premises, and safeguards regarding (County of Los Angeles 2018a).

- Conditions affecting the safety of the firefighters and emergency responders during emergency operations, and
- Fire hydrant systems, water supply, fire equipment access, posting of fire equipment access, parking, lot identification, weed abatement, and combustible brush and vegetation that represents an imminent fire hazard, debris abatement, combustible storage abatement including flammable liquid storage, hazardous material storage and use, open-flame and open-burning, and burglar bars at State-regulated mobile home and special occupancy parks within the jurisdiction of the County of Los Angeles Fire Department as per California Health and Safety Code Sections 18691 and 18873.5.

County of Los Angeles Municipal Code – Chapter 2.34, Sheriff

Chapter 2.34 of the Los Angeles County Code outlines law enforcement regulations and the powers and duties of the Sheriff's Department (County of Los Angeles 2018b).

Walnut General Plan

The recently adopted 2018 *City of Walnut General Plan* (2018 WGP) Public Safety Element (City of Walnut 2018a) includes goals and policies aimed at promoting safety and security. This includes maintenance, improvements, and expansion, where necessary, of public safety program and services to ensure protection against natural and human-caused disasters.

The 2018 WGP Public Safety Element includes policies related to effective and comprehensive crime prevention/protection and fire services:

- Policy PS-1.1: Law Enforcement and Fire Services. Maintain law enforcement and fire prevention and protection services that maximize protection of life and property.
- Policy PS-1.8: Environmental Design. Look at design approaches that deter crime and vandalism for both public and private projects when reviewing development proposals and the design of public spaces. Consult methods found in Crime Prevention through Environmental and Design resources.

The 2018 WGP Public Safety Element includes policies to minimize risks related to wildland fires:

- Policy PS-2.2: Development Review. Involve the Fire Department in the early design stage of all projects requiring public review to ensure Fire Department input and appropriate modifications and fire safe design is incorporated in future development.
- Policy PS-2.14: Mutual Aid Agreements Support the work of the Los Angeles County Fire Department to be engaged in inter-fire service coordination preparedness and mutual aid multi-agency agreements to maintain effective and efficient services.

4.13.2 ENVIRONMENTAL SETTING

Fire Protection and Emergency Services

Los Angeles County Fire Department

The Los Angeles County Fire Department (LACoFD) Emergency Medical Services (EMS), fire and rescue services, and "safe haven" services for unincorporated Los Angeles County, contract with cities including the City of Walnut, and Mt. SAC. Two fire stations serve the City of Walnut: Fire Station No. 146 and Fire Station No. 61 (City of Walnut 2018b).

Fire Station No. 146 is located at 20604 Loyalton Drive, approximately 0.25-mile driving distance from the Mt. SAC campus (corner of Temple Avenue and Grand Avenue). The Mt. SAC campus is located within the 1-mile Fire Station Service Area for Station No. 146. The station serves the City of Walnut and is the primary responder for the Mt. SAC campus (City of Walnut 2018a). This Station is known as a Critical Station, which means it responds to emergencies in the City of Walnut and provides mutual aid to other cities, such as West Covina and Diamond Bar as well as other areas including Orange County. This station has one fire engine and a barn-type structure to store the fire apparatus. If a mutual aid emergency would require services from Station No. 146 for a period exceeding one-half hour, another engine is deployed to this station so that a unit is available to respond to other emergencies that might occur within the service area (City of Walnut 2018b).

Fire Station No. 61 is located at 20011 La Puente Road, approximately 2 miles driving distance from the Mt. SAC campus (corner of Temple Avenue and Grand Avenue). Station No. 61 is the secondary responder to the Mt. SAC campus (City of Walnut 2018b). Station No. 61 serves the City of Walnut as well as the surrounding unincorporated County areas, the City of Industry, and the City of Diamond Bar. This station has a paramedics unit and a fire engine. They respond to all emergencies including accidents, fires, swift water rescues, and hazardous material spills (City of Walnut 2018b).

As of 2017, LACoFD has met their response goal time of five minutes for emergency incidents 90 percent of the time. The response goal for non-emergency calls is eight minutes (City of Walnut 2018b).

Mt. San Antonio College

The Department of Police and Campus Safety

Mt. SAC's Department of Police and Campus Safety maintains a cooperative relationship with LACoFD. This includes special events coordination, investigation of serious incidents, emergency response to crimes, emergency medical response, fire response, alarm response, 911 response, explosive ordinance response, and tactical operations (Mt. SAC 2017a**).**

Emergency Response

The Department of Police and Campus Safety (Campus Safety) Officers and the LACoFD are first responders to critical incidents on campus. Fires are reported to Campus Safety. Primary response to fire alarms on campus is through Campus Safety. Campus emergencies are discovered by Campus Safety personnel or reported to Campus Safety. Campus Safety personnel investigate any reported emergency or dangerous situation and coordinate with LACoFD officials to assess reports of an emergency and confirm the presence of an immediate

threat to the health or safety of the campus community. The Department of Police and Campus Safety Director, Assistant Director, Field Supervisor, or Patrol Officers assess situations or incidents reported on the Mt. SAC campus and determine whether an immediate or ongoing threat exists (Mt. SAC 2017a). When an immediate threat to the college campus is confirmed, an immediate emergency alert notification is given to students and staff on campus. If required, Police and Campus Safety or the Emergency Operations Center (EOC) will request assistance from Los Angeles County emergency response resources (Mt. SAC 2018a).

Fire Department Access

A fire department access plan that records the approved routes used by the fire department and other emergency services is maintained by Mt. SAC for all incidents responded to on the campus. These routes include a Los Angeles County Fire Department approved route and must comply with the fire department's guidelines and standards and are designed to accommodate the weight and limited maneuvering abilities of fire trucks These paved, on-site routes provide access to existing buildings, site facilities, and fire hydrants (Mt. SAC 2018b).

Fire Technology Program

The Mt. SAC campus offers a Fire Technology program, which is dedicated to the instruction and support of potential fire service professionals. The program offers courses, in coordination with the on-campus Fire Academy, geared toward the enhancement of fire and emergency services and allied professionals, to address fire and related emergencies effectively (Mt. SAC 2018c).

Police Protection

Los Angeles Sheriff's Department

The Los Angeles County Sheriff's Department (LASD) serves the Los Angeles County, an area totaling approximately 4,084 square miles with a population of approximately 10 million people as of 2010. With approximately 18,000 employees, it is considered the largest sheriff's department in the world. LASD provides general law enforcement services to 40 contract cities, 90 unincorporated communities, 216 facilities, hospitals, and clinics located throughout the County, nine community colleges, the Metropolitan Transit Authority, and 47 Superior Courts. LASD also provides additional services such as laboratories and academy training to smaller law enforcement agencies within the County and is responsible for securing approximately 18,000 inmates daily in seven custody facilities (LASD 2018a).

A Memorandum of Understanding (MOU), from July 1, 2017, to June 30, 2022, between the Mt. SAC Board of Trustees and the Los Angeles Sheriff's Department (LASD) is a guideline for the calls to the Deputy Sheriffs assigned for criminal investigations at Mt. San Antonio College. The MOU clarifies operational responsibilities and defines the geographical boundaries of response for investigations of Part 1 crimes,[1] sexual assaults, and hate crimes occurring on each campus and setting minimum standards for law enforcement (Mt. SAC 2017b). At this time, the LASD has the sole responsibility for law enforcement response and criminal investigations for the entire campus for Part 1 crimes. The LASD has the primary responsibility for providing police protection to the neighborhoods adjacent to the Mt. SAC campus. While officers from the LASD do not patrol the Mt. SAC campus, as stipulated in the MOU, they provide assistance for investigations of Part 1 violent crimes including homicide, forcible rape, robbery, aggravated assaults, sexual assaults,

[1] Part 1 crimes are major crimes and include criminal homicide, forcible rape, robbery, aggravated assault, burglary, larceny-theft, motor vehicle theft, and arson (FBI 2004).

and hate crimes occurring on campus property and property controlled by the college (Mt. SAC 2017b).

The Mt. SAC campus is located within the LASD Walnut/Diamond Bar Station service area located at 21695 Valley Boulevard, Walnut, California 91789, approximately 1-mile driving distance from the Mt. SAC campus (corner of Temple Avenue and Grand Avenue) (LASD 2018b). The Walnut/Diamond Bar Station serves the Cities of Walnut, Diamond Bar, and Rowland Heights and the unincorporated areas of Rowland Heights, Covina Hills, and West Covina.

The current police facilities are adequate to handle the existing personnel and equipment that are employed and utilized by the LASD Walnut/Diamond Bar Station. 102 sworn law enforcement officers and 50 civilian support staff currently staff the station. The City of Walnut contracts for nine deputies, which equates to three patrol units on the day shift, three patrol units on the PM shift, and three patrol units on the early morning shift (Reyes 2018).

The Los Angeles County Sheriff's Department has the following response time standards (Reyes 2018):

- 10 minutes for emergency calls for service
- 20 minutes for priority calls for service
- 60 minutes for routine calls for service

The Walnut/Diamond Bar Station has the following response time averages in the City of Walnut for a one-year time period (Reyes 2018):

- 4.2 minutes for emergency calls for service
- 8.5 minutes for priority calls for service
- 20.9 minutes for routine calls for service

In the LASD Walnut/Diamond Bar Station service area, the predominant crimes in 2016 and 2017 were property crimes including burglary, larceny theft, and vehicle theft (LASD 2018c).

Mt. San Antonio College

The Department of Police and Campus Safety

The Mt. SAC Police and Campus Safety, formerly Mt. SAC Public Safety Department, has primary responsibility for the campus. The Mt. San Antonio College Board of Trustees has established the Department of Police and Campus Safety as a community college police department under Education Code Section 72330(a), which authorizes the governing board of a community college district to establish a community college police department under the supervision of a community college chief of police. Although a designated police department, Mt. SAC Police and Campus Safety has a memorandum of understanding with the Los Angeles County Sheriff's Department, which has jurisdiction to investigate all crimes occurring on campus (Mt. SAC 2017a**).** Police and Campus Safety is located on campus in Building 23 (northwest corner), on the southwest corner of the intersection of Bonita Drive and Stadium Way, just south of West Temple Avenue.

The Mt. SAC Police and Campus Safety Chief, Deputy Chief, and Sergeants are sworn peace officers with arrest powers. Police and Campus Safety Officers have the authority to enforce the

Student Discipline Code of Conduct, and Parking Officers have the authority to enforce the campus parking regulations (Mt. SAC 2017a**).**

Currently, Mt. SAC Police and Campus Safety is in transition to a full-service "certified" police department (Mt. SAC 2017c). With the establishment of a full-service police department, the Mt. SAC Police and Campus Safety will consist of Community Services Officers, Department of Police and Campus Safety Officers, Police Officers, Dispatchers, and administrative support personnel. Former Campus Safety Officers have been retrained and reclassified into one of four positions: Community Service Officer, Public Safety Officer I, Public Safety Officer II, and Police Officer. Each of the four classifications affords varying levels of training and certification including incorporating the State Peace Officer Standards and Training (POST) methodology and in-service training. Mt. SAC Police and Campus Safety will continue to provide existing services to the campus community as well as providing on-campus law enforcement in cooperation with LASD (Mt. SAC 2017c).

Police and Campus Safety maintains and publishes a Daily Crime Log of all crimes reported to Police and Campus Safety (Mt. SAC 2017a). According to the 2017 Annual Security Report (prepared pursuant to the Jeanne Clery Disclosure of Campus Security Policy and Campus Crime Statistics Act), [2] a total of 37 reported offenses occurred on campus in 2014, 21 offenses were reported on campus in 2015, and 18 offenses were reported on campus in 2016. This represents an approximate 49 percent decrease in incidents reported in 2014 to 2016. The statistics included in the report reflect the number of criminal incidents reported to the various authorities. These totals include all on-campus property offenses, non-campus building or property offenses, and public property offenses within or immediately adjacent to Mt. SAC. (Mt. SAC 2017b). The majority of the reported offenses were liquor law and drug abuse violations.

Emergency Response

Both Mt. SAC Police and Campus Safety Officers and the Los Angeles County Sheriff's Department work cooperatively as first responders to critical incidents on campus. Depending on the nature and severity of an incident, the college Emergency Response Plan is activated. In most cases, emergencies are discovered by, or reported to, the Department of Police and Campus Safety Officers who investigate the reported emergency or dangerous situation. Depending on the severity of the reported emergency or situation, Mt. SAC Police and Campus Safety or the Los Angeles County Sheriff's Department are required to assess the situation to confirm that it represents an immediate threat to the health or safety of the campus community (Mt. SAC 2017a).

In addition to Police and Campus Safety Officers and the Los Angeles County Sheriff's Department, additional campus officials under the Campus Security Authorities (CSAs) are designated as "any person who has the authority and the duty to take action or respond to particular issues on behalf of the institution." All CSAs are required to report all incidents and/or crimes to the Campus Clery Coordinator (Mt. SAC 2017a).

If an emergency is a degree of magnitude that requires additional planning or logistical support, Mt. SAC activates its Incident Command Post (ICP) and Emergency Operations Center (EOC) that supports the incident command system and campus emergency response efforts. Mt. SAC

[2] The Jeanne Clery Disclosure of Campus Security Policy and Campus Crime Statistics Act requires applicable institutions to, among other items, provide statistics for the current calendar year and preceding two calendar years regarding (1) the following types of criminal offenses reported to the campus security authorities or local police agencies: murder, sex offenses, robbery, aggravated assault, burglary, motor vehicle theft, manslaughter, and arson; (2) arrests or persons referred for campus disciplinary action for liquor law violations, drug-related violations, and weapons possession; (3) hate crimes; and (4) domestic violence, dating violence, and stalking incidents.

Police and Campus Safety or the EOC will request assistance in cooperation with the City of Walnut, Los Angeles County emergency response resources, and other governmental agencies, as required. (Mt. SAC 2018a).

Campus Emergency Notification

When an immediate threat to the college campus is confirmed, the Department of Police and Campus Safety Chief and Assistant Chief, the Chief Technology Officer, the Director of Marketing and Communications, the Director of Public Affairs and the Director of Safety and Risk Management are the authorized administrators who determine the emergency notification notice to communicate the threat to the entire campus population. An immediate emergency alert notification is sent out campus wide to students and staff via voice, text, and e-mail messages, as well as use of the campus digital marquee at Grand and Temple Avenues and inner-campus digital message (Mt. SAC 2018b). The Department of Police and Campus Safety patrol vehicles are equipped with public address (PA) systems and located throughout the campus to facilitate notification and communication through the PA systems during critical emergencies (Mt. SAC 2018b).

Security Awareness and Crime Prevention Programs

Mt. SAC provides educational programs to promote the awareness and prevention of rape, acquaintance rape, domestic violence, dating violence, sexual assault, and stalking. These programs are offered on an annual basis to the college community and during new student and employee orientations. In addition, Mt. SAC Police and Campus Safety personnel present "Surviving an Active Shooter" and "Surviving Acts of Mass Violence" training throughout the year to students, faculty, and staff (Mt. SAC 2017a).

Mt. SAC Police and Campus Safety officers respond to calls for service anywhere on campus and patrol throughout the day and year-round. The Mt. SAC campus is equipped with Emergency Assistance Lighted Towers (blue strobe light with autodial emergency phone) on campus and in outlying parking areas that directly connect users with a Police and Campus Safety dispatcher who will dispatch Police and Campus Safety officers where needed. Mt. SAC Police and Campus Safety also provides individual car escorts. Further, the Department of Police and Campus Safety post crime bulletins to inform the campus community of significant campus crime trends (Mt. SAC 2017a).

Police and Campus Safety Policies

Mt. SAC Police and Campus Safety Policies address many topics, including alcohol and drug use and the standards of conduct expected on campus and disciplinary actions for misconduct. This includes the prohibited possession, use, or distribution of illicit drugs or alcohol by students or employees on campus and Mt. SAC owned or controlled property. In addition, the possession, carrying and use of weapons, ammunition, or explosives is prohibited on campus and Mt. SAC owned or controlled property, excluding authorized law enforcement officers or others specifically authorized by Mt. SAC (Mt. SAC 2017a).

Schools

On Campus

Mt. San Antonio College Child Development Center

The Mt. SAC Child Development Center (Buildings 70, 71, and 72) is located on the Mt. SAC campus at 1100 North Grand Avenue. The Center is a department within the Business Division and is operated by Mt. SAC. The Center provides full and part-day early care and education services for the children of college students, staff, and the community on campus throughout the year. The Center enrolls approximately 200 children each semester, from age groups 3 to 15 months (infants) through 5 years (pre-school) and provides an afterschool program for kindergarten-aged students (Mt. SAC 2018e).

Off Campus

Mt. San Antonio College Early College Academy is a dual enrollment public high school in collaboration with the West Covina Unified School District. The Mt. SAC Academy is a four-year college preparatory educational program designed to fulfill “a-g” college admission requirements and prepare students for the college transition and eligible for admission to University of California, California State University, and other institutions of higher learning. The program blends high school and college in a program that compresses the time needed to complete a high school diploma and up to two years of transferable general education college credits College courses are offered during the school day and are taught by college instructors, and students receive college credit through dual enrollment with Mt. SAC (Mt. SAC Academy 2018).

Public School Districts

Ten K–12 school districts are located within Mt. SAC’s geographic boundaries. These districts include Baldwin Park Unified School District (USD), Bassett USD, Bonita USD, Charter Oak USD, Covina Valley USD, Hacienda/La Puente USD, Pomona USD, Rowland USD, Walnut Valley USD, and West Covina USD. In addition, 43 feeder high schools are located within the ten school districts included in Mt. SAC’s geographic boundaries (Mt. SAC 2018f).

Other Public Facilities

Mt. SAC Library

The Mt. SAC Library is located within the Library/Learning Technology Center (Building 6) and provides support services to Mt. SAC students, faculty, and staff (Mt. SAC 2018f). The Mt. SAC Library contains a collection of over 90,000 print and media materials including print books and ebooks, as well as closed-captioned DVDs and online streaming videos, specialized materials such as audiobooks and career guides, and popular fiction and non-fiction materials. The Mt. SAC Library subscribes to over 100 online databases that include access to online journals, ebooks, and streaming videos (Mt. SAC 2018g). The Mt. SAC Library also provides computers, software, and accessories for accessing the electronic library resource collections and tools, as well as cloud-based learning management system and access to printers, copiers, and remote printing services. In addition to the collection, the Mt. SAC Library offers two courses in library research and multiple workshops both in-person and online, as well as digital learning options through the Mt. SAC Library website and 24/7 online chat reference (Mt. SAC 2018h).

Parks, Athletics Facilities, and Recreation

On Campus

Existing outdoor athletic facilities on campus include the cross-country course, Art Mazmanian (baseball) Field, Marie T. Mills Aquatics Facility, two soccer fields, the golf practice facility, and a softball stadium. Additional recreation uses on campus include Sherman Park, which is an existing open space within the Farm Precinct, and the Wildlife Sanctuary, which provides a unique educational resource for both the college and the wider community. There is also a gymnasium, wellness center, weight rooms, adaptive physical education room, and wrestling room. The Physical Education Project Phase 1 (PEP Phase 1) is under construction and will provide a new stadium, practice fields, and support facilities (concessions, ticketing, and restrooms). In addition, bicycle/pedestrian pathways traverse the campus and provide connection between buildings and campus facilities (Mt. SAC 2018b).

In addition to on-campus athletic facilities, off-campus facilities used for competitive events by Mt. SAC athletics include the Covina District Field, Pacific Palms Resort, and Citrus College tennis courts (Mt. SAC 2018d).

Off Campus

The City of Walnut and County of Los Angeles provide recreational services in the City of Walnut. Three community parks operated by the City of Walnut are located within a 1-mile radius of the campus. Snow Creek Park is located approximately 0.75 mile to the south of the campus corner at Temple Avenue and Grand Avenue, and Country Hollow Park and Walnut Ranch Park are located approximately 0.75 mile and 1 mile to the west of the campus corner at Temple Avenue and Grand Avenue, respectively. The approximately 9.5-acre Snow Creek Park contains one lighted baseball field, a playground area, restroom/snack bar, and passive recreation including picnic tables and barbecue grills. Country Hollow Park is approximately 6.4 acres, and offers five picnic tables (two covered) and exercise equipment (City of Walnut 2018c). Walnut Ranch is an approximately 45.2-acre park that offers three lighted tennis courts, a playground area, four lighted soccer fields, nine bleachers, one restroom/snack bar, and passive recreation areas including benches and picnic tables (City of Walnut 2018d). In addition, The City of Walnut has included plans for the expansion of Walnut Ranch Park, which will include an aquatics center, pool, community center, and outdoor amphitheater with lawn. (City of Walnut 2018a).

The City of Walnut also contains 30.5 miles of equestrian/hiking trails. The City of Walnut maintains 23.5 miles of the trail system, and the County of Los Angeles maintains 7.0 miles. The trails systems include passive reaction amenities with three rest areas that contain picnic tables, trash cans, and tree-shaded areas (City of Walnut 2018e). The trail segment nearest the Mt. SAC campus is located on the Los Angeles County Schabarum Trail located approximately 0.5 mile to the north (City of Walnut 2015).

Walnut Creek Community Regional Park is located approximately 3 miles north of the Mt. SAC campus and is owned and operated by Los Angeles County Parks and Recreation. At 2 acres, Walnut Creek Community Regional Park is located along Walnut Creek trail in the City of San Dimas, California. It allows access to the Walnut Creek trail system and contains parking space available for up to ten trucks and horse trailers. The park contains 2 acres of equestrian staging areas and includes multi-use trails for horseback riding, hiking, and mountain biking (County of Los Angeles 2018c).

4.13.3 THRESHOLDS OF SIGNIFICANCE

According to Appendix G of the California Environmental Quality Act (CEQA) Guidelines, a proposed Project will normally have a significant adverse environmental impact if it would:

- Result in substantial adverse physical impacts associated with the provision of new or physically altered government facilities, need for new or physically altered government facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for:
    - Fire Protection
    - Police Protection
    - Schools
    - Other Public Facilities
- 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
- Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment

Mt. SAC 2016 CEQA Thresholds of Significance

To the extent the following thresholds of significance are applicable to the proposed 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
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.	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 are required.
LASD: Los Angeles County Sheriff's Department; LACoFD: Los Angeles County Fire Department				

4.13.4 ENVIRONMENTAL IMPACTS

Impact Analysis

Threshold 13.1	**Would the proposed 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 fire protection?**

The following analysis addresses the need for new or physically altered fire protection facilities to serve the proposed 2018 EFMP. Emergency access is discussed in Section 4.14, Transportation/Traffic and fire hazards/fuel modification is discussed in Section 4.8, Hazards and Hazardous Materials and Wildfire, of this Draft EIR.

2018 Educational and Facilities Master Plan (Phases 1A, 1B, and 2) and Project-Specific

Phase 1A would involve construction of the Student Center and Central Campus Infrastructure, and Parking Structure R and Tennis Courts, and the development of minor projects including the Sand Volleyball Courts and Parking Lot W Reconstruction. Phase 1A would also include improvements to Parking Structure S and West Temple Avenue Pedestrian Bridge. Phase 1B would involve the construction of the Bookstore. Phases 1A and 1B would not involve the development of any new residence halls.

Development and renovation of these institutional and athletic uses would increase the demand for fire protection and emergency services and the associated demand on fire protection and emergency service apparatus, equipment, and personnel compared to existing levels. However, as described in Section 4.12, Population and Housing, the proposed 2018 EFMP does not include housing elements and would not directly or indirectly induce growth. In addition, the proposed new institutional uses are not anticipated to change the types or substantially increase the number of service calls at the main campus (LACoFD 2018).

Development of the proposed 2018 EFMP would be required to comply with all applicable code and ordinance requirements including but not limited to construction, access, water mains, fire flows, and fire hydrants. Therefore, through compliance with all applicable code and ordinance requirements, LACoFD Station 146, with Station 61 providing backup fire protection service, would be able to adequately serve the proposed uses within the established response times and distances. No new, expanded, or altered fire-protection services or facilities are required to maintain acceptable response times or distances (LACoFD 2018). Based on correspondence with Los Angeles County Fire Department, the proposed 2018 EFMP would not affect the Fire Department's ability to maintain acceptable response times (LACoFD 2018).

As identified in Section 3.0, Project Description, the proposed 2018 EFMP (including Phases 1A, 1B, and 2) involves the construction of new major buildings, major renovations to existing buildings, and minor new construction and renovation projects within the long-range planning and development plan and analyzed at the program level. The proposed 2018 EFMP, including Phases 1A and 1B, would involve the demolition of approximately 207,805 gross square feet (gsf) of the existing institutional square footage on campus. New buildings totaling 752,000 gsf and additions to existing buildings of 405,023 gsf institutional square footage would be constructed,

for a net increase of 544,195 gsf on campus with the proposed Project (refer to Section 3.0, Project Description).

As discussed in Section 4.12, Population and Housing, based on the estimated growth forecasts for the fall semesters, between 2018 and 2027 there would be an increase in enrollment of between 926 and 1,557 students at Mt. SAC, Further, employees (faculty and staff) would increase from approximately 4,497 total employees in fall 2018 to between 4,810 and 5,016 employees in fall 2027 (based on estimated medium and high growth rates). This would represent an increase of between 313 to 519 employees from fall 2018 to fall 2027.

As discussed above for Phases 1A and 1B, implementation of the proposed 2018 EFMP would not increase the demand for fire protection and emergency services and the associated demand on fire protection and emergency service apparatus, equipment, and personnel compared to existing levels. In addition, there would not be a change in types or substantial increase in the number of service calls at the main campus. No new, expanded, or altered fire-protection services or facilities are required to maintain acceptable response times or distances (LACoFD 2018).

The proposed 2018 EFMP would be designed in accordance with all applicable code, ordinances, and fire and life safety requirements including but not limited to construction, access, water mains, fire flows, and fire hydrants. Adherence to LACoFD requirements would assure adequate provision of fire protection and emergency services/access to the campus and surrounding areas (LACoFD 2018).

No new, expanded, or altered fire protection services or facilities would be required to provide fire protection service in the future. Therefore, no physical impacts associated with new or altered fire protection facilities would result. The proposed Project would comply with all applicable codes and requirements related to fire protection. Proposed Project impacts are considered less than significant, and no mitigation is required.

Level of Significance Prior to Mitigation

Less than significant.

Recommended Mitigation Measures

No significant impacts were identified, and mitigation is not required.

Level of Significance After Mitigation

Less than significant.

Threshold 13.2	**Would the proposed 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 police protection?**

2018 Educational and Facilities Master Plan (Phases 1A, 1B, and 2) and Project-Specific

Phase 1A would involve construction of the Student Center and Central Campus Infrastructure, in addition to Parking Structure R and Tennis Courts and the development of minor projects including the Sand Volleyball Courts and Parking Lot W Reconstruction. Phase 1A would also include improvements to Parking Structure S and West Temple Avenue Pedestrian Bridge. Phase 1B would involve the construction of the Bookstore. Phases 1A and 1B and the proposed 2018 EFMP would not involve the development of any housing elements.

As identified in Section 3.0, Project Description, the proposed 2018 EFMP (including Phases 1A, 1B, and 2) involves the construction of new major buildings, major renovations to existing buildings, and minor new construction and renovation projects within the long-range planning and development plan and analyzed at the program level. The proposed 2018 EFMP, including Phases 1A and 1B, would involve the demolition of approximately 207,805 gsf of the existing institutional square footage on campus. New buildings totaling 752,000 gsf and additions to existing buildings of 405,023 gsf institutional square footage would be constructed, for a net increase of 544,195 gsf on campus with the proposed Project (refer to Section 3.0, Project Description).

As discussed previously, based on the estimated growth forecasts for the fall semesters, between 2018 and 2027 there would be an increase in enrollment of between 926 and 1,557 students at Mt. SAC. Further, employees (faculty and staff) would increase from approximately 4,497 total employees in fall 2018 to between 4,810 and 5,016 employees in fall 2027 (based on estimated medium and high growth rates). This would represent an increase of between 313 to 519 employees from fall 2018 to fall 2027.

However, implementation of the proposed 2018 EFMP does not involve the development of new residential uses or student housing, and the projected increase in the on-campus population with the proposed 2018 EFMP would not change the types or substantially increase the number of service calls at the main campus. The demand for police protection services would not substantially increase, nor would the associated demand for police protection personnel compared to existing levels. The LASD has indicated that the Walnut/Diamond Bar Station staffing would need to increase the number of sworn officers by one deputy for the day and evening shifts to maintain traffic safety and maintain existing response times. However, this addition would not result in the need for new or expanding facilities; and, therefore, no expansion of the existing Walnut Sheriff's Station facilities would be required to serve the proposed 2018 EFMP adequately (Reyes 2018).

Implementation of the proposed 2018 EFMP would not require new or physically altered LASD facilities that would cause significant environmental impacts, and no mitigation is required. In addition, Mt. SAC would be required to continue to comply with all applicable codes, ordinances, and requirements related to safety.

With respect to Mt. SAC Police and Campus Safety, during Phase 2, construction of the new Campus Safety building would expand on-campus police and safety services required to serve the existing on-campus population and projected population growth. In addition, the current number of Mt. SAC Police and Campus Safety staff members would likely be increased during Phase 2 (as part of the estimated overall increase in campus employees and students). However, because there would not be a substantial increase in the demand for Mt. SAC Police and Campus Safety services, the increase in the number of Mt. SAC Police and Campus Safety personnel compared to existing levels would not be significant. As part of this new development, the overall square footage occupied by Mt. SAC Police and Campus Safety would be expanded as compared

to the total square footage that the department currently occupies. However, this would occur in existing or planned buildings, as addressed in this Draft EIR. No new or expanded facilities beyond those assumed for the proposed 2018 EFMP would be required.

Level of Significance Prior to Mitigation

Less than significant.

Recommended Mitigation Measures

No significant impacts were identified, and mitigation is not required.

Level of Significance After Mitigation

Less than significant.

Threshold 13.3	**Would the proposed 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 schools?**

2018 Educational and Facilities Master Plan (Phases 1A, 1B, and 2) and Project-Specific

The proposed development and renovation of the institutional and athletic uses proposed in Phases 1A and 1B and the proposed 2018 EFMP (Phases 1A, 1B, and 2) do 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 proposed 2018 EFMP would generate a relatively small number of new staff. As discussed in Section 4.12, Population and Housing, of this Draft EIR, 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 proposed 2018 EFMP. Therefore, the proposed 2018 EFMP would not require the construction of new or physically altered school facilities, and no physical impacts would occur. This impact is less than significant, and no mitigation is necessary.

Level of Significance Prior to Mitigation

Less than significant.

Recommended Mitigation Measures

No significant impacts were identified, and mitigation is not required.

Level of Significance After Mitigation

Less than significant.

Threshold 13.4	**Would the proposed 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 other public facilities?**

2018 Educational and Facilities Master Plan (Phases 1A, 1B, and 2) and Project-Specific

As discussed in Section 3, Project Description, the proposed development and renovation of the institutional and library uses proposed in Phases 1A and 1B and the proposed 2018 EFMP (Phases 1A, 1B, and 2) would involve the construction of a new, expanded Library/Learning Resources facility in Phase 2. Additionally, Phase 1A would involve construction of the Student Center and Central Campus Infrastructure and Phase 1B would involve the construction of the Bookstore. 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 2018b). To facilitate the growing demand for library services, implementation of Phases 1A and 1B and the proposed 2018 EFMP (Phases 1A, 1B, and 2), which includes the construction of a new, expanded Library/Learning Resources facility, will meet the demands of the projected growth.

Direct and indirect impacts associated with construction and operation of these facilities are evaluated in the respective sections of this Draft EIR. Proposed Project-related short-term, construction-related local and regional air quality impacts are addressed in Section 4.2, Air Quality; construction-related noise impacts are addressed in Section 4.11, Noise; and construction-related traffic impacts are addressed in Section 4.14, Transportation/Traffic. Potential impacts resulting from the installation of sports field lighting are addressed in Section 4.1, Aesthetics. No additional impacts would occur with beyond those addressed in this Draft EIR. No direct impacts to Walnut Creek Community Regional Park would occur with implementation of the proposed Project, and potential indirect impacts, including to biological resources, which are addressed in Section 4.3, Biological Resources, and Section 4.11, Noise.

As identified through the analysis presented in these sections, impacts resulting from construction and operation of proposed new and modified library facilities would be less than significant with incorporation of identified RRs and MMs.

Level of Significance Prior to Mitigation

Less than significant.

Recommended Mitigation Measures

No significant impacts were identified and mitigation is not required.

Level of Significance After Mitigation

Less than significant.

Threshold 13.5	**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?**
Threshold 13.6	**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?**

2018 Educational and Facilities Master Plan (Phases 1A, 1B, and 2) and Project-Specific

The proposed development and renovation of the institutional and athletic uses proposed in Phases 1A and 1B and the proposed 2018 EFMP (Phases 1A through 2) would not involve the construction of any new or expanded public recreational facilities. However, as discussed in Section 3, Project Description, Phase 1A would involve construction of tennis courts and the development of the Sand Volleyball Courts and Parking Lot W Reconstruction. Based on the enrollment data for Mt. SAC and the labor market data related to Athletics, the growth for Athletics is projected to parallel the College's growth rate (Mt. SAC 2018i), therefore, the implementation of Phase 1A and 1B Projects and the proposed 2018 EFMP including the expansion of on-campus recreational and athletics uses would be developed to meet the demands of the projected growth.

Direct and indirect impacts associated with construction and operation of these facilities are evaluated in the respective sections of this Draft EIR. Proposed Project-related short-term, construction-related local and regional air quality impacts are addressed in Section 4.2, Air Quality; construction-related noise impacts are addressed in Section 4.11, Noise; and construction-related traffic impacts are addressed in Section 4.14, Transportation. Potential impacts resulting from the installation of sports field lighting are addressed in Section 4.1, Aesthetics. No additional impacts would occur with beyond those addressed in this Draft EIR. No direct impacts to Walnut Creek Community Regional Park would occur with implementation of the proposed Project, and potential indirect impacts, including to biological resources, are addressed in Section 4.3, Biological Resources, and Section 4.11, Noise.

As identified through the analysis presented in these sections, impacts resulting from construction and operation of proposed new and modified athletic and recreational facilities would be less than significant with incorporation of identified regulatory requirements (RRs) and mitigation measures (MMs).

Level of Significance Prior to Mitigation

Less than significant.

Recommended Mitigation Measures

No significant impacts were identified, and mitigation is not required.

Level of Significance After Mitigation

Less than significant.

4.13.5 CUMULATIVE IMPACTS

Past projects in the City of Walnut and surrounding cities within Los Angeles County and unincorporated areas have converted undeveloped and agricultural land to urban uses resulting in area residential and employment population increases and associated impacts to public services. The contribution of these past projects to area growth is also reflected in Los Angeles County projections (i.e., 2016–2040 RTP/SCS Final Growth Forecast by Jurisdiction). Future regional growth will result in increased demand for public services and facilities. Service providers will continue to evaluate levels of service desired and potential funding sources to meet this demand. Long-range planning for the provisions of public services and facilities is typically based on growth projections that reflect 2018 WGP growth projections.

Fire Protection and Police

As additional development occurs in the City of Walnut and surrounding areas, the demand for law enforcement and fire protection services, including personnel, equipment, and/or facilities will increase. However, increases in demand are routinely assessed by the LACoFD and LASD as part of the standard monitoring and budgeting process, and law enforcement and fire protection services in the City and County are anticipated to be adequate to serve the proposed 2018 EFMP and cumulative projects. Additionally, the proposed Project's contribution to cumulative impacts would be less than significant since the campus would continue to be adequately served with existing personnel, equipment, and facilities. No new or expanded LACoFD or LASD facilities would be required to serve the proposed Project, and no associated physical environmental impacts would occur. With respect to police services, the campus would also continue to be served by professional security services provided by the Department of Police and Campus Safety; this department would increase staff, equipment, and facilities as necessary to serve the increase in demand generated by the proposed 2018 EFMP (Phases 1A, 1B, and 2).

Because implementation of the proposed 2018 EFMP full buildout (Phases 1 through 4) can be accommodated by the existing and projected LACoFD and LASD service capabilities, and because existing requirements for fire and life safety (as identified in (RR PS-1) would be implemented as part of the proposed Project, which continue to ensure the adequate provision of services, the proposed 2018 EFMP would not result in a cumulatively considerable contribution to a significant cumulative impact related to fire and police protection.

School

Increased development throughout the City of Walnut and Los Angeles County would generate additional demand for public school classroom seating capacity within the surrounding school districts. The degree to which this demand would be satisfied is dependent upon future enrollment trends. However, all new private-sector development will be required to pay statutory impact fees to school districts (pursuant to Senate Bill 50)[3] to help fund construction of additional classroom capacity; and, under current law, payment of these fees is deemed to constitute full mitigation under CEQA. For these reasons and assuming that cumulative demand for school capacity would be met as planned by the school districts within and surrounding the City of Walnut and Los Angeles County, cumulative impacts would be less than significant.

However, as discussed above, the proposed 2018 EFMP would add a relatively small number of new employment opportunities, which would likely be filled by the local labor pool. The proposed

[3] Senate Bill (SB) 50 (Leroy Green School Facilities Act), enacted in 1998, established a comprehensive program for funding school facilities based on 50 percent funding from the State and 50 percent funding from local districts, while limiting the obligation of developers to mitigate the impact of projects on school facilities.

housing projects in the City and the County do not involve the development of new residential uses that would result in a direct increase/generation of students. As such, implementation of the proposed City and County housing projects is not expected to increase the number of students enrolled in the school districts within the Mt. SAC boundaries or service area substantially including the City of Walnut and surrounding cities within Los Angeles County. As a result, the proposed 2018 EFMP would not have a cumulatively considerable contribution to cumulative impacts on schools.

Other Public Facilities (Libraries)

Increased development throughout the City of Walnut and Los Angeles County would generate additional demand for library services and facilities. However, the proposed City and County housing projects would not result in a cumulatively considerable contribution to a significant cumulative impact. The proposed 2018 EFMP would add a relatively small number of new employment opportunities, which would likely be filled by the local labor pool but would not involve an increase in the anticipated student enrollment at the campus and do not involve the development of new residential uses that would result in a direct increase in demand for library services. As such, implementation of the proposed City and County housing projects is not expected to increase the demand for library services on and off campus substantially and would not have a cumulatively considerable contribution to cumulative impacts on libraries.

Parks and Recreation

The geographic area for cumulative analysis of recreation is defined as the City of Walnut and Los Angeles County. In order to accommodate future cumulative demand, additional park and recreational facilities would be developed and constructed throughout the City of Walnut, including on the Mt. SAC campus for students and faculty/staff. Because the size, location, and type of these future facilities in the City of Walnut is not known at this time, it is speculative to assess the magnitude of cumulative impacts associated with the construction of these facilities. However, the 2018 WGP and Subdivision Ordinance (in accordance with the Quimby Act) requires residential developers to dedicate parkland and/or improvements/amenities, and/or pay fees in-lieu of dedication, at a rate of 5 acres per thousand population. The allocation of land and improvements is apportioned at 2 acres to community parks and 3 acres to public and/or private neighborhood parks. Additionally, it is reasonable to expect that all these facilities would undergo CEQA review in accordance with California law and that project-specific impacts associated with development of each of these facilities would be mitigated to the extent feasible.

As previously discussed, the proposed 2018 EFMP includes the provision of new and modified on-campus athletic and recreational facilities. The potential impacts from construction and operation of these facilities are fully analyzed in each appropriate section of this Draft EIR. The construction and operational impacts from these facilities would be limited to uses on campus and immediately adjacent to the campus; no cumulative projects have been identified in the vicinity of the campus that would result in significant cumulative impacts. As a result, the proposed 2018 EFMP would not result in a cumulatively considerable contribution to a significant cumulative impact related of park and recreational facilities.

4.13.6 MITIGATION MEASURES

No mitigation is required.

4.13.7 REFERENCES

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4.14 TRANSPORTATION/TRAFFIC

This section assesses traffic impacts resulting from implementation of the proposed 2018 Educational and Facilities Master Plan examining Existing Conditions, Existing Plus Project (full proposed 2018 EFMP buildout through Phase 2) Conditions, 2021 Cumulative Conditions (Existing plus Related Projects), 2021 Cumulative Plus Project (Phase 1A) Conditions, 2027 Cumulative Conditions, and 2027 Cumulative Plus Project (full proposed 2018 EFMP buildout through Phase 2) Conditions. Information presented in this section is based on the *Traffic Impact Analysis (TIA) for Mt. San Antonio College Long Range Development Plan 2018 Educational and Facilities Master Plan*, prepared by Psomas in March 2019 and included in its entirety in this Draft EIR Appendix J. A detailed discussion of the methods, assumptions, and analysis calculations of the traffic and parking studies are provided in Appendix J.

In response to the Notice of Preparation (NOP), a comment letter was received from the California Department of Transportation, District 7 which included various comments regarding transportation and traffic, including reduction in vehicle miles traveled through multimodal and regional transit improvements, alternative transportation safety, and use of State highways.

4.14.1 REGULATORY SETTING

Federal

Manual on Uniform Traffic Control Devices

The Federal Highway Administration's (FHWA) Manual on Uniform Traffic Control Devices (MUTCD) is contained in the *Code of Federal Regulations* (CFR, Title 23, Part 655, Subpart F). The FHWA requires that the most recent MUTCD be adopted by individual states as their legal State standard for traffic-control devices within two years of the update. The MUTCD identifies the standards that should be used to install and maintain traffic-control devices on all public streets, highways, bikeways, and private roads that are open to public traffic. The City uses the MUTCD for determining the necessary traffic-control devices (e.g., signs, barricades, gates, warning signs, object markers, guide signs, pavement and curb markings, traffic-control signs, pedestrian control signs, in-roadway lights, and flagger control) on public streets, highways, bikeways, and school areas in the City, including temporary traffic-control devices in and near construction work areas.

State

Senate Bill 743

On January 1, 2019 the State Office of Planning and Research (OPR) issued revisions to the California Environmental Quality Act (CEQA) Guidelines under Senate Bill (SB) 743. The revised CEQA Guidelines establish new criteria for determining the significance of transportation impacts and define alternative metrics to replace the traditional level of service (LOS) metric. The updated Guidelines now identify the reduction of vehicle miles traveled (VMT) as the alternative performance metric to determine significant traffic impacts under CEQA.

Senate Bill 743 replaces the traditional LOS performance metric for identifying environmental impacts with VMT as a more appropriate transportation metric for CEQA assessment. Senate Bill 743 also provides guidance on potential significance impact thresholds related to development projects, land use plans, and transportation infrastructure projects. In addition, the preliminary guidelines discuss factors for consideration in analyzing traffic safety impacts. The SB 743

guidance language is very specific about what may constitute significant impacts such as stating, "A development project . . . that results in vehicle miles traveled greater than the regional average for the land use type (e.g., residential, employment, commercial) may indicate a significant impact". It also identifies that a project with VMT less than the regional average for a similar use would not be considered a significant impact. For additional information related to VMT generation associated with the proposed Project, please refer to Section 4.2, Air Quality; Section 4.5, Energy, Section 4.7, Greenhouse Gas Emissions, and 4.10, Land Use and Planning, of this EIR.

For the proposed Project, it is assumed that enhanced services would help reduce overall VMT of local residents. Density of the Project and ability to utilize the existing Metrolink station are all attributes that would assist in decreasing the VMT generated by the Project on a per service population basis. The Project's attributes would help reduce local and regional VMT and therefore the Project is consistent with the goals and policies of SB 743. For additional analysis of the Project's SCAG's regional plan goals, see Section 4.10, Land Use and Planning, sub-section 4.10.5, Environmental Impacts.

Regional

Regional Transportation Plan/Sustainable Communities Strategy

The Southern California Association of Governments (SCAG) adopted the 2016−2040 *Regional Transportation Plan/Sustainable Communities Strategy (*RTP/SCS) to identify transportation strategies that address mobility needs for the future and to demonstrate the integration of land use, transportation strategies, and transportation investments within the region. The RTP/SCS and Project's consistency with RTP/SCS is discussed in Section 4.9, Land Use Planning, of this Draft EIR. As addressed in Section 4.10, the proposed project is consistent with the goals identified in the RTP/SCS.

Congestion Management Program

Within the SCAG region, there are five Congestion Management Agencies (CMAs) that have the responsibility for preparing the Congestion Management Program (CMP) for their respective counties. In its role as Los Angeles County's CMA, SCAG prepares, monitors, and periodically updates the Los Angeles County CMP to meet federal Congestion Management Process requirements and the County's Measure A program.

The Los Angeles County CMP defines a network of state highways and arterials; level of service standards and related procedures; the process for mitigation of impacts of new development on the transportation system; and technical justification for the approach. The CMP sets the LOS standard for the County's CMP-designated highway system at LOS E for roadway intersections and freeway interchanges in the County's CMP-designated highway system and implements an enhanced transportation management program to ensure that the designated roadways and intersections meet the set standard for CMP-designated highways and streets in the TIS study area.

The CMP outlines the level of service analysis procedures and guidelines for preparing TIS reports for development projects. The TIS for the Project uses parameters provided in the CMP for Los Angeles County.

As recommended in the CMP for Los Angeles County, Walnut also supports programs that encourage transit use, such as subsidizing Metrolink's EZ Transit Pass, as well as Foothill Transit passes. The EZ Transit Pass is valid for unlimited travel with 22 participating Transit Agencies

throughout Southern California, including Foothill Transit (Walnut 2018a). In accordance with the CMP traffic impact analysis guidelines, implementation of the proposed 2018 EFMP is not anticipated to add 50 or more peak hour trips to any CMP intersections and is not expected to add 150 or more peak hour trips in either direction to any of the CMP freeway segments. Therefore, no CMP analysis for arterial monitoring intersections or freeway monitoring segments is required (Psomas 2019).

Local

City of Walnut General Plan Circulation Element

As previously discussed in Section 4.10, Land Use and Planning, of this Draft EIR, the Walnut General Plan Circulation Element includes the City's goals and supporting objectives and policies to provide an accessible multi-modal transportation system that includes the road system, public transit services, pedestrian circulation, bicycle circulation, and trails to provide access to major activity areas within the City and trail system.

The Circulation Element consists of the general location and boundaries of existing and proposed major arterials, transportation routes, terminals, and facilities in relation to current and planned land use, environmental resources and other related elements of this General Plan. Adequate circulation facilities are necessary for efficient movement and transit of people and goods within the planning area. Circulation Element goals and policies that pertain to the proposed project include the following:

- **GOAL C-2:** Quiet streets with limited congestion.
    - Policy C-2.4: Safe Routes to School Plan. Work with school districts to develop a Safe Routes to School plan, creating a plan for each school in Walnut to expand on school safety programs. Encourage Mt. San Antonio College and Cal Poly Pomona to also plan for safer bicycle and pedestrian access by college students, staff, and faculty. Measures can include evaluation of streets around schools and improvements to student drop-off and pick-up zones. Identify engineering, enforcement, education, and evaluation improvements that maximizes pedestrian safety.
- **GOAL C-5:** Efficient, frequent, and convenient transit system
    - Policy C-5.5: Higher Education Connectivity Consult with transit agencies, Mt. San Antonio College, and Cal Poly Pomona to continue to invest in transit amenities and programs that encourage increased transit ridership by students, staff, and faculty

The goals and policies in the Circulation Element of the General Plan that are applicable to the proposed project are presented in Table 4.10-2, General Plan Consistency Analysis of EFMP, in Section 4.10, Land Use and Planning, with an analysis of the project's consistency with these goals and policies.

Walnut Municipal Code

Division 2 (Transportation and Air Quality Measures) of Title VI (Planning and Zoning), Chapter 25 (Zoning), Article XVI Supplemental Planning Requirements of the Walnut Municipal Code contains the requirements of the City's Trip Reduction and Transportation Demand Management

(TDM) Ordinance. The City's TDM Ordinance was certified in 1993 to comply with the Congestion Management Program (CMP) of Los Angeles County (Walnut 2018a).

4.14.2 METHODS

Analysis of Traffic Impacts

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

The traffic generated by the project or by the project in combination with other projects in the area could worsen the LOS of a facility. To assess the potential traffic impacts due to the growth of the student population and the addition of new parking structures, and due to background traffic growth and related projects, the following scenarios were evaluated:

- Existing Conditions
- Existing Plus Project (full proposed 2018 EFMP buildout through Phase 2) Conditions
- 2021 Cumulative Conditions (Existing plus Related Projects)
- 2021 Cumulative Plus Project (Phase 1A) Conditions
- 2027 Cumulative Conditions
- 2027 Cumulative Plus Project (full proposed 2018 EFMP buildout through Phase 2) Conditions

This TIA follows the *Los Angeles County Traffic Impact Analysis Report Guidelines*. Non-freeway ramp intersections were evaluated based on the LA County guidelines, which apply the Intersection Capacity Utilization (ICU) methodology at signalized intersections and the Highway Capacity Manual (HCM) methodology at unsignalized intersections. For the intersections operated under Caltrans' jurisdiction, operational analyses were based on the HCM methodology. The methodologies and significance thresholds are discussed further in the following sections.

Existing Traffic Counts

Traffic volume data was collected at most study intersections in May 2018 by National Data & Surveying Services for Psomas from 7:00 AM to 9:00 AM and from 4:00 PM to 6:00 PM. Traffic volume data at the Proposed Transit Center Access and Temple Avenue intersection was also collected in March 2018 for a 24-hour period. The overall peak hours for the study area were found to be from 7:15 to 8:15 AM and from 5:00 to 6:00 PM.

The volumes along I-10 and SR-57 are from 2016 Caltrans data. Traffic volume data for the two intersections added after the initial draft of this report (I-10 eastbound off ramp/East Campus Drive/Kellogg Drive and East Campus Drive/South Campus Drive) was collected in October 2018. In addition, these two intersections (numbers 29 and 30) are not part of the study area and are not included in the detailed traffic analysis for this project; however, the volumes were included in the analysis throughout for reference.

All collected traffic volume data is included in Appendix A of the TIA included as Appendix J of the Draft EIR.

Traffic Volume Forecasts

The anticipated growth for this study was assumed to be 1.22 percent per year, which is the most conservative growth rate presented in the proposed 2018 EFMP. The interim study year is at the completion of Phase 1A (assumed to be in 2021) and the buildout year is 2027, which is consistent with the 10-year horizon for buildout of Phase 2 of the proposed 2018 EFMP.

Because parking needs may change over time due to the construction of the Transit Center and the general shift of trips away from personal vehicles, the structure in Lot F may not be needed when initially indicated, if at all. Therefore, it is recommended that parking demand data be collected in the third week (census week) of the fall semester on a regular basis (i.e. every year, every other year). A parking generation rate should be calculated as the total demand divided by the total number of students, and the rate should be compared to previous years to determine how the parking rate per student is changing over time.

Along with the proposed 2018 EFMP growth, other ongoing development and roadway improvement projects (which have been previously approved and studied) must be accounted for in the appropriate study years. While specific educational facilities, the Physical Education Project (Phase 1,2), and the Transit Center (among others) are specified developments in the proposed 2018 EFMP, this traffic study provided analyses based on the anticipated number of new students. The number of students is not necessarily tied to specific new buildings on campus; instead, the campus population is anticipated to grow as it has in the past, being served by the planned new and improved facilities. Therefore, the physical projects listed in the assumptions below are only those which influence traffic, such as new parking structures.

Existing

- Existing geometry at all intersections, including recently completed construction on Grand Avenue at Baker Parkway and at the SR-60 WB Ramps)

Existing Plus Project (proposed 2018 EFMP buildout through Phase 2) Conditions

- School population increase of 4,881 students (42,745 total students, buildout conditions)
- New developments include Transit Center and parking structures in Lots R, S, B, and F (buildout conditions)
- Roadway geometry changes include:
    - New exclusive eastbound and westbound right turn lanes at Temple Avenue/Bonita Drive associated with the Physical Education Project (Phase 1,2)
    - New traffic signal at Temple Avenue/Transit Center access
    - New south leg (for parking structure S) at Temple Avenue/Transit Center access
    - Exclusive eastbound and westbound right turn lanes at Temple Avenue/Transit Center access
- An additional possible improvement includes extending the existing westbound left turn lane storage length at the intersection of Temple Avenue and Bonita Drive
    - Mt. SAC and the City of Walnut are discussing this potential construction
    - The possible extension of the left turn lane does not have any effect on the analyses in this report

Phase 1A (2021) Cumulative Conditions

- Includes Transit Center
- Roadway geometry changes include:
    - New exclusive eastbound right turn lane at Temple Avenue/Bonita Drive associated with the Physical Education Project (Phase 1,2)
    - New traffic signal at Temple Avenue/Transit Center access
    - New south leg at Temple Avenue/Transit Center access
    - Exclusive eastbound and westbound right turn lanes at Temple Avenue/Transit Center access

Phase 1A (2021) Cumulative Conditions Plus Project

- School population increase of 1,882 students (39,746 total students)
- In addition to 2021 Cumulative Conditions, includes parking structures in Lots R and S

Buildout (2027) Cumulative Conditions

- Includes Transit Center
- Roadway geometry changes include:
    - New exclusive eastbound right turn lane at Temple Avenue/Bonita Drive associated with the Physical Education Project (Phase 1,2)
    - New traffic signal at Temple Avenue/Transit Center access
    - New south leg at Temple Avenue/Transit Center access
    - Exclusive eastbound and westbound right turn lanes at Temple Avenue/Transit Center access

Buildout (2027) Cumulative Conditions

- School population increase of 4,881 students (42,745 total students)
- In addition to 2027 Cumulative Conditions, includes parking structures in Lots R, S, B, and F

Traffic Analysis

Intersection Capacity Utilization (ICU)

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

Per the LA County guidelines, a maximum of 2,880 vehicles per hour per lane should be used in the ICU method for dual left-turn lanes, and a maximum of 1,600 vehicles per hour per lane should be used for the remaining lane configurations. A ten percent yellow clearance time (i.e. lost time) should be included in the calculations.

The impact related to the project is considered significant if the increase in the volume to capacity (V/C) ratio with the project equals or exceeds the values shown in Table 4.14-1.

TABLE 4.14-1
SIGNIFICANT IMPACT THRESHOLDS – ICU METHODOLOGY

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

Highway Capacity Manual (HCM)

The LA County guidelines do not refer to significant impacts at unsignalized intersections. However, this study applied the *HCM* methodology to evaluate unsignalized intersections, which defines LOS based on delay. The analyses for the unsignalized intersections were conducted using the software Synchro.

Although no thresholds are available for significant impacts at unsignalized intersections, several jurisdictions recommend evaluation methodologies. For example, the LADOT guidelines recommend that if an unsignalized intersection has a LOS E or F in the "future with project" scenario, a signal warrant analysis should be conducted.

For this study, the LOS for unsignalized intersections is shown for each scenario. For intersections with LOS E or F, a preliminary peak hour signal warrant evaluation was conducted. However, the construction of a signal is not considered a mitigation measure, and the preliminary warrant analysis is provided for information only. Further, it is recommended that a full signal warrant analysis be conducted before a new traffic signal is installed at any location.

Caltrans Guidelines

The LOS at the intersections operating under Caltrans' jurisdiction is based on measures of effectiveness defined in the *HCM*. Caltrans aims to have facilities operate at the transition between LOS C and LOS D.

There are no formal thresholds from Caltrans to determine significant impacts. To be consistent with previous studies conducted for Mt. SAC and considering that Caltrans wants to maintain facilities operating at LOS D or better, this study assumed that a project-related impact is considered significant if the LOS changes from D or better to E or F. Further, a significant impact occurs if the facility operates at LOS E or F during existing conditions and the project-related traffic results in an increase in delay.

For freeway facilities, Caltrans uses the segment flow rates shown in Table 4.14-2, listed in passenger cars per hour per lane.

TABLE 4.14-2
FREEWAY SEGMENT CAPACITY

LOS	Maximum Flow Rate (pc/hr/ln)
A	710
B	1,170
C	1,680
D	2,090
E	2,350
pc/hr/ln: passenger cars per hour per lane	

4.14.3 ENVIRONMENTAL SETTING

Study Area

The 28 study intersections listed below were selected based on their inclusion in the 2015 Traffic Impact Study and requests from the Cities of Walnut, Pomona, and West Covina. In addition, major intersections which directly serve Mt. SAC which were not included in the 2015 study were added. The jurisdiction in which each intersection is located is shown in parentheses, and Caltrans intersections are indicated as such.

1. Nogales Street and Amar Road (West Covina)
2. Lemon Avenue and Amar Road (Walnut)
3. Meadow Pass Road and Amar Road (Walnut)
4. Grand Avenue and Temple Avenue/Amar Road (Walnut) – will be referred to as Grand Avenue and Temple Avenue throughout this report
5. Mt. SAC Way and Temple Avenue (Walnut)
6. Proposed Transit Center Access and Temple Avenue (Walnut)
7. Bonita Drive and Temple Avenue (Walnut)
8. Lot F Entrance and Temple Avenue (Walnut)
9. University Drive and Temple Avenue (Pomona)
10. Campus Drive and Temple Avenue (Pomona)
11. Campus Drive and Kellogg Drive (Pomona)
12. Valley Boulevard and Temple Avenue (Pomona)
13. Pomona Boulevard and Temple Avenue (Pomona)
14. SR-57 SB Ramps and Temple Avenue (Pomona, Caltrans)
15. SR-57 NB Ramps and Temple Avenue (Pomona, Caltrans)
16. Grand Avenue and I-10 WB Ramp (West Covina, Caltrans)
17. Grand Avenue and I-10 EB Ramp (West Covina, Caltrans)
18. Grand Avenue and Holt Avenue (West Covina)
19. Grand Avenue and Cortez Street (West Covina)

1. Nogales Street and Amar Road
2. Lemon Avenue and Amar Road
3. Meadow Pass Road and Amar Road
4. 4.Grand Avenue and Temple Avenue/Amar Road – will be referred to as Grand Avenue and Temple Avenue throughout this report
5. Mt. SAC Way and Temple Avenue
6. Proposed Transit Center Access and Temple Avenue
7. Bonita Drive and Temple Avenue
8. Lot F Entrance and Temple Avenue
9. University Drive and Temple Avenue
10. Campus Drive and Temple Avenue
11. Campus Drive and Kellogg Drive
12. Valley Boulevard and Temple Avenue
13. Pomona Boulevard and Temple Avenue
14. SR-57 SB Ramps and Temple Avenue
15. SR-57 NB Ramps and Temple Avenue
16. Grand Avenue and I-10 WB Ramp
17. Grand Avenue and I-10 EB Ramp
18. Grand Avenue and Holt Avenue
19. Grand Avenue and Cortez Street
20. Barranca Street and Cameron Avenue
21. Grand Avenue and Cameron Avenue
22. Grand Avenue and Mountaineer Road
23. Grand Avenue and San Jose Hills Road
24. Grand Avenue and La Puente Road
25. Grand Avenue and Valley Boulevard
26. Grand Avenue and Baker Parkway
27. Grand Avenue and SR-60 WB Ramps
28. Grand Avenue and SR-60 EB Ramps
29. I-10 eastbound off-ramp/East Campus Drive and Kellogg Drive
30. East Campus Drive and South Campus Drive

LEGEND

- XX Study Intersection
- XX Additional Intersection (Reference Only)
- Mt. SAC Campus
- Project Area (2018 EFMP)

Project Location and Study Intersections

Exhibit 4.14-1

Mt. SAC 2018 Educational and Facilities Master Plan EIR

N W E S

PSOMAS

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20. Barranca Street and Cameron Avenue (West Covina)
21. Grand Avenue and Cameron Avenue (Los Angeles County)
22. Grand Avenue and Mountaineer Road (Walnut)
23. Grand Avenue and San Jose Hills Road (Walnut)
24. Grand Avenue and La Puente Road (Walnut)
25. Grand Avenue and Valley Boulevard (Walnut)
26. Grand Avenue and Baker Parkway (Industry)
27. Grand Avenue and SR-60 WB Ramps (Industry, Caltrans)
28. Grand Avenue and SR-60 EB Ramps (Diamond Bar, Caltrans)

After the initial draft of this study was completed, Mt. SAC was contacted by California State Polytechnic University, Pomona (Cal Poly Pomona) with a request to provide a preliminary discussion about a possible campus bypass which would include the following intersections:

29. I-10 eastbound off-ramp/East Campus Drive and Kellogg Drive (Los Angeles County, Caltrans)
30. East Campus Drive and South Campus Drive (Los Angeles County)

Although these two intersections are outside the study area for this document and were therefore not analyzed, traffic volume information for both (given the existing geometry and circulation) is provided throughout for reference. The potential plans for the area, along with the discussion and evaluation of these two intersections, are provided in Section 8 of the TIA.

In addition to the study intersections, the Caltrans facility segments listed below were analyzed because the project is expected to add 50 or more peak hour trips along each of the segments:

- I-10, Citrus Street to Holt Avenue
- SR-57, Grand Avenue to SR-60

The *2010 Congestion Management Program (CMP) for Los Angeles County* provides guidelines to evaluate the potential impact of local growth on the regional transportation system. Although there are some CMP facilities in the project vicinity, the project trips are not expected to meet thresholds for analysis of any of the facilities and CMP analysis is therefore not required.

The project vicinity and the study intersections as well as the two intersections included for evaluation as requested by Cal Poly Pomona are shown in Exhibit 4.14-1, Project Location and Study Intersections.

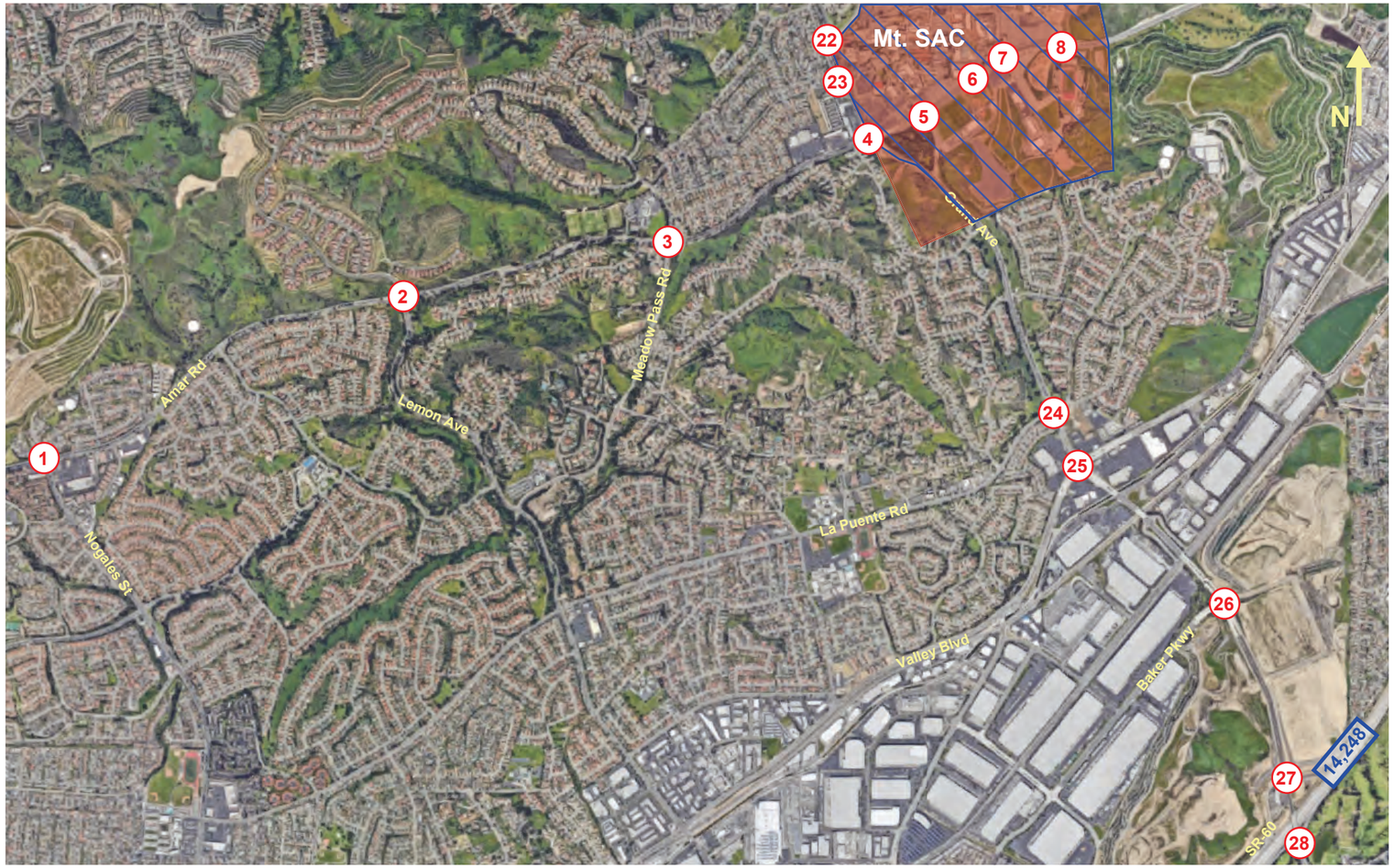
Existing Roadway Network

Following is a description of existing transportation facilities in the traffic study area. Quantitative information regarding the existing operations for study area intersections and freeway facilities is provided in the analysis for Threshold 14.1.

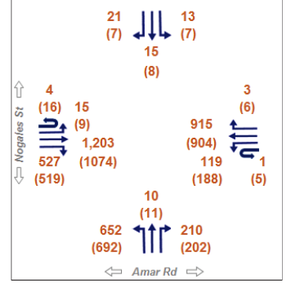
- ***Grand Avenue*** is an existing four-lane divided roadway in the project vicinity, widening to six lanes further south in the study area. There are bike lanes along some portions of the roadway, and on-street parking is prohibited. The roadway is classified as a major arterial

by the City of Walnut, and has a posted speed limit of 40 mph in the campus vicinity, increasing to 45 mph north of campus and 50 mph south of Temple Avenue.

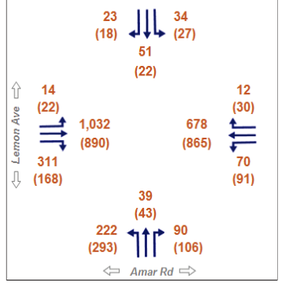
- ***Amar Road/Temple Avenue*** is a four-lane divided roadway through the campus area, widening to a six-lane facility to the east. On-street parking is generally prohibited along the roadway, except for the segment between Mt. SAC Way and Bonita Drive. The roadway is classified by the City of Walnut as a major arterial east of Grand Avenue and as a minor arterial west of Grand Avenue with a posted speed limit of 40 mph in the campus vicinity, increasing to 45 mph west of Heidelberg Avenue and 50 mph east of Bonita Drive.
- ***Mountaineer Road*** is a two-lane divided roadway located on the northern boundary of the campus between Grand Avenue and Edinger Way and is classified as an important local street by the City of Walnut. Near the Grand Avenue intersection, the roadway is wider, providing four turn lanes onto Grand Avenue and two egress lanes from Grand Avenue. Mountaineer Road provides direct access to campus parking and facilities via Edinger Way. On-street parking is prohibited in this segment, and the posted speed limit is 30 mph.
- ***Cameron Avenue*** is a four-lane undivided roadway with bike lanes which provides access to the area between I-10 and Grand Avenue via Citrus Street and Barranca Street. The roadway is classified as a principal arterial by the City of West Covina and has a posted speed limit of 45 mph.
- ***La Puente Road*** is a four-lane divided roadway west of Grand Avenue; east of Grand Avenue, the roadway narrows to a two-lane undivided roadway and serves a large residential area. West of Grand Avenue, the roadway is classified as a secondary street by the City of Walnut and has a posted speed limit of 40 mph.
- ***Valley Boulevard*** is a four- to six-lane divided roadway and is classified as a major arterial by the City of Walnut. South of Pomona Boulevard, the roadway has a raised median, and north of Pomona Boulevard, there is a two-way left turn lane. On-street parking is prohibited in the study area, and the roadway has a posted speed limit of 50 mph.
- ***Nogales Street*** is a four-lane divided roadway with bike lanes south of Amar Road, and becomes the two-lane undivided Walnut Vista Way north of Amar Road. The portion of the roadway south of Amar Road is classified as a minor arterial by the City of Walnut and has a posted speed limit of 45 mph.
- ***Lemon Avenue*** is a four-lane divided roadway south of Amar Road, narrowing to a two-lane undivided roadway north of Amar Road. The southern portion of the roadway is classified as a minor arterial by the City of Walnut and has a posted speed limit of 35 mph.
- ***Meadow Pass Road*** is a two-lane divided roadway with a separate multi-use path south of Amar Road, and becomes the two-lane undivided Country Hollow Drive north of Amar Road. The portion of the roadway south of Amar Road is classified as an important local street by the City of Walnut and has a posted speed limit of 30 mph.
- ***Campus Drive*** is a four-lane generally undivided roadway that passes through the Cal Poly Pomona campus, but also provides access between Temple Avenue and I-10 via Ridgeway Street. Between Temple Avenue and Kellogg Drive, the roadway is divided by either a raised median or left turn lanes. The roadway is classified as a collector by the City of Pomona and has a posted speed limit of 45 mph.



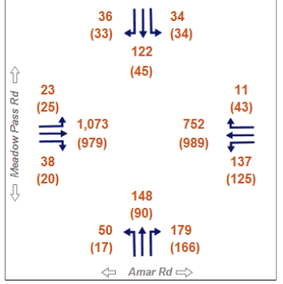
1 Amar Rd / Nogales St



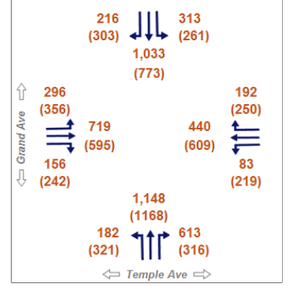
2 Amar Rd / Lemon Ave



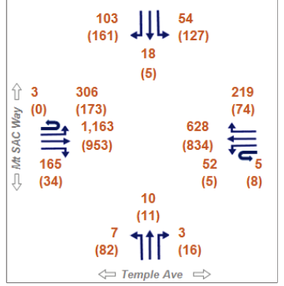
3 Amar Rd / Meadow Pass Rd



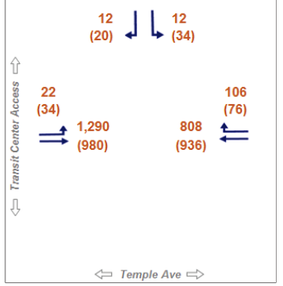
4 Temple Ave / Grand Ave



5 Temple Ave / Mt SAC Way



6 Temple Ave / Transit Center Access

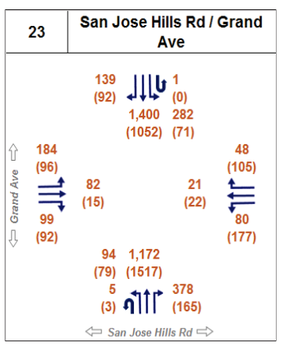


7 Temple Ave / Bonita Dr

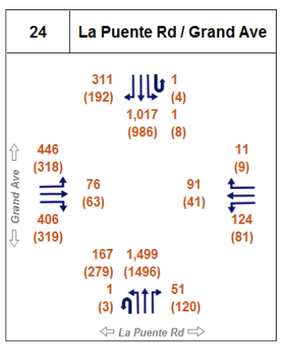
8 Temple Ave / Lot F Entrance

22 Mountaineer Rd / Grand Ave

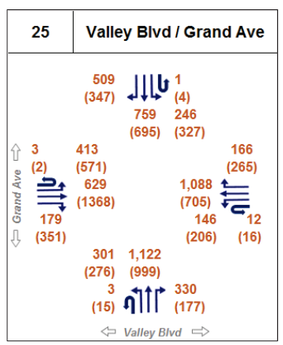
23 San Jose Hills Rd / Grand Ave



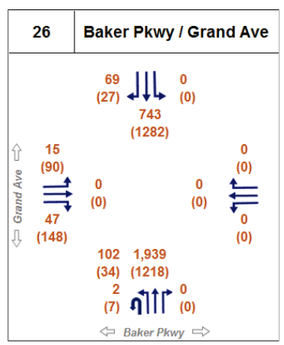
24 La Puente Rd / Grand Ave



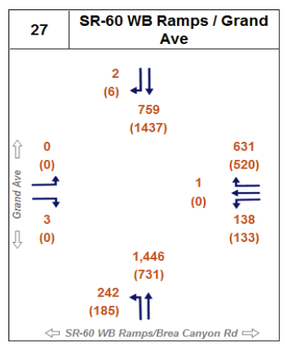
25 Valley Blvd / Grand Ave



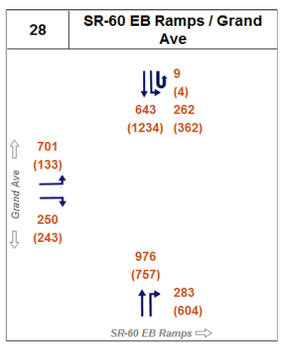
26 Baker Pkwy / Grand Ave



27 SR-60 WB Ramps / Grand Ave



28 SR-60 EB Ramps / Grand Ave



LEGEND

- XX — Intersection Number
- XX — AM Peak Hour Traffic Volume (veh/hr)
- (XX) — PM Peak Hour Traffic Volume (veh/hr)
- XX,XXX — Segment Peak Hour Traffic Volume (pc/hr)
- Mt. SAC Campus
- Project Area (2018 EFMP)

Existing Traffic Volumes (Intersections 1-8, 22-28)

Exhibit 4.14-2a

Mt. SAC 2018 Educational and Facilities Master Plan EIR

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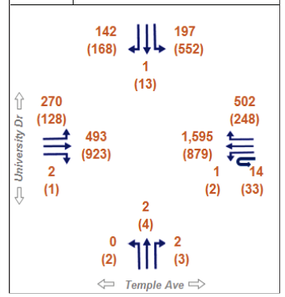
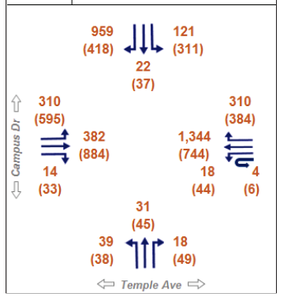
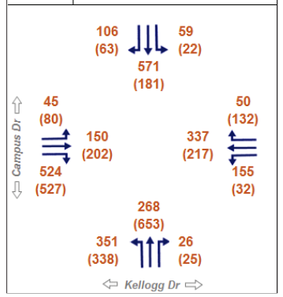
9 Temple Ave / University Dr



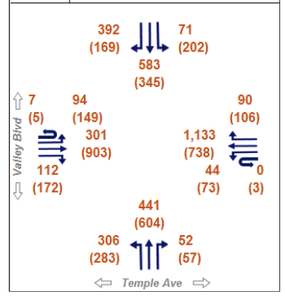
10 Temple Ave / Campus Dr



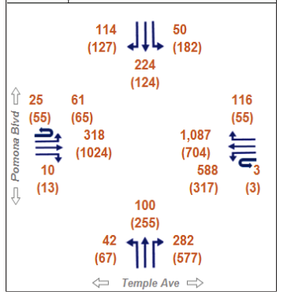
11 Kellogg Dr / Campus Dr



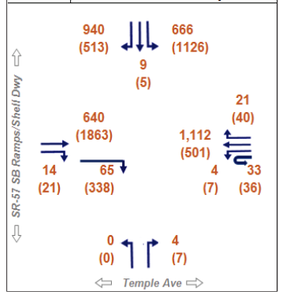
12 Temple Ave / Valley Blvd



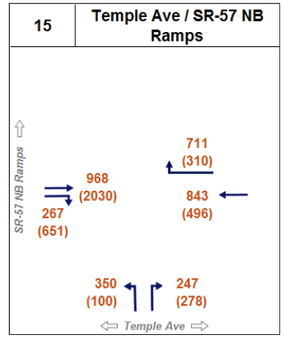
13 Temple Ave / Pomona Blvd



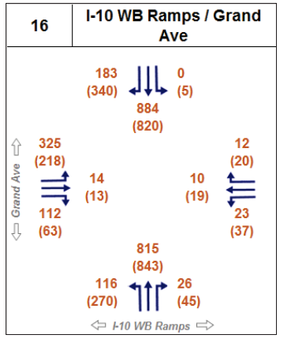
14 Temple Ave / Shell Dwy / SR-57 SB Ramps



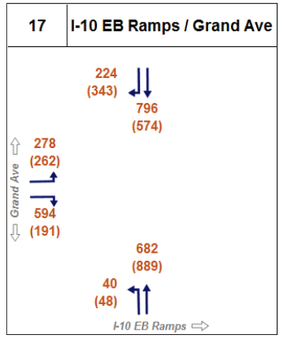
15 Temple Ave / SR-57 NB Ramps



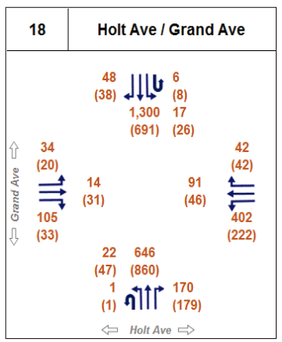
16 I-10 WB Ramps / Grand Ave



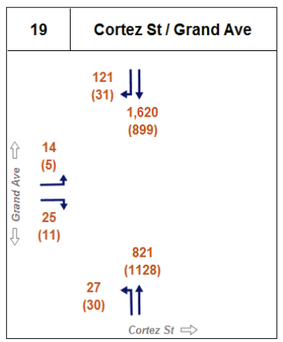
17 I-10 EB Ramps / Grand Ave



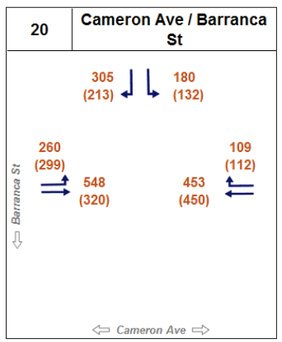
18 Holt Ave / Grand Ave



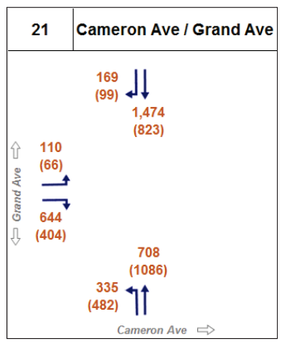
19 Cortez St / Grand Ave



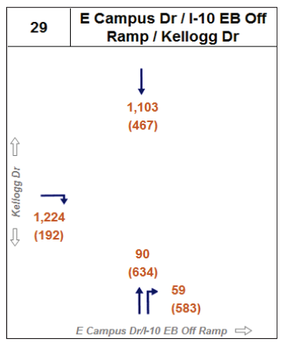
20 Cameron Ave / Barranca St



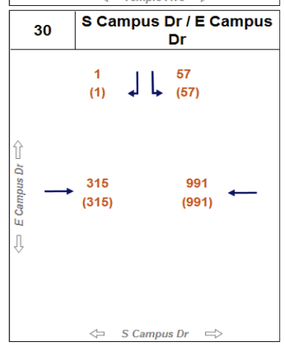
21 Cameron Ave / Grand Ave



29 E Campus Dr / I-10 EB Off Ramp / Kellogg Dr



30 S Campus Dr / E Campus Dr



LEGEND

- XX — Intersection Number
- XX — AM Peak Hour Traffic Volume (veh/hr)
- (XX) — PM Peak Hour Traffic Volume (veh/hr)
- XX,XXX — Segment Peak Hour Traffic Volume (pc/hr)
- Mt. SAC Campus
- Project Area (2018 EFMP)

Existing Traffic Volumes (Intersections 9–21, 29–30)

Exhibit 4.14-2b

Mt. SAC 2018 Educational and Facilities Master Plan EIR

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As discussed previously, Exhibit 4.14-1, Project Location and Study Intersections, shows the locations of these roadways relative to the Project site. In addition, Exhibit 4.14-2a, Existing Traffic Volumes (Intersections 1-8, 22-28), and 4.14-2b, Existing Traffic Volumes (Intersections 19-21, 29-30), shows the existing conditions at the Project study area intersections.

Existing Traffic Conditions

Existing Year (2018)

As previously discussed, the non-Caltrans signalized intersections were evaluated using the ICU methodology, and the unsignalized intersections and Caltrans signalized intersections were evaluated using the HCM methodology. For existing conditions, the ICU spreadsheets and HCM reports are included in Appendix B of the TIA. Table 4.14-3 in shows the resulting LOS for each of the study intersections under existing conditions, with any unacceptable LOS highlighted in red. As indicated in Table 4.14-3, nine signalized intersections currently operate at LOS E or worse in one or both peak hours, including the following:

4. Temple Avenue/Grand Avenue (AM peak hour)
10. Temple Avenue/Campus Drive (AM peak hour)
12. Temple Avenue/Valley Boulevard (AM peak hour)
13. Temple Avenue/Pomona Boulevard (AM and PM peak hours)
18. Holt Avenue/Grand Avenue (AM peak hour)
21. Cameron Avenue/Grand Avenue (AM peak hour)
23. San Jose Hills Road/Grand Avenue (AM peak hour)
24. La Puente Road/Grand Avenue (AM peak hour)
25. Valley Boulevard/Grand Avenue (AM peak hour)

TABLE 4.14-3
EXISTING TRAFFIC CONDITIONS

	Intersection	AM Peak Hour			PM Peak Hour			Significant Impact?	
		Delay	V/C	LOS	Delay	V/C	LOS	AM	PM
1	Amar Rd/Nogales St		0.862	D		0.829	D	NO	NO
2	Amar Rd/Lemon Ave		0.792	C		0.652	B	NO	NO
3	Amar Rd/Meadow Pass Rd		0.773	C		0.699	B	NO	NO
4	Temple Ave/Grand Ave		0.932	E		0.813	D	YES	YES
5	Temple Ave/Mt. SAC Way		0.625	B		0.687	B	NO	NO
6	Temple Ave/Transit Center		0.589	A		0.478	A	NO	NO
7	Temple Ave/Bonita Dr		0.602	B		0.571	A	NO	NO
8	Temple Ave/Lot F	27.2		D	18.7		C	N/A	N/A
9	Temple Ave/University Dr		0.839	D		0.688	B	YES	NO
10	Temple Ave/Campus Dr		1.003	F		0.759	C	YES	NO
11	Kellogg Dr/Campus Dr		0.828	D		0.579	A	YES	NO
12	Temple Ave/Valley Blvd		0.919	E		0.763	C	YES	NO
13	Temple Ave/Pomona Blvd		0.971	E		1.071	F	NO	YES
14	Temple Ave/SR-57 SB Ramps	23.7		C	42.8		D	NO	NO
15	Temple Ave/SR-57 NB Ramps	9.8		A	8.5		A	NO	NO
16	I-10 WB Ramps/Grand Ave	21.8		C	20.6		C	NO	NO
17	I-10 EB Ramps/Grand Ave	23.2		C	13.8		B	NO	NO
18	Holt Ave/Grand Ave		1.019	F		0.617	B	YES	NO
19	Cortez St/Grand Ave	207.5		F	49.7		E	N/A	N/A
20	Cameron Ave/Barranca St	48.2		E	29.1		D	N/A	N/A
21	Cameron Ave/Grand Ave		1.131	F		0.771	C	YES	YES
22	Mountaineer Rd/Grand Ave		0.719	C		0.753	C	NO	YES
23	San Jose Hills Rd/Grand Ave		0.934	E		0.897	D	YES	YES
24	La Puente Rd/Grand Ave		1.028	F		0.875	D	YES	YES
25	Valley Blvd/Grand Ave		0.907	E		0.824	D	YES	YES
26	Baker Pkwy/Grand Ave		0.581	A		0.534	A	NO	NO
27	SR-60 WB Ramps/Grand Ave	24.2		C	15.2		B	NO	NO
28	SR-60 EB Ramps/Grand Ave	22.7		C	13.9		B	NO	NO

Delay = seconds of delay; EB = Eastbound; **BOLD** = significant impact/condition; LOS = Level of Service V/C = volume/Capacity WB = Westbound

[1] Caltrans Intersection
[2] Highest Lane Delay at TWSC Intersection

Source: Table 7, *Traffic Impact Study*, Psomas 2019.

In addition, the worst minor-street (stop controlled) movement at the intersection of Cortez Street and Grand Avenue (intersection 19) operates at LOS E or worse in both peak hours as well as at the intersection of Cameron Avenue and Barranca Street (intersection 20) in the AM peak hour. Recall that for two-way stop-controlled intersections (such as Cortez Street/Grand Avenue and Cameron Avenue/Barranca Street), there is no defined intersection LOS. In addition to the study intersections, two study Caltrans segments were evaluated for existing conditions:

- I-10, Citrus Street to Holt Avenue

  - 1,857 passenger cars per hour per lane (pc/hr/ln), LOS D
- SR-57, Grand Avenue to SR-60
  - 792 pc/hr/ln, LOS B

Alternative Transportation Facilities

Pedestrian Circulation

Pedestrian routes exist throughout the academic core and are composed of varying widths and materials and pedestrian routes through parking lots are primarily undefined. Existing pedestrian trails are located within the Wildlife Sanctuary, Farm, and cross-country course for a variety of users (Mt. SAC 2018). The existing crosswalks on Grand Avenue provide pedestrian connections between the campus and local shops and restaurants. The crosswalks on Temple Avenue and the tunnel between parking Lot F and Hilmer Lodge Stadium provide pedestrian connections between the northern and southern halves of campus. Existing sidewalks along the campus perimeter provide minimal connectivity to the surrounding neighborhoods to the north and to Cal Poly Pomona to the east (Mt. SAC 2018).

Bicycle Circulation

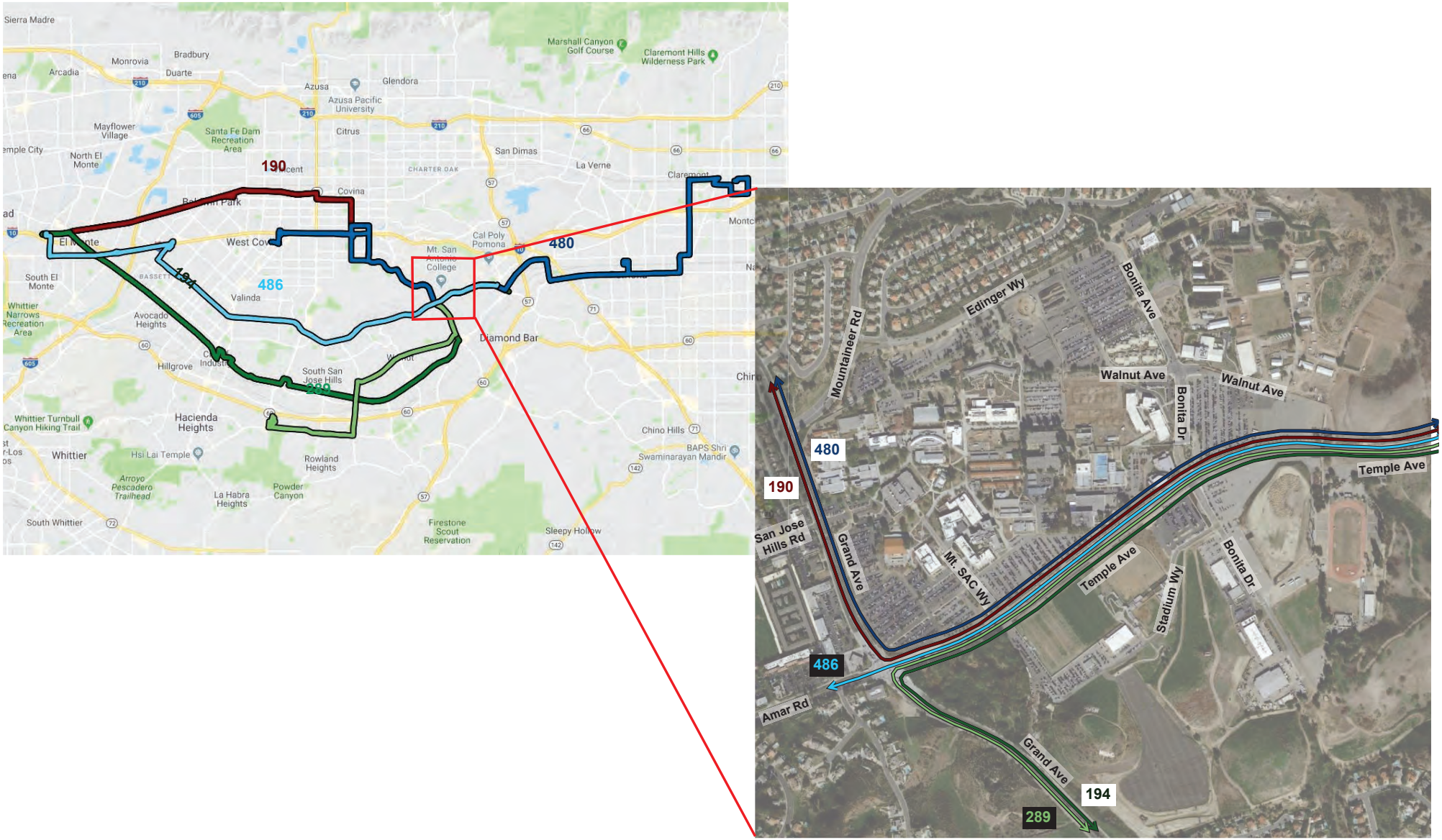
Current campus policy does not allow cyclists on campus sidewalks or service roads, and no designated bike lanes or paths within the interior of the College campus are currently defined. Bicycle circulation and infrastructure on campus remain minimal and most bike racks are located within the academic core, away from roads and existing bike routes, which conflicts with the current campus policy. No distinct bike paths exist separate from pedestrian or vehicular circulation. In addition, the campus sloped topography creates a challenge for cyclists traveling north-south on campus. The average slope from the north end of Bonita Avenue across campus to the intersection of Grand and Temple Avenues is four percent and several locations on campus have slope grades between five and ten percent, with some locations at slopes greater than ten percent (Mt. SAC 2018).

Class II bicycle facilities (located off-campus) include bike lanes which striped and segregated from the vehicular travel lanes. Existing bike lanes are located on Grand Avenue that continue beyond College property. The bike lanes on Temple Avenue are fragmented, and the separation for cyclists on Grand Avenue ends as the lanes approach the intersection with Temple Avenue (Mt. SAC 2018).

Transit Facilities

The Mt. SAC campus is currently served by five Foothill Transit routes, all of which travel along Temple Avenue from Grand Avenue to the east. Routes 190 and 480 travel to/from the north along Grand Avenue, route 486 travels to/from the west on Amar Road, and routes 194 and 289 travel to/from the south along Grand Avenue. Exhibit 4.14-3, Existing Foothill Transit Routes, shows the existing routes as of December 2018 in a regional context and along the Mt. SAC frontage (Psomas 2019).

Further, on December 12, 2018, the Board of Trustees of the Mt. San Antonio Community College District adopted and certified the Final Initial Study/Negative Declaration for the Mt. San Antonio College Transit Center (SCH 2018091026) and approved the Transit Center project via Resolution No. 18-13. The proposed transit center will be located on the north side of Temple Avenue, just west of Bonita Drive (Psomas 2019).



Existing Foothill Transit Routes

Exhibit 4.14-3

Mt. SAC 2018 Educational and Facilities Master Plan EIR

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4.14.4 THRESHOLDS OF SIGNIFICANCE

According to Appendix G of the CEQA Guidelines, a project will normally have a significant adverse environmental impact on transportation and traffic if it will:

- Conflict with an applicable program, plan, ordinance or policy addressing of the circulation system, including transit, roadways, bicycle lanes, and pedestrian facilities paths.
- Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b).
- Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).
- Result in inadequate emergency access.

The specific criteria for evaluation of project impacts to traffic and circulation were previously discussed under "Traffic Performance Criteria".

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; Caltrans; MTA; 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 fifteen (15) trucks per hour and 100,000 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 five (5) years. Complete a site-specific traffic study for 56,000 asf (80,000 gsf) or more

Environmental Topic in the CEQA Checklist	Impact	Mt. San Antonio Community College District Threshold of Significance	Agencies and Regulations	CEQA Procedures
				of new construction for a site-specific project (excludes renovation) that generates more than 1,925 daily trips [waived when included in FMP in last five (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);

4.14.5 ENVIRONMENTAL IMPACTS

Project Trip Generation

Interim Year (2021) – Phase 1A

The proposed 2018 EFMP provides low, medium, and high approximations for student population growth at Mt. SAC. To be conservative, the high annual growth rate (1.22 percent per year) was assumed in the TIA. Based on that growth rate, the student population is expected to grow from 37,864 students in the fall of 2017 to 39,746 students in 2021, a growth of 1,882 students.

The trip generation for the project was calculated using the Institute of Transportation Engineers' (ITE) *Trip Generation Manual*. The resulting trip generation is shown in Table 4.14-4. As seen in the table, the project is expected to generate 2,164 new daily trips at the completion of Phase 1A, including 207 peak hour trips in each of the AM and PM peak hours.

TABLE 4.14-4
INTERIM (2021) PROJECT TRIP GENERATION

ITE LU 540 (10th Edition) - Junior/Community College						
Students				**1,882**		
Period	**Trips/Unit**	**Trips**	**% In**	**% Out**	**Trips In**	**Trips Out**
AM Peak	0.11	207	81%	19%	168	39
PM Peak	0.11	207	56%	44%	116	91
Daily	1.15	2,164	50%	50%	1,082	1,082

Buildout Year (2027)

As with Phase 1A conditions, the trip generation for the project was calculated based on the anticipated daily student headcount in the horizon year of the proposed 2018 EFMP (2027). The student population is expected to grow from the fall 2017 count of 37,864 to 42,745 students in 2027, an increase of 4,881 students. Table 4.14-5 shows the trip generation for the 2027 horizon year for the new students. As shown in the table, 5,613 new daily trips are anticipated in the buildout year due to the project, including 537 trips in each peak hour.

TABLE 4.14-5
BUILDOUT (2027) PROJECT TRIP GENERATION

ITE LU 540 (10th Edition) - Junior/Community College						
Students				**4,881**		
Period	**Trips/Unit**	**Trips**	**% In**	**% Out**	**Trips In**	**Trips Out**
AM Peak	0.11	537	81%	19%	435	102
PM Peak	0.11	537	56%	44%	301	236
Daily	1.15	5,613	50%	50%	2,807	2,807

Related Project Traffic Volumes

The region of influence for the proposed 2018 EFMP is bounded by I-10 to the north, State Route 60 to the south, State Route 71 to the east, and Azusa Avenue to the west. Trip generation for the related projects was based on the ITE *Trip Generation Manual*, and the trip distribution was estimated separately for each project based on their location and type of project (i.e. residential, commercial, etc.).

Table 4.14-6 shows the related project gross trips, pass-by and internal capture trips, replaced trips from existing developments, and the total new trips expected to be generated by the related projects in 2021. As seen in Table 4.14-6, the related projects are expected to generate nearly 3,000 new daily trips, including 340 trips in the AM peak hour and 211 trips in the PM peak hour. Based on the trip generation and trip distribution for each of the projects, the resulting peak hour traffic volumes at each of the study intersections was calculated and are shown in Figures 12A and 12B of the TIA in Appendix J.

TABLE 4.14-6
RELATED PROJECTS TRIP GENERATION

Related Projects Gross Trips			
Period	**Total Trips**	**Trips In**	**Trips Out**
AM Peak	527	202	326
PM Peak	825	449	376
Daily	9,096	4,548	4,548
Pass-By/Internal Capture Trips			
Period	**Total Trips**	**Trips In**	**Trips Out**
AM Peak	-49	-22	-28
PM Peak	-113	-58	-55
Daily	-1,247	-624	-624
Trips from Existing/Replaced Developments			
Period	**Total Trips**	**Trips In**	**Trips Out**
AM Peak	-139	-41	-97
PM Peak	-501	-309	-192
Daily	-4,917	-2,458	-2,458
Total Related Projects New Trips			
Period	**Total Trips**	**Trips In**	**Trips Out**
AM Peak	340	139	201
PM Peak	211	82	129
Daily	2,931	1,466	1,466

Trip Distribution and Assignment

Interim Year (2021) – Phase 1A

The project trip distribution was estimated as shown in Exhibit 4.14-4, Project Trip Distribution and Exhibit 4.14-5, Project Trip Distribution (Inbound) –Campus Area. Exhibit 4.14-4 shows the distribution for the outlying intersections, while Exhibit 4.14-5 shows the inbound distribution at the campus access points. The distribution of traffic exiting campus is expected to be the same as the inbound percentages shown in Exhibit 4.14-5 with the exceptions of intersections 7 and 8; traffic which enters Lot F at intersection 8 is assumed to exit campus from Bonita Drive at intersection 7.

Buildout Year (2027)

As seen in Exhibit 4.14-5, the distribution is expected to shift slightly between Phase 1A and the buildout year (2027). The shift is due to the anticipated construction of the parking structures in Lots B and F during that time. However, this is a conservative analysis and, as noted previously, parking needs may change over time due to the construction of the Transit Center and the general shift away from personal vehicles, and therefore, the structure in Lot F may not be required as initially indicated, if at all.

Cumulative Growth

As discussed in the TIA, based on the CMP, a 1.0 percent per year growth was considered conservative for the neighboring cities and was used to calculate background growth for all the

Project Trip Distribution

Exhibit 4.14-4

Mt. SAC 2018 Educational and Facilities Master Plan EIR

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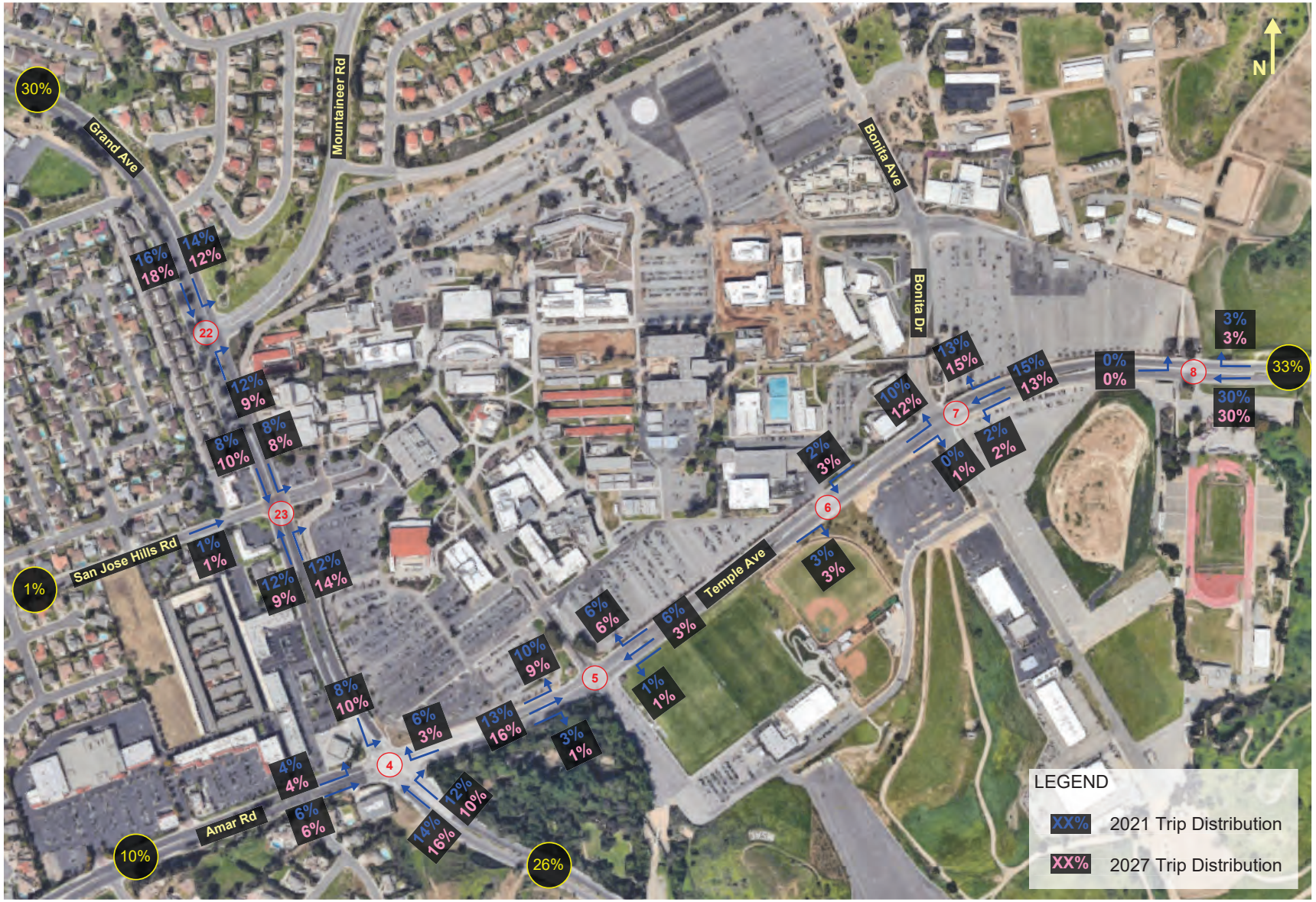

Project Trip Distribution (Inbound) – Campus Area

Exhibit 4.14-5

Mt. SAC 2018 Educational and Facilities Master Plan EIR

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study intersections. By using this conservative growth rate, the traffic volume projections in the TIA are more likely to account for shorter periods of growth which may exceed the CMP projections due to fluctuations in the economy and development community.

In addition, the project traffic volumes were assumed to be included within the 1.0 percent per year growth rate; and therefore, those volumes were subtracted to obtain 2027 traffic volumes without the project. Figures 16A and 16B in the TIA included as Appendix J show the 2027 cumulative traffic volumes (without the project). In a few cases, generally near Mt. SAC, the project traffic growth was calculated to be greater than the growth calculated based on the annual growth rate. These differences are likely due to the anticipated redistribution of traffic near the campus due to the project. To be conservative, for movements where the project traffic resulted a larger increase than was generated by the assumed growth rate, the additional project traffic volume was added to the movement for conditions with the project. Figures 17A and 17B in the TIA included as Appendix J show the 2027 cumulative plus project traffic volumes.

Impact Analysis

Threshold 14.1	**Would the project conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadways, bicycle lanes and pedestrian facilities paths?**

2018 Educational and Facilities Master Plan (Phases 1A, 1B, and 2) and Project-Specific

As discussed previously, a project-specific TIA was prepared to identify the short-term and long-range traffic impacts associated with the proposed 2018 EFMP in accordance with the applicable requirements of the City's Traffic Impact Analysis Guidelines. The project-specific TIA addresses potential impacts of the proposed project based on existing future traffic conditions. Conditions with and without the project are identified to determine if the proposed project would result in significant impacts. The TIA follows the *Los Angeles County Traffic Impact Analysis Report Guidelines*. Non-freeway ramp intersections were evaluated based on the LA County guidelines, which apply the ICU methodology at signalized intersections and the HCM methodology at unsignalized intersections. For the intersections operated under Caltrans' jurisdiction, operational analyses were based on the HCM methodology. The results of the analysis for each scenario are summarized below and discussed in detail in the TIA (Appendix J).

Nine signalized intersections currently operate at LOS E or worse in one or both peak hours. In addition, the worst minor-street (stop controlled) movement at the intersection of Cortez Street and Grand Avenue (intersection 19) operates at LOS E or worse in both peak hours as well as at the intersection of Cameron Avenue and Barranca Street (intersection 20) in the AM peak hour. Further, for the two-way stop-controlled intersections (such as Cortez Street/Grand Avenue and Cameron Avenue/Barranca Street), there is no defined intersection LOS.

Existing Plus Project Traffic Impacts

Intersection Impacts

The Existing Plus Project LOS analysis was prepared using ICU and HCM for the proposed 2018 EFMP (The intersections which would operate at LOS E or worse are the same as those listed in Section 4.14.3, Existing Setting). Further, the intersection of San Jose Hills Road and Grand Avenue, already operating at LOS E in the AM peak hour, would deteriorate from LOS D to LOS E in the PM peak hour. Figures 18A and 18B of the TIA in Appendix J show the existing plus project traffic volumes.

Caltrans Segments

For the Caltrans intersections, a significant impact can only occur if the intersection is operating at LOS E or F. For existing conditions plus project, the volumes and LOS on the Caltrans study segments include:

- I-10, Citrus Street to Holt Avenue
    - 1,869 passenger cars pc/hr/ln, LOS D
- SR-57, Grand Avenue to SR-60
    - 797 pc/hr/ln, LOS B

For the Caltrans study segments, both are expected to operate at LOS D or better with the project; and therefore, no mitigation is required.

Non-Caltrans Segments

Table 4.14-7, Existing Plus Project Impacts – Local Intersections, identifies the traffic conditions at study area intersections under Existing Plus Project scenario. The LOS for existing and existing plus project conditions as well as the increase in ICU for the non-Caltrans intersections with the project. Although operational information is provided for unsignalized intersections, projects are not considered to have a significant impact on any unsignalized intersections. However, a preliminary peak hour signal warrant evaluation was conducted for unsignalized intersections which are expected to operate at LOS E or F (Psomas 2019). As shown in Table 4.14-7, two unsignalized intersections are shown to operate at LOS E or F under existing and existing plus project conditions; the intersections of Cortez Street/Grand Avenue and Cameron Avenue/Barranca Street are expected to operate at LOS E or F under existing and existing plus project conditions. Because of the existing southbound right turn lane on Grand Avenue at Cortez Street, the right turn volume was not included in the total volume at that intersection. The intersection of Cameron Avenue and Barranca Street is expected to meet the peak hour signal warrant, while the intersection of Cortez Street and Grand Avenue is not (due to the low volumes on Cortez Street) (Psomas 2019).

TABLE 4.14-7
EXISTING PLUS PROJECT IMPACTS – LOCAL INTERSECTIONS

	Intersection	AM Peak Hour			PM Peak Hour			Significant Impact	
		Delay	V/C	LOS	Delay	V/C	LOS	AM	PM
1	Amar Rd/Nogales St		0.874	D		0.838	D	NO	NO
2	Amar Rd/Lemon Ave		0.805	D		0.661	B	NO	NO
3	Amar Rd/Meadow Pass Rd		0.791	C		0.713	C	NO	NO
4	Temple Ave/Grand Ave		0.993	E		0.847	D	YES	YES
5	Temple Ave/Mt. SAC Way		0.664	B		0.738	C	NO	NO
6	Temple Ave/Transit Center		0.625	B		0.511	A	NO	NO
7	Temple Ave/Bonita Dr		0.677	B		0.621	B	NO	NO
8	Temple Ave/Lot F	32.0		D	20.6		C	N/A	N/A
9	Temple Ave/University Dr		0.885	D		0.722	C	YES	NO
10	Temple Ave/Campus Dr		1.056	F		0.783	C	YES	NO
11	Kellogg Dr/Campus Dr		0.853	D		0.601	B	YES	NO
12	Temple Ave/Valley Blvd		0.936	E		0.776	C	YES	NO
13	Temple Ave/Pomona Blvd		0.974	E		1.077	F	NO	YES
14	Temple Ave/SR-57 SB Ramps	24.2		C	43.6		D	NO	NO
15	Temple Ave/SR-57 NB Ramps	10.0		A	8.5		A	NO	NO
16	I-10 WB Ramps/Grand Ave	23.8		C	22.1		C	NO	NO
17	I-10 EB Ramps/Grand Ave	27.7		C	13.7		B	NO	NO
18	Holt Ave/Grand Ave		1.057	F		0.638	B	YES	NO
19	Cortez St/Grand Ave	278.2		F	60.7		F	N/A	N/A
20	Cameron Ave/Barranca St	51.4		F	30.6		D	N/A	N/A
21	Cameron Ave/Grand Ave		1.184	F		0.809	D	YES	YES
22	Mountaineer Rd/Grand Ave		0.748	C		0.790	C	NO	YES
23	San Jose Hills Rd/Grand Ave		0.992	E		0.960	E	YES	YES
24	La Puente Rd/Grand Ave		1.063	F		0.895	D	YES	YES
25	Valley Blvd/Grand Ave		0.933	E		0.841	D	YES	YES
26	Baker Pkwy/Grand Ave		0.604	B		0.547	A	NO	NO
27	SR-60 WB Ramps/Grand Ave	26.7		C	15.9		B	NO	NO
28	SR-60 EB Ramps/Grand Ave	23.7		C	15.0		B	NO	NO

Delay = seconds of delay; EB = Eastbound; **BOLD** = significant impact/condition; LOS = Level of Service V/C = volume/Capacity WB = Westbound

[1] Caltrans Intersection
[2] Highest Lane Delay at TWSC Intersection

Source: Table 7, *Traffic Impact Study*, Psomas 2019.

Table 4.14-8, Existing Plus Project Impacts – Local Intersections – With Mitigation, indicates that implementation of MM TRA-1, requiring payment of fair share contributions toward various circulation improvements, would reduce the project impact to a less than significant level for nine of the 12 intersections. 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. Thus, the impacts would be significant and unavoidable.

In addition, implementation of travel demand management (TDM) strategies included as part of the proposed 2018 EFMP such as construction of the Transit Center on campus, along with complementary programs (i.e. bike storage, bike share, etc.), may help shift student, staff, and faculty trips from personal vehicles to transit and thus, reduce campus vehicular traffic. These reductions may help reduce the project traffic overall; and therefore, further reduce the project impacts at study area intersections. However, even with implementation of TDM strategies, the project impacts at study area intersections would continue to be significant and unavoidable.

TABLE 4.14-8
EXISTING PLUS PROJECT IMPACTS – LOCAL INTERSECTIONS – WITH MITIGATION

Intersection		AM Peak Hour		PM Peak Hour		Significant Impact	
		V/C	LOS	V/C	LOS	AM	PM
4	Temple Ave/Grand Ave	0.962	E	0.841	D	YES	YES
9	Temple Ave/University Dr	0.807	D	0.709	C	NO	NO
10	Temple Ave/Campus Dr	0.973	E	0.780	C	NO	NO
11	Kellogg Dr/Campus Dr	0.802	D	0.530	A	NO	NO
12	Temple Ave/Valley Blvd	0.832	D	0.776	C	NO	NO
13	Temple Ave/Pomona Blvd	0.936	E	1.034	F	NO	NO
18	Holt Ave/Grand Ave	0.911	E	0.638	B	NO	NO
21	Cameron Ave/Grand Ave	0.985	E	0.702	C	NO	NO
22	Mountaineer Rd/Grand Ave	0.748	C	0.790	C	NO	YES
23	San Jose Hills Rd/Grand Ave	0.920	E	0.749	C	NO	NO
24	La Puente Rd/Grand Ave	1.030	F	0.874	D	NO	NO
25	Valley Blvd/Grand Ave	0.933	E	0.841	D	YES	YES

Delay = seconds of delay; EB = Eastbound; **BOLD** = significant impact/condition; LOS = Level of Service V/C = volume/Capacity WB = Westbound

[1] Caltrans Intersection
[2] Highest Lane Delay at TWSC Intersection

Source: Table 8, *Traffic Impact Study*, Psomas 2019.

Prior to Mitigation

Potentially Significant Impact

Recommended Mitigation Measures

MM TRA-1

Level of Significance After Mitigation

Significant and Unavoidable. Implementation of MM TRA-1 would reduce the project impact to a less than significant level for nine of the 12 intersections. 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. Thus, the impacts would be significant and unavoidable.

Interim Year (2021)

2021 Cumulative Condition Without the Project

Intersection Analysis

The 2021 cumulative conditions without the project were evaluated using the ICU and HCM. The ICU and HCM reports for 2021 cumulative without the project conditions are included in Appendix C of the TIA included in Appendix J of this EIR. Table 4.14-9, Interim (2021) Cumulative Plus Project Impacts Analysis, shows the resulting LOS for each of the study intersections under 2021 Cumulative Conditions Without the Project. The analysis of intersection LOS for the Year 2021 Cumulative Conditions Without the Project traffic analysis scenario considers the LOS in 2018 with the addition of traffic from any potential development projects located in the region of influence as discussed previously.

As shown in Table 4.14-9, nine intersections would operate at LOS E or worse. These included all nine intersections operating at LOS E or worse under Table 4.14-3, Existing Traffic Conditions. In addition, the worst minor-street (stop controlled) movement at the intersection of Cortez Street and Grand Avenue (intersection 19) would operate at LOS E or worse in both peak hours as well as at the intersection of Cameron Avenue and Barranca Street (intersection 20) in the AM peak hour.

For two-way stop-controlled intersections (such as Cortez Street/Grand Avenue and Cameron Avenue/Barranca Street), there is no defined intersection LOS.

In addition to the study intersections, the two study Caltrans segments were also evaluated for 2021 cumulative conditions:

- I-10, Citrus Street to Holt Avenue
    - 1,868 pc/hr/ln, LOS D
- SR-57, Grand Avenue to SR-60
    - 792 pc/hr/ln, LOS B

2021 Cumulative Plus Project Conditions

Intersection Analysis

Under 2027 conditions, the interim study year is at the completion of Phase 1A (year 2021). The 2021 cumulative conditions plus the project; was evaluated using the ICU and HCM. The ICU and HCM reports for 2021 cumulative plus project conditions are included in Appendix C of the TIA included in Appendix J of this EIR.

Caltrans Segments

As discussed previously, for the Caltrans intersections, a significant impact can only occur if the intersection is operating at LOS E or F without project traffic. The two study Caltrans segments were also evaluated for 2021 cumulative plus project conditions as described under the 2021 Cumulative Conditions Without the Project analysis and would operate at the same LOS as without the project.

- I-10, Citrus Street to Holt Avenue
    - 1,873 pc/hr/ln, LOS D
- SR-57, Grand Avenue to SR-60
    - 795 pc/hr/ln, LOS B

Both Caltrans study segments, are expected to operate at LOS D or better with the project; and therefore, no mitigation is required.

Non-Caltrans Segments

The increase in ICU for the non-Caltrans intersections due to the project traffic is shown in Table 4.14-9, Interim (2021) Cumulative Plus Project Impacts Analysis, which indicates the resulting level of service for each of the study intersections for 2021 cumulative plus project conditions. As shown in Table 4.14-9, nine intersections would operate at LOS E or worse. These included all nine intersections operating at LOS E or worse under Table 4.14-3, Existing Traffic Conditions.

Further, as seen in Table 4.14-9, the intersections of Cortez Street/Grand Avenue and Cameron Avenue/Barranca Street are expected to operate at LOS E or F under existing and existing plus project conditions and therefore, the peak hour signal warrant (warrant 3 of the MUTCD) was evaluated. As discussed previously the Cameron Avenue/Barranca Street intersection is expected to meet the signal warrant, while the intersection of Cortez Street and Grand Avenue is still not expected to meet the signal warrant due to the low volumes on Cortez Street.

TABLE 4.14-9
INTERIM (2021) CUMULATIVE PLUS PROJECT IMPACTS ANALYSIS

		2021 Cumulative						2021 Cumulative Plus Project						Significant Impact?	
		AM Peak Hour			PM Peak Hour			AM Peak Hour			PM Peak Hour				
	Intersection	Delay	V/C	LOS	Delay	V/C	LOS	Delay	V/C	LOS	Delay	V/C	LOS	AM	PM
1	Amar Rd/Nogales St		0.877	D		0.846	D		0.882	D		0.849	D	NO	NO
2	Amar Rd/Lemon Ave		0.806	D		0.662	B		0.810	D		0.665	B	NO	NO
3	Amar Rd/Meadow Pass Rd		0.803	D		0.730	C		0.810	D		0.736	C	NO	NO
4	Temple Ave/Grand Ave		0.948	E		0.842	D		0.974	E		0.855	D	YES	NO
5	Temple Ave/Mt. SAC Way		0.637	B		0.699	B		0.650	B		0.722	C	NO	NO
6	Temple Ave/Transit Center		0.600	B		0.486	A		0.611	B		0.498	A	NO	NO
7	Temple Ave/Bonita Dr		0.610	B		0.582	A		0.635	B		0.601	B	NO	NO
8	Temple Ave/Lot F	28.2		D	19.2		C	29.9		D	20.0		C	N/A	N/A
9	Temple Ave/University Dr		0.851	D		0.700	C		0.868	D		0.713	C	YES	NO
10	Temple Ave/Campus Dr		1.021	F		0.774	C		1.042	F		0.781	C	YES	NO
11	Kellogg Dr/Campus Dr		0.841	D		0.590	A		0.851	D		0.598	A	NO	NO
12	Temple Ave/Valley Blvd		0.934	E		0.773	C		0.941	E		0.778	C	YES	NO
13	Temple Ave/Pomona Blvd		1.030	F		1.158	F		1.031	F		1.160	F	NO	NO
14	Temple Ave/SR-57 SB Ramps	24.3		C	45.6		D	24.5		C	45.9		D	NO	NO
15	Temple Ave/SR-57 NB Ramps	10.1		B	8.9		A	10.1		B	8.9		A	NO	NO
16	I-10 WB Ramps/Grand Ave	24.9		C	22.5		C	25.4		C	23.4		C	NO	NO
17	I-10 EB Ramps/Grand Ave	24.8		C	13.8		B	26.6		C	13.8		B	NO	NO
18	Holt Ave/Grand Ave		1.045	F		0.648	B		1.060	F		0.656	B	YES	NO
19	Cortez St/Grand Ave	248.6		F	62.5		F	278.2		F	66.4		F	N/A	N/A
20	Cameron Ave/Barranca St	51.6		F	31.1		D	53.1		F	31.7		D	N/A	N/A
21	Cameron Ave/Grand Ave		1.158	F		0.808	D		1.178	F		0.823	D	YES	NO
22	Mountaineer Rd/Grand Ave		0.750	C		0.786	C		0.763	C		0.802	D	NO	NO
23	San Jose Hills Rd/Grand Ave		0.972	E		0.934	E		0.995	E		0.957	E	YES	YES
24	La Puente Rd/Grand Ave		1.062	F		0.918	E		1.076	F		0.926	E	YES	YES
25	Valley Blvd/Grand Ave		0.931	E		0.888	D		0.941	E		0.894	D	YES	NO

TABLE 4.14-9
INTERIM (2021) CUMULATIVE PLUS PROJECT IMPACTS ANALYSIS

Intersection		2021 Cumulative						2021 Cumulative Plus Project						Significant Impact?	
		AM Peak Hour			PM Peak Hour			AM Peak Hour			PM Peak Hour				
		Delay	V/C	LOS	Delay	V/C	LOS	Delay	V/C	LOS	Delay	V/C	LOS	AM	PM
26	Baker Pkwy/Grand Ave		0.590	A		0.548	A		0.599	A		0.553	A	NO	NO
27	SR-60 WB Ramps/Grand Ave	24.8		C	15.4		B	25.7		C	15.8		B	NO	NO
28	SR-60 EB Ramps/Grand Ave	23.8		C	14.7		B	24.2		C	15.1		B	NO	NO

Delay = seconds of delay; EB = Eastbound; **BOLD** = significant impact/condition; LOS = Level of Service V/C = volume/Capacity WB = Westbound

[1] Caltrans Intersection
[2] Highest Lane Delay at TWSC Intersection

Source: Table 9, *Traffic Impact Study*, Psomas 2019.

Table 4.14-10, Interim (2021) Cumulative Plus Project Impacts Analysis, indicates that implementation of MM TRA-1, requiring payment of fair share contributions toward various circulation improvements, would reduce the project impact to a less than significant level for eight of the nine intersections. 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, the impacts would be significant and unavoidable.

As discussed previously, implementation of travel demand management (TDM) strategies included as part of the proposed 2018 EFMP such as construction of the Transit Center on campus, along with complementary programs (i.e. bike storage, bike share, etc.), may help shift student, staff, and faculty trips from personal vehicles to transit and thus, reduce campus vehicular traffic. These reductions may help reduce the project traffic overall; and therefore, further reduce the project impacts at study area intersections. However, even with implementation of TDM strategies, the project impacts at study area intersections would continue to be significant and unavoidable.

TABLE 4.14-10
INTERIM (2021) CUMULATIVE PLUS MITIGATED PROJECT IMPACTS ANALYSIS

Intersection		2021 Cumulative				2021 Cumulative + Project w/Mitigation				Significant Impact?	
		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour			
		V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	AM	PM
4	Temple Ave/ Grand Ave	0.948	E	0.842	D	0.946	E	0.845	D	NO	NO
9	Temple Ave/ University Dr	0.851	D	0.700	C	0.800	C	0.702	C	NO	NO
10	Temple Ave/ Campus Dr	1.021	F	0.774	C	0.962	E	0.779	C	NO	NO
12	Temple Ave/ Valley Blvd	0.934	E	0.773	C	0.833	D	0.778	C	NO	NO
18	Holt Ave/Grand Ave	1.045	F	0.648	B	0.916	E	0.656	B	NO	NO
21	Cameron Ave/ Grand Ave	1.158	F	0.808	D	0.980	E	0.715	C	NO	NO
23	San Jose Hills Rd/ Grand Ave	0.972	E	0.934	E	0.914	E	0.742	C	NO	NO
24	La Puente Rd/ Grand Ave	1.062	F	0.918	E	1.041	F	0.904	E	NO	NO
25	Valley Blvd/ Grand Ave	0.931	E	0.888	D	0.941	E	0.894	D	YES	NO

Delay = seconds of delay; EB = Eastbound; **BOLD** = significant impact/condition; LOS = Level of Service V/C = volume/Capacity WB = Westbound

[1] Caltrans Intersection
[2] Highest Lane Delay at TWSC Intersection

Source: Table 10, *Traffic Impact Study*, Psomas 2019.

Level of Significance Prior to Mitigation

Potentially Significant Impact

Recommended Mitigation Measures

MM TRA-1

Level of Significance After Mitigation

Significant and Unavoidable. Implementation of MM TRA-1 would reduce the project impact to a less than significant level, for eight of the nine intersections. 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, the impacts would be significant and unavoidable.

Buildout Year 2027

2027 Cumulative Conditions Without the Project

Intersection Analysis

As previously discussed, the non-Caltrans signalized intersections were evaluated using the ICU methodology, and the unsignalized intersections and Caltrans signalized intersections were evaluated using the HCM methodology. The analysis of intersection LOS for the Year 2027 Cumulative Conditions Without the Project traffic analysis scenario considers the LOS in 2027 with the addition of traffic from any potential development projects located in the region of influence as discussed previously.

Ten intersections operate at LOS E or worse for 2027 cumulative conditions without the project in one or both peak hours as shown in Table 4.14-11, Buildout (2027) Cumulative Plus Project Impacts Analysis and include the following intersections:

1. Amar Road/Nogales Street (AM peak hour)
4. Temple Avenue/Grand Avenue (AM peak hour)
10. Temple Avenue/Campus Drive (AM peak hour)
12. Temple Avenue/Valley Boulevard (AM peak hour)
13. Temple Avenue/Pomona Boulevard (AM and PM peak hours)
18. Holt Avenue/Grand Avenue (AM peak hour)
21. Cameron Avenue/Grand Avenue (AM peak hour)
23. San Jose Hills Road/Grand Avenue (AM and PM peak hours)
24. La Puente Road/Grand Avenue (AM and PM peak hours)
25. Valley Boulevard/Grand Avenue (AM peak hour)

In addition, the worst minor-street (stop controlled) movement at the intersection of Cortez Street and Grand Avenue (intersection 19) would operate at LOS E or worse in both peak hours as well as at the intersection of Cameron Avenue and Barranca Street (intersection 20) in the AM peak hour. Recall that for two-way stop-controlled intersections (such as Cortez Street/Grand Avenue and Cameron Avenue/Barranca Street), there is no defined intersection LOS. In addition to the study intersections, the two study Caltrans segments were evaluated for 2021 cumulative conditions:

- I-10, Citrus Street to Holt Avenue
    - 1,868 pc/hr/ln, LOS D
- SR-57, Grand Avenue to SR-60
    - 792 pc/hr/ln, LOS B

2027 Cumulative Plus Project Conditions

Intersection Analysis

Under 2027 conditions, the full buildout of the proposed 2018 EFMP is assumed, consistent with the 10-year horizon for buildout of Phase 2 of the proposed 2018 EFMP. Similar to the 2027 Cumulative without Project analysis, the non-Caltrans signalized intersections were evaluated using the ICU methodology, and the unsignalized intersections and Caltrans signalized intersections were evaluated using the HCM methodology, assuming full buildout of the project. The ICU and HCM reports for 2027 cumulative plus project conditions are included in Appendix D of the TIA.

Caltrans Segments

As discussed previously, for the Caltrans intersections, a significant impact can only occur if the intersection is operating at LOS E or F without project traffic. The two study Caltrans segments were evaluated for 2027 cumulative plus project conditions:

- I-10, Citrus Street to Holt Avenue
    - 1,705 pc/hr/ln, LOS D
- SR-57, Grand Avenue to SR-60
    - 889 pc/hr/ln, LOS B

For the Caltrans study segments, both are expected to operate at LOS D or better with the project; therefore, no mitigation is required

Non-Caltrans Segments

Table 4.14-11, Buildout (2027) Cumulative Plus Project Impacts Analysis shows the resulting level of service for each of the study intersections for 2027 cumulative plus project conditions. The intersections which would operate at LOS E or worse under the 2027 Cumulative Conditions Without the Project would continue to operate at LOS E or worse for 2027 Cumulative Plus Project Conditions. Further, both Temple Avenue/Grand Avenue and San Jose Hills/Grand Avenue intersections will deteriorate from LOS E to LOS F in the AM peak hour and the intersection of Temple Avenue and University Drive would deteriorate from LOS D to LOS E in the AM peak hour. Further, Table 4.14-11 shows the increase in ICU for the non-Caltrans intersections with

the project. As shown in the Table 4.14-11, 15 intersections have a significant impact for 2027 cumulative plus project conditions.

As seen in Table 4.14-11, the intersections of Cortez Street/Grand Avenue and Cameron Avenue/Barranca Street are expected to operate at LOS E or F under buildout (2027) cumulative conditions, with and without the project. Therefore, the peak hour signal warrant (warrant 3 of the MUTCD) was evaluated. Since the Cameron Avenue/Barranca Street intersection met the warrant for existing plus project conditions, it was not reevaluated for this condition. In addition, as shown in Figure 21 of the TIA, the intersection of Cortez Street and Grand Avenue is still not expected to meet the signal warrant due to the low volumes on Cortez Street.

TABLE 4.14-11
BUILDOUT (2027) CUMULATIVE PLUS PROJECT IMPACTS ANALYSIS

	Intersection	2027 Cumulative						2027 Cumulative Plus Project						Significant Impact?	
		AM Peak Hour			PM Peak Hour			AM Peak Hour			PM Peak Hour				
		Delay	V/C	LOS	Delay	V/C	LOS	Delay	V/C	LOS	Delay	V/C	LOS	AM	PM
1	Amar Rd/Nogales St		0.922	E		0.890	D		0.933	E		0.899	D	YES	NO
2	Amar Rd/Lemon Ave		0.843	D		0.695	B		0.857	D		0.704	C	NO	NO
3	Amar Rd/Meadow Pass Rd		0.818	D		0.747	C		0.836	D		0.761	C	YES	NO
4	Temple Ave/Grand Ave		0.957	E		0.852	D		1.018	F		0.884	D	YES	YES
5	Temple Ave/Mt. SAC Way		0.639	B		0.703	C		0.676	B		0.754	C	NO	YES
6	Temple Ave/Transit Center		0.611	B		0.492	A		0.647	B		0.525	A	NO	NO
7	Temple Ave/Bonita Dr		0.602	B		0.586	A		0.677	B		0.636	B	NO	NO
8	Temple Ave/Lot F	27.8		D	19.200		C	32.9		D	21.200		C	N/A	N/A
9	Temple Ave/University Dr		0.862	D		0.714	C		0.908	E		0.748	C	YES	NO
10	Temple Ave/Campus Dr		1.034	F		0.804	D		1.087	F		0.821	D	YES	YES
11	Kellogg Dr/Campus Dr		0.873	D		0.601	B		0.899	D		0.623	B	YES	NO
12	Temple Ave/Valley Blvd		0.979	E		0.811	D		0.996	E		0.825	D	YES	NO
13	Temple Ave/Pomona Blvd		1.055	F		1.176	F		1.059	F		1.182	F	NO	YES
14	Temple Ave/SR-57 SB Ramps	25.6		C	53.4		D	26.2		C	54.6		D	NO	NO
15	Temple Ave/SR-57 NB Ramps	10.9		B	9.5		A	11.0		B	9.5		A	NO	NO
16	I-10 WB Ramps/Grand Ave	27.4		C	23.1		C	28.9		C	25.2		C	NO	NO
17	I-10 EB Ramps/Grand Ave	24.8		C	14.6		B	30.1		C	14.7		B	NO	NO
18	Holt Ave/Grand Ave		1.066	F		0.644	B		1.105	F		0.665	B	YES	NO
19	Cortez St/Grand Ave	259.4		F	53.900		F	376.0		F	64.400		F	N/A	N/A
20	Cameron Ave/Barranca St	67.9		F	39.800		E	72.4		F	40.900		E	N/A	N/A
21	Cameron Ave/Grand Ave		1.174	F		0.796	C		1.227	F		0.834	D	YES	YES
22	Mountaineer Rd/Grand Ave		0.748	C		0.788	C		0.777	C		0.825	D	NO	YES
23	San Jose Hills Rd/Grand Ave		0.967	E		0.935	E		1.024	F		0.998	E	YES	YES
24	La Puente Rd/Grand Ave		1.080	F		0.929	E		1.115	F		0.949	E	YES	YES
25	Valley Blvd/Grand Ave		0.957	E		0.895	D		0.983	E		0.912	E	YES	YES

TABLE 4.14-11
BUILDOUT (2027) CUMULATIVE PLUS PROJECT IMPACTS ANALYSIS

		2027 Cumulative						2027 Cumulative Plus Project						Significant Impact?	
		AM Peak Hour			PM Peak Hour			AM Peak Hour			PM Peak Hour				
	Intersection	Delay	V/C	LOS	Delay	V/C	LOS	Delay	V/C	LOS	Delay	V/C	LOS	AM	PM
26	Baker Pkwy/Grand Ave		0.602	B		0.561	A		0.625	B		0.574	A	NO	NO
27	SR-60 WB Ramps/Grand Ave	25.8		C	16.1		B	28.9		C	17.3		B	NO	NO
28	SR-60 EB Ramps/Grand Ave	25.2		C	15.8		B	26.4		C	17.0		B	NO	NO

Delay = seconds of delay; EB = Eastbound; **BOLD** = significant impact/condition; LOS = Level of Service V/C = volume/Capacity WB = Westbound

[1] Caltrans Intersection
[2] Highest Lane Delay at TWSC Intersection

Source: Table 11, *Traffic Impact Study*, Psomas 2019.

Table 4.14-11 indicates eight intersections would have significant traffic impacts that require mitigation at the end of Project buildout. However, implementation of the improvements outlined in Mitigation Measure TRA-1, requiring payment of fair share contributions toward various circulation improvements, would reduce the traffic impacts of the Project after buildout to less than significant levels except for the intersections at Amar Road and Nogales Street and Amar Road and Meadow Road (as shown in Table 4.14-12).

TABLE 4.14-12
BUILDOUT (2027) CUMULATIVE PLUS MITIGATED PROJECT IMPACTS ANALYSIS

Intersection		2021 Cumulative				2021 Cumulative + Project w/Mitigation				Significant Impact?	
		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour			
		V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	AM	PM
1	Amar Rd/ Nogales St	0.922	E	0.890	D	0.914	E	0.894	D	NO	NO
3	Amar Rd/Meadow Pass Rd	0.818	D	0.747	C	0.836	D	0.761	C	YES	NO
4	Temple Ave/ Grand Ave	0.957	E	0.852	D	0.984	E	0.873	D	YES	YES
5	Temple Ave/Mt. SAC Way	0.639	B	0.703	C	0.675	B	0.689	B	NO	NO
9	Temple Ave/ University Dr	0.862	D	0.714	C	0.839	D	0.735	C	NO	NO
10	Temple Ave/ Campus Dr	1.034	F	0.804	D	1.004	F	0.815	D	NO	NO
11	Kellogg Dr/ Campus Dr	0.873	D	0.601	B	0.843	D	0.549	A	NO	NO
12	Temple Ave/ Valley Blvd	0.979	E	0.811	D	0.882	D	0.825	D	NO	NO
13	Temple Ave/ Pomona Blvd	1.055	F	1.176	F	1.011	F	1.135	F	NO	NO
18	Holt Ave/Grand Ave	1.066	F	0.644	B	0.958	E	0.665	B	NO	NO
21	Cameron Ave/ Grand Ave	1.174	F	0.796	C	1.017	F	0.721	C	NO	NO
22	Mountaineer Rd/ Grand Ave	0.748	C	0.788	C	0.777	C	0.825	D	NO	YES
23	San Jose Hills Rd/ Grand Ave	0.967	E	0.935	E	0.948	E	0.777	C	NO	NO
24	La Puente Rd/ Grand Ave	1.080	F	0.929	E	1.079	F	0.926	E	NO	NO
25	Valley Blvd/ Grand Ave	0.957	E	0.895	D	0.983	E	0.912	E	YES	YES

Delay = seconds of delay; EB = Eastbound; **BOLD** = significant impact/condition; LOS = Level of Service V/C = volume/Capacity WB = Westbound

[1] Caltrans Intersection
[2] Highest Lane Delay at TWSC Intersection

Source: Table 12, *Traffic Impact Study*, Psomas 2019.

As shown in Table 4.14-12, implementation of MM TRA-1 and MM TRA-2, requiring payment of fair share contributions toward various circulation improvements, would reduce impacts to a less than significant level for 11 of the 15 intersections. 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.

In addition, as discussed previously, implementation of travel demand management (TDM) strategies included as part of the proposed 2018 EFMP such as construction of the Transit Center on campus, along with complementary programs (i.e. bike storage, bike share, etc.), may help shift student, staff, and faculty trips from personal vehicles to transit and thus, reduce campus vehicular traffic. These reductions may help reduce the project traffic overall; and therefore, further reduce the project impacts at study area intersections. However, even with implementation of TDM strategies, the project impacts at study area intersections would continue to be significant and unavoidable.

Level of Significance Prior to Mitigation

Potentially Significant Impact

Recommended Mitigation Measures

MM TRA-1, MM TRA-2

Level of Significance After Mitigation

Significant and Unavoidable. Implementation of MM TRA-1 and MM TRA-2 would reduce impacts to a less than significant level for 11 of the 15 intersections for the proposed 2018 Educational and Facilities Master Plan (Phases 1A, 1B, and 2.) 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.

Alternative Transportation

Foothill Transit provides bus transit services in the area. Currently, five separate bus lines operate near Mt. SAC: Lines 190, 194, 289, 480, and 486, with various stops along Temple Avenue and Grand Avenue. A new Transit Center is also under construction on campus north of Temple Avenue, which would consolidate the stops on Temple Avenue. Pedestrian sidewalks, crosswalks, walkways, pathways, tunnel and bike lanes are present on and near campus, as discussed in Section 11 of the proposed 2018 EFMP.

As stated above, the proposed 2018 EFMP includes various pedestrian and bikeway/bike lane improvements, including improvements to the Miracle Mile pedestrian corridor, Mt. SAC Way and Bonita Drive promenades, improvements to pedestrian bridges/tunnel, Healthy Living Loop, Temple Avenue Green Corridor, Grand Avenue sidewalk completion, and Temple and Grand Avenues bicycle lane extensions to provided dedicated facilities and improve safety for pedestrian and bicyclists. These would promote alternatives to the use of the automobile through increased

walking and greater use of bicycles by students, employees and visitors. While no specific bus stops or transit facilities are proposed by the 2018 EFMP, the improvements to the pedestrian circulation network would facilitate walking on campus and improve access to the Transit Center and bus stops near the campus.

Further, based on the project generated transit trips estimated using the CMP guidelines, the project is expected to generate 10 new peak hour trips in the interim year of 2021 and 26 new peak hour trips at buildout (2027). It is not anticipated that the estimated increase in peak hour trips would result in a significant impact on transit operations, as the campus is currently served by five Foothill Transit routes (Psomas 2019). In addition, the increased use of these alternative transportation facilities would be consistent with policies, plans, and programs for alternative transportation systems and would not decrease the performance of these facilities.

Construction-Related Traffic

The proposed project would generate temporary trips associated with construction activities, as described in Section 3.0, Project Description, of this Draft EIR, which would be considered a potentially significant impact. Construction associated with the implementation of the proposed 2018 EFMP would primarily involve demolition/removal of existing structures, facilities, and utility infrastructure; construction of new buildings; and roadway and parking improvements. Construction-related traffic would primarily be associated with delivery of building materials and construction equipment; export of soil and import of sand; removal of demolition and construction debris; and construction workers commuting to and from the project site. The amount of construction traffic would vary daily depending on the nature of the activity and would occur during off-peak hours, as further discussed below. In general, phased construction of the proposed uses is not anticipated to result in substantial daily construction-related trip volumes, including heavy truck trips.

During construction, partial or full closures of streets, sidewalks, cross walks, pathways, and/or bike lanes may occur, which could obstruct emergency access to various buildings and facilities on campus. Construction activities would be temporary, staggered, and located at scattered locations that would not affect other areas of the campus. Compliance with the Work Area Traffic Control Handbook (WATCH) would include notification of emergency service providers of planned construction activities, closures and detours; a traffic control plan to maintain access to nearby land uses and facilities; and use of signs and flag persons to redirect traffic around the construction site. MMs TRA-3 through TRA-8 are recommended to maintain adequate emergency access to various areas at Mt. SAC and the surrounding areas during construction activities. These MMs would limit interference to vehicular movement along Temple Avenue and Grand Avenue to one side of the road so as to maintain emergency access along these roadways and would ensure that emergency access to on-campus areas and surrounding land uses would be maintained at all times.

Compliance with these requirements would reduce temporary construction-related traffic impacts to a less than significant level.

Level of Significance Prior to Mitigation

Potentially Significant Impact

Recommended Mitigation Measures

MM TRA-3 through MM TRA-8

Level of Significance After Mitigation

Less Than Significant

Threshold 14.2	**Would the project conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?**

2018 Educational and Facilities Master Plan (Phases 1A, 1B, and 2) and Project-Specific

The CEQA Guidelines Section 15064.3(b) state that if the VMT generated by a project exceed an applicable threshold of significance, it may indicate a significant impact. The guidelines also state that projects, which decrease VMT in the project area when compared to existing conditions should be presumed to have a less than significant impact. The Transit Center identified in the proposed 2018 EFMP is a separate project being completed in coordination with Foothill Transit. The Transit Center would be constructed on campus located on the north side of Temple Avenue. The proposed 2018 EFMP project would be located within one-half mile of a major transit stop with development of the new Transit Center. Therefore, with implementation of the proposed Transit Center project which would serve the project site, the proposed 2018 EFMP would be considered to have a less than significant transportation impact in regard to Section 15064.3, subdivision (b) and no mitigation is required.

Level of Significance Prior to Mitigation

Less Than Significant Impact

Recommended Mitigation Measures

None

Level of Significance After Mitigation

Less Than Significant

Threshold 14.3	**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)?**

2018 Educational and Facilities Master Plan (Phases 1A, 1B, and 2) and Project-Specific

Mt. SAC is served by existing public roadways and internal roads that provide vehicle access to various facilities and areas of campus, as well as sidewalks, crosswalks, pathways, pedestrian tunnel, bike lanes and other facilities for pedestrian and bicycle circulation. Vehicular circulation and parking improvements and pedestrian and bicycle circulation improvements that are proposed in the 2018 EFMP are shown in Exhibits 3-22 through 3-26, respectively, and discussed in greater detail in Section 3.0, Project Description. The proposed improvements would improve vehicle, pedestrian and bicycle circulation and provide welcoming, efficient, and equitable access to the campus.

Intersection and roadway improvements at Temple Avenue/Bonita Way, access into Parking Structure S off Temple Avenue, Temple Avenue/Mt. SAC Way, and Grand Avenue/San Jose Hills Road would be completed under Phase 1. Roadway improvements on La Puente Drive, Grand Avenue/Mountaineer Way, Farm Road, Reservoir Road and internal service roads would be

completed under Phase 2. Additionally, a new emergency access route connecting Bonita Drive to the southern campus boundary is proposed. These improvements have been designed to improve vehicle circulation and safety and the proposed improvements on Temple Avenue and Grand Avenue would be subject to City review (including the City's Traffic Engineer and Traffic Safety Committee) for compliance with standard street specifications, signs, vision clearance, and sight distance requirements to prevent the creation of traffic hazards; the roadway and intersections improvements on campus have been designed in accordance with Standard Specifications for Public Works Construction (Greenbook).

The proposed 2018 EFMP also includes pedestrian and bikeway/bike lane improvements, including improvements to the Miracle Mile, Mt. SAC Way and Bonita Drive promenades, improvements to pedestrian bridges/tunnel, Healthy Living Loop, Temple Avenue Green Corridor, Grand Avenue sidewalk completion, and Temple and Grand Avenues bicycle lane extensions) to provided dedicated facilities and improve safety for pedestrian and bicyclists.

Thus, implementation of the proposed 2018 EFMP and Phase 1A and 1B projects would reduce traffic hazards and would have no impacts associated with hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses. No mitigation is required.

Level of Significance Prior to Mitigation

Less Than Significant Impact

Recommended Mitigation Measures

None

Level of Significance After Mitigation

Less Than Significant

Threshold 14.4 Would the project result in inadequate emergency access?

2018 Educational and Facilities Master Plan (Phases 1A, 1B, and 2) and Project-Specific

Emergency access to Mt SAC is provided by Grand Avenue and Temple Avenue and various internal roads on campus. The proposed 2018 EFMP and Phase 1A and 1B projects proposes the construction and improvement of various facilities and site improvements, which would be subject to review by the Division of the State Architect and the State Fire Marshal and the local fire authority (Los Angeles County Fire Department) for structural safety, fire and life safety, and access requirements. This includes the provision of adequate emergency access to individual facilities on campus. Additionally, a new emergency access route connecting Bonita Drive to the southern campus boundary is proposed as part of the proposed 2018 EFMP.

During construction, partial or full closures of streets, sidewalks, cross walks, pathways, and/or bike lanes may occur, which could obstruct emergency access to various buildings and facilities on campus. Construction activities would be temporary, staggered, and located at scattered locations that would not affect other areas of the campus. Compliance with the WATCH would include notification of emergency service providers of planned construction activities, closures and detours; a traffic control plan to maintain access to nearby land uses and facilities; and use of signs and flag persons to redirect traffic around the construction site. MMs TRA-3 through

TRA-8 are recommended to maintain adequate emergency access to various areas at Mt. SAC and the surrounding areas during construction activities. These MMs would limit interference to vehicular movement along Temple Avenue and Grand Avenue to one side of the road to maintain emergency access along these roadways and would ensure that emergency access to on-campus areas and surrounding land uses would be maintained at all times.

No adverse long-term impacts to emergency access would occur. Short-term impacts related to emergency access would be less than significant after mitigation.

Level of Significance Prior to Mitigation

Potentially Significant Impact

Recommended Mitigation Measures

MM TRA-3 through MM TRA-8

Level of Significance After Mitigation

Less Than Significant

4.14.6 CUMULATIVE IMPACTS

Cumulative traffic impacts consider the impacts of future growth and development in the City on the roadway system serving the Project area as well as non-vehicular transportation services. A detailed quantitative analysis of Project traffic impacts under General Plan and Project buildout conditions was discussed in Section 4.14.5, Environmental Impacts, Threshold 14-1. As identified in that analysis, the proposed Project would result in a significant and unavoidable cumulative impact under Existing Plus Project Condition, 2021 Plus Project Condition and 2027 Plus Project Condition at the intersections of Mountaineer Road and Grand Avenue and Valley Boulevard and Grand Avenue, even with implementation of Mitigation Measures TRA-1 and TRA-2. In addition, the proposed Project would result in a significant and unavoidable cumulative impact under the 2027 Plus Project Condition at the intersections of Amar Road and Meadow Pass Road, even with implementation of Mitigation Measures TRA-1 and TRA-2. There is insufficient right-of-way to accommodate the required improvements at these intersections; therefore, the proposed Project would contribute to this cumulatively considerable traffic impact.

The Project would have less than significant impacts related to transportation and traffic issues evaluated in Section 4.14.5 above (Thresholds 14.2 through 14.4) and therefore, would not result in any significant cumulative impacts related to these other transportation issues, and no additional mitigation is required.

4.14.7 MITIGATION MEASURES

Existing Plus 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:

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.

2027 Full Buildout

MM TRA-2 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:

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.

Construction

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 plans 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 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 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 the Facilities Planning and Management Department of Mt. SAC.

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.

4.14.8 REFERENCES

Walnut, City of. (2018 (October 25 access date). Walnut City Code. Walnut, CA: City of. http://qcode.us/codes/walnut/

Mt San Antonio Community College District (Mt. SAC). 2018. *2018 Educational and Facilities Master Plan.* Walnut, CA: District.

Public Works Standards, Inc. (PWSI). 2016. Work Area Traffic Control Handbook (WATCH). Vista, CA: PWSI.

Psomas. (March 2019). *Traffic Impact Analysis (TIA) for Mt. San Antonio College Long Range Development Plan 2018 Educational and Facilities Master Plan*. Santa Ana, CA: Psomas.

4.15 TRIBAL CULTURAL RESOURCES

This section evaluates the potential of the proposed Mt. San Antonio College (Mt. SAC) 2018 Educational and Facilities Master Plan (proposed 2018 EFMP) to have adverse effects on tribal cultural resources. The analysis in this section is based on the results of consultation with California Native American Tribes conducted by Mt. SAC staff, as required by the California Environmental Quality Act (CEQA), as amended by California Assembly Bill (AB) 52. These communications are included as Appendix K to this Draft Environmental Impact Report (EIR).

The California Native American Heritage Commission (NAHC) submitted a Notice of Preparation (NOP) comment letter and identified the following: (1) an analysis of Tribal Cultural Resources is required as a separate category of cultural resources; (2) consultation with California Native American tribes that are traditionally and culturally affiliated with the geographic area of the project is required; and (3) standard guidance on the scope of the analysis of potential impacts to Native American cultural resources in the Draft EIR. The NAHC NOP comment letter also provided an overview of consultation efforts pursuant to Senate Bill (SB) 18 and AB 52.

Additionally, during the NOP public review period the Gabrieleño Band of Mission Indians – Kizh Nation submitted a letter requesting consultation pursuant to AB 52. These letters are included in Appendix A of this Draft EIR.

4.15.1 REGULATORY SETTING

State

California Register of Historical Resources

The California Register of Historical Resources (CRHR) program encourages public recognition and protection of resources of architectural, historical, archaeological, tribal cultural resources, and cultural significance; identifies historical resources for State and local planning purposes; determines eligibility for State historic preservation grant funding; and affords certain protections under the California Environmental Quality Act (CEQA). The criteria established for eligibility for the CRHR are directly comparable to the national criteria established for the National Register of Historic Places (NRHP).

In order to be eligible for listing in the CRHR, a building, object, or structure must satisfy at least one of the following four criteria:

1. It is associated with events that have made a significant contribution to the broad patterns of local or regional history or the cultural heritage of California or the United States.
2. It is associated with the lives of persons important to local, California, or national history.
3. It embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of a master or possesses high artistic values.
4. It has yielded, or has the potential to yield, information important to the prehistory or history of the local area, California, or the nation.

Archaeologists and Tribal Representatives assess sites based on all four of the above criteria but usually focus on the fourth criterion provided above. Historical resources eligible for listing in the

CRHR must also retain enough of their historic character or appearance to be recognizable as historical resources and to convey the reasons for their significance. For the purposes of eligibility for the CRHR, integrity is defined as "the authenticity of an historical resource's physical identity evidenced by the survival of characteristics that existed during the resource's period of significance". This general definition is generally strengthened by the more specific definition offered by the NRHP—the criteria and guidelines on which the CRHR criteria and guidelines are based upon.

Tribal Cultural Resources/Assembly Bill 52

In September 2014, Governor Brown signed AB 52 (Chapter 532, Statutes of 2014), which creates a new category of environmental resources that must be considered under CEQA: "tribal cultural resources." The legislation imposes new requirements for offering to consult with California Native American tribes regarding projects that may affect a tribal cultural resource, emphasizes a broad definition of what may be considered to be a tribal cultural resource, and includes a list of recommended mitigation measures (MMs).

Recognizing that tribes may have expertise regarding their tribal history and practices, AB 52 requires lead agencies to provide notice to tribes that are traditionally and culturally affiliated with the geographic area of a proposed project if they have requested notice of projects proposed within that area. MMs agreed upon during consultation must be recommended for inclusion in the environmental document.

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 NOP for an EIR, a Mitigated Negative Declaration (MND), or Negative Declaration (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.

Native American Historic Resource Protection Act

Established in 2002, the Native American Historic Resource Protection Act, establishes a misdemeanor for unlawfully and maliciously excavating upon, removing, destroying, injuring, or defacing a Native American historic, cultural, or sacred site that is listed or may be eligible for listing in the CRHR. The focus of this legislation was to provide additional legal protection for Native American historical and cultural sites, art, and other cultural artifacts found at those sites. The Act also encourages collaborative relationships for the protection of Native American cultural resources between Native Americans and landowners. Funding and other state assistance should be encouraged for support of voluntary agreements to conserve, maintain, and provide physical access for Native Americans to these cultural resources.

California Health and Safety Code (Sections 7050.5, 7051, and 7054)

These sections of the *California Health and Safety Code* collectively address the illegality of interference with human burial remains (except as allowed under applicable sections of the [California Public Resources Code (PRC)]. These sections also address the disposition of Native American burials in archaeological sites and protect such remains from disturbance, vandalism, or inadvertent destruction. Procedures to be implemented are established for (1) the discovery of Native American skeletal remains during construction of a project; (2) the treatment of the remains prior to, during, and after evaluation; and (3) reburial.

Section 7050.5 of the *California Health and Safety Code* specifically provides for the disposition of accidentally discovered human remains. Section 7050.5 states that if human remains are found, no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains shall occur until the County Coroner has determined the appropriate treatment and disposition of the human remains.

California Public Resources Code (Section 5097.98)

Section 5097.98 of the PRC states that, if remains are determined by the Coroner to be of Native American origin, the Coroner must notify the NAHC within 24 hours. When the NAHC receives this notification from a County Coroner, it shall immediately notify those persons it believes to be most likely descended from the deceased Native American. The descendants may, with the permission of the owner of the land or his or her authorized representative, inspect the site of the remains and may recommend to the owner or the person responsible for the excavation work means for treatment or disposition, with appropriate dignity, of the human remains and any associated grave goods. The descendants shall complete their inspection and make recommendations or preferences for treatment within 48 hours of being granted access to the site. This regulation also requires that, upon the discovery of Native American remains, the landowner shall ensure that the immediate vicinity, according to generally accepted cultural or archaeological standards or practices, where the Native American human remains are located, is not damaged or disturbed by further development activity until the landowner has discussed and conferred with the most likely descendants regarding their recommendations and all reasonable options regarding their preferences for treatment. This section of the PRC has been incorporated into Section 15064.5(e) of the State CEQA Guidelines.

4.15.2 EXISTING CONDITIONS

Records Search Results

Section 4.4 of this Draft EIR provides an evaluation of cultural resources and human remains. As noted in that section, a cultural resource record search and literature review was conducted at the California Historical Resources Information System (CHRIS), which maintains records and literature regarding cultural resources within California. The South Central Coastal Informational Center (SCCIC) is a designated branch of the CHRIS and houses records recorded in San Bernardino, Los Angeles, Orange, and Ventura Counties. The CHRIS office for Los Angeles County is located at the SCCIC at California State University, Fullerton. Although the literature review at the SCCIC revealed that 15 cultural resources studies have been undertaken within ½-mile of Mt. SAC, none of these studies included a portion of the Mt. SAC campus. No known archaeological resources, including prehistoric archaeological sites, are located on the campus or within a ½-mile of the project area. As identified in Section 4.4.4, three additional reports regarding historical resources have been prepared for Mt. SAC but also did not identify any archaeological resources at the campus.

Regional Ethnographies

Ethnography is a cultural anthropologic research method that strives to answer anthropological questions about different cultures' ways of life, and the following section describes the ethnographic setting of the Mt. SAC site.

Gabrieliño

At the time of European contact, this part of Los Angeles County was the home of the Gabrieliño. The Gabrieliño and their descendants are those people who became associated with Mission San Gabriel Arcángel, which was established in south-central Los Angeles County on September 8, 1771, in what has ever since been called the San Gabriel Valley. Today, these people are sometimes referred to as the *Tongva,* although the term apparently originally (i.e., before the arrival of Euro-Americans) referred to the inhabitants of the San Gabriel Valley only. In either case, the inhabitants of Santa Catalina Island and San Clemente Island are often included as being parts of this tribe, as are the Fernandeño, who inhabited most of the San Fernando Valley. Note that the Eastern Gabrieliño refers to those who lived south of the San Gabriel Mountains, mainly in the San Gabriel Valley, while the Western Gabrieliño refers to those who lived along the western coast of Los Angeles County, from Malibu to Palos Verdes, and includes the people living in the San Fernando Valley.

The ancestral Gabrieliño arrived in the Los Angeles Basin probably before 500 BCE (Before Common Era) as part of the so-called Shoshonean (Takic speaking) Wedge from the Great Basin region and gradually displaced the indigenous peoples, probably Hokan speakers. Large, permanent villages were established in the fertile lowlands along rivers and streams and in sheltered areas along the coast. Eventually, Gabrieliño territory encompassed the watersheds of the Los Angeles, San Gabriel, Rio Hondo, and Santa Ana Rivers (which includes the greater Los Angeles Basin) to perhaps as far south as Aliso Creek, as well as portions of the San Fernando, San Gabriel, and San Bernardino Valleys. Gabrieliño territory also included the islands of San Clemente, San Nicholas, and Santa Catalina. Recent studies suggest the population may have numbered as many as 10,000 individuals at their peak in the Pre-contact Period.

The subsistence economy of the Gabrieliño was one of hunting and gathering. The surrounding environment was rich and varied, and the natives were able to exploit mountains, foothills, valleys, deserts, and coasts. As was the case for most native Californians, acorns were the staple food (by the Intermediate Horizon), supplemented by the roots, leaves, seeds, and fruit of a wide variety of flora (i.e., cactus, yucca, sage, and agave). Fresh and saltwater fish, shellfish, birds, insects, and large and small mammals were exploited.

A wide variety of tools and implements were employed by the Gabrieliño to gather, collect, and process food resources. The most important hunting tool was the bow and arrow. Traps, nets, blinds, throwing sticks, and slings were also employed. Fish were an important resource and nets, traps, spears, harpoons, hooks, and poisons were utilized to catch them. Ocean-going plank canoes and tule balsa canoes were used for fishing and for travel by those groups residing near the Pacific Ocean.

The processing of food resources was accomplished in a variety of ways: nuts were cracked with hammer stone and anvil; acorns were ground with mortar and pestle; and seeds and berries were ground with mano and metate. Yucca, a valuable resource in many areas, was eaten by the natives and exploited for its fibers.

Strainers, leaching baskets and bowls, knives, bone saws, and wooden drying racks were also employed. Food was consumed from a variety of vessels. Catalina Island steatite was used to make ollas and cooking vessels.

Gabrieliño houses were circular domed structures of willow poles thatched with tule. They were actually quite large and could, in some cases, hold 50 individuals. Other structures served as sweathouses, menstrual huts, and ceremonial enclosures.

4.15.3 METHODS AND RESULTS

Native American Consultation

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

As discussed previously, AB 52 became effective on July 1, 2015. 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 September 18, 2018 as requested.

On November 5, 2018, the Gabrieleño Band of Mission Indians – Kizh Nation requested consultation with Mt. SAC regarding the proposed 2018 EFMP. In response to their request, Mt. SAC requested a teleconference meeting. On November 7, 2018, Mr. Andrew Salas (Tribal Chair) and a tribal archaeologist from the Gabrieleño Band of Mission Indians – Kizh Nation and Mt. SAC discussed the components of the proposed 2018 EFMP and the likelihood of impacts given the disturbed nature of the campus. Additionally, as part of that same contact, Mt. SAC staff enquired if Mr. Salas had additional information based on his consultation with the tribe's in-house archaeologist and tribal elders on potential tribal cultural resources on the Mt. SAC campus.

He indicated that the campus lies within an area where ancestral territories of Kizh Gabrieliño Tribe villages adjoined and overlapped, at least during the Late Prehistoric (i.e., before European contact) and Protohistoric Periods (i.e., Post-contact). Mr. Salas also mentioned that several artifacts (i.e. manos and metates) were discovered on the campus during the 1970s; however, to date, the tribe has not provided documentation that supports the identification of cultural resources on the campus. Additionally Mr. Salas also recommended developing an agreement (i.e. Memorandum of Agreement or Memorandum of Understanding) between the Gabrieleño Band of Mission Indians – Kizh Nation and Mt. SAC. Mr. Salas also recommended a certified Native American monitor of Gabrieleño descent be onsite during ground disturbing activities related to the components of the proposed 2018 EFMP, including but not limited to pavement removal, post holing, auguring, boring, grading, excavation and trenching to protect any cultural resources which may be affected during construction or development.

It should also be noted that the NOP for this Draft EIR was transmitted to the Tonga Ancestral Territorial Tribal Nation; no response was received.

Based on coordination to date, Native American representatives have not provided documentation supporting that there are known cultural resources that are significant to a California Native American tribe on the campus of Mt. SAC. Notwithstanding the current lack of evidence of the known resources on site, it is acknowledged this portion of Los Angeles County was inhabited by Native American tribes. Although there is no documentation from the SCCIC or the NAHC of archaeological resources important to Native Americans having been identified near the campus, there is always the possibility that undiscovered intact cultural resources, including tribal cultural resources may be present below the surface in native sediments. To minimize the potential direct impacts a mitigation measure has been included requiring Native American monitoring when construction activities are in native soil. Implementation of Mitigation Measure

MM TCR-1 would provide for appropriate protection of tribal cultural resources that may be discovered during construction. Therefore, this impact would be less than significant.

4.15.4 THRESHOLDS OF SIGNIFICANCE

According to Appendix G of the State CEQA Guidelines, a project will normally have a significant adverse environmental impact on tribal cultural resources if it will:

- Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

  a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), 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.

4.15.5 ENVIRONMENTAL IMPACTS

Impact Analysis

Threshold 15.1	**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 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).**

2018 Educational and Facilities Master Plan (Phases 1A, 1B, and 2) and Project-Specific

For purposes of impact analysis, a tribal cultural resource is considered a site, feature, place, cultural landscape, sacred place, or object which is of cultural value to a California Native American Tribe and is either eligible for the CRHR or a local register. As indicated in Section 4.4 of this Draft EIR, based on a SCCIC record search the results from the NAHC SLF database there are no resources on the Mt. SAC campus that are currently listed on the CRHR. Therefore, the proposed Project would not have an impact on tribal cultural resources associated with an impact to a resource that is listed or eligible for listing on the CRHR or a local register.

Level of Significance Prior to Mitigation

No impact.

Recommended Mitigation Measures

No significant impacts were identified, and mitigation is not required.

Level of Significance After Mitigation

No impact.

Threshold 15.2	**Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is a 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.**

2018 Educational and Facilities Master Plan (Phases 1A, 1B, and 2) and Project-Specific

The second component of this threshold is if the proposed 2018 EFMP would impact "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 Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe." Subdivision (c) states:

> A resource may be listed as an historical resource in the California Register if it meets any of the following CRHR criteria:
>
> (1) Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage.
>
> (2) Is associated with the lives of persons important in our past.
>
> (3) Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values.
>
> (4) Has yielded, or may be likely to yield, information important in prehistory or history.

Based on information available through the record searches at the SCCIC and the NAHC, and the long-term past use of the Mt. SAC campus for educational purposes, there is no information available that indicates there are significant tribal resources on campus that would be significant pursuant to criteria set forth in subdivision (c) of Public Resource Code Section 5024.1. However,

as noted in Section 4.15.3, Methods and Results, Mt. SAC requested consultation with tribes that notified Mt. SAC of a desire to be consulted with regarding projects on the campus.

Mt. SAC received one response. Mr. Salas (the Tribal Chair), for the Gabrieliño Band of Mission Indians – Kizh Nation, responded on November 5, 2018. Consultation between the Gabrieliño Band of Mission Indians – Kizh Nation and Mt. SAC occurred on November 7, 2018.

Mr. Salas indicated that the campus lies within an area where ancestral territories of Kizh Gabrieliño Tribe villages adjoined and overlapped, at least during the Late Prehistoric (i.e., before European contact) and Protohistoric Periods (i.e., Post-contact). Mr. Salas also mentioned that several artifacts (i.e. manos and metates) were discovered on the campus during the 1970s; however, to date, the tribe has not provided documentation that supports the identification of cultural resources on the campus.

Therefore, based on coordination to date, Native American representatives have not provided substantial documentation supporting that there are resources that are significant to a California Native American tribe. Notwithstanding the current lack of evidence of known tribal cultural resources on campus, it is acknowledged Native Americans inhabited this portion of Los Angeles County. Although no archaeological resources important to Native Americans have been identified near the campus, there is always the possibility that undiscovered intact cultural resources, including tribal cultural resources may be present below the surface in native sediments.

Level of Significance Prior to Mitigation

Potentially significant.

Recommended Mitigation Measures

MM TRC 1.

Level of Significance After Mitigation

Less than significant.

4.15.6 CUMULATIVE IMPACTS

Although tribal cultural resources are site-specific with regard to any given resource (e.g. resources of important cultural value to Native Americans), impacts may be considered cumulative simply because they relate to the loss of cultural resources in general over time throughout the region. There are no tribal cultural resources listed or determined eligible for listing, on the national, State, or local register of historical resources on the Mt. SAC campus. However, should buried resources be identified, ground disturbance within native sediment could lead to the accelerated degradation of previously unknown tribal cultural resources.

4.15.7 MITIGATION MEASURES

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.

4.15.8 REFERENCES

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4.16 UTILITIES AND SERVICE SYSTEMS

This section discusses the potential impacts of the proposed Mt. San Antonio College (Mt. SAC) 2018 Educational and Facilities Master Plan (proposed 2018 EFMP) on water supply and distribution systems, wastewater collection systems, electric power, natural gas, telecommunications, and solid waste. This Draft Environmental Impact Report (EIR) also includes an analysis of storm drain facilities in Section 4.9, Hydrology and Water Quality.

The County Sanitation Districts of Los Angeles County (Districts) submitted a Notice of Preparation (NOP) comment letter that stated that the Districts' maintain sewerage facilities within the proposed 2018 EFMP area. Therefore, approval to construct improvements within the Districts' sewer easement or over or near a Districts' sewer is required. They further noted that wastewater flow from the campus would ultimately flow to the Districts' facilities and provided wastewater generation and connection fees information. The District confirmed that capacities of the Districts' wastewater treatment facilities are based on the Southern California Association of Governments' (SCAG's) regional growth projections. The Districts intend to provide service up to the levels that are legally permitted. This NOP comment letter is included in Appendix A of this Draft EIR.

4.16.1 REGULATORY SETTING

State

California Public Utilities Commission

The California Public Utilities Commission (CPUC) regulates utility companies and ensures the provision of safe, reliable utility service and infrastructure related to electric, natural gas, telecommunications, water, railroad, rail transit, and passenger transportation companies. CPUC General Order 112E, which is based upon the Federal Department of Transportation Guidelines contained in Part 192 of the *Code of Federal Regulations,* specifies a variety of design, construction, inspection, and notification requirements. The CPUC conducts annual audits of pipeline operations to ensure compliance with these safety standards. In addition, the Southern California Gas Company (SCG) has a safety program which has reduced the risk of gas distribution fires by improving welds on the larger diameter (24- to 30-inch) pipelines and by replacing old distribution pipes with flexible plastic pipes.

Urban Water Management Planning Act

The California Urban Water Management Planning Act (*California Water Code,* Sections 10610–10656) requires urban water suppliers that provide over 3,000 acre-feet (af) of water annually or serve more than 3,000 or more connections to analyze the reliability of their water sources over a 20-year planning horizon. The Act requires urban water suppliers to prepare and update Urban Water Management Plans (UWMPs) that analyze the availability of water supplies to meet demands during normal, single-dry, and multiple-dry years as a way to encourage water conservation programs and create long-term planning obligations.

Water Conservation Act of 2009/Senate Bill 7

The Water Conservation Act of 2009 or Senate Bill 7 (SB X7-7) was approved in November 2009 and requires urban water retail suppliers in California to reduce per capita water use by at least 10 percent on or before December 31, 2015, and to achieve a 20 percent reduction by December 31, 2020. In their 2010 UWMPs, urban retail water suppliers must include the baseline

daily per capita water use, urban water use target, interim urban water use target, and compliance daily per capita water use, along with the bases for determining those estimates and references to the supporting data. Urban wholesale water suppliers must also include an assessment of present and proposed water conservation measures, programs, and policies needed to achieve the water use reductions required by this Act. While it does not require existing customers to undertake changes in product formulation, operations, or equipment that would reduce process water use, suppliers may provide technical assistance and financial incentives to those customers to implement efficiency measures for process water.

Urban retail water suppliers and agricultural water suppliers would not be eligible for State water grants or loans for surface water or groundwater storage, recycling, desalination, water conservation, water supply reliability, and water supply augmentation unless they comply with the water conservation requirements established by this Act.

20x2020 Water Conservation Plan

The 20x2020 Water Conservation Plan, issued by the California Department of Water Resources (DWR) in 2010 pursuant to the Water Conservation Act of 2009 (SB X7-7), established a water conservation target of 20 percent reduction in water use by 2020 compared to 2005 baseline use.

Executive Orders for Drought State of Emergency

In January 2014, California Governor Jerry Brown declared a drought state of emergency and directed State officials to take all necessary actions to make water immediately available. The State Water Resources Control Board (SWRCB) was to consider petitions that could streamline water transfers and exchanges between water users and to notify water rights holders that they may be directed to cease or reduce water diversions based on water shortages. The SWRCB was also asked to modify requirements for releases of water from reservoirs or diversion limitations so that water may be conserved in reservoirs to protect cold water supplies for salmon; to maintain water supplies; and to improve water quality. The DWR and the SWRCB were directed to accelerate funding for projects that could enhance water supplies. The Governor also asked for a voluntary reduction in water consumption by 20 percent.

In April 2014, Governor Brown proclaimed a continued state of emergency and asked that the State strengthen its ability to manage water and habitat effectively in drought conditions. He directed the DWR and SWRCB to expedite approvals of voluntary water transfers to assist farmers. He also directed the California Department of Fish and Wildlife (CDFW) to accelerate monitoring of drought impacts on winter-run Chinook salmon in the Sacramento River and its tributaries and to execute habitat restoration projects that will help fish weather the ongoing drought. In response to the increased threat of wildfire season, he called for streamlined contracting rules for the Governor's Office of Emergency Services and the California Department of Forestry and Fire Protection (CAL FIRE) to purchase equipment and allowed landowners to quickly clear brush and dead, dying, or diseased trees that increase fire danger.

Governor Brown also called on all Californians to redouble their efforts to conserve water and to take specific actions to avoid wasting water, including limiting lawn watering and car washing; he recommended that schools, parks, and golf courses limit the use of potable water for irrigation and asked that hotels and restaurants give customers options to conserve water by only serving water upon request. He also prevented homeowner associations from fining residents who limit their lawn watering.

In December 2014, Executive Order B-28-14 extended the Governor's January 2014 and April 2014 proclamations and extended the operation of the provisions in these proclamations to May 2016.

On April 1, 2015, in response to historically dry conditions, Governor Brown signed Executive Order B-29-15, which required a 25 percent reduction of urban potable water use throughout the State of California through February 28, 2016. The DWR was directed to lead a Statewide initiative, in partnership with local agencies, to collectively replace 50 million square feet (sf) of lawns and ornamental turf with drought-tolerant landscapes, and the California Energy Commission was asked to implement a Statewide appliance rebate program to provide monetary incentives for replacing inefficient household devices. On November 13, 2015, Executive Order B-36-15 extended the measures set forth by Executive Order B-29-15 through October 2016. In May 2016, Executive Order B-37-16 further extended the provisions in the January 2014 and April 2014 proclamations, as well as provisions in Executive Order B-36-15 through January 2017. On April 7, 2017, Executive Order B-40-17 ended the drought state of emergency in all California counties except Fresno, Kings, Tulare, and Tuolumne, where emergency drinking water projects will continue to help address diminished groundwater supplies. It maintains water reporting requirements and prohibitions on wasteful practices. The order was built on actions taken in Executive Order B-37-16, which remains in effect. In a related action, State agencies, including DWR, released a plan to continue making water conservation a way of life.

Senate Bill 610 and Senate Bill 221

On January 1, 2002, SB 610 and SB 221 took effect with the intent of improving the link between information on water supply availability and certain land use decisions made by cities and counties. SB 610 (Section 10910 et seq. of the *California Water Code*) requires land use planning entities, when evaluating certain large development projects, to request a water supply assessment (WSA) from the entity that would provide water to the project. The WSA must be prepared in conjunction with the land use approval process associated with a project and is required for any project that is subject to the California Environmental Quality Act (CEQA) and meets certain criteria relative to size (e.g., a residential development of more than 500 dwelling units). The WSA must then be included in the project's environmental documentation for the project.

SB 221 (Section 66473.7[b][2] of the *California Government Code*) requires land use planning agencies to include (as a condition in any tentative map that includes a subdivision involving more than 500 dwelling units) a requirement to obtain a written verification from the applicable public water system that sufficient water supplies are available for the subdivision. SB 221 requires a Water Supply Verification only for a residential subdivision that proposes more than 500 dwelling units or that would increase the public water system's number of existing service connections by at least 10 percent when the public water system has fewer than 5,000 service connections. It requires a County or City to deny approval of a tentative or parcel map if the County or City finds that the project does not have a sufficient, reliable water supply as defined in the bill.

The proposed 2018 EFMP (Phases 1A and 1B and Phase 2) do not meet criteria requirements for a WSA or a Water Supply Verification.

California Integrated Waste Management Act (AB 939)

Sections 40050 to 40063 of the California Public Resources Code is the California Integrated Waste Management Act of 1989 (Assembly Bill [AB] 939), created the Board now known as California Department of Resources Recycling and Recovery (CalRecycle) and accomplished the

following: (1) it required each jurisdiction in the state to submit detailed solid waste planning documents for CalRecycle approval; (2) it set diversion requirements of 25 percent in 1995 and 50 percent in 2000; (3) it established a comprehensive statewide system of permitting, inspections, enforcement, and maintenance for solid waste facilities; and (4) it authorized local jurisdictions to impose fees based on the types or amounts of solid waste generated. Jurisdictions select and implement the combination of waste prevention, reuse, recycling, and composting programs that best meet the needs of their community while achieving the diversion requirements.

Construction and Demolition Waste Diversion Requirements

In 2002, SB 1374 required CalRecycle, by March 1, 2004, to adopt a model ordinance suitable for adoption by any local agency to require 50 to 75 percent diversion of construction and demolition (C&D) waste materials from landfills. It required jurisdictions to summarize progress made in diversion of C&D waste materials in their annual progress reports to CalRecycle. In determining penalties for a jurisdiction's failure to implement its source reduction and recycling element or its household hazardous waste element, the bill required CalRecycle to determine if the jurisdiction has provided information on whether C&D waste materials are at least a moderately significant portion of the waste stream and, if so, whether the jurisdiction has adopted a local C&D ordinance, adopted CalRecycle's model ordinance, or implemented another C&D diversion program.

Assembly Bill 341

On October 6, 2011, Governor Brown signed AB 341 establishing a State policy goal that no less than 75 percent of solid waste generated be source reduced, recycled, or composted by 2020, and requiring CalRecycle to provide a report to the Legislature that recommends strategies to achieve the policy goal by January 1, 2014. AB 341 also mandates that local jurisdictions implement commercial recycling by July 1, 2012. CalRecycle will review each jurisdiction's commercial recycling program every two to four years for compliance. Businesses and public entities generating four cubic yards of trash or more and multi-family residential dwellings with five or more units are required to establish and maintain recycling service under AB 341.

Title 24 Green Building Standards

The 2016 California Green Building Standards Code (Title 24, Part 11 of the *California Code of Regulations*), effective January 1, 2017, requires the use of green building principles and practices in site planning and building design to promote energy and water efficiency and conservation; material conservation and resource efficiency; and environmental quality. Also known as the CALGreen Code, the voluntary and mandatory standards in the CALGreen Code apply to new low-rise residential buildings, privately owned non-residential buildings (i.e., theaters, restaurants, banks, offices, daycare centers, industrial buildings, laboratories, department stores, storage and accessory buildings); State-owned buildings; public schools; medical facilities; and additions/alterations to existing non-residential buildings. Mandatory measures include stormwater pollution prevention, water conservation, and recycling and/or salvage of at least 50 percent of nonhazardous construction and demolition wastes.

DSA PR 15-03: Compliance with CALGreen Code Outdoor Water Use Regulations

This procedure outlines the process or series of steps to be taken by Division of the State Architect (DSA) staff and external stakeholders to fulfill the administrative requirements for demonstrating compliance with the CALGreen Outdoor Water Use regulations for landscape irrigation work (DGS 2019).

In response to California's continuing drought, Governor Brown issued State of Emergency proclamations in January and April of 2014. In support of the Governor's initiatives, DSA proposed regulations in the 2013 California Green Building Standards Code (also known as CALGreen Code) to reduce outdoor water use for landscape irrigation by public schools and community colleges. DSA regulations were approved on an emergency basis by the California Building Standards Commission on July 21, 2015 with an effective date of July 23, 2015 and were based upon the 2009 Model Water Efficiency Landscape Ordinance (MWELO) regulations adopted by the Department of Water Resources (DWR). To align with DWR's recently updated 2015 MWELO which became effective December 1, 2015, the emergency regulations were revised during certifying rulemaking and became effective January 26, 2016.

4.16.2 ENVIRONMENTAL SETTING

Water (Potable and Non-Potable)

Potable water service is currently provided to the campus by Three Valleys Municipal Water District (TVMWD) through an existing water transmission main line. Mt. SAC currently uses potable water to satisfy its domestic, fire protection and landscape irrigation needs. Mt. SAC's existing master meter and point of connection to the main line is located east of the Mt. SAC campus on the property of Cal Poly Pomona. From this connection point, water is supplied to an existing 12-inch water main in Temple Avenue that serves the entire Mt. SAC campus. The southern portion of campus is served directly from this 12-inch main. The northern portion of the campus is served by a 1,000,000-gallon storage tank and four 25,000-gallon supplemental storage tanks located in the northeastern portion of campus. Water from the 12-inch main is supplied to these tanks using a series of pumps, and then distributed to the campus through a Mt. SAC owned water distribution system that is pressurized by the elevation of the main tank. The existing potable water system is shown in Exhibit 3-35 in Section 3.0, Project Description, of this Draft EIR. Currently, Mt. SAC uses potable water to satisfy its landscape irrigation needs. As indicated in Section 3.0, TVMWD offers reclaimed water for non-potable uses and Mt. SAC has committed to evaluating the demand for, and drafting a plan for, reclaimed water.

Based on water data for the last 3 years (2014 through 2016) as discussed in the 2018 EMFP, the campus consumed approximately 115,929,359 mgd/yr (2014), 84,890,437 mgd/yr (2015), and 104,025,000 mgd/yr (2016) of potable water. However, because Mt. SAC uses potable water for irrigation needs, a large portion (67 percent in 2014, 64 percent in 2015 and 65 percent in 2016) was used for irrigation use instead of in buildings.

Water Supply

The Three Valleys Municipal Water District (TVMWD) was established in 1950 and includes a service area of 133 square miles in the Pomona, Walnut, and eastern San Gabriel Valleys. The TVMWD provides potable and non-potable water and is a member agency to the Metropolitan Water District of Southern California (MWD).

The TVWMD has prepared an Urban Water Management Plan (UWMP), a document required by statute. The UWMP complies with the defined elements as listed in the statute (*California Water Code,* Sections 10631, et seq.) and is required to be updated in years ending with "five" and "zero". TVMWD's most current UWMP is its UWMP 2015, which was approved on May 18, 2016.

Based on the UWMP 2015, two sources of water supply available to TVWMD include groundwater (pumped by two TVMWD wells) and imported water that TVMWD purchase from the Metropolitan Water District of Southern California (MWD); it is imported from the Colorado River via the

Colorado River Aqueduct and from the State Water Project via the California Aqueduct. Approximately 55 percent of TVMWD water is imported from MWD. The remaining 45 percent of the water supply has historically been met with local sources (groundwater, surface water and recycled water) (TVMWD 2016).

The TVMWD service area overlies several groundwater basins, is adjacent to foothill areas that provide local surface supplies, includes water reclamation plants that deliver recycled water. The TVMWD operates two water treatment plants (Weymouth Water Treatment Plant [WWTP] and the Miramar Water Treatment Plant [MWTP]) that process and deliver imported water for potable use. The MWTP receives 100 percent State Project Water from MWD's Foothill Feeder and treats that water for potable use. More recently, a second groundwater production well was constructed at the MWTP site and now augments the imported water production of the plant. The two wells provide about 7 percent of the total output of the MWTP. Between the WWTP and MWTP facilities, the entire potable imported water needs of TVMWD's member agencies are served.

Wastewater

Wastewater from Mt. SAC is treated at the Los Angeles County Sanitation Districts (LACSD) San Jose Creek Water Reclamation Plant (WRP) located in the City of Industry. The 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) (LACSD 2018).

The LACSD provides sanitary sewer service to Mt. SAC through on-campus sanitary sewer lines which connect to a 15-inch vitrified clay pipe (VCP) trunk line in Temple Avenue (refer to Exhibit 3-36, in Section 3.0). The 15-inch diameter public VCP main line continues through the campus area south of the Wildlife Sanctuary within a public easement in Campus Way and continues south in Grand Avenue. The campus recently installed a new sanitary sewer main that runs from Bonita Avenue along Stadium Way to the northern edge of the Wildlife Sanctuary where it connects to the County's public sewer main. This new service line was designed and constructed to serve the site and facilities of the Athletics Complex East and Physical Education Complex.

Storm Drain

The existing campus storm drain infrastructure is designed to collect and convey stormwater to the public drainage system. Following the topography, campus infrastructure generally drains southward and conveys stormwater to several public main lines: an 84-inch reinforced concrete pipe (RCP) public main located in Grand Avenue, an 84-inch RCP public main located in Bonita Drive, and a 60-inch RCP storm drain located in Temple Avenue and Mt SAC Way. 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.

Electric Power

Mt. SAC is currently served by Southern California Edison (SCE) from an existing 12 kilovolt (kV) substation located near Grand Avenue. This incoming service is received and metered at a switchgear substation and is distributed to each building on campus through a series of electrical maintenance manholes and medium voltage duct banks.

Natural Gas

Natural gas service is provided to Mt. SAC from Southern California Gas Company's (SCG) high-pressure service laterals that lead into the campus. Three main meters are located throughout the campus as the main connection to these laterals. Medium pressure natural gas is then fed to the campus cogeneration system, and campus buildings where it is converted to low pressure for heating and hot water.

Telecommunications

Verizon provides communication services to the campus. Mt. SAC uses an existing underground system of conduits to distribute all fiber and copper cables to its buildings.

Solid Waste

Mt. SAC contracts with Athens Services (Athens), a local waste management company, who provides solid waste service to the campus. On a weekly basis, Athens hauls its three-ton bins from the campus. These bins contain commingled solid waste that is taken to an offsite recycling center and sorted into recyclable and landfill waste; landfill waste is sent to the County Sanitation Districts of Los Angeles County (LACSD) landfill system.

4.16.3 THRESHOLDS OF SIGNIFICANCE

Thresholds Addressed in this Draft Environmental Impact Report

According to Appendix G of the State CEQA Guidelines, a project will normally have a significant adverse environmental impact if it would:

- 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 or relocation of which could cause significant environmental effects.
- Have insufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years.
- 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.
- 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.
- Comply with federal, state, and local management and reduction statutes and regulations related to solid waste

4.16.4 ENVIRONMENTAL IMPACTS

Impact Analysis

Threshold 16.1	**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?**

2018 Educational and Facilities Master Plan (Phases 1A, 1B, and 2) and Project-Specific

Water and Wastewater Treatment

The campus is currently provided with water service (potable and recycled) from TVMWD. To calculate water demand for the proposed 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 proposed 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.

The campus is currently provided with wastewater service from 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, below, 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 108,839 gpd or 122 acre-feet per year (AFY). This water demand is the same as the wastewater generated by the Project. It should be noted that using a student headcount provides a water demand/wastewater generated of approximately 97,620 gpd or 109 AFY. The water demand estimates based on building square footage is used to provide a more conservative estimate.

TABLE 4.16-1
NET INCREASE IN WATER DEMAND/WASTEWATER GENERATED BY PHASE

Phase	Water Demand/Wastewater Generated (gpd)	Water Demand/Wastewater Generated (AFY)
Phase 1A (2019–2021)	6,263	7
Phase 1B (2022–2025)	43,727	49
Phase 2 (2026–2027)	58,849	66
Total Project	108,839	122
Source: Psomas 2018 (water); LACSD 2018 (wastewater)		

As previously indicated, 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 with the proposed 2018 EFMP 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 proposed 2018 EFMP, an update of Mt. SAC's Utilities Infrastructure Master Plan would be conducted to ensure that infrastructure, including the campus water distribution system, would meet the future capacity and needs of the proposed Project. This may result in 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 proposed 2018 EFMP.

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 proposed 2018 EFMP, an update of Mt. SAC's Utilities Infrastructure Master Plan would be 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 anticipated with the proposed 2018 EFMP. As previously indicated, the San Jose Creek 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 2018 EFMP.

Stormwater Drainage

Existing and proposed storm drain lines that would serve the proposed 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 Section 3.0, Project Description, of this Draft EIR. As described in Section 3.0, Project Description, 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 proposed 2018 EFMP. However, as identified in the proposed 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. In addition, a hydrology analysis would be required for each new building and site project associated with the proposed 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.

As discussed previously in Section 4.9, Hydrology and Water Quality, low impact development (LID) best management practices (BMPs) would be implemented for individual project components associated with the proposed 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 4.9, 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

proposed 2018 EFMP 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 throughout this Draft 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 2018 EFMP related to storm drain facilities would be less than significant.

Electric Power

Southern California Edison (SCE) provides electricity to the campus. The college's 12 kilovolt (kV) (medium-voltage) electrical distribution system distributes power from the utility to each building on campus (refer to Exhibit 3-39). To meet the needs of new facilities and renovations identified in the proposed 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.

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 throughout this Draft 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 2018 EFMP related to electric power facilities would be less than significant.

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.; Exhibit 3-40 depicts the medium-pressure lines. To meet the needs of new facilities and renovations that are identified in the proposed 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 proposed 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.

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 throughout this Draft 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 2018 EFMP related to natural gas facilities would be less than significant.

Telecommunications Facilities

Verizon is the local exchange carrier (LEC) for communication services and Mt. SAC uses an underground system of conduits to distribute all fiber and copper cables to its buildings (refer to Exhibit 3-41). As part of the proposed 2018 EFMP, Mt. SAC would provide redundant data and voice services to all proposed 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 (VoIP) 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, as detailed in Section 3.0, Project Description. The proposed tower would support 2-way communication for the campus associated with the Emergency Operations Center (EOC), 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 throughout this Draft 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 2018 EFMP related to telecommunications facilities would be less than significant.

Level of Significance Prior to Mitigation

Less than significant.

Recommended Mitigation Measures

No significant impacts were identified, and mitigation is not required.

Level of Significance After Mitigation

Less than significant.

Threshold 16.2	**Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?**

2018 Educational and Facilities Master Plan (Phases 1A, 1B, and 2) and Project-Specific

Development of the proposed 2018 EFMP 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.

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 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 proposed 2018 EFMP would result in a net increase of 544,195 gsf of campus structures on campus. As indicated in Table 4.16-1, 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 2016).

The TVWMD has indicated that it has capacity to provide for the proposed 2018 EFMP (TWMD 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 proposed 2018 EFMP are considered less than significant.

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 proposed 2018 EFMP. Therefore, impacts from the proposed 2018 EFMP would be less than significant and no mitigation is required.

Level of Significance Prior to Mitigation

Less than significant.

Recommended Mitigation Measures

No significant impacts were identified, and mitigation is not required.

Level of Significance After Mitigation

Less than significant.

Threshold 16.3	**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?**

2018 Educational and Facilities Master Plan (Phases 1A, 1B, and 2) and Project-Specific

The proposed 2018 EMFP would result in a net increase of 544,195 gross square footage (GSF) of new structures associated with the proposed 2018 EFMP (Phases 1A, 1B and 2) which would generate an estimated 108,839 gpd (0.10 mgd) of wastewater (LACSD 2018a). 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 2018 EFMP (Phases 1A, 1B, and 2), 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 2018 EFMP would occur and no mitigation is required.

Level of Significance Prior to Mitigation

Less than significant.

Recommended Mitigation Measures

No significant impacts were identified, and mitigation is not required.

Level of Significance After Mitigation

Less than significant.

Threshold 16.4	**Generate solid waste in excess of State or local standards, in in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste goals?**

2018 Educational and Facilities Master Plan (Phases 1A, 1B, and 2) and Project-Specific

According to the proposed 2018 EFMP, Mt. SAC generated approximately 11.9 pounds (lbs) 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 2018 EFMP, solid waste would be generated during construction, and there would also be an increase in daily solid waste generation during operation. Based on the U.S. Environmental Protection Agency's (USEPA's) new construction and demolition waste generation rate of 3.89 pounds per square foot (lbs/sf) for non-residential uses, construction of the proposed 752,000 sf of new structure, and demolition of 207,805 sf of existing structures, a net total of approximately 1,867 tons[1] of solid waste would be generated over the construction period for the proposed 2018 EFMP.

Based on the operational solid waste disposal factor of 32.85 cubic yards (cy) per 1,000 square feet (ksf) per year for institutional facilities, the project's proposed net increase of 544,195 sf of new institutional buildings would generate approximately 17,877 cy of solid waste per year[2] requiring landfill disposal. It should be noted that Mt. SAC currently recycles food waste and cooking oil at its food services facilities and recycles green waste for mulching landscaped areas; these activities would continue with implementation of the proposed 2018 EFMP.

As of December 2016 (the most current data available), the County's 10 municipal landfills have a permitted daily capacity of 28,549 tons and an estimated remaining permitted capacity of 103.18 million tons, with remaining life estimates of between 12 and 39 years (LACDPW 2017). The estimated solid waste associated with the project that would require disposal (i.e., non-recyclable) represents less than one percent of the County landfill's daily capacity, and one year's waste generation represents less than one percent of the remaining permitted capacity. It should be noted that 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 2018 EFMP additional waste stream would exceed the capacity of these landfills. Therefore, there would be less than significant impacts from the proposed 2018 EFMP related to landfill capacity and no mitigation is required.

Level of Significance Prior to Mitigation

Less than significant.

Recommended Mitigation Measures

No significant impacts were identified, and mitigation is not required.

1 (752,000 sf + 207,8051sf) x 3.89 lbs/sf = 3,733,641 lbs or approximately 1867 tons.
2 (544,195 sf x 32.85 cy/yr) = 17,877 cy/yr.

Level of Significance After Mitigation

Less than significant.

Threshold 16.5	**Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?**

2018 Educational and Facilities Master Plan (Phases 1A, 1B, and 2) and Project-Specific

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. SB 1016 passed in 2008 and introduced a per capita disposal measurement system that measures the 50 percent diversion requirement using a disposal measurement equivalent. In 2016, California's statewide disposal was 42.7 million tons and the population was 39.2 million residents. This resulted in a per resident disposal rate of 4.9 pounds/resident/day calculated using SB 1016's measurement system. This is slightly more than the 2015 rate of 4.7 pounds/resident/day and decreased the per resident "diversion rate equivalent" to 61 percent.

The 50 percent diversion equivalent target for the City of Walnut in 2016 is a disposal rate of 5.4 pounds/persons/day (ppd) for residences and 20.0 ppd for businesses. According to the CalRecycle website (CalRecycle 2018), the City's 2016 calculated disposal rate was 3.2 ppd for residences and 10.4 ppd for businesses. The City is in compliance with AB 939 goals and uses several programs for diversion of solid waste from landfills including programs for composting, recycling, household hazardous waste (HHW), source reduction, and special waste materials such as construction and demolition debris to achieve the diversion goal. Mt. SAC currently participates in waste diversion programs implemented by the City and, related to the proposed 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). Further, Mt. SAC has prepared a 2018 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. These future goals would serve to further reduce solid waste and promote conservation practices in the future.

The proposed Project site would continue to be served by Athens for the collection of solid waste and recyclables, and the proposed 2018 EFMP would be required to comply with ongoing waste management programs/requirements implemented by the City, as well as comply with applicable regulations, as described above. The waste recycler is also required to meet or exceed the diversion requirements set forth in AB 939. Therefore, impacts from the proposed 2018 EFMP related to solid waste regulations would be less than significant, and no mitigation is required.

Level of Significance Prior to Mitigation

Less than significant.

Recommended Mitigation Measures

No significant impacts were identified, and mitigation is not required.

Level of Significance After Mitigation

Less than significant.

4.16.5 CUMULATIVE IMPACTS

The cumulative impact area to determine cumulative impacts on utility services considers the service area of the respective providers.

Water Supply

As discussed above, water service is provided by the TVMWD. The primary water sources are approximately 45 percent local (groundwater, surface) and 55 percent imported. The 2015 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. The proposed 2018 EFMP water demand increase 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 2016). The proposed 2018 EFMP would not contribute to a cumulatively considerable impact to water supplies.

Wastewater

Cumulative impacts on trunk sewer lines and wastewater treatment would occur within the service area of the LACSD. Future growth and development in the region would generate additional wastewater that would require conveyance and treatment at the WRPs of the LACSD, including the San Jose Creek WRP. This WRP currently has a remaining capacity of 36.2 mgd. Of this, the proposed 2018 EFMP's estimated wastewater generation represents less than one percent of the remaining capacity at the San Jose Creek WRP. Also, all future development projects in the LACSD's service area would be subject to the LACSD's Wastewater Ordinance, which includes the Connection Fee program. The Connection Fee program requires all new users of the LACSD's sewerage system, as well as existing users that significantly increase the quantity or strength of their wastewater discharge, to pay their fair share of the costs for providing additional conveyance, treatment, and disposal facilities. The LACSD uses the fees for the expansion and improvement of their facilities, as needed, to serve existing and anticipated developments. Based on continued implementation of the LACSD Wastewater Ordinance and the nominal contribution of additional wastewater flows to the LACSD system, the proposed 2018 EFMP would not contribute to a cumulatively considerable impact to LACSD facilities.

Storm Drain

The cumulative study area for storm drains includes the public storm drain system within the City of Walnut as well as tributary systems beyond the City's limits. The proposed 2018 EFMP and other new development anticipated in the recently adopted 2018 *City of Walnut General Plan* would result in changes to on-site land uses, primarily the conversion of undeveloped vacant land to urban uses. Such land conversion would result in increased impervious surfaces and would increase the amount and velocity of surface runoff entering the storm drain system. The provision of drainage system improvements sized to accommodate anticipated increase in stormwater flow, as a component of each individual project associated with the proposed 2018 EFMP, would ensure that project-specific impacts would be less than significant. With on-site stormwater detention systems, the drainage from the proposed 2018 EFMP would not exceed existing conditions. Therefore, the proposed Project would not contribute to a cumulatively considerable impact to storm drain facilities.

Electric Power

Electrical power would be provided by SCE on demand, consistent with CPUC requirements. The proposed 2018 EFMP and other new development in the service area would result in increased demand for electricity and an increased demand on the existing distribution system. Each new project associated with the 2018 EFMP would be required to coordinate with SCE to implement necessary upgrades to existing facilities or construction of new facilities to accommodate the anticipated demand. Additionally, on-site energy use would be reduced through compliance with Title 24, the CalGreen Code (as adopted by the County into Title 31 of the County Code), and other energy conservation programs and policies. Cumulative projects in the County would also comply with the same regulations.

Natural Gas

Natural gas service would be provided by SCG on demand, consistent with CPUC requirements. The proposed 2018 EFMP and other new development in the service area would result in increased demand for natural gas and an increased demand on the existing distribution system. Each new project associated with the proposed 2018 EFMP would be required to coordinate with SCG to implement necessary upgrades to existing facilities or construction of new facilities to accommodate the anticipated demand. Additionally, on-site energy use would be reduced through compliance with Title 24, the CalGreen Code (as adopted by the County into Title 31 of the County Code), and other energy conservation programs and policies. Cumulative projects in the County would also comply with the same regulations.

Telecommunications

The cumulative study area for telecommunications is inclusive of Verizon's service area. Future growth and development in the region would generate additional demand for telecommunication services. As with the proposed Project, all future projects associated with the proposed 2018 EFMP would be responsible for connection to Verizon's facilities and would be required to comply with all applicable regulations related to telecommunications.

Solid Waste

Solid waste collection services are provided on demand by private haulers, and cumulative impacts on their services would occur from future development in their service area. Available landfill capacity is expected to decrease over time with future growth and development in the San Gabriel Valley. Waste reduction and recycling programs and regulations are expected to reduce this demand and extend the life of existing landfills. Also, CalRecycle is responsible for administering and monitoring State solid waste reduction initiatives, and individual jurisdiction's ability to meet these requirements. It is assumed that the role of CalRecycle would continue in the future. Based on the available capacity of landfills in the region and the nominal contribution of additional solid waste requiring disposal, approximately 0.10 percent of the County landfill's daily capacity, the proposed 2018 EFMP would not contribute to a cumulatively considerable impact to landfill capacity or solid waste regulations.

4.16.6 MITIGATION MEASURES

No mitigation measures are required.

4.16.7 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Less than significant.

4.16.8 REFERENCES

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SECTION 5.0
ALTERNATIVES TO THE PROPOSED PROJECT

5.1 INTRODUCTION

In compliance with Section 15126.6(a) of the California Environmental Quality Act (CEQA) Guidelines, an Environmental Impact Report (EIR) must "describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any significant effects of the project, and evaluate the comparative merits of the alternatives". The Mt. San Antonio Community College District, as the CEQA Lead Agency, is responsible for selecting a range of proposed Project alternatives. This section identifies potential alternatives to the proposed 2018 EFMP and evaluates them, as required by CEQA.

Key provisions of the State CEQA Guidelines on alternatives (Sections 15126.6[b]–15126.6[f]) are summarized below to explain the foundation and legal requirements for the alternatives analysis in this Draft EIR.

- The discussion of alternatives shall focus on alternatives to the proposed Project or its location which are capable of avoiding or substantially lessening any significant effects of the proposed Project, even if these alternatives would impede to some degree the attainment of the proposed Project objective, or would be more costly (Section 15126.6[b]).
- The specific alternative of "no project" shall also be evaluated along with its impact (Section 15126.6[e][1]).
- The "no project" analysis shall discuss the existing conditions at the time the Notice of Preparation is published, and at the time the environmental analysis is commenced, as well as what would reasonably be expected to occur in the foreseeable future if the proposed Project were not approved, based on current plans and consistent with available infrastructure and community services. If the environmentally superior alternative is the "no project" alternative, the Draft EIR shall also identify an environmentally superior alternative among the other alternatives (Section 15126.6[e][2]).
- The range of alternatives required in a Draft EIR is governed by the "rule of reason" that requires the Draft EIR to set forth only those alternatives necessary to permit a reasoned choice. The alternatives shall be limited to ones that would avoid or substantially lessen any of the significant effects of the proposed Project. Of those alternatives, the Draft EIR need examine in detail only the ones that the Lead Agency determines could feasibly attain most of the basic objectives of the proposed Project. The range of feasible alternatives shall be selected and discussed in a manner to foster meaningful public participation and informed decision making. Among the factors that may be taken into account when addressing the feasibility of alternatives are site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries, and whether the proponent can reasonably acquire, control or otherwise have access to the alternative site (or the site is already owned by the proponent) (Section 15126.6[f]).

- [For alternative locations,] only locations that would avoid or substantially lessen any of the significant effects of the proposed Project need be considered for inclusion in the Draft EIR (Section 15126.6[f][2][A]).
- If the Lead Agency concludes that no feasible alternative locations exist, it must disclose the reasons for this conclusion, and should include the reasons in the Draft EIR. For example, in some cases there may be no feasible alternative locations for a geothermal plant or mining project which must be in close proximity to natural resources at a given locations (Section 15126.6[f][2][B]).
- A Draft EIR need not consider an alternative whose effect cannot be reasonably ascertained and whose implementation is remote and speculative (Section 15126.6[f][3]).

Pursuant to the guidelines stated above, a range of alternatives to the proposed 2018 EFMP is considered and evaluated in this Draft EIR. These alternatives were developed in the course of project planning and environmental review. The discussion in this section provides the following:

- A description of alternatives considered.
- A comparative analysis of the alternatives under consideration and the proposed 2018 EFMP. The focus of this analysis is to determine if alternatives are capable of eliminating or reducing the significant environmental effects of the proposed Project to a less than significant level.
- An analysis of whether the alternatives meet most of the objectives of the proposed Project (as presented in Section 3.3 of this Draft EIR and restated below).

5.2 SUMMARY OF THE PROPOSED PROJECT

As described in detail in Section 3.0, Project Description, of this Draft EIR, the Mt. San Antonio College (Mt. SAC or college) campus (also referred to herein as “the campus” or “the proposed Project site”) encompasses approximately 418.44 acres and is located north and south of Temple Avenue east of Grand Avenue, with the “West Parcel” located west of Grand Avenue and south of Amar Road/Temple Avenue. Mountaineer Road and Edinger Way form the northern boundary of the campus and the eastern boundary is consistent with the City of Walnut’s eastern boundary. The Mt. SAC campus is approximately 1.8 miles west of State Route (SR)-57, 1.0 mile south of Interstate (I)-10, and 0.9 mile north of SR-60.

The proposed 2018 Educational and Facilities Master Plan (proposed 2018 EFMP) is Mt. SAC’s long-range development plan and serves as the foundation for other components of Mt. SAC’s integrated planning process. Among other purposes, the proposed 2018 EFMP projects Mt. SAC’s overall growth and the growth of programs and services during the planning horizon and develops recommendations for site and facilities improvements that are informed by education planning. The proposed 2018 EFMP would involve the construction of new buildings, removal/demolition of aged and/or temporary facilities, renovations, and campus-wide site and infrastructure improvement projects.

The proposed Project involves the adoption of the proposed 2018 EFMP by the District’s Board of Trustees and subsequent implementation of proposed building construction and renovation, minor facilities, vehicular circulation and parking, pedestrian and bicycle circulation, open space, public art, wayfinding/signage and lighting, and other site and infrastructure improvements, as outlined in the proposed 2018 EFMP.

The proposed Project does not require any changes to the recently adopted 2018 *City of Walnut General Plan* (2018 WGP) and would not change the campus' existing General Plan land use and zoning designation of Schools and Public Institutional. However, proposed improvements on Temple Avenue and Grand Avenue would require City approval of Street Improvement Plans and construction easements (for work in public rights-of-way) and administrative review and approval of grading/drainage plans for specific Mt. SAC facilities.

With respect to the changes in physical development at the campus that would occur with implementation of the 2018 EFMP, 33 aged and/or temporary facilities (approximately 207,805 gross square feet [gsf] of building space) would be removed/demolished; 13 new buildings (approximately 752,000 gsf), including 10 major buildings would be constructed; up to four parking structures would be constructed; and 9 buildings (405,023 gsf) would be renovated. When the proposed 2018 EFMP be fully implemented, there would be approximately 2,474,053 gsf of building space on campus (including the previously approved Physical Education Project [PEP]). This represents a net increase of approximately 766,925 gsf compared to the total floor area of existing buildings when taking into consideration the PEP, and a net increase of approximately 544,195 gsf when considering the proposed development under Phases 1A, 1B and 2 of the 2018 EFMP.

The 2018 EFMP also identifies vehicular circulation, parking, and non-vehicular circulation improvements for the campus. The recommended approach for additional parking includes improving existing surface parking lots to increase capacity and circulation flow and building up to four new parking structures. The recommended approach to on-campus vehicular circulation keeps vehicles on the outer portions of campus, thus helping to separate pedestrian and vehicular circulation and reserve the academic core of campus for pedestrians. Improvements to campus vehicular circulation, emergency/service access, campus parking (surface and parking structures), bicycle circulation, and pedestrian circulation (including pedestrian bridges) are described in Section 3.5 of this Draft EIR. In addition to the demolition and renovation of existing buildings, construction of new buildings, and parking and circulation components, implementation of the proposed 2018 EFMP would include athletic facilities, enhanced open space areas and public art, implementation of an Urban Forest Initiative, infrastructure improvements, and utility infrastructure and roadway improvements at the Farm Precinct.

Implementation of the 2018 EFMP, which is a long range planning and development plan, would include construction and operation of various components that are planned under Phases 1A, 1B and 2 of the 2018 EFMP within the 10-year horizon period, including components that were included in previous Facilities Master Plans but not yet implemented. A description of the proposed 2018 EFMP components that would occur with each phase is provided in Section 3.0, Project Description, of this Draft EIR. It is not anticipated that Phase 3 components of the 2018 EFMP would be built during the 10-year horizon period; therefore, they are not being evaluated in this Draft EIR. Rather, implementation of Phase 3 components would be subject to separate environmental review pursuant to CEQA. However, they are considered in the cumulative impacts analysis in this Draft EIR and are described in Section 4.0, Introduction to the Environmental Analyses, of this Draft EIR.

5.3 PROPOSED PROJECT OBJECTIVES

As stated in Section 3.3 of this Draft EIR and pursuant to Section 15124(b) of the State CEQA Guidelines, the following objectives have been established for the proposed 2018 EFMP to aid decision makers in their review of the proposed Project.

1. Provide an affordable local alternative to four-year universities for local students and returning veterans.
2. Implement the facilities, site improvement, and infrastructure needed to support the growth projected for instructional programs and support services at Mt. SAC.
3. Maximize functional space and eliminate non-functional space on campus, including by removing and replacing temporary facilities with permanent facilities in a timely manner, and renovating or replacing aged and outdated facilities.
4. Improve the utilization of space on campus by replacing small single-story buildings with multi-story buildings and consolidating open space into usable-sized portions.
5. Improve the efficiency of space on campus by aligning the classroom inventory with class sizes, and building flexible, multi-use/multi-purpose spaces, and spaces that can be readily reconfigured by occupants.
6. Ensure safety of faculty, staff, and students by upgrading or replacing aging, seismically unsafe buildings and facilities.
7. Promote sustainable facilities design, construction, and operations.
8. Improve pedestrian and vehicular access and circulation on campus.
9. Upgrade classroom and laboratory spaces to provide students with up-to-date skills and modern technology.
10. Upgrade school security to keep students safe by installing emergency mass notification beacons and marquees, outdoor lighting, and up-to-date security measures including improved security and emergency communication systems and infrastructure.

5.4 SUMMARY OF PROPOSED PROJECT'S SIGNIFICANT AND UNAVOIDABLE IMPACTS

The analysis in Sections 4.1 through 4.14 of this Draft EIR concludes that implementation of Phases 1A, 1B, and 2 of the proposed 2018 EFMP, which are addressed at a program level in this Draft EIR, and implementation of certain individual projects in Phases 1A and 1B , which are being evaluated at a "project-specific level" in this Draft EIR, would result in significant and unavoidable environmental impacts, even with the incorporation of mitigation measures (MMs), related to Cultural Resources (demolition of buildings) and Transportation/Traffic. All other impacts would be less than significant with or without mitigation.

5.5 ALTERNATIVES CONSIDERED BUT NOT CARRIED FORWARD FOR DETAILED ANALYSIS

Section 15126.6(c) of the State CEQA Guidelines specifies that a Draft EIR should (1) identify alternatives that were considered by the Lead Agency but were eliminated from detailed consideration because they were determined to be infeasible during the scoping process and (2) briefly explain the reasons underlying the Lead Agency's determination. This section of the State CEQA Guidelines states "Among the factors that may be used to eliminate alternatives from

detailed consideration in an [Draft] EIR are: (i) failure to meet most of the basic project objectives, (ii) infeasibility, or (iii) inability to avoid significant environmental impacts".

The following alternatives were considered during the scoping and planning process but were not selected for detailed analysis in this Draft EIR. In addition to an alternative site, alternatives that were considered but not carried forward for analysis in the Draft EIR include previous iterations of the proposed 2018 EFMP that were considered by the District but were ultimately eliminated from further consideration due to potential impacts, which would be greater than the proposed Project, and due to concerns raised by the adjacent residential communities, as described below.

5.5.1 ALTERNATIVE SITE

CEQA requires that the discussion of alternatives focus on alternatives to the proposed Project or its location, which are capable of avoiding or substantially lessening any significant effects of the proposed Project. The key question and first step in the analysis is determining whether any of the significant effects of the proposed 2018 EFMP would be avoided or substantially lessened by developing the proposed Project at another location. Only locations that would avoid or substantially lessen any of the significant effects of the proposed Project need be considered for inclusion in the Draft EIR (State CEQA Guidelines, Section 15126.6[f][2][B]).

There is approximately 1.71 million square feet (msf) of existing building development on campus (144 buildings). There are also athletic facilities, a Wildlife Sanctuary, the Farm Precinct, and surface parking lots. Many of these existing buildings and improvements would remain in place.

The currently approved Facilities Master Plan (2015 Facilities Master Plan Update [2015 FMPU]), which replaced the 2012 Facilities Master Plan, anticipated that the campus would have a total of 1,552,072 assignable square feet (asf) and approximately 2.0 million gross square feet (gsf) by the projected buildout year of 2025 to accommodate a student enrollment of 39,731 students. The proposed 2018 EFMP generally has a planning horizon of approximately 10 years (through 2027). The total floor area at buildout of Phases 1A, 1B and 2 of the proposed 2018 EFMP would be 2.47 million gsf to serve the projected increase in the unduplicated student headcount from 37,864 students in Fall 2017 to between 40,802 and 42,745 students by Fall 2027.

The proposed 2018 EFMP does not involve an expansion of the campus boundaries. As further discussed in Section 3.4, Project Background, of this Draft EIR, the proposed 2018 EFMP involves an update to the 2015 FMPU to address changes in the demand for higher education and the need to replace aging infrastructure on campus. Thus, the Alternative Site assumes development of only the proposed net increase in square footage (544,195 gsf) at an alternate site, not relocation of the Mt SAC campus in its entirety.

As identified in Section 5.3 above, the proposed 2018 EFMP objectives focus on accommodating the demand for community college students, faculty, and staff and implementing the facilities, site improvement and infrastructure needed to support the growth projected for Instructional Programs and Support Services at Mt. SAC. Construction of the proposed institutional uses at any other location in the City would not meet these key proposed Project objectives and would not maximize functional space, improve the utilization of space, or improve the efficiency of space on campus. It would also decrease pedestrian and vehicular connectivity and accessibility, due to the differing locations of on campus and off campus facilities. Thus, implementing the proposed structures associated with the proposed 2018 EFMP, including the Student Center, Bookstore, Parking Structures R and S, tennis courts and volleyball courts and replacement communication tower, at another site would not accomplish the objectives of the proposed Project. This alternative would

not maintain or enhance the synergy that comes from providing necessary resources in the same location on campus.

Because the campus already has existing, scattered student center and bookstore facilities, it would not be efficient to demolish these structures and build the Student Center and Bookstore at an alternative site, which would be located away from the instructional and program buildings that the majority of the student body utilize. Locating the proposed Parking Structures R and S, tennis courts and volleyball courts at the alternate site would also be inefficient, as it would require longer walks to reach the instructional and program buildings on campus. This alternative would also require the construction of site and infrastructure improvements necessary to support the proposed buildings uses at an off-campus location. Additionally, implementing the proposed institutional uses and support facilities at an alternate site would not allow for the removal of aging buildings and infrastructure and replacement of these buildings with more efficient, functional, and sustainable facilities, which are also objectives of the proposed 2018 EFMP.

With respect to environmental impacts, as identified through the analysis presented in Sections 4.1 through 4.16 of this Draft EIR, the proposed 2018 EFMP (Phases 1A, 1B, and 2) would result in significant and unavoidable impacts from construction and/or operation of proposed facilities and associated site and infrastructure improvements. Specifically, the proposed Project would result in significant unavoidable impacts related to Cultural Resources (demolition of buildings) and Transportation/Traffic.

Without a site-specific analysis, the physical impacts from construction and operation, including impacts to biological resources, cultural resources, geology/soils, hazards and hazardous materials, hydrology/water quality, mineral resources, and utilities/service systems at an alternative site cannot be meaningfully evaluated. However, development of the proposed Project at an alternative site would likely result in similar or less construction-related impacts compared to the proposed 2018 EFMP, including construction-related air quality, greenhouse gas (GHG) emissions, and noise impacts if the same facilities are constructed. Also, impacts related to historical resources would be avoided since campus buildings considered contributors Mt. SAC Historic District would not be demolished or renovated. At the same time, development within the existing boundaries of the campus provides an infill type of development, which would typically result in less impacts than new construction at an undeveloped site (as it relates to biological resources, archaeological, paleontological and tribal cultural resources, and hydrology/water quality).

Operation of the proposed 2018 EFMP at an alternative site would also have greater operational impacts than the proposed Project, as it relates to increased traffic, air quality emissions, GHG emissions, and noise if there is a need to use vehicles to travel between campus facilities and the alternative site. In addition, the less than significant impacts of the proposed 2018 EFMP would be similar at an alternative site because development of the proposed Project at an alternative site would only move proposed Project impacts to a different location, thus resulting in impacts to the same land area, types of land use, and project size and would be subject to the same regulatory requirements and MMs. However, impacts related to land use, population and housing (displacement), public services, and utilities could be greater than the impacts of the proposed 2018 EFMP. Therefore, construction and operation of the proposed Project at an alternative site would reduce the proposed 2018 EFMP's significant impacts on historical resources but, at the same time, it would increase other impacts.

Mt. SAC does not own other land in the district boundaries that would accommodate the proposed 2018 EFMP and meet the proposed Project objectives. CEQA does not require the consideration of sites not owned by the landowner or which could not be reasonably acquired by the landowner as alternatives to the proposed Project (State CEQA Guidelines, Section 15126.6[f][1]).

In summary, there are no alternative sites in the district boundaries that would meet the proposed 2018 EFMP objectives related to maximized functional space, improved utilization and efficiency of space, sustainable facilities design, construction and operations, and improved pedestrian and vehicular access and circulation. While locating the proposed 2018 EFMP at an alternative site would reduce the significant unavoidable impacts of the proposed Project on historical resources, development at any alternatives site to serve campus programs and facilities would result in greater impacts due to the distance between the existing facilities on campus and the alternative site. Therefore, further analysis of an alternative site(s) is not provided in this Draft EIR.

5.5.2 MT. SAC HISTORIC DISTRICT RETENTION

As discussed in Section 5.4 and detailed in Section 4.4, Cultural Resources, to accommodate the proposed the Student Center and Central Campus Infrastructure and Bookstore, the proposed 2018 EFMP would require demolition of buildings that are contributing resources to the Mt. SAC Historic District. Demolition of these buildings would result in a potentially significant and unavoidable impact. Even with implementation of MM CULT 1 requiring implementation of Historic American Buildings Survey (HABS) documentation and MM CULT 2 requiring establishment of interpretive sign(s) in one or adjacent to one of the major buildings in the historical heart of the campus, the loss of the historic district would be a significant and unavoidable impact resulting from the proposed 2018 EFMP. In order to avoid this impact, an alternative would need to either (1) relocate the proposed Student Center and Central Campus Infrastructure and Bookstore or (2) not construct the proposed Student Center and Central Campus Infrastructure and Bookstore. While relocation of the Student Center and Bookstore buildings to another area on the campus would be feasible, relocation of the Central Campus Infrastructure would not be a feasible option.

As discussed in Section 3.0, Project Description, the Central Campus Infrastructure project includes the replacement of storm drain, domestic/fire water, chilled water (including the proposed location of a new central plant), high voltage electric loops, electrical distribution, sanitary sewer, natural gas, telecommunications conduits and copper. The current infrastructure system is aging and must be replaced in the immediate future to continue serving the campus without major infrastructure system failures. Therefore, the Central Campus Infrastructure project is a critical element to the continued operation of the Mt. SAC campus. Further, the selected location for the Central Campus Infrastructure project is predetermined based on the existing utility infrastructure system layouts on campus. If an alternate location were to be identified, the impacts related to rerouting the infrastructure systems would require an expanded disturbance area, resulting in substantially greater impacts than the proposed 2018 EFMP. Therefore, further analysis of a Mt. SAC Historic District Retention Alternative is not provided in this Draft EIR.

5.5.3 2015 FACILITIES MASTER PLAN UPDATE

The proposed 2018 EFMP, as described in Section 3.0, Project Description, of this Draft EIR, is an update of the 2015 Facilities Master Plan Update (FMPU). Thus, the District has the option to not adopt an update to the FMPU and, instead, continue to use of the 2015 FMPU. Since no new Facilities Master Plan would be adopted by the District, no CEQA compliance or environmental analysis is necessary. The impacts associated with the 2015 FMPU have been analyzed in the *2015 Facilities Master Plan Update and Physical Education Project Final Subsequent/Program/Project EIR* (FMPU/PEP 2016 SEIR), which evaluated the 2015 FMPU at a program-level, and Phases 1 and 2 of the Physical Education Projects (PEP) at a project-level. Therefore, further analysis of the impacts of the 2015 FMPU is not provided in this Draft EIR and need not be re-analyzed if the 2015 FMPU is not updated.

However, this alternative does not allow Mt. SAC to better plan for the facilities, services, programs, and improvements on campus that would be needed to serve the changing student population and demand for higher education. It will also make Mt. SAC implement facility and infrastructure improvements that would only meet near-term needs and not provide the facilities and infrastructure needed in the more distant future. Since this alternative would not provide an up-to-date plan for Mt. SAC and would not meet any of the proposed 2018 EFMP objectives, it has been rejected from further consideration and analysis in this Draft EIR.

5.6 ALTERNATIVES ANALYSIS

Based on the criteria listed previously and the fact that the proposed 2018 EFMP would result in significant and unavoidable impacts related to Transportation/Traffic, the alternatives described below have been determined to represent a reasonable range of alternatives.

The alternatives considered in this Draft EIR include the following alternatives to the proposed 2018 EFMP, which are further described in this section.

- Alternative 1: No Project/No Development
- Alternative 2: Medium Growth Rate Alternative

With respect to the No Project alternatives, Section 15126.6(e) of the State CEQA Guidelines requires than a Draft EIR evaluate a "no project" alternative to allow decision makers to compare the impacts of approving a proposed Project with the impacts of not approving that proposed Project. Section 15126.6(e)(3) of the State CEQA Guidelines describes the two general types of no project alternative: (1) when the proposed Project is the revision of an existing land use or regulatory plan, policy, or ongoing operation, the no project alternative would be the continuation of that plan and (2) when the proposed Project is other than a land use/regulatory plan, such as a specific development on an identifiable property, the no project alternative is the circumstance under which that proposed Project is not processed (i.e., no development). Both types of no project alternatives are addressed in this Draft EIR (refer to Alternatives 1 and 2).

For the build alternatives, it is assumed that regulatory requirements and project-specific MMs identified for the proposed 2018 EFMP would also be implemented with the alternative, and thus serve to reduce or avoid potential significant impacts similar to the proposed Project.

5.6.1 ALTERNATIVE 1: NO PROJECT/NO DEVELOPMENT

Description of the Alternative

Under the No Project/No Development Alternative, as required by CEQA, no further development would occur at the Mt. SAC campus, including proposed and renovated buildings and infrastructure improvements currently planned in the 2015 FMPU. This No Project alternative is evaluated in accordance with Section 15126.6(e)(3)(A) of the State CEQA Guidelines.

Comparative Analysis of Environmental Impacts

Aesthetics

The No Project/No Development Alternative would not involve any construction or development on campus and no new light sources would be installed. Therefore, this alternative would avoid the less than significant aesthetic impacts during construction and operation that would occur with the proposed Project (change in visual character and introduction of light and glare). The aesthetic

impacts resulting from No Project/No Development Alternative would be less than those of the proposed 2018 EFMP (Phases 1A, 1B and 2).

This impact would be less than the proposed 2018 EFMP.

Air Quality

The No Project/No Development Alternative would not involve any construction activities (including demolition, grading, and excavation) or new development on campus. In the absence of construction activities and new traffic generation, this alternative would not result in any air quality impacts. South Coast Air Quality Management District (SCAQMD) thresholds for construction-related and long-term operational emissions would not be exceeded. Therefore, this alternative would avoid the less than significant short-term, long-term, and cumulative air quality impacts that would occur with implementation of the proposed Project. Additionally, this alternative would not involve an increase in population or traffic and would not conflict with the Air Quality Management Plan (AQMP) for the South Coast Air Basin, consistent with the proposed Project. The air quality impacts of this alternative would be less than those of the proposed 2018 EFMP (Phases 1A, 1B and 2).

This impact would be less than the proposed 2018 EFMP.

Biological Resources

Under the No Project/No Development Alternative, undeveloped areas of the campus would remain in their existing undeveloped condition and no disturbance of existing vegetation and habitats would occur. Potential direct and indirect impacts to sensitive and other biological resources resulting from implementation of the proposed 2018 EFMP (Phases 1A, 1B and 2) would not occur under the No Project/No Development Alternative. Therefore, the impacts to biological resources resulting from this alternative would be less than those of the proposed 2018 EFMP (Phases 1A, 1B and 2).

This impact would be less than the proposed 2018 EFMP.

Cultural Resources

In the absence of any construction activities, this alternative would not result in the potential for impacts to unknown archaeological or paleontological resources that may be encountered during grading activities. As such, the potential for impacts to cultural resources resulting from implementation of the proposed 2018 EFMP (Phases 1A, 1B and 2) would not occur under the No Project/No Development Alternative. Additionally, this alternative would not involve demolition of existing structures; therefore, the significant and unavoidable impact related to demolition of buildings considered to be contributing historical resources would not occur. The cultural resources impacts for the No Project/No Development Alternative would be less than with the proposed Project and the significant and unavoidable impact related to the demolition of buildings would not occur.

This impact would be less than the proposed 2018 EFMP.

Geology and Soils

The No Project/No Development Alternative would not involve any construction activities (including grading and excavation) or any new development and infrastructure improvements on campus. Therefore, potential geology and soils impacts identified for the proposed Project would

not occur under the No Project/No Development Alternative. The geology and soils impacts of this alternative would be less than those of the proposed 2018 EFMP (Phases 1A, 1B and 2).

This impact would be less than the proposed 2018 EFMP.

Greenhouse Gas Emissions

The No Project/No Development Alternative would not involve any construction activities (including demolition, grading, and excavation) or any new development and infrastructure improvements on campus. In the absence of construction activities and operation of the new institutional and support uses (including new traffic generation), this alternative would not generate GHG emissions beyond existing conditions. Thus, the No Project/No Development Alternative would avoid the GHG impacts resulting from the proposed Project. The GHG emissions impacts of this alternative would be less than those of the proposed 2018 EFMP (Phases 1A, 1B and 2).

This impact would be less than the proposed 2018 EFMP.

Hazards and Hazardous Materials and Wildfire

The No Project/No Development Alternative would not involve the use, transport, disposal, or emission of hazardous materials associated with the proposed Project. However, continued use of various hazardous materials for campus operations and maintenance would occur. All use of hazardous materials under this alternative and the proposed Project would be conducted in compliance with applicable regulations and would not result in significant impacts.

In the absence of construction activities, the No Project/No Development Alternative would not have the potential to expose construction personnel or other individuals to asbestos-containing materials (ACMs), polychlorinated biphenyls (PCBs), organochlorine pesticides (OCPs), or other hazards during construction, which would potentially occur with the proposed 2018 EFMP.

Because this alternative would not involve the use, transport, disposal, or emission of hazardous materials associated with operation of the proposed Project, the potential hazards and hazardous materials impacts associated with the proposed Project would not occur under the No Project/No Development Alternative. The hazards and hazardous materials impacts of this alternative would be less than those of the proposed 2018 EFMP (Phases 1A, 1B and 2).

The campus is not located in a very high fire hazard severity zone (VHFHSZ). In the event of fire emergency, Mt. SAC has an established a Campus Emergency Response and Evacuation Plan that identifies procedures and actions for emergencies, including wildfires. This plan would be implemented under the No Project/No Development Alternative, as with the proposed Project. Wildfire hazards under the No Project/No Development Alternative would be the same with the proposed 2018 EFMP (Phases 1A, 1B and 2).

This impact would be less than the proposed 2018 EFMP.

Hydrology and Water Quality

Under the No Project/No Development Alternative, the existing hydrology patterns and hydrologic characteristics of the campus would remain consistent with current conditions. This alternative would not result in an increase in impervious surfaces, increase in the amount and velocity of surface runoff, and amount of pollutants carried by the stormwater runoff. Since this alternative does not include any grading or construction, it would not result in an increase in the potential for

soil erosion during grading and construction which would occur with the proposed Project. Additionally, this alternative also would not require or involve the installation of water quality Best Management Practices (BMPs) consistent with current regulatory requirements. This alternative would not generate hydrology and water quality impacts and impacts would be less than those of the proposed 2018 EFMP (Phases 1A, 1B and 2).

This impact would be less than the proposed 2018 EFMP.

Land Use

Under the No Project/No Development Alternative, there would be no change in the existing or planned conditions at the Mt. SAC campus, which is currently developed and operational. This alternative would not result in any direct or indirect physical land use impacts.

The No Project/No Development Alternative would not involve any new development and would not conflict with any local or regional planning programs, although currently allowed development would also not be implemented. Because no entitlement actions or development proposed with the proposed Project would occur, there would be no need to comply with the terms of the MOU between Mt. SAC and the City of Walnut.

Additionally, the No Project/No Development Alternative would not support regional planning policies related to increasing pedestrian mobility and safety and providing the desired resources for students. Therefore, while the No Project/No Development would avoid any physical land use impacts associated with the proposed Project, the proposed 2018 EFMP's inherent benefits would not be achieved.

This impact would be less than the proposed 2018 EFMP.

Noise

The No Project/No Development Alternative would not involve any grading or construction activities. Therefore, the noise and vibration impacts associated with construction activities resulting from the proposed Project would not occur under this alternative. This alternative would not generate noise impacts and impacts would be less than those of the proposed 2018 EFMP (Phases 1A, 1B and 2).

Increases in long-term, traffic-related, and operational noise levels associated with the proposed Project would not occur. Therefore, the noise impacts of this alternative would be less than those of the proposed 2018 EFMP (Phases 1A, 1B and 2).

This impact would be less than the proposed 2018 EFMP.

Population and Housing

As identified in Section 4.12, Population and Housing, of this Draft EIR, Mt. SAC is projecting there will be an increase in the on-campus student population to approximately 14,237 full-time equivalent (FTE) students and 4,810 faculty and staff in 2027 under the medium growth rate scenario and 15,055 FTE students and 5,016 faculty and staff under the high growth scenario. The proposed 2018 EFMP on-campus projects would assist in accommodating the anticipated growth. Under the No Project/No Development Alternative, no new development would occur on campus. Therefore, while there could continue to be some growth on campus under this alternative, it would be limited based on the physical capacity of on campus facilities. Therefore, this alternative is expected to result in reduced population (student, faculty, and staff) growth

compared to the proposed Project, and this impact would be less than significant when considered in the context of local and regional population projections. The population and housing impacts of this alternative would be less than those of the proposed 2018 EFMP (Phases 1A, 1B and 2).

This impact would be less than the proposed 2018 EFMP.

Public Services and Recreation

Under the No Project/No Development Alternative, there is a potential that some population growth would occur on campus; however, it would be less than with the proposed Project. Therefore, the impact of the No Project/No Development Alternative relative to the demand for public services and recreation would be less than the proposed project.

Under the No Project/No Development Alternative, no new educational, athletic or recreational, and support facilities would be developed on campus, and the proposed Project's impacts from construction and operation of these facilities would be avoided. At the same time, the demand for educational and recreational facilities on campus would not be met by this alternative.

The public services and recreation impacts of this alternative would be less than those of the proposed 2018 EFMP (Phases 1A, 1B and 2).

This impact would be less than the proposed 2018 EFMP.

Transportation and Traffic

No construction-related traffic would be generated under the No Project/No Development Alternative. Therefore, this alternative would avoid the proposed Project's construction-related traffic impacts, and the impact would be less than the proposed 2018 EFMP (Phases 1A, 1B and 2).

Under the No Project/No Development Alternative, it is expected that the current trip generation from campus operations, based on the total amount of institutional square footage on campus, would continue. The No Project/No Development Alternative would not change the existing circulation conditions, including the levels of service for study area intersections and roadway segments, because the roadway and intersection improvements that would be implemented as part of the proposed Project would not occur, and there would be no increase in trip generation associated with new development. Notably, proposed improvements along Temple Avenue and Grand Avenue would not be implemented under this alternative. Improvements on internal roads and proposed pedestrian and bicycle facilities on campus would also not occur.

Because there would not be an increase in traffic from new development on campus, and the project-related traffic impacts would not occur, this alternative would have less impacts than the proposed 2018 EFMP related to traffic generation. At the same time, the demand for parking facilities on campus would not be met by this alternative.

This impact would be less than the proposed 2018 EFMP.

Tribal Cultural Resources

In the absence of any construction activities, this alternative would not result in the potential for impacts to tribal cultural resources that may be encountered during grading or construction activities. As such, the potential for impacts to tribal cultural resources resulting from

implementation of the proposed 2018 EFMP (Phases 1A, 1B and 2) would not occur under the No Project/No Development Alternative.

This impact would be less than the proposed 2018 EFMP.

Utilities and Service Systems and Energy

Because there would be no new development under this alternative, the demands for utilities and service systems and energy on campus would remain at existing levels. Although impacts with the proposed Project are less than significant, the impact of the No Project/No Development Alternative relative to utilities and service systems and energy would be less than the proposed Project. The utilities and service systems impacts of this alternative would be less than those of the proposed 2018 EFMP.

This impact would be less than the proposed 2018 EFMP.

Conclusions

Avoid or Substantially Lessen the Significant Impacts of the Project

The No Project/No Development Alternative would avoid most of the potential project impacts from the proposed 2018 EFMP (Phases 1A, 1B and 2), which are less than significant for each environmental topic with adherence to regulatory requirements and project-specific MMs. It is expected that impacts related to population and housing and public services and recreation would be less than the proposed Project, because although there may be some growth in the on-campus population, it would be limited based on the capacity of the existing facilities. With this alternative, there would be no roadway or intersection improvements implemented, nor would any improvements be made to support pedestrian circulation and safety.

Attainment of Project Objectives

The No Project/No Development would not attain any of the proposed 2018 EFMP objectives identified above in Section 5.3.

5.6.2 ALTERNATIVE 2: MEDIUM GROWTH RATE ALTERNATIVE

Description of the Alternative

The purpose of this alternative is primarily to reduce the amount of traffic generated by the proposed 2018 EFMP. As discussed in Section 3.0, Project Description, Mt. SAC projects that its annual growth rate will range between 0.18 and 1.22 percent, with a mid-point of 0.75 percent. For purposes of analysis, this Draft EIR analyzes the high growth rate of 1.22 percent, therefore this alternative involves implementation of the proposed 2018 EFMP based on a medium growth rate of 0.75 percent. As noted in Table 3-2 of the Project Description, the full-time equivalent students (FTES) is projected to increase from 13,185 during the fall semester of 2017 to 14,237 FTES under the medium growth rate, compared to 15,055 students under a high growth rate in the fall semester of 2027. The unduplicated student headcount is projected to increase from 37,864 students (during the fall semester of 2017) to 40,802 students under a medium growth rate, compared to 42,745 students under a high growth rate in the fall semester of 2027. Under this alternative, the increase in daily traffic resulting from the proposed 2018 EFMP for the 2027 horizon year would be reduced from 5,613 daily trips with the proposed Project, to approximately 3,379 daily trips.

The Medium Growth Rate Alternative would continue to construct new and renovate existing buildings and structures, thus resulting in a similar impact footprint. The primary difference in anticipated projects would be the need for less parking which could result in smaller structures or elimination of one or more parking structures.

Comparative Analysis of Environmental Impacts

Aesthetics

Under the Medium Growth Rate Alternative, there would be visual changes resulting from development on campus similar to the proposed 2018 EFMP. Development would continue to occur within the existing campus limits and, although visible from areas surrounding the campus, would represent less than significant impacts. As with the proposed Project, recommended development would not exceed applicable height restrictions (for non-classroom facilities) as set forth by development standards associated with the Schools and Public Institutional (SPI) zone, would be surrounded by existing development, and would not further obstruct any distant or scenic views. Construction activities would be visible throughout the campus; however, consistent with the proposed Project, views of building construction, roadway improvements, and utility installations would be temporary in nature and would not represent a significant impact. Under this alternative, physical development on campus would comply with the provisions of the City's Planning and Zoning Ordinance for non-classroom facilities, unless another zoning exemption is applicable, which addresses visual character, including landscaping, building height, building setbacks, and lighting requirements. Consistent with the proposed Project, development and improvements under the Medium Growth Rate Alternative would add new campus buildings and infrastructure that would maintain or improve the site's visual quality. Therefore, with implementation of identified MMs, the overall aesthetic impacts associated with this alternative would be consistent with the aesthetic impacts associated with the proposed 2018 EFMP.

This impact would be similar to the proposed 2018 EFMP.

Air Quality

As identified above, under the Medium Growth Rate Alternative, there would be a reduction in daily trips, which would potentially result in a slight reduction of development due to a potential reduction in parking facilities. While the proposed Project would result in less than significant construction-related air quality impacts and would not exceed SCAQMD thresholds, the potential for a slight reduction in construction activities associated with this alternative would have reduced construction-related air quality impacts compared to the proposed 2018 EFMP. With implementation of the identified MMs, these impacts would be reduced to a level considered less than significant.

Under the Medium Growth Rate Alternative, the net increase in FTES students on campus would be reduced approximately 40 percent compared to the proposed 2018 EFMP (2,938 compared to 4,881). Therefore, there would be a corresponding decrease in daily trips generated. As shown in Table 5-1 under Transportation/Traffic, below, the average daily trips from all campus operations with the Medium Growth Rate Alternative would be reduced from 5,613 to 3,379 daily trips, a reduction of 2,234 daily trips compared to the proposed Project. With the reduction in trip generation, this alternative would also have reduced air pollutant emissions from mobile sources compared to the proposed 2018 EFMP. Because there would be a slight reduction in the amount of physical development with this alternative compared to the proposed Project, area source emissions of volatile organic compounds (VOCs) from consumer products and source emissions

from architectural coating associated with routine maintenance would be slightly reduced in comparison to the proposed 2018 EFMP.

Therefore, there would be an overall reduction in air quality emissions (project-specific and cumulative) with the Medium Growth Rate Alternative compared to the proposed Project due to the reduction in daily trips as well as a potential reduction in the amount of parking facilities to be constructed, including parking structures. However, as identified in Table 4.2-8, in Section 4.2, Air Quality, of this Draft EIR, the proposed Project would not exceed the SCAQMD thresholds of significance and operational impacts would be less than significant. Therefore, this alternative would also have a less than significant impact related to operational air quality emissions and the impact could be less than proposed 2018 EFMP.

Because the development proposed under this alternative does not conflict with the WGP and City's zoning assumptions, it is also consistent with the assumptions for the City included in the AQMP; therefore, this alternative would not conflict with the AQMP, consistent with the proposed 2018 EFMP.

This impact would be less than the proposed 2018 EFMP.

Biological Resources

Under the Medium Growth Rate Alternative, there would be new construction and renovation of existing buildings and structures throughout the campus, similar to the proposed Project and thus impacting biological resources. With implementation of the identified MMs, these impacts would be reduced to a level considered less than significant. Because the type and amount of sensitive habitat that would be impacted by this alternative would be similar to the proposed Project and the type of construction activities and operational activities on campus would be the same, direct and indirect impacts resulting from the Medium Growth Rate Alternative would be similar to the proposed 2018 and would be less than significant.

This impact would be similar to the proposed 2018 EFMP.

Cultural Resources

Under the Medium Growth Rate Alternative, the physical impact area and amount of required grading/excavation for development would be similar to the proposed 2018 EFMP, therefore, potential impacts to unknown archaeological and paleontological resources would be similar to the proposed Project. With implementation of the identified MMs, these impacts would be reduced to a level considered less than significant. Additionally, the demolition of Buildings 17, 18, 19A, 19B, and 20 would continue to occur to accommodate the proposed Student Center and Central Campus Infrastructure and Bookstore. As discussed in Section 4.4, Cultural Resources, these buildings contribute to the Mt. SAC Historic District; therefore, demolition of these buildings would continue to be a significant and unavoidable impact despite implementation of identified MMs under the Medium Growth Rate Alternative.

This impact would be similar to the proposed 2018 EFMP.

Energy

As with the proposed 2018 EFMP, the Medium Growth Rate Alternative would involve an increase in demand for energy and the installation of new utility lines to serve the recommended uses on campus. The physical impacts associated with installation of utility infrastructure would be similar to the proposed 2018 EFMP as addressed throughout Sections 4.1 through 4.16 of this Draft EIR and would be less than significant and no mitigation would be required. Therefore, the Medium Growth Rate Alternative would have similar less than significant impacts as the proposed 2018 EFMP relative to energy.

This impact would be similar to the proposed 2018 EFMP.

Geology and Soils

Based on the geotechnical evaluations that have been completed for development on the campus, there are no major geologic or seismic hazards within the proposed 2018 EFMP development areas. Geologic and seismic considerations such as the potential for ground shaking, liquefaction, landslides, lateral spreading, subsidence, compressible soils and settlement, and unsuitable soils have been evaluated and determined to be manageable relative to proposed Project development with implementation of the identified MMs. Given that, from a geotechnical perspective, the development area with the proposed Project and this alternative is the same and the land use types anticipated under each development scenario are not substantially different from a geotechnical and seismic safety standpoint, it is likely that development on campus under this alternative would have impacts related to geology and seismicity similar to those associated with the proposed 2018 EFMP. Potential impacts from the proposed Project and this alternative can be reduced to a level considered less than significant with implementation of the identified MMs. Comparing this alternative to the proposed Project, there is no substantial difference from a geotechnical and safety standpoint; therefore, the geology and soils impacts of this alternative would be similar to those of the proposed 2018 EFMP.

This impact would be similar to the proposed 2018 EFMP.

Greenhouse Gas Emissions

As described above under the Medium Growth Rate Alternative for Air Quality, the net amount of increased development on campus would be slightly reduced compared to the proposed 2018 EFMP. Therefore, there would also be an overall reduction in GHG construction-related and operational GHG emissions. As detailed in Section 4.7, Greenhouse Gas Emissions, with the proposed Project, the total net increase in GHG emissions would be below the threshold of 3,000 $MTCO_2e$ with implementation of the identified MM. The reduced GHG emissions resulting from this alternative would also be well below the SCAQMD draft threshold with implementation of the identified MM. Additionally, this alternative and the proposed 2018 EFMP would not conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions.

The Medium Growth Rate Alternative and the proposed Project would have a less than significant impact related to GHG emissions.

This impact would be less than the proposed 2018 EFMP.

Hazards and Hazardous Materials and Wildfire

With the same type of development as the proposed 2018 EFMP, the hazards and hazardous materials impacts resulting from operation of the Medium Growth Rate Alternative would be similar to the proposed Project. Impacts would be less than significant and no mitigation would be required.

The potential wildfire hazards for this alternative would be similar to the proposed Project because the alternative would not be located within a designated Very High Fire Hazard Severity Zone and all proposed structures would be constructed to meet current building and fire codes, and the buildings would be sprinklered accordingly. As with implementation of the proposed 2018 EFMP, potential impacts related to fire hazards are less than significant.

This impact would be similar to the proposed 2018 EFMP.

Hydrology and Water Quality

Development under the Medium Growth Rate Alternative would result in an increase in the amount and velocity of surface water runoff, similar to the proposed 2018 EFMP, due to the increased amount of impervious surfaces. As with the proposed Project, implementation of identified MMs requiring application of BMPs would ensure that the impact to storm drain infrastructure is less than significant.

As with the proposed Project, there is a potential for sediments and non-sediment-related pollutants to enter stormwater flows with this alternative; potential impacts would be similar to the proposed 2018 EFMP. As with the proposed Project, with implementation of identified MMs, the potential impacts related to erosion during construction from this alternative would be less than significant.

Similar to the proposed Project, the Medium Growth Rate Alternative would result in an increase in surface runoff after build-out due to the increase in impervious surface. However, this runoff is likely to include pollutants consistent with the existing campus developed areas. With implementation of the identified MMs, water quality impacts from campus operations under this alternative would be reduced to a level considered less than significant, similar to the proposed 2018 EFMP.

This impact would be similar to the proposed 2018 EFMP.

Land Use

The Medium Growth Rate Alternative would generally result in the same type and amount of development as the proposed 2018 EFMP except for a potential slight reduction in parking facilities due to the reduction in FTES count and associated trips. Like the proposed Project, the alternative does not propose any modifications to the West Parcel site and would, therefore, be consistent with and not impede implementation of the MOA with the City of Walnut. In addition, the alternative would propose the same development as the proposed 2018 EFMP, aside from a potential slight reduction in parking facilities, and would be consistent with relevant goals and policies in the WGP and SCAG's 2016–2040 RTP/SCS. As with the proposed Project, colleges would be permitted uses in the SPI zone and, thus the alternative, which will maintain the use of Mt. SAC as a community college, would be a permitted use. In addition, improvements under the alternative, which would be the same as the proposed 2018 EFMP minus a possible slight reduction in parking facilities, are permitted uses in the proposed SPI Zone.

Consistent with the proposed 2018 EFMP, this alternative would not result in land use or planning impacts and no mitigation would be required.

This impact would be similar to the proposed 2018 EFMP.

Noise

The Medium Growth Rate Alternative would generally result in the same type and amount of development as the proposed Project except for a potential slight reduction in parking facilities due to the reduction in FTES count and associated trips. Therefore, the amount of construction associated with the Medium Growth Rate Alternative would be similar compared to the proposed 2018 EFMP, with the same types of construction activities as the proposed Project. Therefore, the noise levels generated from construction would be the same with this alternative as the proposed Project. As with the proposed 2018 EFMP, grading and construction activities would be conducted in compliance with the City's Noise Ordinance. Similar to the proposed Project, vibration impacts would be less than significant and short-term construction-related noise impacts would be reduced compared to the proposed 2018 EFMP and would be less than significant with implementation of the project-specific MM.

This alternative would generate less traffic compared to the proposed Project and would generate less traffic noise. The noise generated from stationary on-campus uses from this alternative would be similar to the proposed 2018 EFMP and would be less than significant.

Due to the reduction in operational noise, this impact would be less than the proposed 2018 EFMP.

Population and Housing

With implementation of the Medium Growth Rate Alternative, the potential increase in the on-campus population (faculty, students, and staff) would be the same as the proposed 2018 EFMP, and the impact would therefore be less than significant and no mitigation would be required.

This impact would be similar to the proposed 2018 EFMP.

Public Services and Recreation

The increase in demands for public services and facilities under the Medium Growth Rate Alternative would be similar to that of the proposed 2018 EFMP and would be less than significant.

This alternative would involve implementation of the same recreational and athletic facilities as the proposed Project. Therefore, the physical environmental impacts associated with construction of such facilities would also be the same as the proposed 2018 EFMP. Therefore, the impact of this alternative relative to recreation would be the same as the proposed Project. Impacts resulting from construction and operation of new and modified athletic and recreational facilities under this alternative would be less than significant with incorporation of the identified RRs.

This impact would be similar to the proposed 2018 EFMP.

Transportation/Traffic

As identified in Section 4.14, Transportation/Traffic, of this Draft EIR, and summarized in Table 5-1 below, with implementation of the proposed 2018 EFMP, the college is forecast to generate 5,613 daily trips, with 537 AM peak hour trips (435 inbound and 102 outbound trips) and 537 PM

peak hour trips (301 inbound and 236 outbound trips). Under this alternative, the increase in daily traffic resulting from the proposed Project for the 2027 horizon year would be reduced from 5,613 daily trips with the proposed 2018 EFMP, to approximately 3,379 daily trips. As shown in Table 5-2 below, this includes 323 AM peak hour trips (262 inbound and 61 outbound trips) and 323 PM peak hour trips (181 inbound and 142 outbound trips). Therefore, under this alternative there would be a reduction in the amount of traffic generated.

TABLE 5-1
TRIP GENERATION PROPOSED PROJECT (HIGH GROWTH RATE)

ITE LU 540 (10th Edition) - Junior/Community College						
Students				**4,881**		
Period	**Trips/Unit**	**Trips**	**% In**	**% Out**	**Trips In**	**Trips Out**
AM Peak	0.11	537	81%	19%	435	102
PM Peak	0.11	537	56%	44%	301	236
Daily	1.15	5,613	50%	50%	2,807	2,807

TABLE 5-2
TRIP GENERATION MEDIUM GROWTH RATE ALTERNATIVE

ITE LU 540 (10th Edition) - Junior/Community College						
Students				**2,938**		
Period	**Trips/Unit**	**Trips**	**% In**	**% Out**	**Trips In**	**Trips Out**
AM Peak	0.11	323	81%	19%	262	61
PM Peak	0.11	323	56%	44%	181	142
Daily	1.15	3,379	50%	50%	1,689	1,689

Under this alternative, there would be a reduction of approximately 2,234 daily trips, 214 AM peak hour trips, and 214 PM peak hour trips.

The proposed 2018 EFMP would result in significant impacts to 15 intersections. With implementation of MMs, impacts at 11 of the 15 intersections would be reduced to less than significant levels. However, even with the implementation of MMs, the potential intersection impacts resulting from the proposed Project at the intersection of Amar Road at Meadow Pass Road, Temple Avenue at Grand Avenue, and Mountaineer Road at Grand Avenue, and Valley Boulevard at Grand Avenue would still occur.

The Medium Growth Rate Alternative would reduce traffic impacts to less than significant levels at 11 intersections when compared to the traffic impacts at 15 intersections associated with the proposed 2018 EFMP. However, with the implementation of the identified MMs, potential intersection impacts resulting from implementation of this alternative would be avoided at the intersections of Amar Road at Meadow Pass Road, Temple Avenue at Grand Avenue, and Mountaineer Road at Grand Avenue. Even with the reduction in traffic, significant and unavoidable impacts at Valley Boulevard at Grand Avenue would still occur. The construction-related traffic impacts from this alternative would similar to the proposed 2018 EFMP as construction activities would be the same. Construction impacts would be reduced to less than significant levels with implementation of identified MMs.

Consistent with the proposed 2018 EFMP, the construction-related and operational traffic impacts from this alternative would be less than significant with implementation of project-specific MMs.

This impact would be less than the proposed 2018 EFMP.

Tribal Cultural Resources

Under the Medium Growth Rate Alternative, the physical impact area and amount of required grading/excavation for development would be similar to the proposed 2018 EFMP, therefore, potential impacts to tribal cultural resources would be similar to the proposed Project. With implementation of the identified MMs, these impacts would be reduced to a level considered less than significant.

This impact would be similar to the proposed 2018 EFMP.

Utilities and Service Systems

As with the proposed 2018 EFMP, the Medium Growth Rate Alternative would involve an increase in demand for utilities and energy and the installation of new utility lines to serve the recommended uses on campus. The physical impacts associated with installation of utility infrastructure would be similar to the proposed 2018 EFMP as addressed throughout Sections 4.1 through 4.16 of this Draft EIR and would be less than significant and no mitigation would be required. Additionally, there would be sufficient water supplies available from MWD to serve the proposed Project and this alternative. Therefore, the Medium Growth Rate Alternative would have similar less than significant impacts as the proposed 2018 EFMP relative to utilities and service systems.

This impact would be similar to the proposed 2018 EFMP.

Conclusions

Avoid or Substantially Lessen the Significant Impacts of the Proposed Project

As described above and summarized in Table 5-2 at the end of this section, the Medium Growth Rate Alternative would have reduced construction-related impacts compared to the proposed 2018 EFMP (i.e., air quality, GHG emissions, noise, traffic) due to the reduction in daily trips, which would potentially result in a slight reduction of development due to a potential reduction in parking.

Because the site conditions and operations for this alternative are generally the same as the proposed Project (with the potential for a slight reduction parking), physical impacts resulting from this alternative would also be similar to the proposed Project. This alternative would result in a similar magnitude of impacts related to aesthetics, biological resources, cultural resources (archaeology), energy, geology/soils, hazards and hazardous materials and wildfire, hydrology and water quality, land use and planning, population and housing, public services and recreation, tribal cultural resources, and utilities and service systems. However, the impacts from the proposed 2018 EFMP and this alternative would be less than significant.

This alternative would continue to construct new and renovate existing buildings and structures, thus resulting in a similar impact footprint when compared to the proposed Project. The primary difference in anticipated projects would be the need for less parking which could result in smaller structures or elimination of one or more parking structures. Thus, the overall amount of development on campus with the Medium Growth Rate would be similar to the proposed 2018 EFMP.

The Medium Growth Rate would involve demolition of Buildings 17, 18, 19A, 19B, and 20 to accommodate construction of the Student Center and Central Campus Infrastructure and Bookstore, which would continue to result in a significant and unavoidable impact related to demolition of buildings that contribute to the Mt. SAC Historic District.

The Medium Growth Rate Alternative would result in a reduction in trip generation (daily trips, PM peak hour, and AM peak hour). Therefore, this alternative would result in an overall reduction in operational air quality, GHG emissions, traffic-related noise, and traffic impacts. However, while this alternative would result in an overall reduction in traffic related impacts, a significant and unavoidable traffic impact would occur at one intersection.

Attainment of Project Objectives

The Medium Growth Rate Alternative would achieve the following proposed Project objectives:

2. Implement the facilities, site improvement, and infrastructure needed to support the growth projected for instructional programs and support services at Mt. SAC.
3. Maximize functional space and eliminate non-functional space on campus, including by removing and replacing temporary facilities with permanent facilities in a timely manner, and renovating or replacing aged and outdated facilities.
4. Improve the utilization of space on campus by replacing small single-story buildings with multi-story buildings and consolidating open space into usable-sized portions.
5. Improve the efficiency of space on campus by aligning the classroom inventory with class sizes, and building flexible, multi-use/multi-purpose spaces, and spaces that can be readily reconfigured by occupants.
6. Ensure safety of faculty, staff, and students by upgrading or replacing aging, seismically unsafe buildings and facilities.
7. Promote sustainable facilities design, construction, and operations.
8. Improve pedestrian and vehicular access and circulation on campus.
9. Upgrade classroom and laboratory spaces to provide students with up-to-date skills and modern technology.
10. Upgrade school security to keep students safe by installing emergency mass notification beacons and marquees, outdoor lighting, and up-to-date security measures including improved security and emergency communication systems and infrastructure.

The following project objective would not be met to the same extent as the proposed 2018 EFMP:

1. Provide an affordable local alternative to four-year universities for local students and returning veterans.

The Medium Growth Rate Alternative would involve a reduction in FTES and unduplicated student headcount, which would reduce opportunities to serve the anticipated student demand. Because the Medium Growth Rate Alternative would limit the number of students enrolled at Mt. SAC, a portion of the potential student population would be forced to either seek education elsewhere or forgo their educational experience. The Medium Growth Rate Alternative would, however, continue to involve construction of new, and renovation of existing, buildings and structures, thus resulting in a similar impact footprint in comparison to the proposed 2018 EFMP. The primary

difference with the proposed Project would be the need for less parking which could result in smaller structures or elimination of one or more parking structures.

5.7 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

CEQA requires the identification of an environmentally superior alternative. Section 15126.6(e)(2) of the State CEQA Guidelines states that if the No Project Alternative is the environmentally superior alternative, then the Draft EIR shall also identify an environmentally superior alternative among the other alternatives. Table 5-3 provides, in summary format, a comparison of the impacts for each alternative to the proposed Project. Table 5-3 identifies whether the respective alternatives would have similar, reduced (less), or greater impacts compared to the proposed 2018 EFMP's impacts.

The No Project/No Development Alternative has the least impact to the environment because it would not involve any construction activities and would not involve any increase in the amount of educational, recreational, and support uses on campus. There would be no construction-related impacts, and no change in the physical conditions of the campus from the No Project/No Development Alternative. It is expected that there could still be an increase in the student population with this alternative, and an associated (and slight) increase in demand for public services, utilities, and potentially traffic and related air quality, GHG and noise impacts. It should be noted that any traffic impacts associated with the No Project/No Development Alternative would not be subject to mitigation; therefore, impacts could be greater than with the proposed Project. While this alternative would reduce most of the proposed 2018 EFMP's less than significant effects, none of the proposed Project objectives would be met.

The Medium Growth Rate Alternative has been identified as the environmentally superior alternative. As shown in Table 5-3, the Medium Growth Rate Alternative would have less overall impacts than the proposed Project. It would have "less" impacts for four impact categories, compared to the proposed 2018 EFMP. The Medium Growth Rate Alternative has less impacts related to traffic-related impacts (including air quality pollutant and GHG emissions and noise). However, the Medium Growth Rate Alternative would have the same significant and unavoidable impacts as the proposed Project as it relates to Cultural Resources (historical resources) and this significant and unavoidable impact would not be avoided.

While the Medium Growth Rate Alternative is environmentally superior to the proposed 2018 EFMP, it does not meet the proposed Project objectives to the same extent as the proposed Project. Under the Medium Growth Rate Alternative, the currently approved 2015 FMPU would be updated; however, this alternative would not serve the potential student population to the same extent as the proposed 2018 EFMP.

TABLE 5-3
COMPARISON OF THE ALTERNATIVES TO THE PROPOSED PROJECT

Environmental Issue	Proposed Project	No Project/No Development		Medium Growth Rate	
	Impact Level	Impact Level	Comparison to Proposed 2018 EFMP	Impact Level	Comparison to Proposed 2018 EFMP
Aesthetics	LSM	No Impact	Less	LSM	Similar
Air Quality	LSM	No Impact	Less	LSM	Less
Biological Resources	LSM	No Impact	Less	LSM	Similar
Cultural Resources	SU	No Impact	Less	SU	Similar
Energy	LS	No Impact	Less	LS	Similar
Geology and Soils	LSM	No Impact	Less	LSM	Similar
Greenhouse Gas Emissions	LSM	No Impact	Less	LSM	Less
Hazards and Hazardous Materials and Wildfire	LS	No Impact	Less	LS	Similar
Hydrology and Water Quality	LSM	No Impact	Less	LSM	Similar
Land Use and Planning	LS	No Impact	Less	LS	Similar
Noise	LSM	No Impact	Less	LSM	Less
Population and Housing	LS	No Impact	Less	LS	Similar
Public Services and Recreation	LS	No Impact	Less	LS	Similar
Transportation/Traffic	SU	No Impact	Less	SU	Less
Tribal Cultural Resources	LSM	No Impact	Less	LSM	Similar
Utilities and Service Systems	LS	No Impact	Less	LS	Similar
LS: Less Than Significant, LSM: Less Than Significant After Mitigation, SU: Significant and Unavoidable,					

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SECTION 6.0
OTHER CEQA CONSIDERATIONS

Section 15126 of the California Environmental Quality Act (CEQA) Guidelines requires that all aspects of a proposed Project (including planning, acquisition, development, and operation) be considered when evaluating the proposed Project's impact on the environment. Section 15126 also sets forth general content requirements for Environmental Impact Reports (EIRs). The significant environmental effects of the proposed 2018 EFMP are discussed in Sections 4.1 through 4.16 of this Draft EIR, and summarized in Section 1.0, Executive Summary. As addressed through the analysis presented in this Draft EIR, with implementation of project-specific mitigation measures, there are significant environmental effects related to Cultural Resources and Transportation/Traffic, which cannot be avoided if the proposed 2018 EFMP is implemented.

This section identifies (1) effects determined not to be significant; (2) significant irreversible environmental changes that would result from implementing the proposed Project; and (3) growth-inducing impacts of the proposed 2018 EFMP.

6.1 EFFECTS DETERMINED NOT TO BE SIGNIFICANT

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 proposed 2018 EFMP site, Mt. SAC has determined that detailed discussions for agricultural resources (designated farmland), forestry resources, and mineral resources are not required because the proposed Project would result in effects found not to be significant due to the lack of resources on the proposed 2018 EFMP site.

6.2 SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL CHANGES WHICH WOULD BE CAUSED BY THE PROPOSED PROJECT SHOULD IT BE IMPLEMENTED

Section 15126(c) of the CEQA Guidelines requires that a Draft EIR describe any significant irreversible environmental changes which would occur as a result of the proposed action should it be implemented. The Mt. SAC campus in the City of Walnut is currently developed with various uses including 144 Buildings (1,707,128 gross square feet [gsf]), various athletic and recreation facilities, and surface parking lots. The long-term commitment of land resources to a college campus has already occurred with previous development on campus, with the opening of the college in fall of 1946. Additionally, as described in Section 3.0, Project Description, of this Draft EIR, the currently approved 2015 Facilities Master Plan Update, Physical Education Project (Phase 1 and 2), West Parcel Site Improvements, and the Transit Center allows for the development of up to approximately 222,730 gsf of institutional uses. Implementation of the proposed 2018 EFMP would include removal/demolition of 33 aged and/or temporary facilities (approximately 207,805 gsf of building space); 13 new buildings (approximately 752,000 gsf), including construction of 10 major buildings; up to four parking structures would be constructed; and 9 buildings (405,023 gsf) would be renovated. Therefore, should the proposed 2018 EFMP be fully implemented, there would be approximately 2,474,053 gsf of building space on campus (including the previously approved Physical Education Project [PEP]). This represents a net increase of approximately 766,925 gsf compared to existing conditions when taking into consideration the PEP, and a net increase of approximately 544,195 gsf when considering the recommended development under Phases 1A, 1B and 2 of the proposed 2018 EFMP.

The proposed Project would convert existing developed and undeveloped areas on the campus to uses that would further serve the college, resulting in a continuation of the long-term

commitment of land resources to these uses. Construction and long-term operation of the proposed 2018 EFMP would require the commitment and reduction of nonrenewable and/or slowly renewable resources, including petroleum fuels, and natural gas (for vehicle emissions, construction, lighting, heating, and cooling of structures); and lumber, sand/gravel, steel, copper, lead, and other metals (for use in building construction, piping, and roadway infrastructure). Other resources that are slow to renew and/or recover from environmental stresses would also be impacted by proposed Project implementation, such as air quality through the combustion of fossil fuels and production of greenhouse gases; and water supply through the increased potable water demands for drinking, cooking, cleaning, landscaping, and general maintenance needs. An increased commitment of public services (e.g., police, fire, and sewer and water services) would also be required. Therefore, implementation of the proposed 2018 EFMP results in an irreversible commitment of land, energy resources, and public services. Restoration of the campus to pre-developed conditions would not be feasible given the degree of disturbance, the urbanization of the area, and the level of capital investment.

6.3 GROWTH-INDUCING IMPACTS OF THE PROPOSED ACTION

Pursuant to Sections 15126(d) and 15126.2(d) of the CEQA Guidelines, this section is provided to examine ways in which the proposed 2018 EFMP could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. To address this issue, potential growth-inducing effects are examined through analysis of the following questions:

1. Would this proposed Project remove obstacles to growth (e.g., through the construction or extension of major infrastructure facilities that do not presently exist in the project area or through changes in existing regulations pertaining to land development)?
2. Would this proposed Project result in the need to expand one or more public services to maintain desired levels of service?
3. Would this proposed Project encourage or facilitate economic effects that could result in other activities that could significantly affect the environment?
4. Would approval of this proposed Project involve some precedent-setting action that could encourage and facilitate other activities that could significantly affect the environment?

Growth-inducing effects are not necessarily beneficial, detrimental, or of little significance to the environment (CEQA Guidelines, Section 15126.2(d)). This issue is presented to provide additional information on ways in which the proposed 2018 EFMP could contribute to significant changes in the environment, beyond the direct consequences of implementing the proposed Project examined in the preceding sections of this Draft EIR. It should also be noted that while implementation of the proposed 2018 EFMP would result in new development on campus, the associated increases in population are not considered to be the result of growth inducement, but rather reflects the accommodation of growth already anticipated by the recently adopted 2018 City of Walnut General Plan (2018 WGP) and SCAG ‘s Regional Growth Forecast. Section 4.12, *Population and Housing* provides additional discussion regarding such growth.

1. ***Would this proposed Project remove obstacles to growth (e.g., through the construction or extension of major infrastructure facilities that do not presently exist in the project area, or through changes in existing regulations pertaining to land development)?*** As discussed in Section 3.0, Project Description, no major new infrastructure facilities are required to accommodate the proposed 2018 EFMP. On-campus vehicular circulation improvements are proposed at the intersections of Temple Avenue/Bonita Way and Parking Structure S (Phase 1A), Temple Avenue/Mt. SAC Way

(Phase 1B), and Grand Avenue/San Jose Hills Road (Phase 2). Roadway improvements are proposed on campus at La Puente Drive, Grand Avenue/Mountaineer Way and Farm Precinct. In addition, a new emergency access route connecting Bonita Drive to the southern campus boundary is proposed. These improvements are recommended as part of the proposed 2018 EFMP to address existing conditions and respond to input from students and community members about the need to improve wayfinding, safety, and to improve the flow of vehicles within the campus and on the adjacent public roadways. They would also address the increased traffic volumes that would be generated by the proposed Project. However, the proposed intersection and roadway improvements would not provide additional capacity that would induce unplanned growth.

Existing backbone wet and dry utility infrastructure is currently installed within or in the vicinity of the campus. The backbone infrastructure would be protected in place during construction and operation. However, implementation of the proposed 2018 EFMP would involve removal of existing utility infrastructure on campus, and construction of new utility infrastructure, as necessary to serve the proposed facilities and site improvements. The utility infrastructure installed as part of the proposed Project would be sized and located expressly to serve the campus (existing and proposed uses), and would not, therefore, induce growth in the proposed 2018 EFMP vicinity.

The proposed 2018 EFMP identifies the framework for the uses and development of land on campus necessary to accommodate an identified level of enrollment and physical development. Relevant to Mt. SAC, on September 5, 2018, the City of Walnut Planning Commission adopted PC Resolution No. 18-12 recommending that the City Council adopt Zoning Code Amendment (ZCA) No. 2018.01, Zone Change (ZC) No. 2018-02, and Negative Declaration (ND) No. 2018-01 to establish the School and Public Institution Ordinance and Zone(s) for consistency with the recently adopted 2018 *City of Walnut General Plan* (2018 WGP). On January 9, 2019, The ZCA and ZC were presented to the Walnut City Council for review and the Council moved to continue the item until the settlement agreement between Mt. SAC and the City of Walnut is approved and enforceable. As noted above, at this time the settlement agreement has not been finalized or approved by the governing bodies Mt. SAC and the City. Relevant components of the ZCA and ZC are discussed below under the City of Walnut. With adoption of the ZCA and ZC, which involves zoning the portion of the Mt. SAC campus east of Grand Avenue as Schools and Public Institutional zone, Mt. SAC would be required to comply with established zoning regulations. For educational facilities, the Mt. SAC Board of Trustees may exempt Mt. SAC from the City's zoning requirements, pursuant to the provisions of CGC Section 53094(b).

Table 4.10-3 in Section 4.10, *Land Use and Planning*, identifies the permitted, conditionally permitted, and prohibited uses and activities for the proposed SPI zone. As shown, colleges would be permitted uses in the SPI zone and, thus the proposed Project, which will maintain the use of Mt. SAC as a community college, would be a permitted use. In addition, specific improvements under the proposed 2018 EFMP (such as the proposed Student Center facility, sand volleyball courts and tennis courts, Science facility, Bookstore facility, Makerspace facility, Library/Learning Resource facility, Student Services North facility, Technical Education facility, Campus Safety facility, School of Continuing Education facility, parking structures and parking lot reconfiguration, building renovations and demolitions, pedestrian bridges, landscaping, public art and signs, and utility infrastructure and roadway improvements) would be allowed on campus since libraries, related classroom facilities, parking facilities, pedestrian bridges, and related amenities are permitted uses in the proposed SPI Zone. Also, the proposed Auditorium, Fire Training

facility, Reuse Depot, and maintenance and transportation building and theater renovations are permitted subject to conditional use permits. As noted above, to the extent such projects are educational facilities, Mt. SAC may exempt itself form conditional use permit requirements.

Approval of the proposed 2018 EFMP and associated discretionary actions would not remove an existing regulatory obstacle to growth, but rather, would redefine the nature of such growth. The continued development of the campus pursuant to existing entitlements would not encourage growth through the provision of new and essential public services or access opportunities, nor would it result in urbanization of land in a remote location. The proposed Project is not, therefore, considered to be growth inducing with respect to removal of obstacles to growth. Additionally, as discussed in Section 4.10, Land Use and Planning, the proposed 2018 EFMP would be consistent with the goals/policies of the 2018 WGP and other relevant planning documents that address development within the City of Walnut.

2. ***Would this proposed Project result in the need to expand one or more public services to maintain desired levels of service?*** As discussed in Section 4.13, Public Services and Recreation, the proposed Project would potentially increase the demand for public services (police and fire) but would not necessitate the expansion of existing public service facilities in order to maintain desired levels of service. In the event that these facilities or associated resources do need to be expanded, funding mechanisms are in place through existing regulations and standard practices to accommodate such growth. The proposed 2018 EFMP would not, therefore, have significant growth-inducing consequences with respect to public services.

3. ***Would this proposed Project encourage or facilitate economic effects that could result in other activities that could significantly affect the environment?*** During project-specific construction associated with the proposed 2018 EFMP, a number of design, engineering, and construction-related jobs would be created, which would last until project-specific construction is completed. This would provide economic stimulus in the area; however, these jobs are typically filled by existing residents of the region and would not be substantial enough to foster other activities that would have significant effects on the environment.

   In addition, the proposed 2018 EFMP would result in the addition of between 926 and 1,557 students and between 313 and 519 employees. However, as discussed in Section 4.12, Population and Housing, this proposed increase in individuals on campus is within the SCAG 2016-2040 RTP/SCS Growth Forecast. Additionally, the faculty/staff positions are typical of higher education institutions in the region and may not offer a unique enough opportunity to induce job seekers to relocate to the area for the sole purpose of filling these positions. While some faculty/staff may transfer into the area to fill these positions, it is expected that qualified area residents would fill the vast majority of additional faculty and staff positions. Similarly, it is anticipated that construction employees would commute from elsewhere in the region, rather than relocate to the Walnut area for a temporary construction job. Nonetheless, implementation of the proposed 2018 EFMP may result in the creation of indirect and induced jobs. Indirect jobs are those that would be created when the campus purchases goods and services from businesses in the region, and induced jobs are those that are created when wage incomes of those employed in direct and indirect jobs are spent on the purchase of goods and services in the region.

4. ***Would approval of this project involve some precedent-setting action that could encourage and facilitate other activities that could significantly affect the environment?*** As discussed previously, the proposed Project involves facilities and site and infrastructure improvements anticipated to occur with implementation of the proposed 2018 EFMP during the 10-year horizon period (Phases 1A, 1B, and 2). The proposed Project does not involve any changes in the type or amount of allowed development on campus or the City. Additionally, these actions, which include new and different restrictions to campus operations, are project-specific and would not encourage and facilitate other activities. The campus would continue to function as a college and would be consistent with existing land use and planning policies.

   No changes to any of the City's building safety standards (i.e., building, grading, plumbing, mechanical, electrical, fire codes) are proposed or required to implement the proposed 2018 EFMP. Regulatory requirements, and project-specific mitigation measures have been identified in Sections 4.1 through 4.16 to ensure that implementation of the proposed Project complies with all applicable City plans, policies, and ordinances, as applicable, to ensure that there are no conflicts with adopted land development regulations and that environmental impacts are minimized. The proposed 2018 EFMP does not propose any precedent-setting actions that, if approved, would specifically allow or encourage other projects and resultant growth to occur.

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SECTION 7.0
LIST OF EIR PREPARERS AND PERSONS CONSULTED

7.1 EIR PREPARERS

7.1.1 MT. SAN ANTONIO COLLEGE (LEAD AGENCY)

Gary Nellesen ..... Director, Facilities Planning and Management
Bill Asher ..... Assistant Director, Facilities Planning and Management
Mikaela Klein ..... Senior Facilities Planner
Gary Gidcumb ..... Senior Manager, Construction Projects
Carol J.L. Minning ..... Manager, Construction Projects
Matt Thatcher ..... Special Project Manager, Maintenance
Ken McAlpin ..... Manager, Custodial Services

7.1.2 PSOMAS (EIR CONSULTANT)

Jennifer Marks ..... Project Manager
Aimee Frappied ..... Assistant Project Manager
Julie A. Cho ..... Assistant Project Manager
Tin Cheung ..... Director of Air Quality and Noise Programs
Daria Sarraf ..... Environmental Planner
Charles Cisneros ..... Cultural Resources Manager
Melissa Macias ..... Paleontologist
Kassie Sugimoto ..... Archaeologist
Steve Norton ..... Senior Biologist
Allison Rudalevige ..... Senior Biologist
Sheryl Kristal ..... Senior Word Processor
Linda St. John ..... Technical Editor
Michael Deseo ..... GIS Specialist
Darlene Danehy ..... Traffic Engineer
Alysen Weiland ..... Senior Project Manager (Stormwater and Drainage)

7.2 EIR CONTRIBUTORS

7.2.1 HMC ARCHITECTS

Sheryl Sterry ..... Senior Education Facilities Planner
Emilie Waugh ..... Educational and Facilities Planning Leader

7.2.2 HPI ARCHITECTURE

Ammar Sarsam .....Principal, Operations

7.2.3 SWA GROUP

Jana Wehby .....Associate, Landscape Architect

7.2.4 ASM AFFILIATES (HISTORIC RESOURCES)

Shannon Davis..... Director, Architectural History

7.2.5 BKF ENGINEERS (HYDROLOGY)

Bruce Kirby .....Engineer

7.2.6 CONVERSE CONSULTANTS (GEOLOGY)

Siva K Sivathasan..... Senior Vice President/Principal Engineer
Mark B. Schluter ..... Senior Engineering Geologist
Parameswaran Ariram .....Senior Staff Engineer

7.2.7 P2S ENGINEERING (UTILITIES)

Aravind Batra .....Vice President and Higher Education Public Market Segment Leader

7.2.8 STRADLING YOCCA CARLSON & RAUTH

Sean B. Absher, Esq.....Attorney

7.3 ORGANIZATIONS AND PERSONS CONSULTED

7.3.1 NATIVE AMERICAN TRIBES

Andrew Salas..... Chairman, Gabrieleño Band of Mission Indians – Kizh Nation

PSOMAS

3 Hutton Centre Drive
Suite 200
Santa Ana, CA 92707
714.751.7373 Phone
714.545.8883 Fax
www.Psomas.com