
**CALIFORNIA STATE UNIVERSITY EAST BAY
LIBRARY REPLACEMENT PROJECT**

ADDENDUM TO

HAYWARD CAMPUS MP FEIR (SCH No. 2008042100)

April 11, 2018

Prepared For:

The Trustees of the California State University
400 Golden Shore
Long Beach, California 90802

Locally Represented By:

California State University, East Bay Hayward
25800 Carlos Bee Boulevard
Hayward, California 94542
Contact: Winifred Kwofie, Associate Vice-President
winnie.kwofie@cuseastbay.edu

Prepared By:

Impact Sciences, Inc.
505 14th Street, Suite 1230
Oakland, CA 94612
(510) 267-0494
Contact: Paul Stephenson, Senior Project Manager

TABLE OF CONTENTS

Section	Page
1.0 Introduction	1
2.0 CEQA Requirements.....	2
3.0 Project Description	3
4.0 Environmental Factors Potentially Affected.....	8
4.1 Aesthetics	10
4.2 Agriculture and Forestry Resources.....	13
4.3 Air Quality	16
4.4 Biological Resources	24
4.5 Cultural Resources	30
4.6 Geology and Soils.....	35
4.7 Greenhouse Gas Emissions.....	38
4.8 Hazards and Hazardous Materials.....	41
4.9 Hydrology and Water Quality	47
4.10 Land Use and Planning.....	52
4.11 Mineral Resources.....	55
4.12 Noise	57
4.13 Population and Housing.....	62
4.14 Public Services	64
4.15 Recreation.....	67
4.16 Transportation and Traffic.....	69
4.17 Utilities and Service Systems.....	73
5.0 References.....	76
6.0 Report Preparers.....	77

LIST OF FIGURES

Figure	Page
Figure 1, Project Location	6
Figure 2, Conceptual Site Plan	7

LIST OF TABLES

Table	Page
Table 1: Significance Thresholds for Criteria Pollutant Emissions	18
Table 2: Estimated Construction Emissions.....	20
Table 3: GHG Significance Thresholds	39

APPENDICES

Appendix A: Emissions Calculations

Appendix B: Noise Calculations

1.0 INTRODUCTION

In September 2009, the CSU Board of Trustees adopted Findings and a Mitigation Monitoring Program pursuant to California Environmental Quality Act (CEQA) for the 2009 California State University, East Bay (CSUEB) Hayward Campus Master Plan ("2009 Master Plan"). The 2009 Final EIR was challenged in court by the City of Hayward (City) and two local neighborhood groups. The Court of Appeal upheld the 2009 Final EIR in all respects, with the exception of the 2009 Final EIR's analysis of impacts to parklands. The Court of Appeal also directed the Board of Trustees to reconsider the feasibility of funding the California State University's (University) fair-share contribution of off-campus traffic mitigation measures.

Accordingly, in 2017, the University prepared a Partial Recirculated Draft and Final Environmental Impact Report (collectively "2017 PR-FEIR") which updated and replaced the parkland analysis in the 2009 Final EIR, and provides an expanded analysis of the project's impacts on nearby parklands in accordance with the opinion of the Court of Appeal and the peremptory writ of administrative mandamus. The 2017 PR-FEIR concluded, consistent with the 2009 Final EIR that the Master Plan project would not result in a significant adverse impact to parklands. In January 2018, the Board of Trustees set aside and vacated its original approval of the CSUEB 2009 Master Plan, de-certified the 2009 Final EIR, certified the 2017 PR-EIR and re-certified 2009 Final EIR as modified by the 2017 PR-EIR, and re-approved the CSUEB 2009 Master Plan. The re-certified 2009 Final EIR as modified by the 2017 PR-EIR is referred to throughout this Addendum as the "2009 MP FEIR."

The 2009 Master Plan addresses the facility needs of the Hayward Campus to meet State-mandated enrollment through 2030. The 2009 Master Plan involves the reorganization of campus facilities and reconfiguration of campus access and circulation. Activities outlined in the 2009 Master Plan include the demolition/removal of some of the existing buildings on the campus, the renovation of some of the existing buildings, and the construction of a number of new buildings. In addition, the 2009 Master Plan includes recommended vehicle and pedestrian circulation plans for the campus and recommended landscape improvements. The 2009 MP FEIR addressed the environmental impacts from the implementation of the 2009 Master Plan and campus growth through 2030.

The 2009 Master Plan states that the existing campus library is no longer able to meet modern criteria for a technologically advanced, attractive venue for learning and that the construction of a new library to replace the existing campus library would be required. The 2009 Master Plan identified a site adjacent to the east wing of the existing library for expansion of the library. The Campus has reevaluated the previously planned library expansion and determined that a new replacement library located at a site 200 feet to the northeast of the existing library that is south of the existing Science buildings and northwest of

the existing Recreation and Wellness Center would be more appropriate. This Addendum analyzes the environmental effects from amending the approved Master Plan and developing the new library on the proposed site instead of the previously identified location.

Where none of the conditions requiring the preparation of a Subsequent EIR are met, the CEQA Guidelines require a lead agency to prepare an Addendum to the previously certified EIR, including a brief explanation of the decision to not prepare a Subsequent EIR supported by substantial evidence (Section 15164). Based on the analysis below, this Addendum concludes that the construction and operation of the new library at the proposed site would not result in any new significant environmental impacts, or an increase in the severity of adverse impacts previously evaluated and disclosed in the 2009 MP FEIR, nor would it require the adoption or consideration of any new or considerably different mitigation measures and alternatives. Therefore this Addendum is the appropriate form of environmental review required under CEQA.

2.0 CEQA REQUIREMENTS

CEQA Guidelines Section 15164(a) states that the lead agency shall prepare an addendum to a previously adopted EIR if some changes or additions are necessary but none of the conditions described in Section 15162 calling for preparation of a subsequent EIR have occurred. Section 15164(c) states that an addendum does not need to be circulated for public review. Section 15164(d) provides that the decision-making body shall consider the addendum in conjunction with the certified EIR prior to making a decision on the project. Section 15164(e) requires documentation of the decision not to prepare a subsequent EIR pursuant to Section 15162.

CEQA Guidelines Section 15162(a) provides that once an EIR has been adopted, no subsequent EIR shall be prepared unless the lead agency determines, on the basis of substantial evidence, one or more of the following:

- Substantial changes are proposed in the project which will require major revisions of the previous EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;
- Substantial changes occur with respect to the circumstances under which the project is undertaken which will require major revisions of the previous EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;
- New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete, shows any of the following:

- The project will have one or more significant effects not discussed in the previous EIR;
- Significant effects previously examined will be substantially more severe than shown in the previous EIR;
- Mitigation measures previously found not to be feasible would in fact be feasible and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or
- Mitigation measures which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative.

This Addendum has been prepared to satisfy the requirements of CEQA Guidelines Sections 15164(b), 15164(d), and 15164(e).

3.0 PROJECT DESCRIPTION

Project Site

The CSUEB Hayward campus is located at 25800 Carlos Bee Boulevard in the Hayward Hills, approximately 2 miles east of downtown Hayward. The replacement library site is located in the center of the Hayward campus south of the Science buildings and northwest of the Recreation and Wellness Center (see **Figure 1, Project Location**). The site is approximately 1.1 acres in size and is partially paved and partially landscaped with trees and shrubs. The site is sloped and rises approximately 20 feet from the south to the north. Institutional uses surround the replacement library site.

Existing Campus Library

The existing campus library building is located in the campus core approximately 200 feet to the southwest of the project site and includes about 204,000 gross square feet (gsf) of building space with approximately 133,000 gsf of space dedicated to library functions and approximately 71,000 gsf of space devoted to campus support services (non-library functions/services). Library functions are housed in both wings of the upper mall level (81,000 gsf), the west wing of the lower mall level (50,000 gsf), and in the basement of the west wing (2,000 gsf) while campus support services are located in the east wing of the lower mall level (20,000 gsf) and the basement level of the west wing (21,000 gsf). The remaining building basement space (30,000 gsf) is dedicated to mechanical spaces, restrooms, corridors and auxiliary spaces.

Proposed Replacement Library

The proposed replacement library would be three stories and reach a maximum of approximately 47 feet in height. It would provide approximately 100,000 gsf of space. The proposed facility would perform the same functions as the existing library, employ the same number of library staff as the present library, and serve the same number of patrons as the existing facility; the proposed facility would not result in an increase in campus population. As indicated in **Figure 2, Conceptual Site Plan**, the proposed structure would occupy most of the project site. The replacement library would also be served by utilities located within the campus core and the design and landscaping of the proposed facility would be similar to that of existing campus buildings near the project site.

After the relocation of library functions to the replacement library, the west wing of the existing library will remain vacant pending the completion of a study to determine future use. With respect to the east wing, it will undergo a seismic retrofit in either late 2018 or early 2019. The lower mall level of the east wing would continue to house campus support services (20,000 gsf) and the upper mall level of the east wing would continue to house library stacks (27,000 gsf) after the planned retrofit.

Construction of the proposed project is anticipated to begin in spring 2019 and last approximately two years. Because the project is within the scope of the 2009 Master Plan, it is required to implement all applicable mitigation measures set forth in the 2009 MP FEIR. All applicable mitigation measures are identified in the Addendum analysis below. In addition, to minimize emissions of toxic air contaminants during construction, the project includes a best management practice (BMP) that requires all construction equipment used in project construction to be equipped with USEPA rated Tier 4 (model year 2008 or newer) engines. This BMP will be incorporated into the project's construction contract.

Proposed 2009 Master Plan Revision

As noted above, as the existing campus library is no longer able to meet modern criteria for a technologically advanced, attractive venue for learning. In response the campus is seeking a master plan revision to create a new library replacement building on the project site by combining space set aside for a library addition with one of the facilities identified a part of the Instructional Support Services Complex. The site of the library addition is located adjacent to the east wing of the existing library while the site of the Instructional Support Services facility is located adjacent to the project site to the west. As the proposed library replacement project is not adding to the building space projections provided in the 2009 Master Plan, the proposed project is therefore within the scope of the 2009 Master Plan, and as such is analyzed in the 2009 MP FEIR for its environmental impacts. The purpose of the evaluation in this document is to disclose any changes to the previously evaluated and disclosed environmental impacts

that could result from relocating the space assigned to the library addition and the Instructional Support Services facility to the project site and the proposed Master Plan revision.

Figure 1, Project Location

Figure 2, Conceptual Site Plan

4.0 ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

This Addendum provides an analysis of each environmental issue identified in the 2009 MP FEIR to determine whether new or more severe effects would occur or new mitigation measures should be required. CEQA Guidelines Section 15164(b) states that the lead agency shall prepare an addendum to a previously adopted EIR if only minor technical changes or additions are necessary or none of the conditions described in Section 15162 calling for the preparation of a subsequent EIR have occurred. Here, an addendum is appropriate to address additional project-specific details of the proposed project. This document assesses the proposed replacement library to determine whether it is within the scope of the 2009 MP FEIR or whether the construction and/or the operation of the proposed replacement library would result in new significant impacts or substantially more severe impacts under CEQA Guidelines Section 15162.

In the following evaluation each topic section includes the following sub-sections:

- **Environmental Checklist.** Contains a modified form of the Appendix G Initial Study environmental checklist. Each checklist question has been modified to characterize the potentially significant impact, less than significant impact, no impact and other categories in the context of whether or not the project would result in new significant impacts or substantially more severe impacts when compared to the FEIR and the 15162 triggers as follows:
 - Would the project result in substantial changes which will require major revisions of the certified EIR due to new significant environmental effects or a substantial increase in the severity of previously identified effects;
 - Would the project result in substantial changes with respect to the circumstances in which the project is undertaken which will require major revisions of the certified EIR due new significant environmental effects or a substantial increase in the severity of previously identified significant effects;
 - Would the project have one or more significant effects not discussed in the certified EIR or that will be substantially more severe than shown in the EIR, or are there mitigation measures or alternatives previously found not to be feasible or that are considerably different, that would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternatives.

The checklist presented in the following analysis classifies impacts in one of four ways:

- **Potentially Significant New Impact.** This category is for any potentially significant impact that was not analyzed in the 2009 MP FEIR. A potentially significant impact is an effect that may be significant based on substantial evidence and the significance criteria for the proposed project. If the project may result in one or more Potentially Significant Impacts, further environmental documentation is required.

- **Less than Significant New Impact with Mitigation.** This category is for any impacts which were not analyzed or found in the 2009 MP FEIR, but are nonetheless found to be less than significant with mitigation incorporated. This impact is an effect that with the implementation of project-specific mitigation measures is reduced from potentially significant to a less than significant level.
- **Less than Significant New Impact.** This category is for any impacts which were not analyzed or found in the 2009 MP FEIR, but which are nonetheless less than significant.
- **Impacts Fully Analyzed in the FEIR.** This category is for impacts which are equal to or less than the impacts found and analyzed in the 2009 MP FEIR.

4.1 Aesthetics

	Potentially Significant New Impact	Less than Significant New Impact with Mitigation	Less than Significant New Impact	Impacts Fully Analyzed in the FEIR
AESTHETICS - Would the project:				
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion:

Summary of Analysis in the 2009 MP FEIR

A scenic vista is generally defined as an expansive view of highly valued landscape as observable from a publicly accessible vantage point. Scenic vistas of the City of Hayward and San Francisco Bay are offered from vantage points within several neighborhoods north and east of the campus in the Hayward Hills. Implementation of the majority of the 2009 Master Plan would not adversely affect scenic vistas in the Hayward Hills. However, the potential construction of faculty/staff housing adjacent to Grand Avenue would have a substantial adverse effect on a scenic vista from this publicly accessible roadway. **MP Mitigation Measure AES-1** would lessen but not reduce this impact to a less than significant level. As a result, the 2009 MP FEIR concluded that this impact would be significant and unavoidable.

There are no designated state scenic highways located within the vicinity of the campus. Therefore, the 2009 MP FEIR concluded that implementation of the 2009 Master Plan would not substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway. This impact would be less than significant. No mitigation is required.

Buildout of the 2009 Master Plan would alter the existing visual character or quality of the campus. However, implementation of the 2009 Master Plan would enhance, as opposed to degrade, the visual

quality and character of the campus by implementing more cohesive architecture, improving campus entry sequences, and enhancing open space and landscaping. For this reason, the 2009 MP FEIR concluded that implementation of the 2009 Master Plan would not substantially degrade the existing visual character or quality of the site and its surroundings. This impact would be less than significant. No mitigation is required.

Most new construction and reconfiguration under the 2009 Master Plan would occur on the central portion of the campus that is currently developed with light sources. However, projects located along the edges of the campus would introduce new light and glare into areas that are generally dark at night. As a result, the 2009 MP FEIR found that implementation of the 2009 Master Plan would create new sources of light or glare which could adversely affect day or nighttime views in the area. **MP Mitigation Measure AES-4** would reduce this impact to a less than significant level.

The 2009 MP FEIR concluded that cumulative impacts to aesthetics and visual resources from reasonably foreseeable development in the City of Hayward and development under the 2009 Master Plan would be less than significant. No mitigation is required.

Change in Circumstances and/or New Information

Since the certification of the 2009 MP FEIR both originally in 2009 and its recertification in 2018, there have been no changes in circumstances that would alter the conclusions of the 2009 MP FEIR with respect to aesthetics and visual resources.

Analysis of the Proposed Project

Instead of the adding additional space to the east wing of the existing library, the proposed replacement library project would be located 200 feet to the northeast of the existing library in the campus core and would be lower in elevation than the scenic vista points recognized in the Hayward Hills. Building heights within the campus core range from two to four stories. The proposed replacement library would be three stories and reach a maximum of 47 feet in height. While the proposed project would be visible from adjacent areas, at a height of three stories, it would be consistent with the heights of buildings in this portion of the campus and would not exceed the heights of existing and planned buildings in the campus core under the 2009 Master Plan. In addition, the design and landscaping of the proposed project would be compatible with the design and landscaping of existing campus buildings within the campus core. As a result, the impacts to scenic vistas and scenic resources from project development would be less than significant and **MP Mitigation Measure AES-1** would not apply. The project would not result in new or more severe impacts on scenic vistas and scenic resources than previously evaluated and disclosed in the 2009 MP FEIR.

New permanent sources of lighting would be established on the project site with the development of the proposed project that would increase the level of light on the site from current levels. The exterior light proposed would be limited to the amount required to safely light the entrance, sidewalks, and other pedestrian areas within the project site. The interior lighting associated with the proposed project would be similar to that emitted by other such structures on the campus, such as the Sciences Buildings to the north and the Recreation and Wellness Center to the southeast. Furthermore, the replacement library would be at a distance from the campus edges and therefore any exterior lighting associated with the replacement building would not result in light spill on off-campus lands or otherwise result in light and glare impacts. Therefore, impacts from light and glare would be less than significant and **MP Mitigation Measure AES-4** would not apply. The project would not result in a new or more severe impact related to light and glare than previously evaluated and disclosed in the 2009 MP FEIR.

The proposed project is within the scope of the 2009 Master Plan and therefore, its cumulative impacts are adequately addressed in the 2009 MP FEIR. Although the 2009 MP FEIR concluded that there would be a significant and unavoidable cumulative impact related to scenic vistas, the proposed project would not contribute to the impact.

Findings

The potential impacts with respect to aesthetics and visual resources from the proposed library replacement project would be similar to or less than the impacts of campus development analyzed in the 2009 MP FEIR. Therefore, no new or substantially increased significant impacts would result from the proposed project beyond those analyzed in the 2009 MP FEIR. No new mitigation is required

4.2 Agriculture and Forestry Resources

	Potentially Significant New Impact	Less than Significant New Impact with Mitigation	Less than Significant New Impact	Impacts Fully Analyzed in the FEIR
AGRICULTURAL AND FORESTRY RESOURCES - In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in the Forest Protocols adopted by the California Air Resources Board. Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Discussion:

Summary of Analysis in the 2009 MP FEIR

The campus is developed with buildings, paved areas, or landscaped open space and is surrounded by suburban uses and open space. No farmland or agricultural activities are present in the vicinity of the campus. Therefore, implementation of the 2009 Master Plan would not result in conversion of farmland—including Prime Farmland, Unique Farmland, or Farmland of Statewide Importance—to non-agricultural uses. Next, the campus is currently designated for academic uses by the City of Hayward and is surrounded by urban/suburban development and open space. No impacts related to possible conflicts with zoning for agricultural uses or a Williamson Act contract would occur. Finally, as no farmland, agricultural land, or related uses are found in the area or on the campus, implementation of the 2009 Master Plan would not involve changes in the existing environment that could result in conversion of farmland to non-agricultural use. For these reasons, the 2009 MP FEIR concluded that growth and development under the 2009 Master Plan would not impact agriculture resources. No mitigation is required.

Change in Circumstances and/or New Information

Since the certification of the 2009 MP FEIR both originally in 2009 and its recertification in 2018, there have been no changes in circumstances that would alter the conclusions of the 2009 MP FEIR with respect to impacts on agricultural resources. However, since original certification of the 2009 MP FEIR in 2009, Appendix G of the CEQA Guidelines has been updated to include impacts on forestry resources.

Analysis of the Proposed Project

The replacement library project site is within the developed campus. All of the developed areas of the campus as well as additional lands to be developed under the 2009 Master Plan were already assessed for impacts on agricultural resources in the 2009 MP FEIR. The proposed project will result in no impact on agricultural resources. The project would not result in a new or more severe impacts related to agricultural resources than previously evaluated and disclosed in the 2009 MP FEIR. No new mitigation is required.

The project site is not zoned as forest land or for timberland production. No forestry resources occur on the site. For these reasons, the proposed project will result in no impact on forestry resources. No mitigation is required.

Findings

For reasons stated above, implementation of the proposed project would result in no impacts on agriculture and forestry resources. Therefore, no new or substantially increased significant impacts would result from the proposed project beyond those analyzed in the 2009 MP FEIR. No new mitigation is required.

4.3 Air Quality

	Potentially Significant New Impact	Less than Significant New Impact with Mitigation	Less than Significant New Impact	Impacts Fully Analyzed in the FEIR
AIR QUALITY - Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions, which exceed quantitative thresholds for ozone precursors)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion

Summary of Analysis in the 2009 MP FEIR

The campus is within the San Francisco Bay Area Air Basin (SFBAAB) which is under the jurisdiction of the Bay Area Air Quality Management District (BAAQMD), the governing authority for air quality planning in the region. The air quality analysis contained in the 2009 MP FEIR found that construction of the facilities associated with implementation of the 2009 Master Plan would generate short-term emissions of fugitive dust and asbestos that could adversely affect local air quality in the vicinity of the construction site. **MP Mitigation Measures AIR-1a** and **AIR-1b** would reduce the impact to a less than significant level.

The air quality analysis contained in the 2009 MP FEIR found that operation of the facilities associated with implementation of the 2009 Master Plan would generate long-term operational emissions of criteria pollutants that would exceed the BAAQMD thresholds and could therefore conflict with or obstruct the implementation of the regional air quality plan. **MP Mitigation Measures AIR-2a** through **AIR-2c** would reduce but not lessen this impact to a less than significant level. As a result, the 2009 MP FEIR concluded that this impact would be significant and unavoidable.

The air quality analysis contained in the 2009 MP FEIR found that implementation of the 2009 Master Plan would increase carbon monoxide concentrations at busy intersections and along congested roadways in the project vicinity but would not expose sensitive receptors to substantial pollution concentrations. The impact would be less than significant. No mitigation is required.

The air quality analysis contained in the 2009 MP FEIR found that implementation of the 2009 Master Plan would not create objectionable odors affecting a substantial number of people. The impact would be less than significant. No mitigation is required.

The air quality analysis contained in the 2009 MP FEIR found that implementation of the 2009 Master Plan could expose individuals to toxic air contaminants (TACs). Sources of TACs around and within the campus include diesel buses and trucks, laboratory emissions, central plant generators and boilers, water heaters/boilers in individual buildings, and emergency generators. New or modified stationary sources of TACs would be required to comply with BAAQMD permit requirements. In addition, the Campus would implement **MP Mitigation Measure AIR-5**. Adherence to BAAQMD permit requirements and implementation of mitigation would reduce this impact to a less than significant level.

The SFBAAB was in 2009 and still is currently designated as a nonattainment area for state and national ozone standards and particulate matter standards. As emissions associated with operation of the 2009 Master Plan would exceed the BAAQMD recommended operational threshold of significance, the 2009 MP FEIR concluded that implementation of the 2009 Master Plan would result in a cumulatively considerable net increase of criteria pollutants for which the project region is in nonattainment under an applicable federal or state ambient air quality standard. Even with the implementation of **MP Mitigation Measures AIR-1** and **AIR-2** discussed above, the emissions of criteria pollutants would still exceed the thresholds and therefore this impact would remain significant and unavoidable.

Change in Circumstances and/or New Information

The analysis of air quality impacts in the 2009 MP FEIR relied on thresholds set forth in an older version of the BAAQMD CEQA Guidelines that dated from 1999. Since then, the BAAQMD's CEQA Guidelines have been updated, with the latest version published in 2017. The updated guidelines include a new set

of significance thresholds and recommended methodologies for evaluation of air quality impacts of projects proposed within the air basin. The current thresholds are summarized below in **Table 1, BAAQMD CEQA Significance Thresholds for Air Pollutant Emissions**, and were used to evaluate the air quality impacts of the proposed project.

**Table 1
BAAQMD CEQA Significance Thresholds for Air Pollutant Emissions**

Pollutant	Construction Thresholds	Operational Thresholds	
	Average Daily emissions (lbs./day)	Average Daily Emissions (lbs./day)	Annual Average Emissions (tons/year)
Criteria Pollutants			
ROG	54	54	10
NOx	54	54	10
PM10	82	82	15
PM2.5	54	54	10
CO	Not Applicable	9.0 ppm (8-hour average) or 20.0 ppm (1-hour average)	
Fugitive Dust	Construction Dust Ordinance or other Best Management Practices	Not Applicable	
Health Risks and Hazards for New Sources			
Excess Cancer Risk	Same as Operational Threshold	10 per one Million	
Chronic or Acute Hazard Index	Same as Operational Threshold	1.0	
Incremental annual average PM2.5	Same as Operational Threshold	0.3 µg/m3	
Health Risks and Hazards for Sensitive Receptors (Cumulative from all sources within 1,000 foot zone of influence) and Cumulative Thresholds for New Sources			
Excess Cancer Risk	Same as Operational Threshold	10 per one Million	
Chronic Hazard Risk	Same as Operational Threshold	1.0	
Annual Average PM2.5	Same as Operational Threshold	0.8 µg/m3	

Source: Bay Area Air Quality Management District, California Environmental Quality Act Air Quality Guidelines, 2017

MP FEIR Mitigation Measures

MP MM AIR-1a: The control measures contained in Table 2 of the *BAAQMD CEQA Guidelines* listed below shall be implemented, as appropriate and feasible, during construction of each project under the proposed Campus Master Plan.

The following Basic Control Measures shall be implemented at all construction sites:

- Water all active construction areas at least twice daily.
- Cover all trucks hauling soil, sand, and other loose materials *or* require all trucks to maintain at least 2 feet of freeboard (i.e., the minimum required space between the top of the load and the top of the trailer).
- Pave, apply water three times daily (or as sufficient to prevent dust from leaving the site), or apply (non-toxic) soil stabilizers on all unpaved access roads, parking areas, and staging areas at construction sites.
- Sweep daily or as appropriate (with water sweepers using reclaimed water if possible) all paved access roads, parking areas, and staging areas at construction sites.
- Sweep streets daily or as appropriate (with water sweepers using reclaimed water if possible) if visible soil material is carried onto adjacent public streets.

In addition to the Basic Control Measures, the following Enhanced Control Measures shall be implemented at construction sites greater than 4 acres in area:

- Hydroseed or apply (non-toxic) soil stabilizers to inactive construction areas (previously graded areas inactive for 10 days or more).
- Enclose, cover, water twice daily (or as sufficient to prevent dust from leaving the site), or apply (non-toxic) soil stabilizers to exposed stockpiles (dirt, sand, etc.).
- Limit traffic speeds on unpaved roads to 15 miles per hour.
- Install sandbags or other erosion control measures to prevent silt runoff to public roadways.
- Replant vegetation in disturbed areas as quickly as possible.

The following Optional Control Measures are strongly encouraged at construction sites that are large in area or located near sensitive receptors, or may, for any other reason, warrant additional emissions reductions:

- Install wheel washers or wash off the tires or tracks of all trucks and equipment leaving the site.
- Install windbreaks or plant trees/vegetative windbreaks at the windward side(s) of construction areas.
- Suspend excavation and grading activity when sustained winds exceed 25 mph.

Analysis of the Proposed Project

The proposed replacement library would be a three story, approximately 100,000 gross square feet (gsf) building. The proposed facility would perform the same functions as the existing library, employ the

same number of library staff as the present library, and serve the same number of patrons as the existing facility; the proposed facility would not result in an increase in campus population.

Construction-related emissions for the proposed project were estimated using the BAAQMD-approved CalEEMod 2016.3.2 model. The project construction would begin in early 2019 and run approximately 24 months. It was assumed that any soil from grading would be balanced on-site without any import or export of soil and that there would be no hauling emissions that would accompany such activities.

Table 2
Unmitigated Construction Emissions by Year (Maximum Daily Pounds Per Day)

Year	ROG	NOx	PM10 (Exhaust)	PM2.5 (Exhaust)
2019	3	20	1	1
2020	52	17	1	1
Maximum	52	20	1	1
<i>Threshold of Significance</i>	54	54	82	54
<i>Exceeds Threshold?</i>	No	No	No	No

Source: Impact Sciences, 2017

As shown in **Table 2, Unmitigated Construction Emissions by Year**, the construction of the proposed project will produce ROG, NOX, PM10 and PM2.5 emissions that do not exceed the BAAQMD’s thresholds. As a result, construction of the proposed project would not contribute substantially to an existing violation or result in a violation of air quality standards for regional pollutants (e.g., ozone). This impact is considered less than significant. In addition, the Campus would implement **MP Mitigation Measure AIR-1a** to further reduce construction emissions. **MP Mitigation Measure AIR-1b** does not apply as construction of the proposed project would not involve demolition. The project would not result in a new or more severe impact related to construction emissions than previously evaluated and disclosed in the 2009 MP FEIR. No new mitigation is required.

The replacement library project would not result in any new operational emissions as there would be no increases in student or employee population at the campus due to the new facility. As a result, no impact would occur with respect to operational emissions of criteria pollutants. For the same reason, carbon monoxide concentrations along congested roadways in the project vicinity would not increase. **MP Mitigation Measure AIR-2** does not apply. The project would not result in new or more severe impacts related to operational emissions and carbon monoxide concentrations than previously evaluated and disclosed in the 2009 MP FEIR. No new mitigation is required.

The proposed project would generate localized emissions of diesel exhaust during construction equipment operation and truck activity. The odor from these emissions may be noticeable from time to time by adjacent receptors. However, they would be localized and are not likely to adversely affect people off site by resulting in confirmed odor complaints. With respect to operation, the proposed project does not include land uses associated with odorous emissions (e.g., waste transfer and recycling stations, wastewater treatment plants, landfills, composting operations, petroleum operations, food and byproduct processes, factories, and agricultural activities, such as livestock operations). For these reasons, the project would have no impact related to generation of odors and would not result in a new or more severe impact related to generation of odors than previously evaluated and disclosed in the 2009 MP FEIR. No new mitigation is required.

The proposed project is a library replacement project and as discussed further below, would not include any operational sources that would emit toxic air contaminants (TACs). However, during the project's 2-year construction period, diesel fuel would be used to operate construction equipment and construction vehicles. Diesel particulate matter (DPM), which is emitted in the exhaust from construction equipment and diesel-fueled vehicles, is listed as a TAC by the California Air Resources Control Board (CARB). In addition to DPM, the BAAQMD guidelines identify PM_{2.5} also as a potential TAC, to be evaluated for its potential to result in health impacts.

Exposure to DPM and PM_{2.5} emissions would have the potential to result in human health effects. Some groups of people are considered more sensitive to adverse effects from air pollution than the general population. The CARB has identified the following persons as most likely to be affected by air pollution: children under 14, the elderly over 65, athletes, and people with cardiovascular and chronic respiratory diseases. These groups are classified as sensitive receptors. Locations that may contain a high concentration of these sensitive population groups include residential areas, hospitals, daycare facilities, elder care facilities, elementary schools, and parks.

According to the BAAQMD CEQA guidelines, a potential for human health effects exists if sensitive receptors are located within 1,000 feet of a TAC source, including construction sites. Sensitive receptors, which include residences, are located near the project site. There are student residences within about 250 feet of the proposed construction, but they do not house small children or infants or elders over 65. The nearest off-campus receptors are approximately 650 feet to the east of the project site. These residences are assumed to include infants or small children, the elderly and people with cardiovascular and chronic respiratory diseases. For typical construction cancer risk assessments, infants are considered the most sensitive receptors because of their higher sensitivity to cancer causing contaminants or TACs, whereas, other populations, including young adults such as college students, are much less sensitive and the exposure periods are relatively short.

A human health risk analysis was conducted using the USEPA AERMOD dispersion model to determine PM2.5 concentrations, and CARB's Hotspots Analysis and Reporting Program (HARP) Risk Assessment Standalone Tool (RAST), and the Office of Environmental Health Hazard Assessment (OEHHA) risk assessment methodology to estimate the potential cancer and non-cancer risk from exposure to the project's construction emissions. Based on the construction schedule for the proposed project, the modeling assumed a two-year exposure period. As noted in the **Project Description**, to minimize TAC emissions, the proposed project includes a best management practice, which requires that all construction equipment used in project construction be equipped with USEPA rated Tier 4 (model year 2008 or newer) engines.

The results of the human health risk assessment indicate that the construction of the proposed project would result in an annual average PM2.5 concentration of approximately 0.002 µg/m³ from construction equipment exhaust, a lifetime excess cancer risk of one per one million at the maximally exposed sensitive receptor to the east of the project site, and a chronic hazard index of less than 0.01 at the same location (see **Appendix A** for detailed calculations). The annual average PM2.5 concentration, excess cancer risk, and chronic hazard risk values are all below the thresholds identified in **Table 1**, and therefore the construction-phase DPM emissions would result in a less than significant impact. The project would not result in a new significant impact related to TACs during construction. No new mitigation is required.

The proposed replacement building would not include any operational sources of toxic air contaminants such as laboratories. Although the project could include a diesel-fired emergency generator, it would be used only to provide power in the event of a disruption in electrical service to the building and therefore would not be a source of ongoing emissions. Although there would be routine testing emissions from the emergency generator, a permit to operate will be required from the BAAQMD that will stipulate the hours of testing yearly and the rate of emissions for the emergency generator. The generator will also comply with the BAAQMD-administrated statewide Air Toxics Control Measure (ATCM) for stationary diesel engines. Furthermore, the project would not generate any new vehicle trips to and from the campus. Therefore, the replacement building would not pose a human health risk to sensitive receptors in proximity of the replacement building site. The impact would be less than significant and **MP Mitigation Measure AIR-5** does not apply as the proposed project does not involve the installation of boilers, chillers, and/or cooling towers. The project would not result in a new or more severe impact related to TACs during operation than previously evaluated and disclosed in the 2009 MP FEIR.

Findings

The potential impacts with respect to air quality from the proposed library replacement project would be similar to or less than the impacts of campus development analyzed in the 2009 MP FEIR. Therefore, no new or substantially increased significant impacts would result from the proposed project beyond those analyzed in the 2009 MP FEIR. No new mitigation is required.

4.4 Biological Resources

	Potentially Significant Impact	Less than Significant New Impact with Mitigation	Less than Significant New Impact	Impacts Fully Analyzed in the FEIR
BIOLOGICAL RESOURCES - Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion:

Summary of Analysis in the 2009 MP FEIR

There is some potential that special status plant species could occur within the grassland and mixed scrub habitats that occur in the potential faculty/staff housing locations. Additionally, three special status bird species (i.e., burrowing owl, Cooper's hawk, white-tailed kite) and five special status bat species (i.e., pallid bat, fringed myotis, long-legged myotis, yuma myotis, and hoary bat) have potential to occur within the central campus and/or the grasslands and mixed scrub area within or bordering the development areas. As a result, the 2009 MP FEIR found that implementation of the 2009 Master Plan could have a substantial adverse effect on special-status plant and wildlife species. **MP Mitigation Measures BIO-1a** through **BIO-1d** would reduce the impact to a less than significant level.

A small drainage and associated bay woodland is located in the far western portion of the campus near a potential faculty/staff housing location. Therefore, the 2009 MP FEIR found that implementation of the 2009 Master Plan could have a substantial adverse effect on a riparian habitat or other sensitive natural community. **MP Mitigation Measure BIO-2** would reduce the impact to a less than significant level.

The small drainage located in the far western portion of the campus near a potential faculty/staff housing location is expected to fall under the jurisdiction of the United States Army Corps of Engineers (USACE). As the final design of faculty/staff housing at this location is not known, there is potential that associated construction activities and infrastructure (e.g., storm drains) could affect areas of the drainage under federal jurisdiction. For this reason, the 2009 MP FEIR found that implementation of the 2009 Master Plan could have a substantial adverse effect on a federally protected wetland. **MP Mitigation Measure BIO-3** would reduce this impact to a less than significant level.

The developed/landscaped central campus supports a high level of human use and activity, which is not favorable for wildlife movement. The undeveloped lands bordering the central campus are also not favorable for wildlife movement given their proximity to development and areas of high human use and activity. As a result, the 2009 MP FEIR concluded that implementation of the 2009 Master Plan would not interfere substantially with the movement of wildlife. This impact would be less than significant. No mitigation is required.

No adopted habitat conservation plan (HCP) or natural community conservation plan (NCCP) applies to the campus. Therefore, the 2009 MP FEIR concluded that there would be no impact with respect to HCP and NCCP. No mitigation is required.

The 2009 MP FEIR concluded that cumulative impacts to sensitive biological resources from reasonably foreseeable development in the City of Hayward and development under the 2009 Master Plan are not anticipated and that development under the 2009 Master Plan would not contribute substantially to the impact.

MP FEIR Mitigation Measures

MP MM BIO-1b: If a construction project is proposed on the campus that would commence anytime during the nesting/breeding season of native bird species potentially nesting/roosting on the site (typically February through August in the project region), a pre-construction survey of the project vicinity for nesting birds shall be conducted.

This survey shall be conducted by a qualified biologist (i.e., experienced with the nesting behavior of bird species of the region) within two weeks of the commencement of construction activities that would occur during the nesting/breeding season. The intent of the survey shall be to determine if active nests of special status bird species or other species protected by the Migratory Bird Treaty Act and/or the California Fish and Game Code are present within the construction zone or within 500 feet of the construction zone. The survey area shall include all trees and shrubs, as well as grassland habitats (which could be utilized by burrowing owls) in the construction zone and a surrounding 500 feet area. The surveys shall be timed such that the last survey is concluded no more than two weeks prior to initiation of construction or tree removal. If ground disturbance activities are delayed following a survey, then an additional pre-construction survey shall be conducted such that no more than two weeks will have elapsed between the last survey and the commencement of ground disturbance activities.

If active nests are found in areas that could be directly affected or are within 500 feet of construction and would be subject to prolonged construction-related noise, a no-disturbance buffer zone shall be created around active nests during the breeding season or until a qualified biologist determines that all young have fledged. The size of the buffer zones and types of construction activities restricted within them will be determined through consultation with the CDFG, taking into account factors such as the following:

- Noise and human disturbance levels at the construction site at the time of the survey and the noise and disturbance expected during the construction activity;
- Distance and amount of vegetation or other screening between the construction site and the nest; and
- Sensitivity of individual nesting species and behaviors of the nesting birds.

Limits of construction to avoid an active nest shall be established in the field with flagging, fencing, or another appropriate barrier, and construction personnel shall be instructed on the sensitivity of nest areas. The biologist shall serve as a construction monitor during those periods when construction activities would occur near active nest areas of special status bird species to ensure that no impacts on these nests occur.

MP MM BIO-1c:

Prior to the commencement of construction activities within grassland habitats occurring during the non-nesting season of burrowing owl (typically September through January), a qualified biologist shall conduct a clearance survey for wintering burrowing owls. The survey shall be conducted no more than 14 days prior to commencement of construction activities. If non-breeding burrowing owls are observed within the disturbance footprint, they would be excluded from all occupied burrows through the use of exclusion devices placed in occupied burrows in accordance with CDFG protocols (CDFG 1995). Specifically, exclusion devices, utilizing one-way doors, shall be installed in the entrance of all active burrows. The devices shall be left in the burrows for at least 48 hours to ensure that all owls have been excluded from the burrows. Each of the burrows would then be excavated by hand and refilled to prevent reoccupation. Exclusion shall continue until the owls have been successfully excluded from the site, as determined by a qualified biologist.

MP MM BIO-1d:

If trees or buildings are to be removed/demolished during the nesting season of native bat species in California (generally April 1 through August 31), the presence of active maternity roosts in trees or buildings shall be evaluated by a qualified biologist prior to their removal. If it is determined that the trees or structures to be removed provide potential bat roosting habitat, a focused survey shall be conducted by a qualified bat biologist to determine if active maternity roosts of special status bats are present. Should an active maternity roost of a special status bat species be identified, the roost shall not be disturbed until the

roost is vacated and juveniles have fledged, as determined by the biologist. Once all young have fledged, the tree or structure may be removed or demolished.

Change in Circumstances and/or New Information

Since the certification of the 2009 MP FEIR both originally in 2009 and its recertification in 2018, there have been no changes in circumstances that would alter the conclusions of the 2009 MP FEIR with respect to biological resource impacts.

Analysis of the Proposed Project

The site of the library replacement project is located in the campus core and thus would not affect special-status plant species that have the potential to be located on the sites of potential faculty/staff housing. No impact would occur and **MP Mitigation Measure BIO-1a** does not apply. The project would not result in a new or more severe impact related to special-status plant species than previously evaluated and disclosed in the 2009 MP FEIR.

Construction of the replacement library project would require the removal of some small trees that are present on the project site and would also occur near trees, and special-status bird and bat species have some limited potential for utilizing the on-site and nearby trees for nesting and/or roosting. **MP Mitigation Measures BIO-1b** through **BIO-1d**, which would be incorporated into the proposed project, would reduce the impacts to special-status birds and bats to a less than significant level. The project would not result in new or more severe impacts related to special-status wildlife species than previously evaluated and disclosed in the 2009 MP FEIR.

No impacts to riparian habitat or wetlands would result due to the proposed replacement library project as it would be located in the campus core and not the far western portion of campus where these resources are present. No impacts would occur and **MP Mitigation Measures BIO-2** and **BIO-3** do not apply. The project would not result in new or more severe impacts related to riparian habitat or wetlands than previously evaluated and disclosed in the 2009 MP FEIR.

The site of the replacement library project is located in the campus core and the area around the campus is not favorable for wildlife movement. In addition, the project site does not fall within the boundaries of, nor is it adjacent to, an area covered by an adopted regional HCP or NCCP. For these reasons, the proposed project would not interfere with wildlife movement nor would it conflict with an adopted regional HCP or NCCP. No impacts would occur and the project would not result in new or more severe impacts related to wildlife movement and an adopted HCP or NCCP than previously evaluated and disclosed in the 2009 MP FEIR. No new mitigation is required.

Findings

The potential impacts with respect to biological resources from the proposed library replacement project would be similar to or less than the impacts of campus development analyzed in the 2009 MP FEIR. Therefore, no new or substantially increased significant impacts would result from the proposed project beyond those analyzed in the 2009 MP FEIR. No new mitigation is required.

4.5 Cultural Resources

	Potentially Significant New Impact	Less than Significant New Impact with Mitigation	Less than Significant New Impact	Impacts Fully Analyzed in the FEIR
CULTURAL RESOURCES - Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion:

Summary of Analysis in the 2009 MP FEIR

There are no known archaeological sites on the campus. Furthermore, much of the development on the campus under the 2009 Master Plan would occur within the previously disturbed and developed central campus. However, since no surveys are known to have been conducted, it is assumed that there is potential for such resources to exist on those portions of the campus that have not been previously graded or disturbed in a substantial manner or even within the central campus in areas where the previous grading was not substantial. As a result, the 2009 MP FEIR concluded that implementation of the 2009 Master Plan could cause a substantial adverse change in the significance of an archaeological resource through damage or destruction that could occur as a result of grading, excavation, ground disturbance or other project development. **MP Mitigation Measures CULT-1a to CULT-1c** would reduce this impact to a less than significant level.

At the time the 2009 MP FEIR was prepared, all of the structures on the campus were less than 50 years of age at this time, and therefore, did not qualify as historic structures at that time. However, the EIR noted that several structures would be over 50 years or older before or by 2030 which is the year of buildout of the 2009 Master Plan, and their historic significance could change between the time that the EIR was prepared and the time that they are proposed for removal or alteration. Therefore, the 2009 MP FEIR

concluded that implementation of the 2009 Master Plan could cause a substantial adverse change in the significance of a historical building or structure, as a result of alteration, removal, or demolition of the building, or alteration of the site associated with campus development. **MP Mitigation Measures CULT-2a** and **CULT-2b** would lessen but not reduce this impact to a less than significant level. As a result, the 2009 MP FEIR concluded that this impact would be significant and unavoidable.

Although no human remains have been encountered during the construction of buildings and other improvements on the campus, development under the 2009 Master Plan that includes excavation and grading has the potential to uncover, displace, and destroy human remains. For this reason, the 2009 MP FEIR concluded that implementation of the 2009 Master Plan could disturb human remains, including those interred outside of formal cemeteries. **MP Mitigation Measures CULT-3a** to **CULT-3d** would reduce this impact to a less than significant level.

Much of the development on the campus under the 2009 Master Plan would occur within the previously disturbed and developed central campus. Because of the extensive grading and disturbance that has already occurred within the central campus, the potential to encounter intact paleontological resources or unique geologic resources in conjunction with future development is very low. In addition, the campus site is not underlain by geologic formations that are considered sensitive for paleontological resources or unique geologic resources. As a result, the 2009 MP FEIR concluded that implementation of the 2009 Master Plan would not disturb or destroy unique paleontological or geologic resources. This impact is less than significant. To ensure that the impact remains less than significant, the Campus would implement **MP Mitigation Measures CULT-4a** and **CULT-4b**.

The 2009 MP FEIR concluded that with mitigation, cumulative impacts to cultural resources from reasonably foreseeable development in the City of Hayward and development under the 2009 Master Plan would be less than significant.

MP FEIR Mitigation Measures

MP MM CULT-1a: During the planning and environmental review of specific development projects under the 2009 Master Plan, for projects proposed on previously undisturbed campus lands, the Campus shall retain a qualified archaeologist to conduct a pedestrian survey of the site to evaluate the potential for archaeological resources to occur on the project site. If archaeological resources are encountered, MP Mitigation Measure CULT-1c will apply.

MP MM CULT-1b: Regardless of the location of the project on the campus, all construction contracts for campus projects shall include a standard inadvertent discovery clause, which

requires that if an archaeological resource is discovered during construction (whether or not an archaeologist is present), all soil-disturbing work within 100 feet of the find shall cease, and the Campus shall implement MP Mitigation Measure CULT-1c.

MP MM CULT-1c: For an archaeological site that is encountered during the pedestrian survey conducted on a project site or during construction, the Campus shall:

- Retain a qualified archaeologist to determine whether the resource qualifies as an historical resource or a unique archaeological resource.
- If the resource is determined to be a historical resource or a unique archaeological resource, the qualified archaeologist, in consultation with the Campus, shall prepare a research design and archaeological data recovery plan for the recovery of the categories of data for which the site is significant, and implement the data recovery plan prior to or during development of the site. The archaeologist shall also perform appropriate technical analyses, prepare a full written report and file it with the appropriate information center, and provide for the permanent curation of recovered materials.

MP MM CULT-3a: The Campus shall implement MP Mitigation Measure CULT-1 to minimize the potential for disturbance or destruction of human remains in an archaeological context and to preserve them in place, if feasible.

MP MM CULT-3b: The Campus shall arrange for a representative of the local Native American community to monitor any excavation (including archaeological excavation) within the boundaries.

MP MM CULT-3c: In the event of a discovery of human bone, suspected human bone, or a burial, all excavation in the vicinity will halt immediately and the area of the find will be protected until a qualified archaeologist determines whether the bone is human. If the qualified archaeologist determines the bone is human, or if a qualified archaeologist is not present, the Campus will notify the County of Alameda Medical Examiner before additional disturbance occurs. The Campus will ensure that the remains and vicinity of the find are protected against further disturbance until the Coroner has made a finding with regard to PRC 5097 procedures, in compliance with California Health and Safety Code Section 7050.5(b). If it is determined that the find is of Native American origin, the Campus will comply with the provisions of PRC Section 5097.98 regarding identification and involvement of the Native American Most Likely Descendant (MLD).

MP MM CULT-3d: If human remains cannot be left in place, the Campus shall ensure that the qualified archaeologist and the MLD consult regarding archaeological treatment of human remains, and that appropriate studies, as identified through this consultation, are carried out prior to interring the remains. The Campus shall provide results of all such studies to the local Native American community, and shall provide an opportunity for local Native American involvement in any interpretative reporting. As stipulated by the provisions of the California Native American Graves Protection and Repatriation Act, the Campus shall ensure that human remains and associated artifacts recovered from campus projects on state lands are repatriated to the appropriate local tribal group if requested.

MP MM CULT-4a: As part of the construction contract, the Campus shall inform construction contractors to watch for paleontological resources during grading and excavation and to inform the campus immediately if such resources are encountered.

MP MM CULT-4b: If paleontological resources are discovered, all ground-disturbing activities within 100 feet of the find will be halted and a qualified paleontologist will be retained by the Campus to evaluate the find and recommend appropriate handling and treatment of the find. If the find is determined to be significant or potentially significant, the paleontologist will design and carry out a data recovery plan consistent with the Standards of the Society of Vertebrate Paleontologists. Adequate recordation and recovery would, at a minimum, include the following:

- Development of a site specific environmental and contextual information
- Archival research
- Excavation of the resource and its accurate recordation
- For a significant major find, identification of a museum or repository for curation of the resource

Change in Circumstances and/or New Information

Since the certification of the 2009 MP FEIR both originally in 2009 and its recertification in 2018, there have been no changes in circumstances that would alter the conclusions of the 2009 MP FEIR with respect to cultural resource impacts. Assembly Bill (AB) 52 was approved in September 2014 and became effective on July 1, 2015. AB 52 is focused on the protection of tribal cultural resources (TRCs) and

requires that CEQA lead agencies consult with California Native American tribes that are traditionally and culturally affiliated with the geographic area of a project, if so requested by the tribes. AB 52 applies only to projects where the Notice of Preparation (NOP) for the EIR was filed after July 1, 2015.

Analysis of the Proposed Project

No structures are located on the project site. No impact would occur and **MP Mitigation Measure CUL-2** would not apply. The project would not result in a new or more severe impact related to historical architectural resources than previously evaluated and disclosed in the 2009 MP FEIR.

As ground disturbing activities will be minimal on the project site, the probability of uncovering archeological and paleontological resources is low. However, unknown archaeological resources, paleontological resources, and/or burial sites have the potential to be present on the project site, similar to the conclusions included in the 2009 MP FEIR. **MP Mitigation Measures CUL-1, CUL-3, and CUL-4** are incorporated into and a part of the project and would ensure that any archaeological resources, paleontological resources or human remains encountered during construction are properly handled and protected. The project would not result in new or more severe impacts related to archaeological resources, paleontological resources or human remains than previously evaluated and disclosed in the 2009 MP FEIR. No new mitigation is required.

The proposed project is within the scope of the 2009 Master Plan and therefore, its cumulative impacts are adequately addressed in the 2009 MP FEIR. Although the 2009 MP FEIR concluded that there would be significant and unavoidable cumulative impacts related to historical architectural resources, the proposed project would not contribute to the impact.

As stated above, AB 52 applies to projects where the Notice of Preparation (NOP) for the EIR was filed after July 1, 2015. The NOP for the 2009 MP FEIR was filed in September 2008, which predates AB 52. Therefore, the 2009 MP FEIR did not include an assessment of impacts on TRCs. As this addendum shows, the proposed project is adequately analyzed in the FEIR and no new EIR or NOP is necessary. Because the project is within the scope of the previously approved planned development and because no new EIR or NOP is required, the proposed project is not subject to AB 52.

Findings

The potential impacts with respect to cultural resources from the proposed library replacement project would be similar to or less than the impacts of campus development analyzed in the 2009 MP FEIR. Therefore, no new or substantially increased significant impacts would result from the proposed project beyond those analyzed in the 2009 MP FEIR. No new mitigation is required.

4.6 Geology and Soils

	Potentially Significant New Impact	Less than Significant New Impact with Mitigation	Less than Significant New Impact	Impacts Fully Analyzed in the FEIR
GEOLOGY AND SOILS - Would the project:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion:

Summary of Analysis in the 2009 MP FEIR

There are no active faults on the campus although the campus is located only 0.18 mile from the active Hayward fault. However, severe seismic ground shaking and related ground failure is a possibility in the

area of the campus, and portions of the campus have potential for ground failure related to liquefaction and landsliding. As a result, the 2009 MP FEIR concluded that while development under the 2009 Master Plan would not expose people and structures on campus to substantial adverse effects associated with fault rupture, it could expose people and structures on campus to substantial adverse effects related to seismic ground shaking or seismic-related ground failure, including liquefaction, lateral spreading, landslides, and/or settlement. Compliance with the California Building Code (CBC) and implementation of **MP Mitigation Measure GEO-1** would reduce this impact to a less than significant level.

Construction of facilities anticipated under the 2009 Master Plan would result in short-term soil-disturbing activities that could lead to increased erosion, including cut and fill, grading, trenching, boring, and removal of trees and other vegetation. To comply with National Pollutant Discharge Elimination System (NPDES) requirements for construction site storm water discharges, projects involving construction sites that are 1 acre or more are required to prepare and implement a storm water pollution prevention plan (SWPPP). Therefore, the 2009 MP FEIR concluded that development under the 2009 Master Plan would not result in substantial erosion of soils during construction. This impact is less than significant. No mitigation is required.

Portions of the campus are located on expansive soils. For this reason, the 2009 MP FEIR concluded that unstable soils could be located where buildings are proposed. Compliance with the CBC and **MP Mitigation Measure GEO-1** would reduce this impact to a less than significant level.

The 2009 MP FEIR concluded that cumulative impacts involving seismic ground shaking and related ground failure will be less than significant as reasonably foreseeable development in the City of Hayward and development under the 2009 Master Plan would comply with CBC requirements.

MP FEIR Mitigation Measures

MP MM GEO-1: Where existing geotechnical information is not adequate, detailed geotechnical investigations shall be performed for areas that will support buildings or foundations. Such investigations for building or foundation projects on the CSUEB Hayward campus will comply with the California Geological Survey's *Guidelines for Evaluating and Mitigating Seismic Hazards in California* (Special Publication 117), which specifically address the mitigation of liquefaction and landslide hazards in designated Seismic Hazard Zones (CGS 2003). All recommendations of the geotechnical investigations will be incorporated into project designs. Recommendations for buildings located near mapped faults,

prepared by the California State University seismic review committee, shall be reviewed prior to project design.

Change in Circumstances and/or New Information

Since the certification of the 2009 MP FEIR both originally in 2009 and its recertification in 2018, there have been no changes in circumstances that would alter the conclusions of the 2009 MP FEIR with respect to soil and geologic impacts.

Analysis of the Proposed Project

The replacement library project could result in the exposure of people or structures to geological hazards associated with severe seismic ground shaking and related ground failure, similar to the conclusions included in the 2009 MP FEIR. In addition, the project site could contain expansive soil, and thus create substantial risks to life and property. The proposed project would comply with the CBC and **MP Mitigation Measure GEO-1** would be incorporated into the project to ensure that the Campus performs a geotechnical investigation of the project site to evaluate the potential for liquefaction and other types of ground failure and expansive soils. This impact is less than significant and the project would not result in a new or more severe impact related to geological hazards than previously evaluated and disclosed in the 2009 MP FEIR. No new mitigation is required.

Similar to campus development analyzed in the 2009 MP FEIR, short-term soil erosion could occur during ground disturbing activities associated with the proposed project. A storm water pollution prevention plan (SWPPP) would be prepared and implemented, as required by state law, that would minimize erosion. The project would not result in a new or more severe impact related to soil erosion than previously evaluated and disclosed in the 2009 MP FEIR. No new mitigation is required.

The proposed project is within the scope of the 2009 Master Plan and therefore, its cumulative impacts are adequately addressed in the 2009 MP FEIR.

Findings

The potential impacts with respect to aesthetics and visual resources from the proposed library replacement project would be similar to or less than the impacts of campus development analyzed in the 2009 MP FEIR. Therefore, no new or substantially increased significant impacts would result from the proposed project beyond those analyzed in the 2009 MP FEIR. No new mitigation is required.

4.7 Greenhouse Gas Emissions

	Potentially Significant New Impact	Less than Significant New Impact with Mitigation	Less than Significant New Impact	Impacts Fully Analyzed in the FEIR
GREENHOUSE GAS EMISSIONS - Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion:

Summary of Analysis in the 2009 MP FEIR

The greenhouse gas (GHG) emissions analysis contained in the 2009 MP FEIR found that although the 2009 Master Plan would result in GHG emissions, its contribution to the significant cumulative impact associated with GHG emissions would not be cumulatively considerable. This impact is less than significant. No mitigation is required.

Change in Circumstances and/or New Information

The analysis of GHG emissions in the 2009 MP FEIR were based on methodology presented by the California Air Resources Board in 2008 which proposed that California Energy Commission Tier II building energy use standards be applied, which generally require a reduction in energy usage of 30 percent beyond Title 24 building code requirements. Since then, the BAAQMD has published updated BAAQMD CEQA Guidelines (BAAQMD 2017) that include a set of significance thresholds and recommended methodologies that may be used to evaluate the impact of a project's GHG emissions. Significance thresholds put forth in the BAAQMD CEQA Guidelines are listed below in **Table 3, GHG Significance Thresholds**.

Table 3
GHG Significance Thresholds

Pollutant	Construction	Operation
Greenhouse Gases	No threshold	1,100 MTCO ₂ e/yr; or 4.6 MTCO ₂ e/SP/yr

*Source: Bay Area Air Quality Management District, California Environmental Quality Act Air Quality Guidelines, (2017) 2-1.
MTCO₂e = metric tons of carbon dioxide equivalents; SP = service persons (residents plus employees) associated with the proposed project.*

The BAAQMD guidelines recommend quantifying and reporting GHG emissions from a project's construction activities, but do not provide quantitative significance thresholds. Operational emissions of a project may be compared to an absolute threshold of 1,100 metric tons of carbon dioxide equivalents per year (MTCO₂e/yr) or an efficiency standard of 4.6 MTCO₂e/SP/yr, where SP refers to service persons (residents plus employees) associated with the proposed project.

Analysis of the Proposed Project

Construction phase GHG emissions were estimated using the CalEEMod model in the same manner as used to predict criteria air pollutants. Construction phases included site preparation, site grading, some paving, building construction, and application of architectural coatings. Annual CO₂ emissions associated with construction would occur from 2019 into 2020. Construction of the project would emit an estimated 295 metric tons (MT) of CO₂e in 2019 and 288 MT of CO₂e in 2020. The BAAQMD has not established quantified thresholds for construction activities. However, given the low emissions during each year of construction and the temporary nature of these emissions, the impact from the project's construction phase GHG emissions is considered less than significant. No mitigation is required.

The proposed project would not result in any new operational GHG emissions as there would be no increases in student or employee population at the campus as a result of the new facility. In fact, the proposed project would likely result in lower GHG emissions during operation as the replacement library would provide less space than the west wing of the existing library that it is replacing and as a new building, it is expected to be more energy efficient than the existing library. As a result, no impact would occur with respect to operational phase GHG emissions. The project would not result in a new or more severe impact related to operational phase GHG emissions than previously evaluated and disclosed in the 2009 MP FEIR. No mitigation is required.

Findings

The potential impacts with respect to GHG emissions from the proposed library replacement project would be similar to or less than the impacts of campus development analyzed in the 2009 MP FEIR. Therefore, no new or substantially increased significant impacts would result from the proposed project beyond those analyzed in the 2009 MP FEIR. No new mitigation is required.

4.8 Hazards and Hazardous Materials

	Potentially Significant New Impact	Less than Significant New Impact with Mitigation	Less than Significant New Impact	Impact Fully Analyzed in the FEIR
HAZARDS AND HAZARDOUS MATERIALS- Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) For a project located within an airport land use plan or, where such plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Expose people or structures to a significant risk of loss, injury or death involving wild land fires, including where wild lands are adjacent to urbanized areas or where residences are intermixed with wild lands?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion:

Summary of Analysis in the 2009 MP FEIR

Laboratories and other facilities constructed under the 2009 Master Plan would comply with all standards related to the use and storage of hazardous materials. In addition, while the use of hazardous materials on the campus would likely increase, the Campus will continue to comply with all hazardous materials standards related to transport. Finally, adherence to the Campus spill response guidelines and compliance with all applicable regulations related to the use, storage, and transport of hazardous materials will minimize the potential for accidental spills and release of materials to the environment. For these reasons, the 2009 MP FEIR concluded that campus development and activities under the 2009 Master Plan would not create significant hazards to the public or the environment from the use, storage and transport of hazardous materials under routine or upset conditions.

At the time the 2009 MP FEIR was prepared there was one existing childcare center on the campus. There are no existing schools within 0.25 mile of the campus boundary and no new schools are planned at this time within this radius of the campus. Although hazardous materials use and waste generation within 0.25 mile of the childcare center will likely increase as a result of campus growth under the 2009 Master Plan, these materials will not exist in quantities sufficient to pose a risk to occupants of the childcare center or campus community. In addition, the Campus will continue to comply with federal and state regulations, and will continue to implement existing campus safety programs and procedures. As a result, the 2009 MP FEIR concluded that campus development and activities under the 2009 Master Plan would not create significant hazards to the public or the environment, such that existing or proposed adjacent schools may be affected. This impact is less than significant. No mitigation is required.

A search of the governmental databases indicated that a leaking underground storage tank (LUST) located west of the Student Services & Administration building released approximately 750 gallons of diesel fuel before removal in 1988. Records did not indicate if the contaminated site was remediated. Therefore, the 2009 MP FEIR concluded that excavation and other ground disturbing activities associated with the construction of a new facility on the campus in the area of the previous LUST could encounter contaminated soils or groundwater, and potentially expose construction workers, campus occupants or the public to these materials. Implementation of **MP Mitigation Measure HAZ-3** would reduce this impact to a less than significant level.

Hazardous materials could be encountered in campus buildings when they are demolished or remodeled under the 2009 Master Plan. For this reason, the 2009 MP FEIR concluded that demolition or renovation of buildings under the 2009 Master Plan could expose construction workers, campus occupants or the

public to contaminated building materials. Implementation of **MP Mitigation Measure HAZ-4** would reduce this impact to a less than significant level.

The 2009 MP FEIR concluded that implementation of the Master Plan would not expose people on the project site to any safety hazards related to public airports or private airstrips because the campus is approximately four miles east of the Hayward Airport, and is also not located in the vicinity of a private airstrip. No impact would occur and no mitigation is required.

Consistent with the Campus' current procedure, as new buildings are built on the campus under the 2009 Master Plan, an Emergency Operations Plan (EOP) would be developed for each new building. Furthermore, campus growth under the 2009 Master Plan would not interfere with the campus EOP through construction-related road closures. As a result, the 2009 MP FEIR concluded that campus development under the 2009 Master Plan would not interfere physically with the Campus' EOP. To ensure that these procedures and notification requirements will continue under the 2009 Master Plan, the Campus would implement **MP Mitigation Measures HAZ-5a and HAZ-5b**.

New buildings and spaces constructed under the 2009 Master Plan in general would be added to the already developed portion of the campus. With the exception of some expansion of student housing in the southern portion of the campus and potential location of faculty/staff housing south of Grandview Avenue, all new development would be sufficiently distant from open space areas that surround the campus and have the potential for wildland fires. With respect to student and faculty/staff housing that is adjacent to open grassland areas, all buildings would be designed and constructed in conformance with the CBC and with applicable fire code safety requirements. In addition, all new landscaping in the areas surrounding the new housing will be developed to minimize the threat of wildland fire damage to facilities and personnel and the Campus will manage vegetation in adjacent areas to reduce fuel load. Therefore, the 2009 MP FEIR concluded that campus development under the 2009 Master Plan would not expose people or structures to a significant risk of loss, injury, or death involving wildland fires. This impact is less than significant. No mitigation is required.

The 2009 MP FEIR concluded that cumulative impacts associated with hazards and hazardous materials will be less than significant as reasonably foreseeable development in the City of Hayward and development under the 2009 Master Plan would comply with hazardous materials laws which are designed to avoid and minimize adverse impacts on public health, safety, and the environment.

MP FEIR Mitigation Measures

MP MM HAZ-5a: The Campus shall require new construction under the 2009 Master Plan to adhere to the following standards already established by Facilities Planning & Operations:

- Construction work shall be conducted so as to ensure the least possible obstruction to traffic.
- Contractors shall notify the Campus Representative at least two weeks before any road closure.
- When paths, lanes, or roadways are blocked, detour signs shall be installed to clearly designate an alternate route.
- Fire hydrants shall be kept accessible to firefighting equipment at all times.
- To ensure adequate access for emergency vehicles when construction projects will result in temporary lane or roadway closures, campus police and dispatchers shall be notified of the closures and alternative travel routes.

MP MM HAZ-5b: New or updated building and/or department-specific EOPs shall be developed for any new development project.

Change in Circumstances and/or New Information

Since the certification of the 2009 MP FEIR both originally in 2009 and its recertification in 2018, there have been no changes in circumstances that would alter the conclusions of the 2009 MP FEIR with respect to hazards and hazardous materials impacts.

Analysis of the Proposed Project

Although small quantities of hazardous materials would be used in the construction of the proposed project, compliance with local, state, and federal regulations would minimize risks associated with the routine transport, use, or disposal of hazardous materials during construction activities. Any hazardous materials used during the occupancy of the proposed building would be limited to those typically used in academic support and standard maintenance activities (e.g., solvents, paints, cleaning agents), similar to materials used for cleaning and maintenance in the existing campus library. The use of all hazardous materials during occupancy would be required to comply with stringent local, state, and federal regulations on hazardous materials use. Given the types and small quantities of hazardous materials that would be used as well as stringent regulations, the impacts related to the routine transport, use, and disposal of hazardous materials or the release of materials into the environment would be less than

significant, similar to the conclusions included in the 2009 MP FEIR. The project would not result in new or more severe impacts related to the routine transport, use, and disposal of hazardous materials or the release of materials into the environment than previously evaluated and disclosed in the 2009 MP FEIR. No mitigation is required.

A childcare center is no longer located on the campus and no existing or proposed schools are within 0.25 mile of the campus boundary. For these reasons, the proposed project would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school. No impact would occur and the project would not result in a new or more severe impact related to hazardous emissions or the handling of hazardous materials within 0.25 mile of a school than previously evaluated and disclosed in the 2009 MP FEIR. No mitigation is required.

The site of the replacement library is located in the campus core approximately 750 feet from the site of the LUST that is to the west of the Student Services & Administration building. Since certification of 2009 MP FEIR, the LUST site has been remediated and the case has been closed (SWRCB 2018). Given the distance of the project site from the LUST site and its status, this impact is less than significant and **MP Mitigation Measure HAZ-3** would not apply. The project would not result in a new or more severe impact related to the exposure of persons to hazardous materials during construction than previously evaluated and disclosed in the 2009 MP FEIR.

As no structures are located on the project site, the proposed library replacement project would not result in the demolition or renovation on an existing structure. No impact would occur and **MP Mitigation Measure HAZ-4** would not apply. The project would not result in a new or more severe impact related to the exposure of persons to hazardous materials during demolition than previously evaluated and disclosed in the 2009 MP FEIR.

The project site is located within the campus core and therefore is not located within the vicinity of a public airport or private airstrip. As a result, the project would not result in a safety hazard for people residing or working on the site. Similar to the conclusion included in the 2009 MP FEIR, no impact would occur. The project would not result in a new or more severe impact related to safety hazards due to aircraft than previously evaluated and disclosed in the 2009 MP FEIR. to the exposure of persons to hazardous materials during construction. No new mitigation is required.

Consistent with the Campus' current procedure, an EOP would be developed for the proposed replacement library. Furthermore, implementation of the proposed project would not interfere with the campus EOP through construction-related road closures. The impact would be less than significant and the project would not result in a new or more severe impact related to interference with an EOP than

previously evaluated and disclosed in the 2009 MP FEIR. To ensure that campus procedures and road closure notification requirements are followed **MP Mitigation Measure HAZ-5** is incorporated into the project to ensure that the construction of the proposed project would adhere to campus standards and that an EOP be developed prior to occupancy. No new mitigation is required.

The site of the replacement library is located in the campus core and thus would be sufficiently distant from open space areas that surround the campus that have the potential for wildland fires. No impact would occur and the project would not result in a new or more severe impact related to wildland fires than previously evaluated and disclosed in the 2009 MP FEIR. No new mitigation is required.

The proposed project is within the scope of the 2009 Master Plan and therefore, its cumulative impacts are adequately addressed in the 2009 MP FEIR.

Findings

The potential impacts with respect to hazards and hazardous materials from the proposed library replacement project would be similar to or less than the impacts of campus development analyzed in the 2009 MP FEIR. Therefore, no new or substantially increased significant impacts would result from the proposed project beyond those analyzed in the 2009 MP FEIR. No new mitigation is required.

4.9 Hydrology and Water Quality

	Potentially Significant New Impact	Less than Significant New Impact with Mitigation	Less than Significant New Impact	Impact Fully Analyzed in the FEIR
HYDROLOGY AND WATER QUALITY - Would the project:				
a) Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner, which would result in substantial erosion or siltation on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner, which would result in flooding on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Place within a 100-year flood hazard area structures, which would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	Potentially Significant New Impact	Less than Significant New Impact with Mitigation	Less than Significant New Impact	Impact Fully Analyzed in the FEIR
j) Inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion:

Summary of Analysis in the 2009 MP FEIR

Individual construction projects associated with the 2009 Master Plan that involve 1 acre or more of land disturbance would be required to comply with the NPDES General Construction Permit, which includes the preparation of a SWPPP. In addition, all construction on campus would comply with CSUEB standard stormwater management practices and engineering controls, which require the control and minimization of stormwater pollutants originating from construction sites as a standard part of contract specifications. As a result, the 2009 MP FEIR concluded that water quality impacts during construction would be less than significant. No mitigation is required.

The 2009 Master Plan would result in a small increase in impervious surfaces on the campus, and this increase in impervious surfaces could potentially increase both the peak flows and the volume of site runoff which in turn could result in erosion and sedimentation in creeks that receive campus runoff (hydromodification impacts). Furthermore, an increase in impervious surfaces and increased human activity could also result in degradation of the quality of site runoff. According to the 2009 Master Plan, in order to encourage sustainable development on the campus, each new building project will be required to develop a stormwater management plan that addresses both the quantity and quality of runoff by reducing impervious cover, promoting infiltration, and capturing and treating stormwater runoff. In addition, future development on the campus will incorporate low impact development (LID) features appropriate for the campus site and the 2009 Master Plan would include several best management practices (BMPs) to encourage infiltration and improve water quality. As a result, it is anticipated that both the peak flows as well as the total volume of stormwater runoff at buildout of the 2009 Master Plan would be significantly less than the existing condition. Therefore, the 2009 MP FEIR concluded that the water quality impacts during operation would be less than significant. To ensure that stormwater controls are carefully evaluated and incorporated into future development projects, the Campus will implement **MP Mitigation Measure HYDRO-2**.

The storm drain system included in the 2009 Master Plan would be designed to convey on-site stormwater flows and prevent on-site or off-site flooding. In addition, the volume of stormwater would

decrease under the 2009 Master Plan as discussed above. For this reason, the 2009 MP FEIR concluded that development of the campus under the 2009 Master Plan would not substantially alter the existing drainage patterns in a way that would result in on- or off-site flooding. This impact is less than significant. No mitigation is required.

The campus and the surrounding area do not have any significant groundwater resources and the City of Hayward does not depend on local groundwater supplies to meet domestic and industrial needs. In addition, although there would be a slight increase in impervious surfaces on the campus, the decrease in groundwater recharge would not be proportional because the Campus plans to infiltrate stormwater to the maximum extent possible. As a result, the 2009 MP FEIR concluded that implementation of the 2009 Master Plan would not substantially deplete groundwater or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table. This impact is less than significant. No mitigation is required.

The campus is not within a FEMA-designated 100-year flood zone. In addition, the campus is not located within the inundation pathways of nearby reservoirs. Therefore, the 2009 MP FEIR concluded that implementation of the 2009 Master Plan would not place housing or structures that would impede or redirect flood flows within a 100-year flood hazard area or dam inundation zone. This impact is less than significant. No mitigation is required.

The campus is located in the Hayward hills approximately 5.5 miles from the San Francisco Bay. For this reason, the 2009 MP FEIR concluded that development on the campus under the 2009 Master Plan would not be affected by inundation associated with a tsunami or seiche event. No impact would occur. No mitigation is required.

The 2009 MP FEIR concluded that cumulative impacts associated with hydrology and water quality would be less than significant as reasonably foreseeable development in the City of Hayward and development under the 2009 Master Plan would adhere to NPDES requirements and existing stormwater regulations, avoid any increases in peak flows, not require the use of groundwater, and would not place structures with a 100-year flood plain.

MP FEIR Mitigation Measures

MP MM HYDRO-2: During the design review phase of each future development project on the campus, the Campus will verify that the stormwater BMPs were evaluated for the proposed project and those determined to be appropriate were incorporated into the proposed project. The Campus will also verify that post-development runoff from the project site will approximate pre-development runoff volumes.

Change in Circumstances and/or New Information

Since the certification of the 2009 MP FEIR both originally in 2009 and its recertification in 2018, there have been no changes in circumstances that would alter the conclusions of the 2009 MP FEIR with respect to hydrology and water quality impacts.

Analysis of the Proposed Project

In compliance with NPDES regulations, the construction contractor would be required to implement a SWPPP, which will include erosion and pollution control measures to control the release of pollutants and sediment into receiving waters. As a result, the impact on water quality from construction activities would be less than significant, similar to the conclusions of the 2009 MP FEIR. The project would not result in a new or more severe impact related to water quality during construction than previously evaluated and disclosed in the 2009 MP FEIR. No new mitigation is required.

The development of the proposed project would slightly increase the amount of impervious surfaces on the project site and thus would increase the amount of runoff generated on the project site. To improve the quality of run-off during operation, the Campus will develop a stormwater management plan for the project that addresses both the quantity and quality of runoff. In addition, the proposed project will incorporate LID features appropriate for the site. Therefore, similar to the conclusions included in the 2009 MP FEIR, water quality impacts during operation would be less than significant. To ensure that storm water controls are carefully evaluated and incorporated into site design and the project does not result in any downstream impacts, **MP Mitigation Measure HYDRO-2** is incorporated into the project. The project would not result in new or more severe impacts related to water quality during operation than previously evaluated and disclosed in the 2009 MP FEIR. No new mitigation is required.

There are no existing flooding problems on the project site, and the project built on-site would be designed to control for on-site flooding. The proposed project will also incorporate LID features appropriate for the site that will at a minimum ensure that project runoff rates and durations not exceed estimated pre-project rates and duration, thus preventing flooding on- or off-site. For these reasons, existing drainage patterns on the site would not be substantially altered in a way that would result in on- or off-site flooding. This impact is less than significant, similar to the conclusions included in the 2009 MP FEIR. The project would not result in a new or more severe impact related to on- or off-site flooding than previously evaluated and disclosed in the 2009 MP FEIR. No new mitigation is required.

The proposed project would not draw water from groundwater sources nor substantially increase impervious surfaces. Therefore, operation of the proposed project would not substantially deplete groundwater supplies such that there would be a net deficit in aquifer volume or a lowering of the local

groundwater table level. As a result, similar to the conclusions included in the 2009 MP FEIR, this impact would be less than significant. The project would not result in a new or more severe impact related to groundwater use and recharge than previously evaluated and disclosed in the 2009 MP FEIR. No new mitigation is required.

The project site is not located within a FEMA-designated 100-year flood zone (FEMA 2009) nor is it located within the inundation area of any nearby dam. Therefore, the proposed project would not place structures that would impede or redirect flood flows within a 100-year flood hazard area or dam inundation zone. As a result, this impact is less than significant, similar to the conclusions included in the 2009 MP FEIR. The project would not result in a new or more severe impact related to impeding or redirecting flood flows than previously evaluated and disclosed in the 2009 MP FEIR. No new mitigation is required.

Due to its elevation and distance from the ocean and San Francisco Bay, the project site would not be affected by inundation by a tsunami or seiche event. Therefore, similar to the conclusions included in the 2009 MP FEIR, no impact would occur. The project would not result in a new or more severe impact related to tsunami or seiche events than previously evaluated and disclosed in the 2009 MP FEIR. No mitigation is required.

The proposed project is within the scope of the 2009 Master Plan and therefore, its cumulative impacts are adequately addressed in the 2009 MP FEIR.

Findings

The potential impacts with respect to hydrology and water quality from the proposed library replacement project would be similar to or less than the impacts of campus development analyzed in the 2009 MP FEIR. Therefore, no new or substantially increased significant impacts would result from the proposed project beyond those analyzed in the 2009 MP FEIR. No new mitigation is required.

4.10 Land Use and Planning

	Potentially Significant New Impact	Less than Significant New Impact with Mitigation	Less than Significant New Impact	Impact Fully Analyzed in the FEIR
LAND USE AND PLANNING - Would the project:				
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to, the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion:

Summary of Analysis in the 2009 MP FEIR

All development associated with the 2009 Master Plan, including the academic, support, recreation, housing, parking, and roadways, would be located within or immediately adjacent to the existing development on the campus. As a result, the 2009 MP FEIR concluded that growth and development under the 2009 Master Plan would not physically divide an established community. No mitigation is required.

While the campus is not subject to local land use regulations, the Campus maintains cooperative relations with local governments regarding planning and land use issues to assure that mutual interests are addressed. The 2009 Master Plan would not conflict with the City's General Plan land use designation and zoning for the campus. In addition, the 2009 Master Plan would not conflict with pertinent strategies listed within the Hayward Highlands Neighborhood Plan, which governs adjacent land uses to the north and east. Finally, the 2009 Master Plan does not propose land uses that are substantially incompatible with uses adjacent to the campus. Therefore, the 2009 MP FEIR concluded that growth and development under the 2009 Master Plan would not conflict with applicable land use plans, policies, or regulations of an agency with jurisdiction over the project adopted for the purposes of avoiding or mitigating an environmental effect. This impact is less than significant. No mitigation is required.

The 2009 MP FEIR concluded that cumulative impacts related to land use and planning would be less than significant as new development on the Hayward campus would not introduce land uses that would be incompatible with surrounding land uses and future development adjacent to campus would be expected to be in general conformance with local land use plans.

Change in Circumstances and/or New Information

Since the certification of the 2009 MP FEIR both originally in 2009 and its recertification in 2018, there have been no changes in circumstances that would alter the conclusions of the 2009 MP FEIR with respect to land use impacts.

Analysis of the Proposed Project

The site of the replacement library is surrounded by other campus facilities. As a result, similar to the conclusion included in the 2009 MP FEIR, the replacement library project would not physically divide an established community. No impact would occur and the project would not result in a new or more severe impact related to physically dividing an established community than previously evaluated and disclosed in the 2009 MP FEIR. No new mitigation is required.

As discussed above, the land use plan in the 2009 Master Plan identified a site adjacent to the east wing of the existing library for expansion of the library. The Campus has reevaluated the previously planned library expansion and determined that a new replacement library located at a site 200 feet to the northeast of the existing library that is south of the existing Science buildings and northwest of the existing Recreation and Wellness Center would be more appropriate. In order to relocate the library to a new location, an amendment to the land use plan in the 2009 Master Plan would be required. The land use plan would be modified to label the proposed project site as the new library building site.

The project site is located within an area designated for academic and administrative use in the 2009 Campus Master Plan. The proposed replacement library is an allowed land use within this functional zone. As the proposed project would be consistent with the 2009 Campus Master Plan functional zone for the project site, the proposed project would not conflict with the Campus Master Plan. Therefore, the project would not conflict with applicable land use plans, policies, or regulations of an agency with jurisdiction over the project adopted for the purposes of avoiding or mitigating an environmental effect, similar to the conclusion included in the 2009 MP FEIR. In addition, as discussed throughout this Addendum, all environmental impacts associated with amending the 2009 Master Plan to relocate the replacement library to a new site would be either less than significant or would be reduced to a less than significant level with the incorporation of mitigation listed in the 2009 Master Plan EIR. As a result, the project, including the proposed 2009 Master Plan minor amendment would not result in a new or more

severe impact related to conflicts with applicable land use plans than previously evaluated and disclosed in the 2009 MP FEIR. No new mitigation is required.

The proposed project is within the scope of the 2009 Master Plan and therefore, its cumulative impacts are adequately addressed in the 2009 MP FEIR.

Findings

The potential impacts with respect to land use and planning from the proposed library replacement project and related Master Plan amendment would be similar to or less than the impacts of campus development analyzed in the 2009 MP FEIR. Therefore, no new or substantially increased significant impacts would result from the proposed project beyond those analyzed in the 2009 MP FEIR. No new mitigation is required.

4.11 Mineral Resources

	Potentially Significant New Impact	Less than Significant New Impact with Mitigation	Less than Significant New Impact	Impact Fully Analyzed in the FEIR
MINERAL RESOURCES - Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of future value to the region and the residents of the State?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion:

Summary of Analysis in the 2009 MP FEIR

The campus is not located within a regionally significant aggregate resources zone. In addition, implementation of the 2009 Master Plan would not result in any substantial loss of known mineral resources that would be of value to the region or state because the campus area is not available for extraction of mineral resources. Further development of the campus would not result in the additional loss of important mineral resource recovery. As a result, the 2009 MP FEIR concluded that there would be no impacts on mineral resources. No mitigation is required.

Change in Circumstances and/or New Information

Since the certification of the 2009 MP FEIR both originally in 2009 and its recertification in 2018, there have been no changes in circumstances that would alter the conclusions of the 2009 MP FEIR with respect to impacts on mineral resources.

Analysis of the Proposed Project

As described in the 2009 MP FEIR, the loss of availability of known mineral resources on the campus would be low. No impacts would occur and the project would not result in new or more severe impacts to mineral resources than previously evaluated and disclosed in the 2009 MP FEIR.. No new mitigation is required.

Findings

The potential impacts with respect to mineral resources from the proposed library replacement project would be similar to or less than the impacts of campus development analyzed in the 2009 MP FEIR. Therefore, no new or substantially increased significant impacts would result from the proposed project beyond those analyzed in the 2009 MP FEIR. No new mitigation is required.

4.12 Noise

	Potentially New Significant Impact	Less than Significant New Impact with Mitigation	Less than Significant new Impact	Impact Fully Analyzed in the FEIR
NOISE - Would the project result in:				
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Exposure of persons to or generation of excessive ground borne vibration or ground borne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion:

Summary of Analysis in the 2009 MP FEIR

Campus development under the 2009 Master Plan, with and without a third campus entrance, would result in increased vehicular traffic on the regional road network by 2030, which would increase ambient traffic noise levels at existing on- and off-site noise sensitive uses. However, the increase in noise levels along study area road segments would not reach levels that are typically noticed by the human ear. As a result, the 2009 MP FEIR concluded that traffic added by campus development under the 2009 Master Plan, with and without a third campus entrance, at buildout in 2030 would not significantly increase

noise levels along any of the roadway segments. The impact would be less than significant. No mitigation is required.

Noise generated by daily campus activities is not expected to exceed the City noise standards at nearby off-site noise-sensitive location (i.e., residences, churches, schools). However, on-site noise-sensitive receptors, including student housing and academic buildings on the campus, could be exposed to excessive noise from other land uses that are developed within the campus. However, the land use plan for the 2009 Master Plan has been designed to avoid the location of sensitive land uses near potential loud noise sources. Therefore, the 2009 MP FEIR concluded that on- and off-site receptors are not expected to be exposed to noise levels in excess of the standards for noise sensitive uses. This impact is less than significant. No mitigation is required.

Construction on the campus pursuant to the 2009 Master Plan could expose existing and future on- and off-site noise-sensitive receptors to elevated construction noise levels. **MP Mitigation Measures NOI-3a** and **NOI-3b** would reduce this impact to a less than significant level.

The campus is not located within an airport land use plan or within 2 miles of a public airport or public use airport. In addition, the campus is not located within 2 miles of a private airstrip. Therefore, no impact would occur and no mitigation is required.

The 2009 MP FEIR concluded that cumulative noise effects from reasonably foreseeable development in the City of Hayward and development under the 2009 Master Plan would be less than significant.

MP FEIR Mitigation Measures

MP MM NOI-3a: Construction activities on campus shall be restricted to between the hours of 7:00 AM and 7:00 PM on weekdays and Saturdays and 10:00 AM to 6:00 PM on Sundays and holidays.

MP MM NOI-3b: Prior to initiation of campus construction within 500 feet of a noise sensitive receptor, the Campus shall approve a construction noise mitigation program including but not limited to the following.

- All noise-producing project equipment and vehicles using internal combustion engines shall be equipped with exhaust mufflers and air-inlet silencers where appropriate, in good operating condition that meet or exceed original factory specification.

- Mobile or fixed “package” equipment (e.g., arc-welders, air compressors) shall be equipped with shrouds and noise control features that are readily available for that type of equipment.
- All mobile or fixed noise producing equipment used on the project, which is regulated for noise output by local, state or federal agency, shall comply with such regulation while engaged in project-related activities.
- Electrically powered equipment shall be used instead of pneumatic or internal combustion powered equipment, where practicable.
- Material stockpiles and mobile equipment staging, construction vehicle parking and maintenance areas shall be located as far as practicable from noise-sensitive land uses.
- Stationary noise sources such as generators or pumps shall be located away from noise-sensitive land uses as feasible.
- The use of noise-producing signals, including horns, whistles, alarms, and bells shall be for safety warning purposes only. No project-related public address loudspeaker, two-way radio, or music system shall be audible at any adjacent noise-sensitive receptor except for emergency use.
- The erection of temporary noise barriers shall be considered where project activity is unavoidably close to noise-sensitive receptors.
- The noisiest construction operations shall be scheduled to occur together to avoid continuing periods of the greatest annoyance, wherever possible.
- Construction vehicle trips be routed as far as practical from existing residential uses.
- The loudest campus construction activities, such as demolition, blasting, and pile driving, shall be scheduled during summer, Thanksgiving, winter, and spring breaks when fewer people would be disturbed by construction noise.
- Whenever possible, academic, administrative, and residential areas that will be subject to construction noise shall be informed a week before the start of each construction project.

Change in Circumstances and/or New Information

Since the certification of the 2009 MP FEIR both originally in 2009 and its recertification in 2018, there have been no changes in circumstances that would alter the conclusions of the 2009 MP FEIR with respect to noise impacts.

Analysis of the Proposed Project

With operation of the proposed replacement library, noise levels at both on-campus and off-campus receptors would be similar to those under existing conditions. This is because the library project does not include any stationary noise source that could elevate noise levels in the project vicinity, and any HVAC equipment that is roof-mounted on the new library building would be enclosed to minimize emission of noise. The proposed project would not result in new operational vehicle trips as the campus population would stay the same; therefore, traffic noise along area roadways would not increase due to the project. Similar to the conclusion included in the 2009 MP FEIR, the impact related to operational noise would be less than significant. The project would not result in a new or more severe impact related to operational noise than previously evaluated and disclosed in the 2009 MP FEIR. No new mitigation is required.

According to the City of Hayward Municipal Code, construction noise levels shall not exceed 86 dBA outside of the property plane. Noise from project construction would be below this level at the campus property boundary, which is approximately 400 feet from the edge of the project site. The nearest off-campus residential receptor is 650 feet from the project site boundary, and would experience a maximum construction noise level of approximately 58.5 dBA (see **Appendix B** for noise data/calculations). Therefore, similar to the conclusion included in the 2009 MP FEIR, project construction noise would not adversely affect nearby off-campus residential receptors. The project would not result in a new or more severe impact related to construction noise impact on off-campus receptors than previously evaluated and disclosed in the 2009 MP FEIR.

With respect to sensitive receptors on the campus, student residences, classrooms, and places used for learning and research are identified as places that would house noise sensitive receptors. According to the 2009 MP FEIR, a significant impact at these campus receptors would occur if construction activity is predicted to result in a sound level that is more than 6 dBA above the ambient sound level at the nearest sensitive receptor between the hours of 7:00 PM and 7:00 AM on weekdays and Saturdays or between the hours of 10 AM and 6 PM on Sundays and holidays. If a construction site is within a distance of about 500 feet of a sensitive receptor, construction noise is likely to increase sound levels at the receptor by 6 dBA or more. The nearest on-site residential receptors are approximately 250 feet to the southeast of the project site. The nearest on-site classroom receptors are approximately 100 feet to the northeast of the project site. As these receptors are within 500 feet of the project construction activities, they are likely to experience increased noise levels above 6 dBA. This represents a potentially significant impact, similar to the conclusion included in the 2009 MP FEIR. **MP Mitigation Measure NOI-3** would be incorporated into the project to reduce the noise impact from construction activities to a less than significant level. The project would not result in a new or more severe impact related to construction noise impacts on on-campus receptors than previously evaluated and disclosed in the 2009 MP FEIR. No new mitigation is required.

The project site is located within the campus core and therefore is not located within the vicinity of a public airport or private airstrip. As a result, the project would not expose people residing or working in the project area to excessive noise levels from aircraft. Similar to the conclusion included in the 2009 MP FEIR, no impact would occur and the project would not result in a new or more severe impact related to aircraft noise than previously evaluated and disclosed in the 2009 MP FEIR. No new mitigation is required.

The proposed project is within the scope of the 2009 Master Plan and therefore, its cumulative impacts are adequately addressed in the 2009 MP FEIR.

Findings

The potential impacts with respect to noise from the proposed library replacement project would be similar to or less than the impacts of campus development analyzed in the 2009 MP FEIR. Therefore, no new or substantially increased significant impacts would result from the proposed project beyond those analyzed in the 2009 MP FEIR. No new mitigation is required.

4.13 Population and Housing

	Potentially Significant New Impact	Less than Significant New Impact with Mitigation	Less than Significant New Impact	Impact Fully Analyzed in the FEIR
POPULATION AND HOUSING – Would the project:				
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion:

Summary of Analysis in the 2009 MP FEIR

All students new to the Bay Area could be housed by new student beds under the 2009 Master Plan. In addition, ABAG housing projections indicate that there would be ample housing available in the City of Hayward and in Alameda County to accommodate new employees to campus. As a result, the 2009 MP FEIR concluded that implementation of the 2009 Master Plan would not substantially increase the population of the City of Hayward or Alameda County such that additional housing would be required, the construction of which could cause significant environmental impacts. This impact is less than significant. No mitigation is required.

The student and faculty housing envisioned under the 2009 Master Plan would be constructed within existing campus boundaries. Other development associated with 2009 Master Plan implementation would occur on the developed portion of the campus. Therefore, the 2009 MP FEIR concluded that implementation of the 2009 Master Plan would not displace existing housing or population. No mitigation is required.

The 2009 MP FEIR concluded that cumulative impacts with respect to population and housing from reasonably foreseeable development in the City of Hayward and development under the 2009 Master Plan would be less than significant.

Change in Circumstances and/or New Information

Since the certification of the 2009 MP FEIR both originally in 2009 and its recertification in 2018, there have been no changes in circumstances that would alter the conclusions of the 2009 MP FEIR with respect to population and housing impacts.

Analysis of the Proposed Project

The proposed project would not increase campus population as the replacement library is a supporting use that would house existing employees and serve the existing and future student population. Furthermore, the west wing of the existing library would stay vacant after the relocation of the library to the replacement facility and would not house any new students or employees. The east wing would continue to house campus support services and library stacks. Therefore, no impacts related to population and housing would occur and the project would not result in new or more severe impacts related to population and housing than previously evaluated and disclosed in the 2009 MP FEIR. No new mitigation is required.

The proposed project is within the scope of the 2009 Master Plan and therefore, its cumulative impacts are adequately addressed in the 2009 MP FEIR.

Findings

The potential impacts with respect to population and housing from the proposed library replacement project would be similar to or less than the impacts of campus development analyzed in the 2009 MP FEIR. Therefore, no new or substantially increased significant impacts would result from the proposed project beyond those analyzed in the 2009 MP FEIR. No new mitigation is required.

4.14 Public Services

	Potentially New Significant Impact	Less than Significant New Impact with Mitigation	Less than Significant New Impact	Impact Fully Analyzed in the FEIR
PUBLIC SERVICES				
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
i) Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ii) Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iii) Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iv) Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
v) Other governmental services?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion:

Summary of Analysis in the 2009 MP FEIR

Implementation of the 2009 Master Plan would result in additional facilities and population on the campus. This increase in campus facilities and population would place incremental additional demand on the Hayward Fire Department (HFD) for fire protection services. The HFD indicated additional facilities such as an additional bay or fire station would need to be constructed. However, expansion or construction of a fire station would not result in significant environmental impacts due to the limited area that is typically required to build a fire station (between 0.5 and 1 acre) and its urban location. As a result, the 2009 MP FEIR concluded that the construction of additional fire facilities would not result in significant environmental impacts. This impact is considered less than significant. No mitigation is required.

The increase in campus facilities and population would also place incremental additional demand on the Campus Police Department and the Hayward Police Department for law enforcement services. The need

for new on- or off-campus police facilities to service the campus at buildout is not anticipated at this time. However, should new or expanded police facilities be required on campus, the development of such facilities would not result in environmental impacts beyond those evaluated in the 2009 MP FEIR. In addition, an expansion of police facilities in Hayward would be unlikely to result in significant environmental impacts due to the urban setting of the City. Therefore, the 2009 MP FEIR concluded that the construction of additional law enforcement facilities would result in less than significant environmental impacts. This impact is considered less than significant. No mitigation is required.

New employees on campus would result in the addition of approximately 196 K-12 students to Hayward area schools over a period of about 21 to 22 years (approximately 10 K-12 students per year). As this increase is not considered substantial, the 2009 MP FEIR concluded that campus development under the 2009 Master Plan would not result in impacts to City of Hayward schools. This impact is less than significant. No mitigation is required.

The 2009 Master Plan FEIR concluded that cumulative impacts with respect to public services from reasonably foreseeable development in the City of Hayward and development under the 2009 Master Plan would be less than significant.

Change in Circumstances and/or New Information

Since the certification of the 2009 MP FEIR both originally in 2009 and its recertification in 2018, there have been no changes in circumstances that would alter the conclusions of the 2009 MP FEIR with respect to public service impacts.

Analysis of the Proposed Project

The proposed replacement library project would not increase campus population and thus demand for public services would not increase compared to the levels analyzed in the 2009 MP FEIR. As a result, the project would not result in new or more severe impacts related to public services than previously evaluated and disclosed in the 2009 MP FEIR. No new mitigation is required.

The proposed project is within the scope of the 2009 Master Plan and therefore, its cumulative impacts are adequately addressed in the 2009 MP FEIR.

Findings

The potential impacts with respect to public services from the proposed library replacement project would be similar to or less than the impacts of campus development analyzed in the 2009 MP FEIR.

Therefore, no new or substantially increased significant impacts would result from the proposed project beyond those analyzed in the 2009 MP FEIR. No new mitigation is required.

4.15 Recreation

	Potentially Significant New Impact	Less than Significant New Impact with Mitigation	Less than Significant New Impact	Impact Fully Analyzed in the FEIR
RECREATION – Would the project:				
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion:

Summary of Analysis in the 2009 MP FEIR

The 2009 Master Plan identified minor modifications to existing recreational facilities on the campus. The 2017 PR-FEIR which is a part of the 2009 MP FEIR noted that all of these facilities are already developed and located in portions of the campus where sensitive environmental resources are not present. In addition, based on the current low levels of usage of the nearby regional parks by campus population, the FEIR concluded that only a small number of additional students, faculty and staff are expected to patronize regional parks and facilities owned and operated by the Hayward Area Recreation and Park District as existing on-campus recreational facilities would satisfy the demands of this campus population (CSUEB 2018). For these reasons, the 2009 MP FEIR concluded that campus growth under the 2009 Master Plan would not result in significant environmental impacts related to the development of new or modified recreational facilities nor 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. This impact is considered less than significant. No mitigation is required.

The 2009 MP FEIR concluded that cumulative impacts with respect to recreation from reasonably foreseeable development in the City of Hayward and development under the 2009 Master Plan would be less than significant.

Change in Circumstances and/or New Information

Since the certification of the 2009 MP FEIR both originally in 2009 and its recertification in 2018, there have been no changes in circumstances that would alter the conclusions of the 2009 MP FEIR with respect to impacts on recreational facilities.

Analysis of the Proposed Project

As there would be no campus population growth due to the proposed replacement library project, no impacts to existing recreational facilities would occur, nor would there be the need to construct new recreation facilities. Thus, the project would not result in new or more severe impacts related to recreation than previously evaluated and disclosed in the 2009 MP FEIR. No new mitigation is required.

The proposed project is within the scope of the 2009 Master Plan and therefore, its cumulative impacts are adequately addressed in the 2009 MP FEIR.

Findings

The potential impacts with respect to recreational resources from the proposed library replacement project would be similar to or less than the impacts of campus development analyzed in the 2009 MP FEIR. Therefore, no new or substantially increased significant impacts would result from the proposed project beyond those analyzed in the 2009 MP FEIR. No new mitigation is required.

4.16 Transportation and Traffic

	Potentially New Significant Impact	Less than Significant New Impact with Mitigation	Less than Significant New Impact	Impact Fully Analyzed in the FEIR
TRANSPORTATION/TRAFFIC - Would the project:				
a) Cause an increase in traffic, which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion:

Summary of Analysis in the 2009 MP FEIR

The traffic analysis in the 2009 MP FEIR found that full buildout of the campus in 2030 under the 2009 Master Plan, with and without the Third Entrance, will contribute to sub-standard intersection operations at eight study intersections, in either the AM peak hour or PM peak hour, or both peak hours. **MP Mitigation Measures TRANS-1a** and **TRANS-1b** would lessen but not reduce this impact to a less than significant level. As a result, the 2009 MP FEIR concluded that this impact would be significant and unavoidable.

The traffic analysis in the 2009 MP FEIR found that campus gateway intersections will operate at unacceptable levels of service in the future. **MP Mitigation Measure TRANS-2** would reduce this impact to a less than significant level.

The traffic analysis in the 2009 MP FEIR found that traffic added by growth and development under the 2009 MP FEIR would not adversely affect intersection operations at Hayward Boulevard and Civic Avenue. This impact is less than significant. No mitigation is required.

The traffic analysis in the 2009 MP FEIR found that pedestrian safety on Harder Road in the vicinity of the student housing area could be affected by traffic volumes and speeds, with the provision of the third entrance on Hayward Boulevard. **MP Mitigation Measure TRANS-4** would reduce this impact to a less than significant level.

The traffic analysis in the 2009 MP FEIR found that campus growth and development under the 2009 Master Plan would substantially increase volumes on several segments of the Congestion Management Program (CMP) or Metropolitan Transportation System (MTS) networks. **MP Mitigation Measure TRANS-5** would lessen but not reduce this impact to a less than significant level. As a result, the 2009 MP FEIR concluded that this impact would be significant and unavoidable.

The traffic analysis in the 2009 MP FEIR found that campus growth and development under the 2009 Master Plan will increase BART ridership, but will not lead to over-capacity conditions in the peak commute hours. This impact is less than significant. No mitigation is required.

The traffic analysis in the 2009 MP FEIR found that campus growth and development under the 2009 Master Plan will increase bus transit demand, particularly for connections between the campus and the Downtown Hayward and Castro Valley BART stations. **MP Mitigation Measure TRANS-7** would reduce this impact to a less than significant level.

The analysis in the 2009 MP FEIR concluded that walking and bicycling trips to the campus may increase moderately with implementation of the 2009 Master Plan. **MP Mitigation Measure TRANS-8** would reduce this impact to a less than significant level.

The analysis in the 2009 MP FEIR concluded that the 2009 Master Plan could result in overflow parking on nearby neighborhood streets, if the supply is not managed to meet demand as the campus grows. **MP Mitigation Measures TRANS-9a** and **TRANS-9b** would reduce this impact to a less than significant level.

The 2009 MP FEIR concluded that significant cumulative traffic effects would occur from reasonably foreseeable development in the City of Hayward and development under the 2009 Master Plan. No feasible mitigation exists to reduce these cumulative impacts to a less than significant level.

Change in Circumstances and/or New Information

Since the certification of the 2009 MP FEIR both originally in 2009 and its recertification in 2018, there have been no changes in circumstances that would alter the conclusions of the 2009 MP FEIR with respect to traffic and transportation impacts.

Analysis of the Proposed Project

Except for an increase in construction vehicles accessing the project site during project construction, there would be no increase in traffic due to the proposed project as it would not result in an increase in campus population or associated vehicle trips. For this reason, no traffic impact would occur and **MP Mitigation Measures TRANS-1, TRANS-2, and TRANS-5** do not apply. Construction vehicles would travel to and from the project site for a period of two years, with most of the construction traffic accessing or leaving the project area during off-peak hours. As a result, construction traffic would not have any adverse effect on the capacity of the roadway system. The impact of the project's construction traffic would be less than significant. No mitigation is required.

The proposed project would not make any changes to area roads and would not result in the creation of dangerous intersections or other road conditions that would substantially increase hazards in the area. There would be no impact and **MP Mitigation Measure TRANS-4** does not apply.

Construction of the proposed project would not result in any road or bicycle lane closures outside of the project site. Roadways adjacent to the project site would remain open to emergency vehicles during project construction. There would be no impact. No mitigation is required.

The proposed project would not conflict with any adopted policies, plans, or programs that support alternative transportation as it would not increase the population of the campus or change the existing land uses. There would be no impact and **MP Mitigation Measures TRANS-7 and TRANS-8** do not apply. No mitigation is required.

The proposed project as it would not result in an increase in campus population or associated vehicle trips that would require parking. As a result, the proposed project would not result in inadequate parking. There would be no impact and **MP Mitigation Measure TRANS-9** does not apply. No mitigation is required.

The proposed project is within the scope of the 2009 MP FEIR and therefore, its cumulative impacts are adequately addressed in the 2009 MP FEIR. Although the 2009 MP FEIR concluded that there would be significant and unavoidable cumulative impacts related to intersection operations and CMP and MTS networks, the proposed project would not contribute to the significant and unavoidable impacts.

Findings

The potential impacts with respect to traffic from the proposed library replacement project would be similar to or less than the impacts of campus development analyzed in the 2009 MP FEIR. Therefore, no new or substantially increased significant impacts would result from the proposed project beyond those analyzed in the 2009 MP FEIR. No new mitigation is required.

4.17 Utilities and Service Systems

	Potentially New Significant Impact	Less than Significant New Impact with Mitigation	Less than Significant New Impact	Impact Fully Analyzed in the FEIR
UTILITIES AND SERVICE SYSTEMS - Would the project:				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new and expanded entitlements needed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Comply with federal, state, and local statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion:

Summary of Analysis in the 2009 MP FEIR

Campus growth and development under the 2009 Master Plan would result in a demand for water not anticipated in the City's 2005 UWMP. As a result, the 2009 MP FEIR conservatively concluded that the impact of growth and development at Master Plan buildout on water supply would be significant. **MP Mitigation Measure UTIL-1** would reduce this impact to a less than significant level.

The City of Hayward Water Pollution Control Facility (WPCF) would have sufficient capacity to treat wastewater generated on the campus through Master Plan buildout. In addition, no major improvements to the City's sewer mains that serve the campus are needed to handle the increased flow from the campus. Therefore, the 2009 MP FEIR concluded that campus growth and development under the 2009 Master Plan would not require the construction or expansion of wastewater conveyance or treatment facilities. This impact is less than significant. No mitigation is required.

Campus growth and development under the 2009 Master Plan would result in the construction of new electrical, natural gas, and heating water facilities. However, the 2009 MP FEIR concluded that the construction of these facilities would not cause significant environmental impacts. This impact is less than significant. No mitigation is required.

Campus growth and development under the 2009 Master Plan would require a minor expansion of the storm water conveyance system. However, the 2009 MP FEIR concluded that the construction of this system would not cause significant environmental impacts. This impact is less than significant. No mitigation is required.

Campus growth and development under the 2009 Master Plan would increase the amount of non-hazardous waste generated on campus. However, at full buildout under the 2009 Master Plan, 75 to 100 percent of solid waste would be diverted from landfills. Additionally, 100 percent of organic waste generated would be composted on the campus. For these reasons, the 2009 MP FEIR concluded that the 2009 Master Plan would not conflict with applicable solid waste regulations, nor would it result in solid waste requiring disposal that would exceed the landfill capacity. This impact is less than significant. No mitigation is required.

Reasonably foreseeable development in the City of Hayward and campus development under the 2009 Master Plan would result in the demand for additional water supply, wastewater treatment, solid waste disposal, electricity, and natural gas. However, the 2009 MP FEIR concluded that the contribution from campus development to the cumulative impact would not be considerable as the 2009 Master Plan includes sustainability goals to reduce the Campus's water use, energy use, wastewater generation, and solid waste generation and disposal. In addition, mitigation discussed above would further reduce campus water demand and thereby also wastewater discharge.

Change in Circumstances and/or New Information

Since the certification of the 2009 MP FEIR both originally in 2009 and its recertification in 2018, there have been no changes in circumstances that would alter the conclusions of the 2009 MP FEIR with respect to utility impacts.

Analysis of the Proposed Project

The proposed project would not increase the campus population. Therefore, there would be no additional demand for water, wastewater treatment, and solid waste facilities. In addition, impervious surfaces on the project site would minimally increase as described above under **Section 4.7 Hydrology and Water Quality**, resulting in a similar amount of storm water runoff when compared to the 2009 Master Plan analysis. No impacts to utilities and service systems would occur and the project would not result in new or more severe impacts related to utilities and services systems than previously evaluated and disclosed in the 2009 MP FEIR. **MP Mitigation Measure UTIL-1** would not apply.

The proposed project is within the scope of the 2009 MP FEIR and therefore, its cumulative impacts are adequately addressed in the 2009 MP FEIR.

Findings

The potential impacts with respect to utilities and service systems from the proposed library replacement project would be similar to or less than the impacts of campus development analyzed in the 2009 MP FEIR. Therefore, no new or substantially increased significant impacts would result from the proposed project beyond those analyzed in the 2009 MP FEIR. No new mitigation is required.

5.0 REFERENCES

- Bay Area Air Quality Management District (BAAQMD). 2017. *BAAQMD Air Quality CEQA Guidelines*. May.
- California State University East Bay (CSUEB). 2018. CSU East Bay Hayward Campus 2009 Master Plan Final EIR, SCH No. 2008042100. January.
- Federal Emergency Management Agency (FEMA). 2009. Flood Insurance Rate Map No. 06001C0293G for Alameda County, California. August 3.
- California State Water Resources Control Board (SWRCB). 2018. GeoTracker database. Cal State University Hayward (T0600100243). Available at: http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0600100243. Accessed: February 26, 2018.

6.0 REPORT PREPARERS

California State University East Bay

Anne Salazar Leung, University Planner

Impact Sciences, Inc.

Shabnam Barati, Ph.D., Principal

Paul Stephenson, AICP, Senior Project Manager

Jared Jerome, Air Quality and Noise Analyst

Van Hoang, Publications Manager

TABLE OF CONTENTS

Section	Page
1.0 Introduction	1
2.0 CEQA Requirements.....	2
3.0 Project Description	3
4.0 Environmental Factors Potentially Affected.....	8
4.1 Aesthetics	10
4.2 Agriculture and Forestry Resources.....	13
4.3 Air Quality	16
4.4 Biological Resources	24
4.5 Cultural Resources	30
4.6 Geology and Soils.....	35
4.7 Greenhouse Gas Emissions.....	38
4.8 Hazards and Hazardous Materials.....	41
4.9 Hydrology and Water Quality	47
4.10 Land Use and Planning.....	52
4.11 Mineral Resources.....	55
4.12 Noise	57
4.13 Population and Housing.....	62
4.14 Public Services	64
4.15 Recreation.....	67
4.16 Transportation and Traffic.....	69
4.17 Utilities and Service Systems.....	73
5.0 References.....	76
6.0 Report Preparers.....	77

LIST OF FIGURES

Figure	Page
Figure 1, Project Location	6
Figure 2, Conceptual Site Plan	7

LIST OF TABLES

Table	Page
Table 1: Significance Thresholds for Criteria Pollutant Emissions	18
Table 2: Estimated Construction Emissions.....	20
Table 3: GHG Significance Thresholds	39

APPENDICES

Appendix A: Emissions Calculations

Appendix B: Noise Calculations

1.0 INTRODUCTION

In September 2009, the CSU Board of Trustees adopted Findings and a Mitigation Monitoring Program pursuant to California Environmental Quality Act (CEQA) for the 2009 California State University, East Bay (CSUEB) Hayward Campus Master Plan ("2009 Master Plan"). The 2009 Final EIR was challenged in court by the City of Hayward (City) and two local neighborhood groups. The Court of Appeal upheld the 2009 Final EIR in all respects, with the exception of the 2009 Final EIR's analysis of impacts to parklands. The Court of Appeal also directed the Board of Trustees to reconsider the feasibility of funding the California State University's (University) fair-share contribution of off-campus traffic mitigation measures.

Accordingly, in 2017, the University prepared a Partial Recirculated Draft and Final Environmental Impact Report (collectively "2017 PR-FEIR") which updated and replaced the parkland analysis in the 2009 Final EIR, and provides an expanded analysis of the project's impacts on nearby parklands in accordance with the opinion of the Court of Appeal and the peremptory writ of administrative mandamus. The 2017 PR-FEIR concluded, consistent with the 2009 Final EIR that the Master Plan project would not result in a significant adverse impact to parklands. In January 2018, the Board of Trustees set aside and vacated its original approval of the CSUEB 2009 Master Plan, de-certified the 2009 Final EIR, certified the 2017 PR-EIR and re-certified 2009 Final EIR as modified by the 2017 PR-EIR, and re-approved the CSUEB 2009 Master Plan. The re-certified 2009 Final EIR as modified by the 2017 PR-EIR is referred to throughout this Addendum as the "2009 MP FEIR."

The 2009 Master Plan addresses the facility needs of the Hayward Campus to meet State-mandated enrollment through 2030. The 2009 Master Plan involves the reorganization of campus facilities and reconfiguration of campus access and circulation. Activities outlined in the 2009 Master Plan include the demolition/removal of some of the existing buildings on the campus, the renovation of some of the existing buildings, and the construction of a number of new buildings. In addition, the 2009 Master Plan includes recommended vehicle and pedestrian circulation plans for the campus and recommended landscape improvements. The 2009 MP FEIR addressed the environmental impacts from the implementation of the 2009 Master Plan and campus growth through 2030.

The 2009 Master Plan states that the existing campus library is no longer able to meet modern criteria for a technologically advanced, attractive venue for learning and that the construction of a new library to replace the existing campus library would be required. The 2009 Master Plan identified a site adjacent to the east wing of the existing library for expansion of the library. The Campus has reevaluated the previously planned library expansion and determined that a new replacement library located at a site 200 feet to the northeast of the existing library that is south of the existing Science buildings and northwest of

the existing Recreation and Wellness Center would be more appropriate. This Addendum analyzes the environmental effects from amending the approved Master Plan and developing the new library on the proposed site instead of the previously identified location.

Where none of the conditions requiring the preparation of a Subsequent EIR are met, the CEQA Guidelines require a lead agency to prepare an Addendum to the previously certified EIR, including a brief explanation of the decision to not prepare a Subsequent EIR supported by substantial evidence (Section 15164). Based on the analysis below, this Addendum concludes that the construction and operation of the new library at the proposed site would not result in any new significant environmental impacts, or an increase in the severity of adverse impacts previously evaluated and disclosed in the 2009 MP FEIR, nor would it require the adoption or consideration of any new or considerably different mitigation measures and alternatives. Therefore this Addendum is the appropriate form of environmental review required under CEQA.

2.0 CEQA REQUIREMENTS

CEQA Guidelines Section 15164(a) states that the lead agency shall prepare an addendum to a previously adopted EIR if some changes or additions are necessary but none of the conditions described in Section 15162 calling for preparation of a subsequent EIR have occurred. Section 15164(c) states that an addendum does not need to be circulated for public review. Section 15164(d) provides that the decision-making body shall consider the addendum in conjunction with the certified EIR prior to making a decision on the project. Section 15164(e) requires documentation of the decision not to prepare a subsequent EIR pursuant to Section 15162.

CEQA Guidelines Section 15162(a) provides that once an EIR has been adopted, no subsequent EIR shall be prepared unless the lead agency determines, on the basis of substantial evidence, one or more of the following:

- Substantial changes are proposed in the project which will require major revisions of the previous EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;
- Substantial changes occur with respect to the circumstances under which the project is undertaken which will require major revisions of the previous EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;
- New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete, shows any of the following:

- The project will have one or more significant effects not discussed in the previous EIR;
- Significant effects previously examined will be substantially more severe than shown in the previous EIR;
- Mitigation measures previously found not to be feasible would in fact be feasible and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or
- Mitigation measures which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative.

This Addendum has been prepared to satisfy the requirements of CEQA Guidelines Sections 15164(b), 15164(d), and 15164(e).

3.0 PROJECT DESCRIPTION

Project Site

The CSUEB Hayward campus is located at 25800 Carlos Bee Boulevard in the Hayward Hills, approximately 2 miles east of downtown Hayward. The replacement library site is located in the center of the Hayward campus south of the Science buildings and northwest of the Recreation and Wellness Center (see **Figure 1, Project Location**). The site is approximately 1.1 acres in size and is partially paved and partially landscaped with trees and shrubs. The site is sloped and rises approximately 20 feet from the south to the north. Institutional uses surround the replacement library site.

Existing Campus Library

The existing campus library building is located in the campus core approximately 200 feet to the southwest of the project site and includes about 204,000 gross square feet (gsf) of building space with approximately 133,000 gsf of space dedicated to library functions and approximately 71,000 gsf of space devoted to campus support services (non-library functions/services). Library functions are housed in both wings of the upper mall level (81,000 gsf), the west wing of the lower mall level (50,000 gsf), and in the basement of the west wing (2,000 gsf) while campus support services are located in the east wing of the lower mall level (20,000 gsf) and the basement level of the west wing (21,000 gsf). The remaining building basement space (30,000 gsf) is dedicated to mechanical spaces, restrooms, corridors and auxiliary spaces.

Proposed Replacement Library

The proposed replacement library would be three stories and reach a maximum of approximately 47 feet in height. It would provide approximately 100,000 gsf of space. The proposed facility would perform the same functions as the existing library, employ the same number of library staff as the present library, and serve the same number of patrons as the existing facility; the proposed facility would not result in an increase in campus population. As indicated in **Figure 2, Conceptual Site Plan**, the proposed structure would occupy most of the project site. The replacement library would also be served by utilities located within the campus core and the design and landscaping of the proposed facility would be similar to that of existing campus buildings near the project site.

After the relocation of library functions to the replacement library, the west wing of the existing library will remain vacant pending the completion of a study to determine future use. With respect to the east wing, it will undergo a seismic retrofit in either late 2018 or early 2019. The lower mall level of the east wing would continue to house campus support services (20,000 gsf) and the upper mall level of the east wing would continue to house library stacks (27,000 gsf) after the planned retrofit.

Construction of the proposed project is anticipated to begin in spring 2019 and last approximately two years. Because the project is within the scope of the 2009 Master Plan, it is required to implement all applicable mitigation measures set forth in the 2009 MP FEIR. All applicable mitigation measures are identified in the Addendum analysis below. In addition, to minimize emissions of toxic air contaminants during construction, the project includes a best management practice (BMP) that requires all construction equipment used in project construction to be equipped with USEPA rated Tier 4 (model year 2008 or newer) engines. This BMP will be incorporated into the project's construction contract.

Proposed 2009 Master Plan Revision

As noted above, as the existing campus library is no longer able to meet modern criteria for a technologically advanced, attractive venue for learning. In response the campus is seeking a master plan revision to create a new library replacement building on the project site by combining space set aside for a library addition with one of the facilities identified a part of the Instructional Support Services Complex. The site of the library addition is located adjacent to the east wing of the existing library while the site of the Instructional Support Services facility is located adjacent to the project site to the west. As the proposed library replacement project is not adding to the building space projections provided in the 2009 Master Plan, the proposed project is therefore within the scope of the 2009 Master Plan, and as such is analyzed in the 2009 MP FEIR for its environmental impacts. The purpose of the evaluation in this document is to disclose any changes to the previously evaluated and disclosed environmental impacts

that could result from relocating the space assigned to the library addition and the Instructional Support Services facility to the project site and the proposed Master Plan revision.

Figure 1, Project Location

Figure 2, Conceptual Site Plan

4.0 ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

This Addendum provides an analysis of each environmental issue identified in the 2009 MP FEIR to determine whether new or more severe effects would occur or new mitigation measures should be required. CEQA Guidelines Section 15164(b) states that the lead agency shall prepare an addendum to a previously adopted EIR if only minor technical changes or additions are necessary or none of the conditions described in Section 15162 calling for the preparation of a subsequent EIR have occurred. Here, an addendum is appropriate to address additional project-specific details of the proposed project. This document assesses the proposed replacement library to determine whether it is within the scope of the 2009 MP FEIR or whether the construction and/or the operation of the proposed replacement library would result in new significant impacts or substantially more severe impacts under CEQA Guidelines Section 15162.

In the following evaluation each topic section includes the following sub-sections:

- **Environmental Checklist.** Contains a modified form of the Appendix G Initial Study environmental checklist. Each checklist question has been modified to characterize the potentially significant impact, less than significant impact, no impact and other categories in the context of whether or not the project would result in new significant impacts or substantially more severe impacts when compared to the FEIR and the 15162 triggers as follows:
 - Would the project result in substantial changes which will require major revisions of the certified EIR due to new significant environmental effects or a substantial increase in the severity of previously identified effects;
 - Would the project result in substantial changes with respect to the circumstances in which the project is undertaken which will require major revisions of the certified EIR due new significant environmental effects or a substantial increase in the severity of previously identified significant effects;
 - Would the project have one or more significant effects not discussed in the certified EIR or that will be substantially more severe than shown in the EIR, or are there mitigation measures or alternatives previously found not to be feasible or that are considerably different, that would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternatives.

The checklist presented in the following analysis classifies impacts in one of four ways:

- **Potentially Significant New Impact.** This category is for any potentially significant impact that was not analyzed in the 2009 MP FEIR. A potentially significant impact is an effect that may be significant based on substantial evidence and the significance criteria for the proposed project. If the project may result in one or more Potentially Significant Impacts, further environmental documentation is required.

- **Less than Significant New Impact with Mitigation.** This category is for any impacts which were not analyzed or found in the 2009 MP FEIR, but are nonetheless found to be less than significant with mitigation incorporated. This impact is an effect that with the implementation of project-specific mitigation measures is reduced from potentially significant to a less than significant level.
- **Less than Significant New Impact.** This category is for any impacts which were not analyzed or found in the 2009 MP FEIR, but which are nonetheless less than significant.
- **Impacts Fully Analyzed in the FEIR.** This category is for impacts which are equal to or less than the impacts found and analyzed in the 2009 MP FEIR.

4.1 Aesthetics

	Potentially Significant New Impact	Less than Significant New Impact with Mitigation	Less than Significant New Impact	Impacts Fully Analyzed in the FEIR
AESTHETICS - Would the project:				
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion:

Summary of Analysis in the 2009 MP FEIR

A scenic vista is generally defined as an expansive view of highly valued landscape as observable from a publicly accessible vantage point. Scenic vistas of the City of Hayward and San Francisco Bay are offered from vantage points within several neighborhoods north and east of the campus in the Hayward Hills. Implementation of the majority of the 2009 Master Plan would not adversely affect scenic vistas in the Hayward Hills. However, the potential construction of faculty/staff housing adjacent to Grand Avenue would have a substantial adverse effect on a scenic vista from this publicly accessible roadway. **MP Mitigation Measure AES-1** would lessen but not reduce this impact to a less than significant level. As a result, the 2009 MP FEIR concluded that this impact would be significant and unavoidable.

There are no designated state scenic highways located within the vicinity of the campus. Therefore, the 2009 MP FEIR concluded that implementation of the 2009 Master Plan would not substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway. This impact would be less than significant. No mitigation is required.

Buildout of the 2009 Master Plan would alter the existing visual character or quality of the campus. However, implementation of the 2009 Master Plan would enhance, as opposed to degrade, the visual

quality and character of the campus by implementing more cohesive architecture, improving campus entry sequences, and enhancing open space and landscaping. For this reason, the 2009 MP FEIR concluded that implementation of the 2009 Master Plan would not substantially degrade the existing visual character or quality of the site and its surroundings. This impact would be less than significant. No mitigation is required.

Most new construction and reconfiguration under the 2009 Master Plan would occur on the central portion of the campus that is currently developed with light sources. However, projects located along the edges of the campus would introduce new light and glare into areas that are generally dark at night. As a result, the 2009 MP FEIR found that implementation of the 2009 Master Plan would create new sources of light or glare which could adversely affect day or nighttime views in the area. **MP Mitigation Measure AES-4** would reduce this impact to a less than significant level.

The 2009 MP FEIR concluded that cumulative impacts to aesthetics and visual resources from reasonably foreseeable development in the City of Hayward and development under the 2009 Master Plan would be less than significant. No mitigation is required.

Change in Circumstances and/or New Information

Since the certification of the 2009 MP FEIR both originally in 2009 and its recertification in 2018, there have been no changes in circumstances that would alter the conclusions of the 2009 MP FEIR with respect to aesthetics and visual resources.

Analysis of the Proposed Project

Instead of the adding additional space to the east wing of the existing library, the proposed replacement library project would be located 200 feet to the northeast of the existing library in the campus core and would be lower in elevation than the scenic vista points recognized in the Hayward Hills. Building heights within the campus core range from two to four stories. The proposed replacement library would be three stories and reach a maximum of 47 feet in height. While the proposed project would be visible from adjacent areas, at a height of three stories, it would be consistent with the heights of buildings in this portion of the campus and would not exceed the heights of existing and planned buildings in the campus core under the 2009 Master Plan. In addition, the design and landscaping of the proposed project would be compatible with the design and landscaping of existing campus buildings within the campus core. As a result, the impacts to scenic vistas and scenic resources from project development would be less than significant and **MP Mitigation Measure AES-1** would not apply. The project would not result in new or more severe impacts on scenic vistas and scenic resources than previously evaluated and disclosed in the 2009 MP FEIR.

New permanent sources of lighting would be established on the project site with the development of the proposed project that would increase the level of light on the site from current levels. The exterior light proposed would be limited to the amount required to safely light the entrance, sidewalks, and other pedestrian areas within the project site. The interior lighting associated with the proposed project would be similar to that emitted by other such structures on the campus, such as the Sciences Buildings to the north and the Recreation and Wellness Center to the southeast. Furthermore, the replacement library would be at a distance from the campus edges and therefore any exterior lighting associated with the replacement building would not result in light spill on off-campus lands or otherwise result in light and glare impacts. Therefore, impacts from light and glare would be less than significant and **MP Mitigation Measure AES-4** would not apply. The project would not result in a new or more severe impact related to light and glare than previously evaluated and disclosed in the 2009 MP FEIR.

The proposed project is within the scope of the 2009 Master Plan and therefore, its cumulative impacts are adequately addressed in the 2009 MP FEIR. Although the 2009 MP FEIR concluded that there would be a significant and unavoidable cumulative impact related to scenic vistas, the proposed project would not contribute to the impact.

Findings

The potential impacts with respect to aesthetics and visual resources from the proposed library replacement project would be similar to or less than the impacts of campus development analyzed in the 2009 MP FEIR. Therefore, no new or substantially increased significant impacts would result from the proposed project beyond those analyzed in the 2009 MP FEIR. No new mitigation is required

4.2 Agriculture and Forestry Resources

	Potentially Significant New Impact	Less than Significant New Impact with Mitigation	Less than Significant New Impact	Impacts Fully Analyzed in the FEIR
AGRICULTURAL AND FORESTRY RESOURCES - In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in the Forest Protocols adopted by the California Air Resources Board. Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Discussion:

Summary of Analysis in the 2009 MP FEIR

The campus is developed with buildings, paved areas, or landscaped open space and is surrounded by suburban uses and open space. No farmland or agricultural activities are present in the vicinity of the campus. Therefore, implementation of the 2009 Master Plan would not result in conversion of farmland—including Prime Farmland, Unique Farmland, or Farmland of Statewide Importance—to non-agricultural uses. Next, the campus is currently designated for academic uses by the City of Hayward and is surrounded by urban/suburban development and open space. No impacts related to possible conflicts with zoning for agricultural uses or a Williamson Act contract would occur. Finally, as no farmland, agricultural land, or related uses are found in the area or on the campus, implementation of the 2009 Master Plan would not involve changes in the existing environment that could result in conversion of farmland to non-agricultural use. For these reasons, the 2009 MP FEIR concluded that growth and development under the 2009 Master Plan would not impact agriculture resources. No mitigation is required.

Change in Circumstances and/or New Information

Since the certification of the 2009 MP FEIR both originally in 2009 and its recertification in 2018, there have been no changes in circumstances that would alter the conclusions of the 2009 MP FEIR with respect to impacts on agricultural resources. However, since original certification of the 2009 MP FEIR in 2009, Appendix G of the CEQA Guidelines has been updated to include impacts on forestry resources.

Analysis of the Proposed Project

The replacement library project site is within the developed campus. All of the developed areas of the campus as well as additional lands to be developed under the 2009 Master Plan were already assessed for impacts on agricultural resources in the 2009 MP FEIR. The proposed project will result in no impact on agricultural resources. The project would not result in a new or more severe impacts related to agricultural resources than previously evaluated and disclosed in the 2009 MP FEIR. No new mitigation is required.

The project site is not zoned as forest land or for timberland production. No forestry resources occur on the site. For these reasons, the proposed project will result in no impact on forestry resources. No mitigation is required.

Findings

For reasons stated above, implementation of the proposed project would result in no impacts on agriculture and forestry resources. Therefore, no new or substantially increased significant impacts would result from the proposed project beyond those analyzed in the 2009 MP FEIR. No new mitigation is required.

4.3 Air Quality

	Potentially Significant New Impact	Less than Significant New Impact with Mitigation	Less than Significant New Impact	Impacts Fully Analyzed in the FEIR
AIR QUALITY - Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions, which exceed quantitative thresholds for ozone precursors)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion

Summary of Analysis in the 2009 MP FEIR

The campus is within the San Francisco Bay Area Air Basin (SFBAAB) which is under the jurisdiction of the Bay Area Air Quality Management District (BAAQMD), the governing authority for air quality planning in the region. The air quality analysis contained in the 2009 MP FEIR found that construction of the facilities associated with implementation of the 2009 Master Plan would generate short-term emissions of fugitive dust and asbestos that could adversely affect local air quality in the vicinity of the construction site. **MP Mitigation Measures AIR-1a** and **AIR-1b** would reduce the impact to a less than significant level.

The air quality analysis contained in the 2009 MP FEIR found that operation of the facilities associated with implementation of the 2009 Master Plan would generate long-term operational emissions of criteria pollutants that would exceed the BAAQMD thresholds and could therefore conflict with or obstruct the implementation of the regional air quality plan. **MP Mitigation Measures AIR-2a** through **AIR-2c** would reduce but not lessen this impact to a less than significant level. As a result, the 2009 MP FEIR concluded that this impact would be significant and unavoidable.

The air quality analysis contained in the 2009 MP FEIR found that implementation of the 2009 Master Plan would increase carbon monoxide concentrations at busy intersections and along congested roadways in the project vicinity but would not expose sensitive receptors to substantial pollution concentrations. The impact would be less than significant. No mitigation is required.

The air quality analysis contained in the 2009 MP FEIR found that implementation of the 2009 Master Plan would not create objectionable odors affecting a substantial number of people. The impact would be less than significant. No mitigation is required.

The air quality analysis contained in the 2009 MP FEIR found that implementation of the 2009 Master Plan could expose individuals to toxic air contaminants (TACs). Sources of TACs around and within the campus include diesel buses and trucks, laboratory emissions, central plant generators and boilers, water heaters/boilers in individual buildings, and emergency generators. New or modified stationary sources of TACs would be required to comply with BAAQMD permit requirements. In addition, the Campus would implement **MP Mitigation Measure AIR-5**. Adherence to BAAQMD permit requirements and implementation of mitigation would reduce this impact to a less than significant level.

The SFBAAB was in 2009 and still is currently designated as a nonattainment area for state and national ozone standards and particulate matter standards. As emissions associated with operation of the 2009 Master Plan would exceed the BAAQMD recommended operational threshold of significance, the 2009 MP FEIR concluded that implementation of the 2009 Master Plan would result in a cumulatively considerable net increase of criteria pollutants for which the project region is in nonattainment under an applicable federal or state ambient air quality standard. Even with the implementation of **MP Mitigation Measures AIR-1** and **AIR-2** discussed above, the emissions of criteria pollutants would still exceed the thresholds and therefore this impact would remain significant and unavoidable.

Change in Circumstances and/or New Information

The analysis of air quality impacts in the 2009 MP FEIR relied on thresholds set forth in an older version of the BAAQMD CEQA Guidelines that dated from 1999. Since then, the BAAQMD's CEQA Guidelines have been updated, with the latest version published in 2017. The updated guidelines include a new set

of significance thresholds and recommended methodologies for evaluation of air quality impacts of projects proposed within the air basin. The current thresholds are summarized below in **Table 1, BAAQMD CEQA Significance Thresholds for Air Pollutant Emissions**, and were used to evaluate the air quality impacts of the proposed project.

**Table 1
BAAQMD CEQA Significance Thresholds for Air Pollutant Emissions**

Pollutant	Construction Thresholds	Operational Thresholds	
	Average Daily emissions (lbs./day)	Average Daily Emissions (lbs./day)	Annual Average Emissions (tons/year)
Criteria Pollutants			
ROG	54	54	10
NOx	54	54	10
PM10	82	82	15
PM2.5	54	54	10
CO	Not Applicable	9.0 ppm (8-hour average) or 20.0 ppm (1-hour average)	
Fugitive Dust	Construction Dust Ordinance or other Best Management Practices	Not Applicable	
Health Risks and Hazards for New Sources			
Excess Cancer Risk	Same as Operational Threshold	10 per one Million	
Chronic or Acute Hazard Index	Same as Operational Threshold	1.0	
Incremental annual average PM2.5	Same as Operational Threshold	0.3 µg/m3	
Health Risks and Hazards for Sensitive Receptors (Cumulative from all sources within 1,000 foot zone of influence) and Cumulative Thresholds for New Sources			
Excess Cancer Risk	Same as Operational Threshold	10 per one Million	
Chronic Hazard Risk	Same as Operational Threshold	1.0	
Annual Average PM2.5	Same as Operational Threshold	0.8 µg/m3	

Source: Bay Area Air Quality Management District, California Environmental Quality Act Air Quality Guidelines, 2017

MP FEIR Mitigation Measures

MP MM AIR-1a: The control measures contained in Table 2 of the *BAAQMD CEQA Guidelines* listed below shall be implemented, as appropriate and feasible, during construction of each project under the proposed Campus Master Plan.

The following Basic Control Measures shall be implemented at all construction sites:

- Water all active construction areas at least twice daily.
- Cover all trucks hauling soil, sand, and other loose materials *or* require all trucks to maintain at least 2 feet of freeboard (i.e., the minimum required space between the top of the load and the top of the trailer).
- Pave, apply water three times daily (or as sufficient to prevent dust from leaving the site), or apply (non-toxic) soil stabilizers on all unpaved access roads, parking areas, and staging areas at construction sites.
- Sweep daily or as appropriate (with water sweepers using reclaimed water if possible) all paved access roads, parking areas, and staging areas at construction sites.
- Sweep streets daily or as appropriate (with water sweepers using reclaimed water if possible) if visible soil material is carried onto adjacent public streets.

In addition to the Basic Control Measures, the following Enhanced Control Measures shall be implemented at construction sites greater than 4 acres in area:

- Hydroseed or apply (non-toxic) soil stabilizers to inactive construction areas (previously graded areas inactive for 10 days or more).
- Enclose, cover, water twice daily (or as sufficient to prevent dust from leaving the site), or apply (non-toxic) soil stabilizers to exposed stockpiles (dirt, sand, etc.).
- Limit traffic speeds on unpaved roads to 15 miles per hour.
- Install sandbags or other erosion control measures to prevent silt runoff to public roadways.
- Replant vegetation in disturbed areas as quickly as possible.

The following Optional Control Measures are strongly encouraged at construction sites that are large in area or located near sensitive receptors, or may, for any other reason, warrant additional emissions reductions:

- Install wheel washers or wash off the tires or tracks of all trucks and equipment leaving the site.
- Install windbreaks or plant trees/vegetative windbreaks at the windward side(s) of construction areas.
- Suspend excavation and grading activity when sustained winds exceed 25 mph.

Analysis of the Proposed Project

The proposed replacement library would be a three story, approximately 100,000 gross square feet (gsf) building. The proposed facility would perform the same functions as the existing library, employ the

same number of library staff as the present library, and serve the same number of patrons as the existing facility; the proposed facility would not result in an increase in campus population.

Construction-related emissions for the proposed project were estimated using the BAAQMD-approved CalEEMod 2016.3.2 model. The project construction would begin in early 2019 and run approximately 24 months. It was assumed that any soil from grading would be balanced on-site without any import or export of soil and that there would be no hauling emissions that would accompany such activities.

Table 2
Unmitigated Construction Emissions by Year (Maximum Daily Pounds Per Day)

Year	ROG	NOx	PM10 (Exhaust)	PM2.5 (Exhaust)
2019	3	20	1	1
2020	52	17	1	1
Maximum	52	20	1	1
<i>Threshold of Significance</i>	54	54	82	54
<i>Exceeds Threshold?</i>	No	No	No	No

Source: Impact Sciences, 2017

As shown in **Table 2, Unmitigated Construction Emissions by Year**, the construction of the proposed project will produce ROG, NOX, PM10 and PM2.5 emissions that do not exceed the BAAQMD’s thresholds. As a result, construction of the proposed project would not contribute substantially to an existing violation or result in a violation of air quality standards for regional pollutants (e.g., ozone). This impact is considered less than significant. In addition, the Campus would implement **MP Mitigation Measure AIR-1a** to further reduce construction emissions. **MP Mitigation Measure AIR-1b** does not apply as construction of the proposed project would not involve demolition. The project would not result in a new or more severe impact related to construction emissions than previously evaluated and disclosed in the 2009 MP FEIR. No new mitigation is required.

The replacement library project would not result in any new operational emissions as there would be no increases in student or employee population at the campus due to the new facility. As a result, no impact would occur with respect to operational emissions of criteria pollutants. For the same reason, carbon monoxide concentrations along congested roadways in the project vicinity would not increase. **MP Mitigation Measure AIR-2** does not apply. The project would not result in new or more severe impacts related to operational emissions and carbon monoxide concentrations than previously evaluated and disclosed in the 2009 MP FEIR. No new mitigation is required.

The proposed project would generate localized emissions of diesel exhaust during construction equipment operation and truck activity. The odor from these emissions may be noticeable from time to time by adjacent receptors. However, they would be localized and are not likely to adversely affect people off site by resulting in confirmed odor complaints. With respect to operation, the proposed project does not include land uses associated with odorous emissions (e.g., waste transfer and recycling stations, wastewater treatment plants, landfills, composting operations, petroleum operations, food and byproduct processes, factories, and agricultural activities, such as livestock operations). For these reasons, the project would have no impact related to generation of odors and would not result in a new or more severe impact related to generation of odors than previously evaluated and disclosed in the 2009 MP FEIR. No new mitigation is required.

The proposed project is a library replacement project and as discussed further below, would not include any operational sources that would emit toxic air contaminants (TACs). However, during the project's 2-year construction period, diesel fuel would be used to operate construction equipment and construction vehicles. Diesel particulate matter (DPM), which is emitted in the exhaust from construction equipment and diesel-fueled vehicles, is listed as a TAC by the California Air Resources Control Board (CARB). In addition to DPM, the BAAQMD guidelines identify PM_{2.5} also as a potential TAC, to be evaluated for its potential to result in health impacts.

Exposure to DPM and PM_{2.5} emissions would have the potential to result in human health effects. Some groups of people are considered more sensitive to adverse effects from air pollution than the general population. The CARB has identified the following persons as most likely to be affected by air pollution: children under 14, the elderly over 65, athletes, and people with cardiovascular and chronic respiratory diseases. These groups are classified as sensitive receptors. Locations that may contain a high concentration of these sensitive population groups include residential areas, hospitals, daycare facilities, elder care facilities, elementary schools, and parks.

According to the BAAQMD CEQA guidelines, a potential for human health effects exists if sensitive receptors are located within 1,000 feet of a TAC source, including construction sites. Sensitive receptors, which include residences, are located near the project site. There are student residences within about 250 feet of the proposed construction, but they do not house small children or infants or elders over 65. The nearest off-campus receptors are approximately 650 feet to the east of the project site. These residences are assumed to include infants or small children, the elderly and people with cardiovascular and chronic respiratory diseases. For typical construction cancer risk assessments, infants are considered the most sensitive receptors because of their higher sensitivity to cancer causing contaminants or TACs, whereas, other populations, including young adults such as college students, are much less sensitive and the exposure periods are relatively short.

A human health risk analysis was conducted using the USEPA AERMOD dispersion model to determine PM2.5 concentrations, and CARB's Hotspots Analysis and Reporting Program (HARP) Risk Assessment Standalone Tool (RAST), and the Office of Environmental Health Hazard Assessment (OEHHA) risk assessment methodology to estimate the potential cancer and non-cancer risk from exposure to the project's construction emissions. Based on the construction schedule for the proposed project, the modeling assumed a two-year exposure period. As noted in the **Project Description**, to minimize TAC emissions, the proposed project includes a best management practice, which requires that all construction equipment used in project construction be equipped with USEPA rated Tier 4 (model year 2008 or newer) engines.

The results of the human health risk assessment indicate that the construction of the proposed project would result in an annual average PM2.5 concentration of approximately 0.002 µg/m³ from construction equipment exhaust, a lifetime excess cancer risk of one per one million at the maximally exposed sensitive receptor to the east of the project site, and a chronic hazard index of less than 0.01 at the same location (see **Appendix A** for detailed calculations). The annual average PM2.5 concentration, excess cancer risk, and chronic hazard risk values are all below the thresholds identified in **Table 1**, and therefore the construction-phase DPM emissions would result in a less than significant impact. The project would not result in a new significant impact related to TACs during construction. No new mitigation is required.

The proposed replacement building would not include any operational sources of toxic air contaminants such as laboratories. Although the project could include a diesel-fired emergency generator, it would be used only to provide power in the event of a disruption in electrical service to the building and therefore would not be a source of ongoing emissions. Although there would be routine testing emissions from the emergency generator, a permit to operate will be required from the BAAQMD that will stipulate the hours of testing yearly and the rate of emissions for the emergency generator. The generator will also comply with the BAAQMD-administrated statewide Air Toxics Control Measure (ATCM) for stationary diesel engines. Furthermore, the project would not generate any new vehicle trips to and from the campus. Therefore, the replacement building would not pose a human health risk to sensitive receptors in proximity of the replacement building site. The impact would be less than significant and **MP Mitigation Measure AIR-5** does not apply as the proposed project does not involve the installation of boilers, chillers, and/or cooling towers. The project would not result in a new or more severe impact related to TACs during operation than previously evaluated and disclosed in the 2009 MP FEIR.

Findings

The potential impacts with respect to air quality from the proposed library replacement project would be similar to or less than the impacts of campus development analyzed in the 2009 MP FEIR. Therefore, no new or substantially increased significant impacts would result from the proposed project beyond those analyzed in the 2009 MP FEIR. No new mitigation is required.

4.4 Biological Resources

	Potentially Significant Impact	Less than Significant New Impact with Mitigation	Less than Significant New Impact	Impacts Fully Analyzed in the FEIR
BIOLOGICAL RESOURCES - Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion:

Summary of Analysis in the 2009 MP FEIR

There is some potential that special status plant species could occur within the grassland and mixed scrub habitats that occur in the potential faculty/staff housing locations. Additionally, three special status bird species (i.e., burrowing owl, Cooper's hawk, white-tailed kite) and five special status bat species (i.e., pallid bat, fringed myotis, long-legged myotis, yuma myotis, and hoary bat) have potential to occur within the central campus and/or the grasslands and mixed scrub area within or bordering the development areas. As a result, the 2009 MP FEIR found that implementation of the 2009 Master Plan could have a substantial adverse effect on special-status plant and wildlife species. **MP Mitigation Measures BIO-1a** through **BIO-1d** would reduce the impact to a less than significant level.

A small drainage and associated bay woodland is located in the far western portion of the campus near a potential faculty/staff housing location. Therefore, the 2009 MP FEIR found that implementation of the 2009 Master Plan could have a substantial adverse effect on a riparian habitat or other sensitive natural community. **MP Mitigation Measure BIO-2** would reduce the impact to a less than significant level.

The small drainage located in the far western portion of the campus near a potential faculty/staff housing location is expected to fall under the jurisdiction of the United States Army Corps of Engineers (USACE). As the final design of faculty/staff housing at this location is not known, there is potential that associated construction activities and infrastructure (e.g., storm drains) could affect areas of the drainage under federal jurisdiction. For this reason, the 2009 MP FEIR found that implementation of the 2009 Master Plan could have a substantial adverse effect on a federally protected wetland. **MP Mitigation Measure BIO-3** would reduce this impact to a less than significant level.

The developed/landscaped central campus supports a high level of human use and activity, which is not favorable for wildlife movement. The undeveloped lands bordering the central campus are also not favorable for wildlife movement given their proximity to development and areas of high human use and activity. As a result, the 2009 MP FEIR concluded that implementation of the 2009 Master Plan would not interfere substantially with the movement of wildlife. This impact would be less than significant. No mitigation is required.

No adopted habitat conservation plan (HCP) or natural community conservation plan (NCCP) applies to the campus. Therefore, the 2009 MP FEIR concluded that there would be no impact with respect to HCP and NCCP. No mitigation is required.

The 2009 MP FEIR concluded that cumulative impacts to sensitive biological resources from reasonably foreseeable development in the City of Hayward and development under the 2009 Master Plan are not anticipated and that development under the 2009 Master Plan would not contribute substantially to the impact.

MP FEIR Mitigation Measures

MP MM BIO-1b: If a construction project is proposed on the campus that would commence anytime during the nesting/breeding season of native bird species potentially nesting/roosting on the site (typically February through August in the project region), a pre-construction survey of the project vicinity for nesting birds shall be conducted.

This survey shall be conducted by a qualified biologist (i.e., experienced with the nesting behavior of bird species of the region) within two weeks of the commencement of construction activities that would occur during the nesting/breeding season. The intent of the survey shall be to determine if active nests of special status bird species or other species protected by the Migratory Bird Treaty Act and/or the California Fish and Game Code are present within the construction zone or within 500 feet of the construction zone. The survey area shall include all trees and shrubs, as well as grassland habitats (which could be utilized by burrowing owls) in the construction zone and a surrounding 500 feet area. The surveys shall be timed such that the last survey is concluded no more than two weeks prior to initiation of construction or tree removal. If ground disturbance activities are delayed following a survey, then an additional pre-construction survey shall be conducted such that no more than two weeks will have elapsed between the last survey and the commencement of ground disturbance activities.

If active nests are found in areas that could be directly affected or are within 500 feet of construction and would be subject to prolonged construction-related noise, a no-disturbance buffer zone shall be created around active nests during the breeding season or until a qualified biologist determines that all young have fledged. The size of the buffer zones and types of construction activities restricted within them will be determined through consultation with the CDFG, taking into account factors such as the following:

- Noise and human disturbance levels at the construction site at the time of the survey and the noise and disturbance expected during the construction activity;
- Distance and amount of vegetation or other screening between the construction site and the nest; and
- Sensitivity of individual nesting species and behaviors of the nesting birds.

Limits of construction to avoid an active nest shall be established in the field with flagging, fencing, or another appropriate barrier, and construction personnel shall be instructed on the sensitivity of nest areas. The biologist shall serve as a construction monitor during those periods when construction activities would occur near active nest areas of special status bird species to ensure that no impacts on these nests occur.

MP MM BIO-1c:

Prior to the commencement of construction activities within grassland habitats occurring during the non-nesting season of burrowing owl (typically September through January), a qualified biologist shall conduct a clearance survey for wintering burrowing owls. The survey shall be conducted no more than 14 days prior to commencement of construction activities. If non-breeding burrowing owls are observed within the disturbance footprint, they would be excluded from all occupied burrows through the use of exclusion devices placed in occupied burrows in accordance with CDFG protocols (CDFG 1995). Specifically, exclusion devices, utilizing one-way doors, shall be installed in the entrance of all active burrows. The devices shall be left in the burrows for at least 48 hours to ensure that all owls have been excluded from the burrows. Each of the burrows would then be excavated by hand and refilled to prevent reoccupation. Exclusion shall continue until the owls have been successfully excluded from the site, as determined by a qualified biologist.

MP MM BIO-1d:

If trees or buildings are to be removed/demolished during the nesting season of native bat species in California (generally April 1 through August 31), the presence of active maternity roosts in trees or buildings shall be evaluated by a qualified biologist prior to their removal. If it is determined that the trees or structures to be removed provide potential bat roosting habitat, a focused survey shall be conducted by a qualified bat biologist to determine if active maternity roosts of special status bats are present. Should an active maternity roost of a special status bat species be identified, the roost shall not be disturbed until the

roost is vacated and juveniles have fledged, as determined by the biologist. Once all young have fledged, the tree or structure may be removed or demolished.

Change in Circumstances and/or New Information

Since the certification of the 2009 MP FEIR both originally in 2009 and its recertification in 2018, there have been no changes in circumstances that would alter the conclusions of the 2009 MP FEIR with respect to biological resource impacts.

Analysis of the Proposed Project

The site of the library replacement project is located in the campus core and thus would not affect special-status plant species that have the potential to be located on the sites of potential faculty/staff housing. No impact would occur and **MP Mitigation Measure BIO-1a** does not apply. The project would not result in a new or more severe impact related to special-status plant species than previously evaluated and disclosed in the 2009 MP FEIR.

Construction of the replacement library project would require the removal of some small trees that are present on the project site and would also occur near trees, and special-status bird and bat species have some limited potential for utilizing the on-site and nearby trees for nesting and/or roosting. **MP Mitigation Measures BIO-1b** through **BIO-1d**, which would be incorporated into the proposed project, would reduce the impacts to special-status birds and bats to a less than significant level. The project would not result in new or more severe impacts related to special-status wildlife species than previously evaluated and disclosed in the 2009 MP FEIR.

No impacts to riparian habitat or wetlands would result due to the proposed replacement library project as it would be located in the campus core and not the far western portion of campus where these resources are present. No impacts would occur and **MP Mitigation Measures BIO-2** and **BIO-3** do not apply. The project would not result in new or more severe impacts related to riparian habitat or wetlands than previously evaluated and disclosed in the 2009 MP FEIR.

The site of the replacement library project is located in the campus core and the area around the campus is not favorable for wildlife movement. In addition, the project site does not fall within the boundaries of, nor is it adjacent to, an area covered by an adopted regional HCP or NCCP. For these reasons, the proposed project would not interfere with wildlife movement nor would it conflict with an adopted regional HCP or NCCP. No impacts would occur and the project would not result in new or more severe impacts related to wildlife movement and an adopted HCP or NCCP than previously evaluated and disclosed in the 2009 MP FEIR. No new mitigation is required.

Findings

The potential impacts with respect to biological resources from the proposed library replacement project would be similar to or less than the impacts of campus development analyzed in the 2009 MP FEIR. Therefore, no new or substantially increased significant impacts would result from the proposed project beyond those analyzed in the 2009 MP FEIR. No new mitigation is required.

4.5 Cultural Resources

	Potentially Significant New Impact	Less than Significant New Impact with Mitigation	Less than Significant New Impact	Impacts Fully Analyzed in the FEIR
CULTURAL RESOURCES - Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion:

Summary of Analysis in the 2009 MP FEIR

There are no known archaeological sites on the campus. Furthermore, much of the development on the campus under the 2009 Master Plan would occur within the previously disturbed and developed central campus. However, since no surveys are known to have been conducted, it is assumed that there is potential for such resources to exist on those portions of the campus that have not been previously graded or disturbed in a substantial manner or even within the central campus in areas where the previous grading was not substantial. As a result, the 2009 MP FEIR concluded that implementation of the 2009 Master Plan could cause a substantial adverse change in the significance of an archaeological resource through damage or destruction that could occur as a result of grading, excavation, ground disturbance or other project development. **MP Mitigation Measures CULT-1a to CULT-1c** would reduce this impact to a less than significant level.

At the time the 2009 MP FEIR was prepared, all of the structures on the campus were less than 50 years of age at this time, and therefore, did not qualify as historic structures at that time. However, the EIR noted that several structures would be over 50 years or older before or by 2030 which is the year of buildout of the 2009 Master Plan, and their historic significance could change between the time that the EIR was prepared and the time that they are proposed for removal or alteration. Therefore, the 2009 MP FEIR

concluded that implementation of the 2009 Master Plan could cause a substantial adverse change in the significance of a historical building or structure, as a result of alteration, removal, or demolition of the building, or alteration of the site associated with campus development. **MP Mitigation Measures CULT-2a** and **CULT-2b** would lessen but not reduce this impact to a less than significant level. As a result, the 2009 MP FEIR concluded that this impact would be significant and unavoidable.

Although no human remains have been encountered during the construction of buildings and other improvements on the campus, development under the 2009 Master Plan that includes excavation and grading has the potential to uncover, displace, and destroy human remains. For this reason, the 2009 MP FEIR concluded that implementation of the 2009 Master Plan could disturb human remains, including those interred outside of formal cemeteries. **MP Mitigation Measures CULT-3a** to **CULT-3d** would reduce this impact to a less than significant level.

Much of the development on the campus under the 2009 Master Plan would occur within the previously disturbed and developed central campus. Because of the extensive grading and disturbance that has already occurred within the central campus, the potential to encounter intact paleontological resources or unique geologic resources in conjunction with future development is very low. In addition, the campus site is not underlain by geologic formations that are considered sensitive for paleontological resources or unique geologic resources. As a result, the 2009 MP FEIR concluded that implementation of the 2009 Master Plan would not disturb or destroy unique paleontological or geologic resources. This impact is less than significant. To ensure that the impact remains less than significant, the Campus would implement **MP Mitigation Measures CULT-4a** and **CULT-4b**.

The 2009 MP FEIR concluded that with mitigation, cumulative impacts to cultural resources from reasonably foreseeable development in the City of Hayward and development under the 2009 Master Plan would be less than significant.

MP FEIR Mitigation Measures

MP MM CULT-1a: During the planning and environmental review of specific development projects under the 2009 Master Plan, for projects proposed on previously undisturbed campus lands, the Campus shall retain a qualified archaeologist to conduct a pedestrian survey of the site to evaluate the potential for archaeological resources to occur on the project site. If archaeological resources are encountered, MP Mitigation Measure CULT-1c will apply.

MP MM CULT-1b: Regardless of the location of the project on the campus, all construction contracts for campus projects shall include a standard inadvertent discovery clause, which

requires that if an archaeological resource is discovered during construction (whether or not an archaeologist is present), all soil-disturbing work within 100 feet of the find shall cease, and the Campus shall implement MP Mitigation Measure CULT-1c.

MP MM CULT-1c: For an archaeological site that is encountered during the pedestrian survey conducted on a project site or during construction, the Campus shall:

- Retain a qualified archaeologist to determine whether the resource qualifies as an historical resource or a unique archaeological resource.
- If the resource is determined to be a historical resource or a unique archaeological resource, the qualified archaeologist, in consultation with the Campus, shall prepare a research design and archaeological data recovery plan for the recovery of the categories of data for which the site is significant, and implement the data recovery plan prior to or during development of the site. The archaeologist shall also perform appropriate technical analyses, prepare a full written report and file it with the appropriate information center, and provide for the permanent curation of recovered materials.

MP MM CULT-3a: The Campus shall implement MP Mitigation Measure CULT-1 to minimize the potential for disturbance or destruction of human remains in an archaeological context and to preserve them in place, if feasible.

MP MM CULT-3b: The Campus shall arrange for a representative of the local Native American community to monitor any excavation (including archaeological excavation) within the boundaries.

MP MM CULT-3c: In the event of a discovery of human bone, suspected human bone, or a burial, all excavation in the vicinity will halt immediately and the area of the find will be protected until a qualified archaeologist determines whether the bone is human. If the qualified archaeologist determines the bone is human, or if a qualified archaeologist is not present, the Campus will notify the County of Alameda Medical Examiner before additional disturbance occurs. The Campus will ensure that the remains and vicinity of the find are protected against further disturbance until the Coroner has made a finding with regard to PRC 5097 procedures, in compliance with California Health and Safety Code Section 7050.5(b). If it is determined that the find is of Native American origin, the Campus will comply with the provisions of PRC Section 5097.98 regarding identification and involvement of the Native American Most Likely Descendant (MLD).

MP MM CULT-3d: If human remains cannot be left in place, the Campus shall ensure that the qualified archaeologist and the MLD consult regarding archaeological treatment of human remains, and that appropriate studies, as identified through this consultation, are carried out prior to interring the remains. The Campus shall provide results of all such studies to the local Native American community, and shall provide an opportunity for local Native American involvement in any interpretative reporting. As stipulated by the provisions of the California Native American Graves Protection and Repatriation Act, the Campus shall ensure that human remains and associated artifacts recovered from campus projects on state lands are repatriated to the appropriate local tribal group if requested.

MP MM CULT-4a: As part of the construction contract, the Campus shall inform construction contractors to watch for paleontological resources during grading and excavation and to inform the campus immediately if such resources are encountered.

MP MM CULT-4b: If paleontological resources are discovered, all ground-disturbing activities within 100 feet of the find will be halted and a qualified paleontologist will be retained by the Campus to evaluate the find and recommend appropriate handling and treatment of the find. If the find is determined to be significant or potentially significant, the paleontologist will design and carry out a data recovery plan consistent with the Standards of the Society of Vertebrate Paleontologists. Adequate recordation and recovery would, at a minimum, include the following:

- Development of a site specific environmental and contextual information
- Archival research
- Excavation of the resource and its accurate recordation
- For a significant major find, identification of a museum or repository for curation of the resource

Change in Circumstances and/or New Information

Since the certification of the 2009 MP FEIR both originally in 2009 and its recertification in 2018, there have been no changes in circumstances that would alter the conclusions of the 2009 MP FEIR with respect to cultural resource impacts. Assembly Bill (AB) 52 was approved in September 2014 and became effective on July 1, 2015. AB 52 is focused on the protection of tribal cultural resources (TRCs) and

requires that CEQA lead agencies consult with California Native American tribes that are traditionally and culturally affiliated with the geographic area of a project, if so requested by the tribes. AB 52 applies only to projects where the Notice of Preparation (NOP) for the EIR was filed after July 1, 2015.

Analysis of the Proposed Project

No structures are located on the project site. No impact would occur and **MP Mitigation Measure CUL-2** would not apply. The project would not result in a new or more severe impact related to historical architectural resources than previously evaluated and disclosed in the 2009 MP FEIR.

As ground disturbing activities will be minimal on the project site, the probability of uncovering archeological and paleontological resources is low. However, unknown archaeological resources, paleontological resources, and/or burial sites have the potential to be present on the project site, similar to the conclusions included in the 2009 MP FEIR. **MP Mitigation Measures CUL-1, CUL-3, and CUL-4** are incorporated into and a part of the project and would ensure that any archaeological resources, paleontological resources or human remains encountered during construction are properly handled and protected. The project would not result in new or more severe impacts related to archaeological resources, paleontological resources or human remains than previously evaluated and disclosed in the 2009 MP FEIR. No new mitigation is required.

The proposed project is within the scope of the 2009 Master Plan and therefore, its cumulative impacts are adequately addressed in the 2009 MP FEIR. Although the 2009 MP FEIR concluded that there would be significant and unavoidable cumulative impacts related to historical architectural resources, the proposed project would not contribute to the impact.

As stated above, AB 52 applies to projects where the Notice of Preparation (NOP) for the EIR was filed after July 1, 2015. The NOP for the 2009 MP FEIR was filed in September 2008, which predates AB 52. Therefore, the 2009 MP FEIR did not include an assessment of impacts on TRCs. As this addendum shows, the proposed project is adequately analyzed in the FEIR and no new EIR or NOP is necessary. Because the project is within the scope of the previously approved planned development and because no new EIR or NOP is required, the proposed project is not subject to AB 52.

Findings

The potential impacts with respect to cultural resources from the proposed library replacement project would be similar to or less than the impacts of campus development analyzed in the 2009 MP FEIR. Therefore, no new or substantially increased significant impacts would result from the proposed project beyond those analyzed in the 2009 MP FEIR. No new mitigation is required.

4.6 Geology and Soils

	Potentially Significant New Impact	Less than Significant New Impact with Mitigation	Less than Significant New Impact	Impacts Fully Analyzed in the FEIR
GEOLOGY AND SOILS - Would the project:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion:

Summary of Analysis in the 2009 MP FEIR

There are no active faults on the campus although the campus is located only 0.18 mile from the active Hayward fault. However, severe seismic ground shaking and related ground failure is a possibility in the

area of the campus, and portions of the campus have potential for ground failure related to liquefaction and landsliding. As a result, the 2009 MP FEIR concluded that while development under the 2009 Master Plan would not expose people and structures on campus to substantial adverse effects associated with fault rupture, it could expose people and structures on campus to substantial adverse effects related to seismic ground shaking or seismic-related ground failure, including liquefaction, lateral spreading, landslides, and/or settlement. Compliance with the California Building Code (CBC) and implementation of **MP Mitigation Measure GEO-1** would reduce this impact to a less than significant level.

Construction of facilities anticipated under the 2009 Master Plan would result in short-term soil-disturbing activities that could lead to increased erosion, including cut and fill, grading, trenching, boring, and removal of trees and other vegetation. To comply with National Pollutant Discharge Elimination System (NPDES) requirements for construction site storm water discharges, projects involving construction sites that are 1 acre or more are required to prepare and implement a storm water pollution prevention plan (SWPPP). Therefore, the 2009 MP FEIR concluded that development under the 2009 Master Plan would not result in substantial erosion of soils during construction. This impact is less than significant. No mitigation is required.

Portions of the campus are located on expansive soils. For this reason, the 2009 MP FEIR concluded that unstable soils could be located where buildings are proposed. Compliance with the CBC and **MP Mitigation Measure GEO-1** would reduce this impact to a less than significant level.

The 2009 MP FEIR concluded that cumulative impacts involving seismic ground shaking and related ground failure will be less than significant as reasonably foreseeable development in the City of Hayward and development under the 2009 Master Plan would comply with CBC requirements.

MP FEIR Mitigation Measures

MP MM GEO-1: Where existing geotechnical information is not adequate, detailed geotechnical investigations shall be performed for areas that will support buildings or foundations. Such investigations for building or foundation projects on the CSUEB Hayward campus will comply with the California Geological Survey's *Guidelines for Evaluating and Mitigating Seismic Hazards in California* (Special Publication 117), which specifically address the mitigation of liquefaction and landslide hazards in designated Seismic Hazard Zones (CGS 2003). All recommendations of the geotechnical investigations will be incorporated into project designs. Recommendations for buildings located near mapped faults,

prepared by the California State University seismic review committee, shall be reviewed prior to project design.

Change in Circumstances and/or New Information

Since the certification of the 2009 MP FEIR both originally in 2009 and its recertification in 2018, there have been no changes in circumstances that would alter the conclusions of the 2009 MP FEIR with respect to soil and geologic impacts.

Analysis of the Proposed Project

The replacement library project could result in the exposure of people or structures to geological hazards associated with severe seismic ground shaking and related ground failure, similar to the conclusions included in the 2009 MP FEIR. In addition, the project site could contain expansive soil, and thus create substantial risks to life and property. The proposed project would comply with the CBC and **MP Mitigation Measure GEO-1** would be incorporated into the project to ensure that the Campus performs a geotechnical investigation of the project site to evaluate the potential for liquefaction and other types of ground failure and expansive soils. This impact is less than significant and the project would not result in a new or more severe impact related to geological hazards than previously evaluated and disclosed in the 2009 MP FEIR. No new mitigation is required.

Similar to campus development analyzed in the 2009 MP FEIR, short-term soil erosion could occur during ground disturbing activities associated with the proposed project. A storm water pollution prevention plan (SWPPP) would be prepared and implemented, as required by state law, that would minimize erosion. The project would not result in a new or more severe impact related to soil erosion than previously evaluated and disclosed in the 2009 MP FEIR. No new mitigation is required.

The proposed project is within the scope of the 2009 Master Plan and therefore, its cumulative impacts are adequately addressed in the 2009 MP FEIR.

Findings

The potential impacts with respect to aesthetics and visual resources from the proposed library replacement project would be similar to or less than the impacts of campus development analyzed in the 2009 MP FEIR. Therefore, no new or substantially increased significant impacts would result from the proposed project beyond those analyzed in the 2009 MP FEIR. No new mitigation is required.

4.7 Greenhouse Gas Emissions

	Potentially Significant New Impact	Less than Significant New Impact with Mitigation	Less than Significant New Impact	Impacts Fully Analyzed in the FEIR
GREENHOUSE GAS EMISSIONS - Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion:

Summary of Analysis in the 2009 MP FEIR

The greenhouse gas (GHG) emissions analysis contained in the 2009 MP FEIR found that although the 2009 Master Plan would result in GHG emissions, its contribution to the significant cumulative impact associated with GHG emissions would not be cumulatively considerable. This impact is less than significant. No mitigation is required.

Change in Circumstances and/or New Information

The analysis of GHG emissions in the 2009 MP FEIR were based on methodology presented by the California Air Resources Board in 2008 which proposed that California Energy Commission Tier II building energy use standards be applied, which generally require a reduction in energy usage of 30 percent beyond Title 24 building code requirements. Since then, the BAAQMD has published updated BAAQMD CEQA Guidelines (BAAQMD 2017) that include a set of significance thresholds and recommended methodologies that may be used to evaluate the impact of a project's GHG emissions. Significance thresholds put forth in the BAAQMD CEQA Guidelines are listed below in **Table 3, GHG Significance Thresholds**.

Table 3
GHG Significance Thresholds

Pollutant	Construction	Operation
Greenhouse Gases	No threshold	1,100 MTCO ₂ e/yr; or 4.6 MTCO ₂ e/SP/yr

*Source: Bay Area Air Quality Management District, California Environmental Quality Act Air Quality Guidelines, (2017) 2-1.
MTCO₂e = metric tons of carbon dioxide equivalents; SP = service persons (residents plus employees) associated with the proposed project.*

The BAAQMD guidelines recommend quantifying and reporting GHG emissions from a project’s construction activities, but do not provide quantitative significance thresholds. Operational emissions of a project may be compared to an absolute threshold of 1,100 metric tons of carbon dioxide equivalents per year (MTCO₂e/yr) or an efficiency standard of 4.6 MTCO₂e/SP/yr, where SP refers to service persons (residents plus employees) associated with the proposed project.

Analysis of the Proposed Project

Construction phase GHG emissions were estimated using the CalEEMod model in the same manner as used to predict criteria air pollutants. Construction phases included site preparation, site grading, some paving, building construction, and application of architectural coatings. Annual CO₂ emissions associated with construction would occur from 2019 into 2020. Construction of the project would emit an estimated 295 metric tons (MT) of CO₂e in 2019 and 288 MT of CO₂e in 2020. The BAAQMD has not established quantified thresholds for construction activities. However, given the low emissions during each year of construction and the temporary nature of these emissions, the impact from the project’s construction phase GHG emissions is considered less than significant. No mitigation is required.

The proposed project would not result in any new operational GHG emissions as there would be no increases in student or employee population at the campus as a result of the new facility. In fact, the proposed project would likely result in lower GHG emissions during operation as the replacement library would provide less space than the west wing of the existing library that it is replacing and as a new building, it is expected to be more energy efficient than the existing library. As a result, no impact would occur with respect to operational phase GHG emissions. The project would not result in a new or more severe impact related to operational phase GHG emissions than previously evaluated and disclosed in the 2009 MP FEIR. No mitigation is required.

Findings

The potential impacts with respect to GHG emissions from the proposed library replacement project would be similar to or less than the impacts of campus development analyzed in the 2009 MP FEIR. Therefore, no new or substantially increased significant impacts would result from the proposed project beyond those analyzed in the 2009 MP FEIR. No new mitigation is required.

4.8 Hazards and Hazardous Materials

	Potentially Significant New Impact	Less than Significant New Impact with Mitigation	Less than Significant New Impact	Impact Fully Analyzed in the FEIR
HAZARDS AND HAZARDOUS MATERIALS- Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) For a project located within an airport land use plan or, where such plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Expose people or structures to a significant risk of loss, injury or death involving wild land fires, including where wild lands are adjacent to urbanized areas or where residences are intermixed with wild lands?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion:

Summary of Analysis in the 2009 MP FEIR

Laboratories and other facilities constructed under the 2009 Master Plan would comply with all standards related to the use and storage of hazardous materials. In addition, while the use of hazardous materials on the campus would likely increase, the Campus will continue to comply with all hazardous materials standards related to transport. Finally, adherence to the Campus spill response guidelines and compliance with all applicable regulations related to the use, storage, and transport of hazardous materials will minimize the potential for accidental spills and release of materials to the environment. For these reasons, the 2009 MP FEIR concluded that campus development and activities under the 2009 Master Plan would not create significant hazards to the public or the environment from the use, storage and transport of hazardous materials under routine or upset conditions.

At the time the 2009 MP FEIR was prepared there was one existing childcare center on the campus. There are no existing schools within 0.25 mile of the campus boundary and no new schools are planned at this time within this radius of the campus. Although hazardous materials use and waste generation within 0.25 mile of the childcare center will likely increase as a result of campus growth under the 2009 Master Plan, these materials will not exist in quantities sufficient to pose a risk to occupants of the childcare center or campus community. In addition, the Campus will continue to comply with federal and state regulations, and will continue to implement existing campus safety programs and procedures. As a result, the 2009 MP FEIR concluded that campus development and activities under the 2009 Master Plan would not create significant hazards to the public or the environment, such that existing or proposed adjacent schools may be affected. This impact is less than significant. No mitigation is required.

A search of the governmental databases indicated that a leaking underground storage tank (LUST) located west of the Student Services & Administration building released approximately 750 gallons of diesel fuel before removal in 1988. Records did not indicate if the contaminated site was remediated. Therefore, the 2009 MP FEIR concluded that excavation and other ground disturbing activities associated with the construction of a new facility on the campus in the area of the previous LUST could encounter contaminated soils or groundwater, and potentially expose construction workers, campus occupants or the public to these materials. Implementation of **MP Mitigation Measure HAZ-3** would reduce this impact to a less than significant level.

Hazardous materials could be encountered in campus buildings when they are demolished or remodeled under the 2009 Master Plan. For this reason, the 2009 MP FEIR concluded that demolition or renovation of buildings under the 2009 Master Plan could expose construction workers, campus occupants or the

public to contaminated building materials. Implementation of **MP Mitigation Measure HAZ-4** would reduce this impact to a less than significant level.

The 2009 MP FEIR concluded that implementation of the Master Plan would not expose people on the project site to any safety hazards related to public airports or private airstrips because the campus is approximately four miles east of the Hayward Airport, and is also not located in the vicinity of a private airstrip. No impact would occur and no mitigation is required.

Consistent with the Campus' current procedure, as new buildings are built on the campus under the 2009 Master Plan, an Emergency Operations Plan (EOP) would be developed for each new building. Furthermore, campus growth under the 2009 Master Plan would not interfere with the campus EOP through construction-related road closures. As a result, the 2009 MP FEIR concluded that campus development under the 2009 Master Plan would not interfere physically with the Campus' EOP. To ensure that these procedures and notification requirements will continue under the 2009 Master Plan, the Campus would implement **MP Mitigation Measures HAZ-5a and HAZ-5b**.

New buildings and spaces constructed under the 2009 Master Plan in general would be added to the already developed portion of the campus. With the exception of some expansion of student housing in the southern portion of the campus and potential location of faculty/staff housing south of Grandview Avenue, all new development would be sufficiently distant from open space areas that surround the campus and have the potential for wildland fires. With respect to student and faculty/staff housing that is adjacent to open grassland areas, all buildings would be designed and constructed in conformance with the CBC and with applicable fire code safety requirements. In addition, all new landscaping in the areas surrounding the new housing will be developed to minimize the threat of wildland fire damage to facilities and personnel and the Campus will manage vegetation in adjacent areas to reduce fuel load. Therefore, the 2009 MP FEIR concluded that campus development under the 2009 Master Plan would not expose people or structures to a significant risk of loss, injury, or death involving wildland fires. This impact is less than significant. No mitigation is required.

The 2009 MP FEIR concluded that cumulative impacts associated with hazards and hazardous materials will be less than significant as reasonably foreseeable development in the City of Hayward and development under the 2009 Master Plan would comply with hazardous materials laws which are designed to avoid and minimize adverse impacts on public health, safety, and the environment.

MP FEIR Mitigation Measures

MP MM HAZ-5a: The Campus shall require new construction under the 2009 Master Plan to adhere to the following standards already established by Facilities Planning & Operations:

- Construction work shall be conducted so as to ensure the least possible obstruction to traffic.
- Contractors shall notify the Campus Representative at least two weeks before any road closure.
- When paths, lanes, or roadways are blocked, detour signs shall be installed to clearly designate an alternate route.
- Fire hydrants shall be kept accessible to firefighting equipment at all times.
- To ensure adequate access for emergency vehicles when construction projects will result in temporary lane or roadway closures, campus police and dispatchers shall be notified of the closures and alternative travel routes.

MP MM HAZ-5b: New or updated building and/or department-specific EOPs shall be developed for any new development project.

Change in Circumstances and/or New Information

Since the certification of the 2009 MP FEIR both originally in 2009 and its recertification in 2018, there have been no changes in circumstances that would alter the conclusions of the 2009 MP FEIR with respect to hazards and hazardous materials impacts.

Analysis of the Proposed Project

Although small quantities of hazardous materials would be used in the construction of the proposed project, compliance with local, state, and federal regulations would minimize risks associated with the routine transport, use, or disposal of hazardous materials during construction activities. Any hazardous materials used during the occupancy of the proposed building would be limited to those typically used in academic support and standard maintenance activities (e.g., solvents, paints, cleaning agents), similar to materials used for cleaning and maintenance in the existing campus library. The use of all hazardous materials during occupancy would be required to comply with stringent local, state, and federal regulations on hazardous materials use. Given the types and small quantities of hazardous materials that would be used as well as stringent regulations, the impacts related to the routine transport, use, and disposal of hazardous materials or the release of materials into the environment would be less than

significant, similar to the conclusions included in the 2009 MP FEIR. The project would not result in new or more severe impacts related to the routine transport, use, and disposal of hazardous materials or the release of materials into the environment than previously evaluated and disclosed in the 2009 MP FEIR. No mitigation is required.

A childcare center is no longer located on the campus and no existing or proposed schools are within 0.25 mile of the campus boundary. For these reasons, the proposed project would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school. No impact would occur and the project would not result in a new or more severe impact related to hazardous emissions or the handling of hazardous materials within 0.25 mile of a school than previously evaluated and disclosed in the 2009 MP FEIR. No mitigation is required.

The site of the replacement library is located in the campus core approximately 750 feet from the site of the LUST that is to the west of the Student Services & Administration building. Since certification of 2009 MP FEIR, the LUST site has been remediated and the case has been closed (SWRCB 2018). Given the distance of the project site from the LUST site and its status, this impact is less than significant and **MP Mitigation Measure HAZ-3** would not apply. The project would not result in a new or more severe impact related to the exposure of persons to hazardous materials during construction than previously evaluated and disclosed in the 2009 MP FEIR.

As no structures are located on the project site, the proposed library replacement project would not result in the demolition or renovation on an existing structure. No impact would occur and **MP Mitigation Measure HAZ-4** would not apply. The project would not result in a new or more severe impact related to the exposure of persons to hazardous materials during demolition than previously evaluated and disclosed in the 2009 MP FEIR.

The project site is located within the campus core and therefore is not located within the vicinity of a public airport or private airstrip. As a result, the project would not result in a safety hazard for people residing or working on the site. Similar to the conclusion included in the 2009 MP FEIR, no impact would occur. The project would not result in a new or more severe impact related to safety hazards due to aircraft than previously evaluated and disclosed in the 2009 MP FEIR. to the exposure of persons to hazardous materials during construction. No new mitigation is required.

Consistent with the Campus' current procedure, an EOP would be developed for the proposed replacement library. Furthermore, implementation of the proposed project would not interfere with the campus EOP through construction-related road closures. The impact would be less than significant and the project would not result in a new or more severe impact related to interference with an EOP than

previously evaluated and disclosed in the 2009 MP FEIR. To ensure that campus procedures and road closure notification requirements are followed **MP Mitigation Measure HAZ-5** is incorporated into the project to ensure that the construction of the proposed project would adhere to campus standards and that an EOP be developed prior to occupancy. No new mitigation is required.

The site of the replacement library is located in the campus core and thus would be sufficiently distant from open space areas that surround the campus that have the potential for wildland fires. No impact would occur and the project would not result in a new or more severe impact related to wildland fires than previously evaluated and disclosed in the 2009 MP FEIR. No new mitigation is required.

The proposed project is within the scope of the 2009 Master Plan and therefore, its cumulative impacts are adequately addressed in the 2009 MP FEIR.

Findings

The potential impacts with respect to hazards and hazardous materials from the proposed library replacement project would be similar to or less than the impacts of campus development analyzed in the 2009 MP FEIR. Therefore, no new or substantially increased significant impacts would result from the proposed project beyond those analyzed in the 2009 MP FEIR. No new mitigation is required.

4.9 Hydrology and Water Quality

	Potentially Significant New Impact	Less than Significant New Impact with Mitigation	Less than Significant New Impact	Impact Fully Analyzed in the FEIR
HYDROLOGY AND WATER QUALITY - Would the project:				
a) Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner, which would result in substantial erosion or siltation on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner, which would result in flooding on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Place within a 100-year flood hazard area structures, which would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	Potentially Significant New Impact	Less than Significant New Impact with Mitigation	Less than Significant New Impact	Impact Fully Analyzed in the FEIR
j) Inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion:

Summary of Analysis in the 2009 MP FEIR

Individual construction projects associated with the 2009 Master Plan that involve 1 acre or more of land disturbance would be required to comply with the NPDES General Construction Permit, which includes the preparation of a SWPPP. In addition, all construction on campus would comply with CSUEB standard stormwater management practices and engineering controls, which require the control and minimization of stormwater pollutants originating from construction sites as a standard part of contract specifications. As a result, the 2009 MP FEIR concluded that water quality impacts during construction would be less than significant. No mitigation is required.

The 2009 Master Plan would result in a small increase in impervious surfaces on the campus, and this increase in impervious surfaces could potentially increase both the peak flows and the volume of site runoff which in turn could result in erosion and sedimentation in creeks that receive campus runoff (hydromodification impacts). Furthermore, an increase in impervious surfaces and increased human activity could also result in degradation of the quality of site runoff. According to the 2009 Master Plan, in order to encourage sustainable development on the campus, each new building project will be required to develop a stormwater management plan that addresses both the quantity and quality of runoff by reducing impervious cover, promoting infiltration, and capturing and treating stormwater runoff. In addition, future development on the campus will incorporate low impact development (LID) features appropriate for the campus site and the 2009 Master Plan would include several best management practices (BMPs) to encourage infiltration and improve water quality. As a result, it is anticipated that both the peak flows as well as the total volume of stormwater runoff at buildout of the 2009 Master Plan would be significantly less than the existing condition. Therefore, the 2009 MP FEIR concluded that the water quality impacts during operation would be less than significant. To ensure that stormwater controls are carefully evaluated and incorporated into future development projects, the Campus will implement **MP Mitigation Measure HYDRO-2**.

The storm drain system included in the 2009 Master Plan would be designed to convey on-site stormwater flows and prevent on-site or off-site flooding. In addition, the volume of stormwater would

decrease under the 2009 Master Plan as discussed above. For this reason, the 2009 MP FEIR concluded that development of the campus under the 2009 Master Plan would not substantially alter the existing drainage patterns in a way that would result in on- or off-site flooding. This impact is less than significant. No mitigation is required.

The campus and the surrounding area do not have any significant groundwater resources and the City of Hayward does not depend on local groundwater supplies to meet domestic and industrial needs. In addition, although there would be a slight increase in impervious surfaces on the campus, the decrease in groundwater recharge would not be proportional because the Campus plans to infiltrate stormwater to the maximum extent possible. As a result, the 2009 MP FEIR concluded that implementation of the 2009 Master Plan would not substantially deplete groundwater or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table. This impact is less than significant. No mitigation is required.

The campus is not within a FEMA-designated 100-year flood zone. In addition, the campus is not located within the inundation pathways of nearby reservoirs. Therefore, the 2009 MP FEIR concluded that implementation of the 2009 Master Plan would not place housing or structures that would impede or redirect flood flows within a 100-year flood hazard area or dam inundation zone. This impact is less than significant. No mitigation is required.

The campus is located in the Hayward hills approximately 5.5 miles from the San Francisco Bay. For this reason, the 2009 MP FEIR concluded that development on the campus under the 2009 Master Plan would not be affected by inundation associated with a tsunami or seiche event. No impact would occur. No mitigation is required.

The 2009 MP FEIR concluded that cumulative impacts associated with hydrology and water quality would be less than significant as reasonably foreseeable development in the City of Hayward and development under the 2009 Master Plan would adhere to NPDES requirements and existing stormwater regulations, avoid any increases in peak flows, not require the use of groundwater, and would not place structures with a 100-year flood plain.

MP FEIR Mitigation Measures

MP MM HYDRO-2: During the design review phase of each future development project on the campus, the Campus will verify that the stormwater BMPs were evaluated for the proposed project and those determined to be appropriate were incorporated into the proposed project. The Campus will also verify that post-development runoff from the project site will approximate pre-development runoff volumes.

Change in Circumstances and/or New Information

Since the certification of the 2009 MP FEIR both originally in 2009 and its recertification in 2018, there have been no changes in circumstances that would alter the conclusions of the 2009 MP FEIR with respect to hydrology and water quality impacts.

Analysis of the Proposed Project

In compliance with NPDES regulations, the construction contractor would be required to implement a SWPPP, which will include erosion and pollution control measures to control the release of pollutants and sediment into receiving waters. As a result, the impact on water quality from construction activities would be less than significant, similar to the conclusions of the 2009 MP FEIR. The project would not result in a new or more severe impact related to water quality during construction than previously evaluated and disclosed in the 2009 MP FEIR. No new mitigation is required.

The development of the proposed project would slightly increase the amount of impervious surfaces on the project site and thus would increase the amount of runoff generated on the project site. To improve the quality of run-off during operation, the Campus will develop a stormwater management plan for the project that addresses both the quantity and quality of runoff. In addition, the proposed project will incorporate LID features appropriate for the site. Therefore, similar to the conclusions included in the 2009 MP FEIR, water quality impacts during operation would be less than significant. To ensure that storm water controls are carefully evaluated and incorporated into site design and the project does not result in any downstream impacts, **MP Mitigation Measure HYDRO-2** is incorporated into the project. The project would not result in new or more severe impacts related to water quality during operation than previously evaluated and disclosed in the 2009 MP FEIR. No new mitigation is required.

There are no existing flooding problems on the project site, and the project built on-site would be designed to control for on-site flooding. The proposed project will also incorporate LID features appropriate for the site that will at a minimum ensure that project runoff rates and durations not exceed estimated pre-project rates and duration, thus preventing flooding on- or off-site. For these reasons, existing drainage patterns on the site would not be substantially altered in a way that would result in on- or off-site flooding. This impact is less than significant, similar to the conclusions included in the 2009 MP FEIR. The project would not result in a new or more severe impact related to on- or off-site flooding than previously evaluated and disclosed in the 2009 MP FEIR. No new mitigation is required.

The proposed project would not draw water from groundwater sources nor substantially increase impervious surfaces. Therefore, operation of the proposed project would not substantially deplete groundwater supplies such that there would be a net deficit in aquifer volume or a lowering of the local

groundwater table level. As a result, similar to the conclusions included in the 2009 MP FEIR, this impact would be less than significant. The project would not result in a new or more severe impact related to groundwater use and recharge than previously evaluated and disclosed in the 2009 MP FEIR. No new mitigation is required.

The project site is not located within a FEMA-designated 100-year flood zone (FEMA 2009) nor is it located within the inundation area of any nearby dam. Therefore, the proposed project would not place structures that would impede or redirect flood flows within a 100-year flood hazard area or dam inundation zone. As a result, this impact is less than significant, similar to the conclusions included in the 2009 MP FEIR. The project would not result in a new or more severe impact related to impeding or redirecting flood flows than previously evaluated and disclosed in the 2009 MP FEIR. No new mitigation is required.

Due to its elevation and distance from the ocean and San Francisco Bay, the project site would not be affected by inundation by a tsunami or seiche event. Therefore, similar to the conclusions included in the 2009 MP FEIR, no impact would occur. The project would not result in a new or more severe impact related to tsunami or seiche events than previously evaluated and disclosed in the 2009 MP FEIR. No mitigation is required.

The proposed project is within the scope of the 2009 Master Plan and therefore, its cumulative impacts are adequately addressed in the 2009 MP FEIR.

Findings

The potential impacts with respect to hydrology and water quality from the proposed library replacement project would be similar to or less than the impacts of campus development analyzed in the 2009 MP FEIR. Therefore, no new or substantially increased significant impacts would result from the proposed project beyond those analyzed in the 2009 MP FEIR. No new mitigation is required.

4.10 Land Use and Planning

	Potentially Significant New Impact	Less than Significant New Impact with Mitigation	Less than Significant New Impact	Impact Fully Analyzed in the FEIR
LAND USE AND PLANNING - Would the project:				
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to, the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion:

Summary of Analysis in the 2009 MP FEIR

All development associated with the 2009 Master Plan, including the academic, support, recreation, housing, parking, and roadways, would be located within or immediately adjacent to the existing development on the campus. As a result, the 2009 MP FEIR concluded that growth and development under the 2009 Master Plan would not physically divide an established community. No mitigation is required.

While the campus is not subject to local land use regulations, the Campus maintains cooperative relations with local governments regarding planning and land use issues to assure that mutual interests are addressed. The 2009 Master Plan would not conflict with the City's General Plan land use designation and zoning for the campus. In addition, the 2009 Master Plan would not conflict with pertinent strategies listed within the Hayward Highlands Neighborhood Plan, which governs adjacent land uses to the north and east. Finally, the 2009 Master Plan does not propose land uses that are substantially incompatible with uses adjacent to the campus. Therefore, the 2009 MP FEIR concluded that growth and development under the 2009 Master Plan would not conflict with applicable land use plans, policies, or regulations of an agency with jurisdiction over the project adopted for the purposes of avoiding or mitigating an environmental effect. This impact is less than significant. No mitigation is required.

The 2009 MP FEIR concluded that cumulative impacts related to land use and planning would be less than significant as new development on the Hayward campus would not introduce land uses that would be incompatible with surrounding land uses and future development adjacent to campus would be expected to be in general conformance with local land use plans.

Change in Circumstances and/or New Information

Since the certification of the 2009 MP FEIR both originally in 2009 and its recertification in 2018, there have been no changes in circumstances that would alter the conclusions of the 2009 MP FEIR with respect to land use impacts.

Analysis of the Proposed Project

The site of the replacement library is surrounded by other campus facilities. As a result, similar to the conclusion included in the 2009 MP FEIR, the replacement library project would not physically divide an established community. No impact would occur and the project would not result in a new or more severe impact related to physically dividing an established community than previously evaluated and disclosed in the 2009 MP FEIR. No new mitigation is required.

As discussed above, the land use plan in the 2009 Master Plan identified a site adjacent to the east wing of the existing library for expansion of the library. The Campus has reevaluated the previously planned library expansion and determined that a new replacement library located at a site 200 feet to the northeast of the existing library that is south of the existing Science buildings and northwest of the existing Recreation and Wellness Center would be more appropriate. In order to relocate the library to a new location, an amendment to the land use plan in the 2009 Master Plan would be required. The land use plan would be modified to label the proposed project site as the new library building site.

The project site is located within an area designated for academic and administrative use in the 2009 Campus Master Plan. The proposed replacement library is an allowed land use within this functional zone. As the proposed project would be consistent with the 2009 Campus Master Plan functional zone for the project site, the proposed project would not conflict with the Campus Master Plan. Therefore, the project would not conflict with applicable land use plans, policies, or regulations of an agency with jurisdiction over the project adopted for the purposes of avoiding or mitigating an environmental effect, similar to the conclusion included in the 2009 MP FEIR. In addition, as discussed throughout this Addendum, all environmental impacts associated with amending the 2009 Master Plan to relocate the replacement library to a new site would be either less than significant or would be reduced to a less than significant level with the incorporation of mitigation listed in the 2009 Master Plan EIR. As a result, the project, including the proposed 2009 Master Plan minor amendment would not result in a new or more

severe impact related to conflicts with applicable land use plans than previously evaluated and disclosed in the 2009 MP FEIR. No new mitigation is required.

The proposed project is within the scope of the 2009 Master Plan and therefore, its cumulative impacts are adequately addressed in the 2009 MP FEIR.

Findings

The potential impacts with respect to land use and planning from the proposed library replacement project and related Master Plan amendment would be similar to or less than the impacts of campus development analyzed in the 2009 MP FEIR. Therefore, no new or substantially increased significant impacts would result from the proposed project beyond those analyzed in the 2009 MP FEIR. No new mitigation is required.

4.11 Mineral Resources

	Potentially Significant New Impact	Less than Significant New Impact with Mitigation	Less than Significant New Impact	Impact Fully Analyzed in the FEIR
MINERAL RESOURCES - Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of future value to the region and the residents of the State?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion:

Summary of Analysis in the 2009 MP FEIR

The campus is not located within a regionally significant aggregate resources zone. In addition, implementation of the 2009 Master Plan would not result in any substantial loss of known mineral resources that would be of value to the region or state because the campus area is not available for extraction of mineral resources. Further development of the campus would not result in the additional loss of important mineral resource recovery. As a result, the 2009 MP FEIR concluded that there would be no impacts on mineral resources. No mitigation is required.

Change in Circumstances and/or New Information

Since the certification of the 2009 MP FEIR both originally in 2009 and its recertification in 2018, there have been no changes in circumstances that would alter the conclusions of the 2009 MP FEIR with respect to impacts on mineral resources.

Analysis of the Proposed Project

As described in the 2009 MP FEIR, the loss of availability of known mineral resources on the campus would be low. No impacts would occur and the project would not result in new or more severe impacts to mineral resources than previously evaluated and disclosed in the 2009 MP FEIR.. No new mitigation is required.

Findings

The potential impacts with respect to mineral resources from the proposed library replacement project would be similar to or less than the impacts of campus development analyzed in the 2009 MP FEIR. Therefore, no new or substantially increased significant impacts would result from the proposed project beyond those analyzed in the 2009 MP FEIR. No new mitigation is required.

4.12 Noise

	Potentially New Significant Impact	Less than Significant New Impact with Mitigation	Less than Significant new Impact	Impact Fully Analyzed in the FEIR
NOISE - Would the project result in:				
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Exposure of persons to or generation of excessive ground borne vibration or ground borne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion:

Summary of Analysis in the 2009 MP FEIR

Campus development under the 2009 Master Plan, with and without a third campus entrance, would result in increased vehicular traffic on the regional road network by 2030, which would increase ambient traffic noise levels at existing on- and off-site noise sensitive uses. However, the increase in noise levels along study area road segments would not reach levels that are typically noticed by the human ear. As a result, the 2009 MP FEIR concluded that traffic added by campus development under the 2009 Master Plan, with and without a third campus entrance, at buildout in 2030 would not significantly increase

noise levels along any of the roadway segments. The impact would be less than significant. No mitigation is required.

Noise generated by daily campus activities is not expected to exceed the City noise standards at nearby off-site noise-sensitive location (i.e., residences, churches, schools). However, on-site noise-sensitive receptors, including student housing and academic buildings on the campus, could be exposed to excessive noise from other land uses that are developed within the campus. However, the land use plan for the 2009 Master Plan has been designed to avoid the location of sensitive land uses near potential loud noise sources. Therefore, the 2009 MP FEIR concluded that on- and off-site receptors are not expected to be exposed to noise levels in excess of the standards for noise sensitive uses. This impact is less than significant. No mitigation is required.

Construction on the campus pursuant to the 2009 Master Plan could expose existing and future on- and off-site noise-sensitive receptors to elevated construction noise levels. **MP Mitigation Measures NOI-3a** and **NOI-3b** would reduce this impact to a less than significant level.

The campus is not located within an airport land use plan or within 2 miles of a public airport or public use airport. In addition, the campus is not located within 2 miles of a private airstrip. Therefore, no impact would occur and no mitigation is required.

The 2009 MP FEIR concluded that cumulative noise effects from reasonably foreseeable development in the City of Hayward and development under the 2009 Master Plan would be less than significant.

MP FEIR Mitigation Measures

MP MM NOI-3a: Construction activities on campus shall be restricted to between the hours of 7:00 AM and 7:00 PM on weekdays and Saturdays and 10:00 AM to 6:00 PM on Sundays and holidays.

MP MM NOI-3b: Prior to initiation of campus construction within 500 feet of a noise sensitive receptor, the Campus shall approve a construction noise mitigation program including but not limited to the following.

- All noise-producing project equipment and vehicles using internal combustion engines shall be equipped with exhaust mufflers and air-inlet silencers where appropriate, in good operating condition that meet or exceed original factory specification.

- Mobile or fixed “package” equipment (e.g., arc-welders, air compressors) shall be equipped with shrouds and noise control features that are readily available for that type of equipment.
- All mobile or fixed noise producing equipment used on the project, which is regulated for noise output by local, state or federal agency, shall comply with such regulation while engaged in project-related activities.
- Electrically powered equipment shall be used instead of pneumatic or internal combustion powered equipment, where practicable.
- Material stockpiles and mobile equipment staging, construction vehicle parking and maintenance areas shall be located as far as practicable from noise-sensitive land uses.
- Stationary noise sources such as generators or pumps shall be located away from noise-sensitive land uses as feasible.
- The use of noise-producing signals, including horns, whistles, alarms, and bells shall be for safety warning purposes only. No project-related public address loudspeaker, two-way radio, or music system shall be audible at any adjacent noise-sensitive receptor except for emergency use.
- The erection of temporary noise barriers shall be considered where project activity is unavoidably close to noise-sensitive receptors.
- The noisiest construction operations shall be scheduled to occur together to avoid continuing periods of the greatest annoyance, wherever possible.
- Construction vehicle trips be routed as far as practical from existing residential uses.
- The loudest campus construction activities, such as demolition, blasting, and pile driving, shall be scheduled during summer, Thanksgiving, winter, and spring breaks when fewer people would be disturbed by construction noise.
- Whenever possible, academic, administrative, and residential areas that will be subject to construction noise shall be informed a week before the start of each construction project.

Change in Circumstances and/or New Information

Since the certification of the 2009 MP FEIR both originally in 2009 and its recertification in 2018, there have been no changes in circumstances that would alter the conclusions of the 2009 MP FEIR with respect to noise impacts.

Analysis of the Proposed Project

With operation of the proposed replacement library, noise levels at both on-campus and off-campus receptors would be similar to those under existing conditions. This is because the library project does not include any stationary noise source that could elevate noise levels in the project vicinity, and any HVAC equipment that is roof-mounted on the new library building would be enclosed to minimize emission of noise. The proposed project would not result in new operational vehicle trips as the campus population would stay the same; therefore, traffic noise along area roadways would not increase due to the project. Similar to the conclusion included in the 2009 MP FEIR, the impact related to operational noise would be less than significant. The project would not result in a new or more severe impact related to operational noise than previously evaluated and disclosed in the 2009 MP FEIR. No new mitigation is required.

According to the City of Hayward Municipal Code, construction noise levels shall not exceed 86 dBA outside of the property plane. Noise from project construction would be below this level at the campus property boundary, which is approximately 400 feet from the edge of the project site. The nearest off-campus residential receptor is 650 feet from the project site boundary, and would experience a maximum construction noise level of approximately 58.5 dBA (see **Appendix B** for noise data/calculations). Therefore, similar to the conclusion included in the 2009 MP FEIR, project construction noise would not adversely affect nearby off-campus residential receptors. The project would not result in a new or more severe impact related to construction noise impact on off-campus receptors than previously evaluated and disclosed in the 2009 MP FEIR.

With respect to sensitive receptors on the campus, student residences, classrooms, and places used for learning and research are identified as places that would house noise sensitive receptors. According to the 2009 MP FEIR, a significant impact at these campus receptors would occur if construction activity is predicted to result in a sound level that is more than 6 dBA above the ambient sound level at the nearest sensitive receptor between the hours of 7:00 PM and 7:00 AM on weekdays and Saturdays or between the hours of 10 AM and 6 PM on Sundays and holidays. If a construction site is within a distance of about 500 feet of a sensitive receptor, construction noise is likely to increase sound levels at the receptor by 6 dBA or more. The nearest on-site residential receptors are approximately 250 feet to the southeast of the project site. The nearest on-site classroom receptors are approximately 100 feet to the northeast of the project site. As these receptors are within 500 feet of the project construction activities, they are likely to experience increased noise levels above 6 dBA. This represents a potentially significant impact, similar to the conclusion included in the 2009 MP FEIR. **MP Mitigation Measure NOI-3** would be incorporated into the project to reduce the noise impact from construction activities to a less than significant level. The project would not result in a new or more severe impact related to construction noise impacts on on-campus receptors than previously evaluated and disclosed in the 2009 MP FEIR. No new mitigation is required.

The project site is located within the campus core and therefore is not located within the vicinity of a public airport or private airstrip. As a result, the project would not expose people residing or working in the project area to excessive noise levels from aircraft. Similar to the conclusion included in the 2009 MP FEIR, no impact would occur and the project would not result in a new or more severe impact related to aircraft noise than previously evaluated and disclosed in the 2009 MP FEIR. No new mitigation is required.

The proposed project is within the scope of the 2009 Master Plan and therefore, its cumulative impacts are adequately addressed in the 2009 MP FEIR.

Findings

The potential impacts with respect to noise from the proposed library replacement project would be similar to or less than the impacts of campus development analyzed in the 2009 MP FEIR. Therefore, no new or substantially increased significant impacts would result from the proposed project beyond those analyzed in the 2009 MP FEIR. No new mitigation is required.

4.13 Population and Housing

	Potentially Significant New Impact	Less than Significant New Impact with Mitigation	Less than Significant New Impact	Impact Fully Analyzed in the FEIR
POPULATION AND HOUSING – Would the project:				
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion:

Summary of Analysis in the 2009 MP FEIR

All students new to the Bay Area could be housed by new student beds under the 2009 Master Plan. In addition, ABAG housing projections indicate that there would be ample housing available in the City of Hayward and in Alameda County to accommodate new employees to campus. As a result, the 2009 MP FEIR concluded that implementation of the 2009 Master Plan would not substantially increase the population of the City of Hayward or Alameda County such that additional housing would be required, the construction of which could cause significant environmental impacts. This impact is less than significant. No mitigation is required.

The student and faculty housing envisioned under the 2009 Master Plan would be constructed within existing campus boundaries. Other development associated with 2009 Master Plan implementation would occur on the developed portion of the campus. Therefore, the 2009 MP FEIR concluded that implementation of the 2009 Master Plan would not displace existing housing or population. No mitigation is required.

The 2009 MP FEIR concluded that cumulative impacts with respect to population and housing from reasonably foreseeable development in the City of Hayward and development under the 2009 Master Plan would be less than significant.

Change in Circumstances and/or New Information

Since the certification of the 2009 MP FEIR both originally in 2009 and its recertification in 2018, there have been no changes in circumstances that would alter the conclusions of the 2009 MP FEIR with respect to population and housing impacts.

Analysis of the Proposed Project

The proposed project would not increase campus population as the replacement library is a supporting use that would house existing employees and serve the existing and future student population. Furthermore, the west wing of the existing library would stay vacant after the relocation of the library to the replacement facility and would not house any new students or employees. The east wing would continue to house campus support services and library stacks. Therefore, no impacts related to population and housing would occur and the project would not result in new or more severe impacts related to population and housing than previously evaluated and disclosed in the 2009 MP FEIR. No new mitigation is required.

The proposed project is within the scope of the 2009 Master Plan and therefore, its cumulative impacts are adequately addressed in the 2009 MP FEIR.

Findings

The potential impacts with respect to population and housing from the proposed library replacement project would be similar to or less than the impacts of campus development analyzed in the 2009 MP FEIR. Therefore, no new or substantially increased significant impacts would result from the proposed project beyond those analyzed in the 2009 MP FEIR. No new mitigation is required.

4.14 Public Services

	Potentially New Significant Impact	Less than Significant New Impact with Mitigation	Less than Significant New Impact	Impact Fully Analyzed in the FEIR
PUBLIC SERVICES				
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
i) Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ii) Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iii) Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iv) Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
v) Other governmental services?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion:

Summary of Analysis in the 2009 MP FEIR

Implementation of the 2009 Master Plan would result in additional facilities and population on the campus. This increase in campus facilities and population would place incremental additional demand on the Hayward Fire Department (HFD) for fire protection services. The HFD indicated additional facilities such as an additional bay or fire station would need to be constructed. However, expansion or construction of a fire station would not result in significant environmental impacts due to the limited area that is typically required to build a fire station (between 0.5 and 1 acre) and its urban location. As a result, the 2009 MP FEIR concluded that the construction of additional fire facilities would not result in significant environmental impacts. This impact is considered less than significant. No mitigation is required.

The increase in campus facilities and population would also place incremental additional demand on the Campus Police Department and the Hayward Police Department for law enforcement services. The need

for new on- or off-campus police facilities to service the campus at buildout is not anticipated at this time. However, should new or expanded police facilities be required on campus, the development of such facilities would not result in environmental impacts beyond those evaluated in the 2009 MP FEIR. In addition, an expansion of police facilities in Hayward would be unlikely to result in significant environmental impacts due to the urban setting of the City. Therefore, the 2009 MP FEIR concluded that the construction of additional law enforcement facilities would result in less than significant environmental impacts. This impact is considered less than significant. No mitigation is required.

New employees on campus would result in the addition of approximately 196 K-12 students to Hayward area schools over a period of about 21 to 22 years (approximately 10 K-12 students per year). As this increase is not considered substantial, the 2009 MP FEIR concluded that campus development under the 2009 Master Plan would not result in impacts to City of Hayward schools. This impact is less than significant. No mitigation is required.

The 2009 Master Plan FEIR concluded that cumulative impacts with respect to public services from reasonably foreseeable development in the City of Hayward and development under the 2009 Master Plan would be less than significant.

Change in Circumstances and/or New Information

Since the certification of the 2009 MP FEIR both originally in 2009 and its recertification in 2018, there have been no changes in circumstances that would alter the conclusions of the 2009 MP FEIR with respect to public service impacts.

Analysis of the Proposed Project

The proposed replacement library project would not increase campus population and thus demand for public services would not increase compared to the levels analyzed in the 2009 MP FEIR. As a result, the project would not result in new or more severe impacts related to public services than previously evaluated and disclosed in the 2009 MP FEIR. No new mitigation is required.

The proposed project is within the scope of the 2009 Master Plan and therefore, its cumulative impacts are adequately addressed in the 2009 MP FEIR.

Findings

The potential impacts with respect to public services from the proposed library replacement project would be similar to or less than the impacts of campus development analyzed in the 2009 MP FEIR.

Therefore, no new or substantially increased significant impacts would result from the proposed project beyond those analyzed in the 2009 MP FEIR. No new mitigation is required.

4.15 Recreation

	Potentially Significant New Impact	Less than Significant New Impact with Mitigation	Less than Significant New Impact	Impact Fully Analyzed in the FEIR
RECREATION – Would the project:				
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion:

Summary of Analysis in the 2009 MP FEIR

The 2009 Master Plan identified minor modifications to existing recreational facilities on the campus. The 2017 PR-FEIR which is a part of the 2009 MP FEIR noted that all of these facilities are already developed and located in portions of the campus where sensitive environmental resources are not present. In addition, based on the current low levels of usage of the nearby regional parks by campus population, the FEIR concluded that only a small number of additional students, faculty and staff are expected to patronize regional parks and facilities owned and operated by the Hayward Area Recreation and Park District as existing on-campus recreational facilities would satisfy the demands of this campus population (CSUEB 2018). For these reasons, the 2009 MP FEIR concluded that campus growth under the 2009 Master Plan would not result in significant environmental impacts related to the development of new or modified recreational facilities nor 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. This impact is considered less than significant. No mitigation is required.

The 2009 MP FEIR concluded that cumulative impacts with respect to recreation from reasonably foreseeable development in the City of Hayward and development under the 2009 Master Plan would be less than significant.

Change in Circumstances and/or New Information

Since the certification of the 2009 MP FEIR both originally in 2009 and its recertification in 2018, there have been no changes in circumstances that would alter the conclusions of the 2009 MP FEIR with respect to impacts on recreational facilities.

Analysis of the Proposed Project

As there would be no campus population growth due to the proposed replacement library project, no impacts to existing recreational facilities would occur, nor would there be the need to construct new recreation facilities. Thus, the project would not result in new or more severe impacts related to recreation than previously evaluated and disclosed in the 2009 MP FEIR. No new mitigation is required.

The proposed project is within the scope of the 2009 Master Plan and therefore, its cumulative impacts are adequately addressed in the 2009 MP FEIR.

Findings

The potential impacts with respect to recreational resources from the proposed library replacement project would be similar to or less than the impacts of campus development analyzed in the 2009 MP FEIR. Therefore, no new or substantially increased significant impacts would result from the proposed project beyond those analyzed in the 2009 MP FEIR. No new mitigation is required.

4.16 Transportation and Traffic

	Potentially New Significant Impact	Less than Significant New Impact with Mitigation	Less than Significant New Impact	Impact Fully Analyzed in the FEIR
TRANSPORTATION/TRAFFIC - Would the project:				
a) Cause an increase in traffic, which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion:

Summary of Analysis in the 2009 MP FEIR

The traffic analysis in the 2009 MP FEIR found that full buildout of the campus in 2030 under the 2009 Master Plan, with and without the Third Entrance, will contribute to sub-standard intersection operations at eight study intersections, in either the AM peak hour or PM peak hour, or both peak hours. **MP Mitigation Measures TRANS-1a** and **TRANS-1b** would lessen but not reduce this impact to a less than significant level. As a result, the 2009 MP FEIR concluded that this impact would be significant and unavoidable.

The traffic analysis in the 2009 MP FEIR found that campus gateway intersections will operate at unacceptable levels of service in the future. **MP Mitigation Measure TRANS-2** would reduce this impact to a less than significant level.

The traffic analysis in the 2009 MP FEIR found that traffic added by growth and development under the 2009 MP FEIR would not adversely affect intersection operations at Hayward Boulevard and Civic Avenue. This impact is less than significant. No mitigation is required.

The traffic analysis in the 2009 MP FEIR found that pedestrian safety on Harder Road in the vicinity of the student housing area could be affected by traffic volumes and speeds, with the provision of the third entrance on Hayward Boulevard. **MP Mitigation Measure TRANS-4** would reduce this impact to a less than significant level.

The traffic analysis in the 2009 MP FEIR found that campus growth and development under the 2009 Master Plan would substantially increase volumes on several segments of the Congestion Management Program (CMP) or Metropolitan Transportation System (MTS) networks. **MP Mitigation Measure TRANS-5** would lessen but not reduce this impact to a less than significant level. As a result, the 2009 MP FEIR concluded that this impact would be significant and unavoidable.

The traffic analysis in the 2009 MP FEIR found that campus growth and development under the 2009 Master Plan will increase BART ridership, but will not lead to over-capacity conditions in the peak commute hours. This impact is less than significant. No mitigation is required.

The traffic analysis in the 2009 MP FEIR found that campus growth and development under the 2009 Master Plan will increase bus transit demand, particularly for connections between the campus and the Downtown Hayward and Castro Valley BART stations. **MP Mitigation Measure TRANS-7** would reduce this impact to a less than significant level.

The analysis in the 2009 MP FEIR concluded that walking and bicycling trips to the campus may increase moderately with implementation of the 2009 Master Plan. **MP Mitigation Measure TRANS-8** would reduce this impact to a less than significant level.

The analysis in the 2009 MP FEIR concluded that the 2009 Master Plan could result in overflow parking on nearby neighborhood streets, if the supply is not managed to meet demand as the campus grows. **MP Mitigation Measures TRANS-9a** and **TRANS-9b** would reduce this impact to a less than significant level.

The 2009 MP FEIR concluded that significant cumulative traffic effects would occur from reasonably foreseeable development in the City of Hayward and development under the 2009 Master Plan. No feasible mitigation exists to reduce these cumulative impacts to a less than significant level.

Change in Circumstances and/or New Information

Since the certification of the 2009 MP FEIR both originally in 2009 and its recertification in 2018, there have been no changes in circumstances that would alter the conclusions of the 2009 MP FEIR with respect to traffic and transportation impacts.

Analysis of the Proposed Project

Except for an increase in construction vehicles accessing the project site during project construction, there would be no increase in traffic due to the proposed project as it would not result in an increase in campus population or associated vehicle trips. For this reason, no traffic impact would occur and **MP Mitigation Measures TRANS-1, TRANS-2, and TRANS-5** do not apply. Construction vehicles would travel to and from the project site for a period of two years, with most of the construction traffic accessing or leaving the project area during off-peak hours. As a result, construction traffic would not have any adverse effect on the capacity of the roadway system. The impact of the project's construction traffic would be less than significant. No mitigation is required.

The proposed project would not make any changes to area roads and would not result in the creation of dangerous intersections or other road conditions that would substantially increase hazards in the area. There would be no impact and **MP Mitigation Measure TRANS-4** does not apply.

Construction of the proposed project would not result in any road or bicycle lane closures outside of the project site. Roadways adjacent to the project site would remain open to emergency vehicles during project construction. There would be no impact. No mitigation is required.

The proposed project would not conflict with any adopted policies, plans, or programs that support alternative transportation as it would not increase the population of the campus or change the existing land uses. There would be no impact and **MP Mitigation Measures TRANS-7 and TRANS-8** do not apply. No mitigation is required.

The proposed project as it would not result in an increase in campus population or associated vehicle trips that would require parking. As a result, the proposed project would not result in inadequate parking. There would be no impact and **MP Mitigation Measure TRANS-9** does not apply. No mitigation is required.

The proposed project is within the scope of the 2009 MP FEIR and therefore, its cumulative impacts are adequately addressed in the 2009 MP FEIR. Although the 2009 MP FEIR concluded that there would be significant and unavoidable cumulative impacts related to intersection operations and CMP and MTS networks, the proposed project would not contribute to the significant and unavoidable impacts.

Findings

The potential impacts with respect to traffic from the proposed library replacement project would be similar to or less than the impacts of campus development analyzed in the 2009 MP FEIR. Therefore, no new or substantially increased significant impacts would result from the proposed project beyond those analyzed in the 2009 MP FEIR. No new mitigation is required.

4.17 Utilities and Service Systems

	Potentially New Significant Impact	Less than Significant New Impact with Mitigation	Less than Significant New Impact	Impact Fully Analyzed in the FEIR
UTILITIES AND SERVICE SYSTEMS - Would the project:				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new and expanded entitlements needed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Comply with federal, state, and local statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion:

Summary of Analysis in the 2009 MP FEIR

Campus growth and development under the 2009 Master Plan would result in a demand for water not anticipated in the City's 2005 UWMP. As a result, the 2009 MP FEIR conservatively concluded that the impact of growth and development at Master Plan buildout on water supply would be significant. **MP Mitigation Measure UTIL-1** would reduce this impact to a less than significant level.

The City of Hayward Water Pollution Control Facility (WPCF) would have sufficient capacity to treat wastewater generated on the campus through Master Plan buildout. In addition, no major improvements to the City's sewer mains that serve the campus are needed to handle the increased flow from the campus. Therefore, the 2009 MP FEIR concluded that campus growth and development under the 2009 Master Plan would not require the construction or expansion of wastewater conveyance or treatment facilities. This impact is less than significant. No mitigation is required.

Campus growth and development under the 2009 Master Plan would result in the construction of new electrical, natural gas, and heating water facilities. However, the 2009 MP FEIR concluded that the construction of these facilities would not cause significant environmental impacts. This impact is less than significant. No mitigation is required.

Campus growth and development under the 2009 Master Plan would require a minor expansion of the storm water conveyance system. However, the 2009 MP FEIR concluded that the construction of this system would not cause significant environmental impacts. This impact is less than significant. No mitigation is required.

Campus growth and development under the 2009 Master Plan would increase the amount of non-hazardous waste generated on campus. However, at full buildout under the 2009 Master Plan, 75 to 100 percent of solid waste would be diverted from landfills. Additionally, 100 percent of organic waste generated would be composted on the campus. For these reasons, the 2009 MP FEIR concluded that the 2009 Master Plan would not conflict with applicable solid waste regulations, nor would it result in solid waste requiring disposal that would exceed the landfill capacity. This impact is less than significant. No mitigation is required.

Reasonably foreseeable development in the City of Hayward and campus development under the 2009 Master Plan would result in the demand for additional water supply, wastewater treatment, solid waste disposal, electricity, and natural gas. However, the 2009 MP FEIR concluded that the contribution from campus development to the cumulative impact would not be considerable as the 2009 Master Plan includes sustainability goals to reduce the Campus's water use, energy use, wastewater generation, and solid waste generation and disposal. In addition, mitigation discussed above would further reduce campus water demand and thereby also wastewater discharge.

Change in Circumstances and/or New Information

Since the certification of the 2009 MP FEIR both originally in 2009 and its recertification in 2018, there have been no changes in circumstances that would alter the conclusions of the 2009 MP FEIR with respect to utility impacts.

Analysis of the Proposed Project

The proposed project would not increase the campus population. Therefore, there would be no additional demand for water, wastewater treatment, and solid waste facilities. In addition, impervious surfaces on the project site would minimally increase as described above under **Section 4.7 Hydrology and Water Quality**, resulting in a similar amount of storm water runoff when compared to the 2009 Master Plan analysis. No impacts to utilities and service systems would occur and the project would not result in new or more severe impacts related to utilities and services systems than previously evaluated and disclosed in the 2009 MP FEIR. **MP Mitigation Measure UTIL-1** would not apply.

The proposed project is within the scope of the 2009 MP FEIR and therefore, its cumulative impacts are adequately addressed in the 2009 MP FEIR.

Findings

The potential impacts with respect to utilities and service systems from the proposed library replacement project would be similar to or less than the impacts of campus development analyzed in the 2009 MP FEIR. Therefore, no new or substantially increased significant impacts would result from the proposed project beyond those analyzed in the 2009 MP FEIR. No new mitigation is required.

5.0 REFERENCES

- Bay Area Air Quality Management District (BAAQMD). 2017. *BAAQMD Air Quality CEQA Guidelines*. May.
- California State University East Bay (CSUEB). 2018. CSU East Bay Hayward Campus 2009 Master Plan Final EIR, SCH No. 2008042100. January.
- Federal Emergency Management Agency (FEMA). 2009. Flood Insurance Rate Map No. 06001C0293G for Alameda County, California. August 3.
- California State Water Resources Control Board (SWRCB). 2018. GeoTracker database. Cal State University Hayward (T0600100243). Available at: http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0600100243. Accessed: February 26, 2018.

6.0 REPORT PREPARERS

California State University East Bay

Anne Salazar Leung, University Planner

Impact Sciences, Inc.

Shabnam Barati, Ph.D., Principal

Paul Stephenson, AICP, Senior Project Manager

Jared Jerome, Air Quality and Noise Analyst

Van Hoang, Publications Manager

TABLE OF CONTENTS

Section	Page
1.0 Introduction	1
2.0 CEQA Requirements.....	2
3.0 Project Description	3
4.0 Environmental Factors Potentially Affected.....	8
4.1 Aesthetics	10
4.2 Agriculture and Forestry Resources.....	13
4.3 Air Quality	16
4.4 Biological Resources	24
4.5 Cultural Resources	30
4.6 Geology and Soils.....	35
4.7 Greenhouse Gas Emissions.....	38
4.8 Hazards and Hazardous Materials.....	41
4.9 Hydrology and Water Quality	47
4.10 Land Use and Planning.....	52
4.11 Mineral Resources.....	55
4.12 Noise	57
4.13 Population and Housing.....	62
4.14 Public Services	64
4.15 Recreation.....	67
4.16 Transportation and Traffic.....	69
4.17 Utilities and Service Systems.....	73
5.0 References.....	76
6.0 Report Preparers.....	77

LIST OF FIGURES

Figure	Page
Figure 1, Project Location	6
Figure 2, Conceptual Site Plan	7

LIST OF TABLES

Table	Page
Table 1: Significance Thresholds for Criteria Pollutant Emissions	18
Table 2: Estimated Construction Emissions.....	20
Table 3: GHG Significance Thresholds	39

APPENDICES

Appendix A: Emissions Calculations

Appendix B: Noise Calculations

1.0 INTRODUCTION

In September 2009, the CSU Board of Trustees adopted Findings and a Mitigation Monitoring Program pursuant to California Environmental Quality Act (CEQA) for the 2009 California State University, East Bay (CSUEB) Hayward Campus Master Plan ("2009 Master Plan"). The 2009 Final EIR was challenged in court by the City of Hayward (City) and two local neighborhood groups. The Court of Appeal upheld the 2009 Final EIR in all respects, with the exception of the 2009 Final EIR's analysis of impacts to parklands. The Court of Appeal also directed the Board of Trustees to reconsider the feasibility of funding the California State University's (University) fair-share contribution of off-campus traffic mitigation measures.

Accordingly, in 2017, the University prepared a Partial Recirculated Draft and Final Environmental Impact Report (collectively "2017 PR-FEIR") which updated and replaced the parkland analysis in the 2009 Final EIR, and provides an expanded analysis of the project's impacts on nearby parklands in accordance with the opinion of the Court of Appeal and the peremptory writ of administrative mandamus. The 2017 PR-FEIR concluded, consistent with the 2009 Final EIR that the Master Plan project would not result in a significant adverse impact to parklands. In January 2018, the Board of Trustees set aside and vacated its original approval of the CSUEB 2009 Master Plan, de-certified the 2009 Final EIR, certified the 2017 PR-EIR and re-certified 2009 Final EIR as modified by the 2017 PR-EIR, and re-approved the CSUEB 2009 Master Plan. The re-certified 2009 Final EIR as modified by the 2017 PR-EIR is referred to throughout this Addendum as the "2009 MP FEIR."

The 2009 Master Plan addresses the facility needs of the Hayward Campus to meet State-mandated enrollment through 2030. The 2009 Master Plan involves the reorganization of campus facilities and reconfiguration of campus access and circulation. Activities outlined in the 2009 Master Plan include the demolition/removal of some of the existing buildings on the campus, the renovation of some of the existing buildings, and the construction of a number of new buildings. In addition, the 2009 Master Plan includes recommended vehicle and pedestrian circulation plans for the campus and recommended landscape improvements. The 2009 MP FEIR addressed the environmental impacts from the implementation of the 2009 Master Plan and campus growth through 2030.

The 2009 Master Plan states that the existing campus library is no longer able to meet modern criteria for a technologically advanced, attractive venue for learning and that the construction of a new library to replace the existing campus library would be required. The 2009 Master Plan identified a site adjacent to the east wing of the existing library for expansion of the library. The Campus has reevaluated the previously planned library expansion and determined that a new replacement library located at a site 200 feet to the northeast of the existing library that is south of the existing Science buildings and northwest of

the existing Recreation and Wellness Center would be more appropriate. This Addendum analyzes the environmental effects from amending the approved Master Plan and developing the new library on the proposed site instead of the previously identified location.

Where none of the conditions requiring the preparation of a Subsequent EIR are met, the CEQA Guidelines require a lead agency to prepare an Addendum to the previously certified EIR, including a brief explanation of the decision to not prepare a Subsequent EIR supported by substantial evidence (Section 15164). Based on the analysis below, this Addendum concludes that the construction and operation of the new library at the proposed site would not result in any new significant environmental impacts, or an increase in the severity of adverse impacts previously evaluated and disclosed in the 2009 MP FEIR, nor would it require the adoption or consideration of any new or considerably different mitigation measures and alternatives. Therefore this Addendum is the appropriate form of environmental review required under CEQA.

2.0 CEQA REQUIREMENTS

CEQA Guidelines Section 15164(a) states that the lead agency shall prepare an addendum to a previously adopted EIR if some changes or additions are necessary but none of the conditions described in Section 15162 calling for preparation of a subsequent EIR have occurred. Section 15164(c) states that an addendum does not need to be circulated for public review. Section 15164(d) provides that the decision-making body shall consider the addendum in conjunction with the certified EIR prior to making a decision on the project. Section 15164(e) requires documentation of the decision not to prepare a subsequent EIR pursuant to Section 15162.

CEQA Guidelines Section 15162(a) provides that once an EIR has been adopted, no subsequent EIR shall be prepared unless the lead agency determines, on the basis of substantial evidence, one or more of the following:

- Substantial changes are proposed in the project which will require major revisions of the previous EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;
- Substantial changes occur with respect to the circumstances under which the project is undertaken which will require major revisions of the previous EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;
- New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete, shows any of the following:

- The project will have one or more significant effects not discussed in the previous EIR;
- Significant effects previously examined will be substantially more severe than shown in the previous EIR;
- Mitigation measures previously found not to be feasible would in fact be feasible and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or
- Mitigation measures which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative.

This Addendum has been prepared to satisfy the requirements of CEQA Guidelines Sections 15164(b), 15164(d), and 15164(e).

3.0 PROJECT DESCRIPTION

Project Site

The CSUEB Hayward campus is located at 25800 Carlos Bee Boulevard in the Hayward Hills, approximately 2 miles east of downtown Hayward. The replacement library site is located in the center of the Hayward campus south of the Science buildings and northwest of the Recreation and Wellness Center (see **Figure 1, Project Location**). The site is approximately 1.1 acres in size and is partially paved and partially landscaped with trees and shrubs. The site is sloped and rises approximately 20 feet from the south to the north. Institutional uses surround the replacement library site.

Existing Campus Library

The existing campus library building is located in the campus core approximately 200 feet to the southwest of the project site and includes about 204,000 gross square feet (gsf) of building space with approximately 133,000 gsf of space dedicated to library functions and approximately 71,000 gsf of space devoted to campus support services (non-library functions/services). Library functions are housed in both wings of the upper mall level (81,000 gsf), the west wing of the lower mall level (50,000 gsf), and in the basement of the west wing (2,000 gsf) while campus support services are located in the east wing of the lower mall level (20,000 gsf) and the basement level of the west wing (21,000 gsf). The remaining building basement space (30,000 gsf) is dedicated to mechanical spaces, restrooms, corridors and auxiliary spaces.

Proposed Replacement Library

The proposed replacement library would be three stories and reach a maximum of approximately 47 feet in height. It would provide approximately 100,000 gsf of space. The proposed facility would perform the same functions as the existing library, employ the same number of library staff as the present library, and serve the same number of patrons as the existing facility; the proposed facility would not result in an increase in campus population. As indicated in **Figure 2, Conceptual Site Plan**, the proposed structure would occupy most of the project site. The replacement library would also be served by utilities located within the campus core and the design and landscaping of the proposed facility would be similar to that of existing campus buildings near the project site.

After the relocation of library functions to the replacement library, the west wing of the existing library will remain vacant pending the completion of a study to determine future use. With respect to the east wing, it will undergo a seismic retrofit in either late 2018 or early 2019. The lower mall level of the east wing would continue to house campus support services (20,000 gsf) and the upper mall level of the east wing would continue to house library stacks (27,000 gsf) after the planned retrofit.

Construction of the proposed project is anticipated to begin in spring 2019 and last approximately two years. Because the project is within the scope of the 2009 Master Plan, it is required to implement all applicable mitigation measures set forth in the 2009 MP FEIR. All applicable mitigation measures are identified in the Addendum analysis below. In addition, to minimize emissions of toxic air contaminants during construction, the project includes a best management practice (BMP) that requires all construction equipment used in project construction to be equipped with USEPA rated Tier 4 (model year 2008 or newer) engines. This BMP will be incorporated into the project's construction contract.

Proposed 2009 Master Plan Revision

As noted above, as the existing campus library is no longer able to meet modern criteria for a technologically advanced, attractive venue for learning. In response the campus is seeking a master plan revision to create a new library replacement building on the project site by combining space set aside for a library addition with one of the facilities identified a part of the Instructional Support Services Complex. The site of the library addition is located adjacent to the east wing of the existing library while the site of the Instructional Support Services facility is located adjacent to the project site to the west. As the proposed library replacement project is not adding to the building space projections provided in the 2009 Master Plan, the proposed project is therefore within the scope of the 2009 Master Plan, and as such is analyzed in the 2009 MP FEIR for its environmental impacts. The purpose of the evaluation in this document is to disclose any changes to the previously evaluated and disclosed environmental impacts

that could result from relocating the space assigned to the library addition and the Instructional Support Services facility to the project site and the proposed Master Plan revision.

Figure 1, Project Location

Figure 2, Conceptual Site Plan

4.0 ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

This Addendum provides an analysis of each environmental issue identified in the 2009 MP FEIR to determine whether new or more severe effects would occur or new mitigation measures should be required. CEQA Guidelines Section 15164(b) states that the lead agency shall prepare an addendum to a previously adopted EIR if only minor technical changes or additions are necessary or none of the conditions described in Section 15162 calling for the preparation of a subsequent EIR have occurred. Here, an addendum is appropriate to address additional project-specific details of the proposed project. This document assesses the proposed replacement library to determine whether it is within the scope of the 2009 MP FEIR or whether the construction and/or the operation of the proposed replacement library would result in new significant impacts or substantially more severe impacts under CEQA Guidelines Section 15162.

In the following evaluation each topic section includes the following sub-sections:

- **Environmental Checklist.** Contains a modified form of the Appendix G Initial Study environmental checklist. Each checklist question has been modified to characterize the potentially significant impact, less than significant impact, no impact and other categories in the context of whether or not the project would result in new significant impacts or substantially more severe impacts when compared to the FEIR and the 15162 triggers as follows:
 - Would the project result in substantial changes which will require major revisions of the certified EIR due to new significant environmental effects or a substantial increase in the severity of previously identified effects;
 - Would the project result in substantial changes with respect to the circumstances in which the project is undertaken which will require major revisions of the certified EIR due new significant environmental effects or a substantial increase in the severity of previously identified significant effects;
 - Would the project have one or more significant effects not discussed in the certified EIR or that will be substantially more severe than shown in the EIR, or are there mitigation measures or alternatives previously found not to be feasible or that are considerably different, that would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternatives.

The checklist presented in the following analysis classifies impacts in one of four ways:

- **Potentially Significant New Impact.** This category is for any potentially significant impact that was not analyzed in the 2009 MP FEIR. A potentially significant impact is an effect that may be significant based on substantial evidence and the significance criteria for the proposed project. If the project may result in one or more Potentially Significant Impacts, further environmental documentation is required.

- **Less than Significant New Impact with Mitigation.** This category is for any impacts which were not analyzed or found in the 2009 MP FEIR, but are nonetheless found to be less than significant with mitigation incorporated. This impact is an effect that with the implementation of project-specific mitigation measures is reduced from potentially significant to a less than significant level.
- **Less than Significant New Impact.** This category is for any impacts which were not analyzed or found in the 2009 MP FEIR, but which are nonetheless less than significant.
- **Impacts Fully Analyzed in the FEIR.** This category is for impacts which are equal to or less than the impacts found and analyzed in the 2009 MP FEIR.

4.1 Aesthetics

	Potentially Significant New Impact	Less than Significant New Impact with Mitigation	Less than Significant New Impact	Impacts Fully Analyzed in the FEIR
AESTHETICS - Would the project:				
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion:

Summary of Analysis in the 2009 MP FEIR

A scenic vista is generally defined as an expansive view of highly valued landscape as observable from a publicly accessible vantage point. Scenic vistas of the City of Hayward and San Francisco Bay are offered from vantage points within several neighborhoods north and east of the campus in the Hayward Hills. Implementation of the majority of the 2009 Master Plan would not adversely affect scenic vistas in the Hayward Hills. However, the potential construction of faculty/staff housing adjacent to Grand Avenue would have a substantial adverse effect on a scenic vista from this publicly accessible roadway. **MP Mitigation Measure AES-1** would lessen but not reduce this impact to a less than significant level. As a result, the 2009 MP FEIR concluded that this impact would be significant and unavoidable.

There are no designated state scenic highways located within the vicinity of the campus. Therefore, the 2009 MP FEIR concluded that implementation of the 2009 Master Plan would not substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway. This impact would be less than significant. No mitigation is required.

Buildout of the 2009 Master Plan would alter the existing visual character or quality of the campus. However, implementation of the 2009 Master Plan would enhance, as opposed to degrade, the visual

quality and character of the campus by implementing more cohesive architecture, improving campus entry sequences, and enhancing open space and landscaping. For this reason, the 2009 MP FEIR concluded that implementation of the 2009 Master Plan would not substantially degrade the existing visual character or quality of the site and its surroundings. This impact would be less than significant. No mitigation is required.

Most new construction and reconfiguration under the 2009 Master Plan would occur on the central portion of the campus that is currently developed with light sources. However, projects located along the edges of the campus would introduce new light and glare into areas that are generally dark at night. As a result, the 2009 MP FEIR found that implementation of the 2009 Master Plan would create new sources of light or glare which could adversely affect day or nighttime views in the area. **MP Mitigation Measure AES-4** would reduce this impact to a less than significant level.

The 2009 MP FEIR concluded that cumulative impacts to aesthetics and visual resources from reasonably foreseeable development in the City of Hayward and development under the 2009 Master Plan would be less than significant. No mitigation is required.

Change in Circumstances and/or New Information

Since the certification of the 2009 MP FEIR both originally in 2009 and its recertification in 2018, there have been no changes in circumstances that would alter the conclusions of the 2009 MP FEIR with respect to aesthetics and visual resources.

Analysis of the Proposed Project

Instead of the adding additional space to the east wing of the existing library, the proposed replacement library project would be located 200 feet to the northeast of the existing library in the campus core and would be lower in elevation than the scenic vista points recognized in the Hayward Hills. Building heights within the campus core range from two to four stories. The proposed replacement library would be three stories and reach a maximum of 47 feet in height. While the proposed project would be visible from adjacent areas, at a height of three stories, it would be consistent with the heights of buildings in this portion of the campus and would not exceed the heights of existing and planned buildings in the campus core under the 2009 Master Plan. In addition, the design and landscaping of the proposed project would be compatible with the design and landscaping of existing campus buildings within the campus core. As a result, the impacts to scenic vistas and scenic resources from project development would be less than significant and **MP Mitigation Measure AES-1** would not apply. The project would not result in new or more severe impacts on scenic vistas and scenic resources than previously evaluated and disclosed in the 2009 MP FEIR.

New permanent sources of lighting would be established on the project site with the development of the proposed project that would increase the level of light on the site from current levels. The exterior light proposed would be limited to the amount required to safely light the entrance, sidewalks, and other pedestrian areas within the project site. The interior lighting associated with the proposed project would be similar to that emitted by other such structures on the campus, such as the Sciences Buildings to the north and the Recreation and Wellness Center to the southeast. Furthermore, the replacement library would be at a distance from the campus edges and therefore any exterior lighting associated with the replacement building would not result in light spill on off-campus lands or otherwise result in light and glare impacts. Therefore, impacts from light and glare would be less than significant and **MP Mitigation Measure AES-4** would not apply. The project would not result in a new or more severe impact related to light and glare than previously evaluated and disclosed in the 2009 MP FEIR.

The proposed project is within the scope of the 2009 Master Plan and therefore, its cumulative impacts are adequately addressed in the 2009 MP FEIR. Although the 2009 MP FEIR concluded that there would be a significant and unavoidable cumulative impact related to scenic vistas, the proposed project would not contribute to the impact.

Findings

The potential impacts with respect to aesthetics and visual resources from the proposed library replacement project would be similar to or less than the impacts of campus development analyzed in the 2009 MP FEIR. Therefore, no new or substantially increased significant impacts would result from the proposed project beyond those analyzed in the 2009 MP FEIR. No new mitigation is required

4.2 Agriculture and Forestry Resources

	Potentially Significant New Impact	Less than Significant New Impact with Mitigation	Less than Significant New Impact	Impacts Fully Analyzed in the FEIR
AGRICULTURAL AND FORESTRY RESOURCES - In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in the Forest Protocols adopted by the California Air Resources Board. Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Discussion:

Summary of Analysis in the 2009 MP FEIR

The campus is developed with buildings, paved areas, or landscaped open space and is surrounded by suburban uses and open space. No farmland or agricultural activities are present in the vicinity of the campus. Therefore, implementation of the 2009 Master Plan would not result in conversion of farmland—including Prime Farmland, Unique Farmland, or Farmland of Statewide Importance—to non-agricultural uses. Next, the campus is currently designated for academic uses by the City of Hayward and is surrounded by urban/suburban development and open space. No impacts related to possible conflicts with zoning for agricultural uses or a Williamson Act contract would occur. Finally, as no farmland, agricultural land, or related uses are found in the area or on the campus, implementation of the 2009 Master Plan would not involve changes in the existing environment that could result in conversion of farmland to non-agricultural use. For these reasons, the 2009 MP FEIR concluded that growth and development under the 2009 Master Plan would not impact agriculture resources. No mitigation is required.

Change in Circumstances and/or New Information

Since the certification of the 2009 MP FEIR both originally in 2009 and its recertification in 2018, there have been no changes in circumstances that would alter the conclusions of the 2009 MP FEIR with respect to impacts on agricultural resources. However, since original certification of the 2009 MP FEIR in 2009, Appendix G of the CEQA Guidelines has been updated to include impacts on forestry resources.

Analysis of the Proposed Project

The replacement library project site is within the developed campus. All of the developed areas of the campus as well as additional lands to be developed under the 2009 Master Plan were already assessed for impacts on agricultural resources in the 2009 MP FEIR. The proposed project will result in no impact on agricultural resources. The project would not result in a new or more severe impacts related to agricultural resources than previously evaluated and disclosed in the 2009 MP FEIR. No new mitigation is required.

The project site is not zoned as forest land or for timberland production. No forestry resources occur on the site. For these reasons, the proposed project will result in no impact on forestry resources. No mitigation is required.

Findings

For reasons stated above, implementation of the proposed project would result in no impacts on agriculture and forestry resources. Therefore, no new or substantially increased significant impacts would result from the proposed project beyond those analyzed in the 2009 MP FEIR. No new mitigation is required.

4.3 Air Quality

	Potentially Significant New Impact	Less than Significant New Impact with Mitigation	Less than Significant New Impact	Impacts Fully Analyzed in the FEIR
AIR QUALITY - Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions, which exceed quantitative thresholds for ozone precursors)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion

Summary of Analysis in the 2009 MP FEIR

The campus is within the San Francisco Bay Area Air Basin (SFBAAB) which is under the jurisdiction of the Bay Area Air Quality Management District (BAAQMD), the governing authority for air quality planning in the region. The air quality analysis contained in the 2009 MP FEIR found that construction of the facilities associated with implementation of the 2009 Master Plan would generate short-term emissions of fugitive dust and asbestos that could adversely affect local air quality in the vicinity of the construction site. **MP Mitigation Measures AIR-1a** and **AIR-1b** would reduce the impact to a less than significant level.

The air quality analysis contained in the 2009 MP FEIR found that operation of the facilities associated with implementation of the 2009 Master Plan would generate long-term operational emissions of criteria pollutants that would exceed the BAAQMD thresholds and could therefore conflict with or obstruct the implementation of the regional air quality plan. **MP Mitigation Measures AIR-2a** through **AIR-2c** would reduce but not lessen this impact to a less than significant level. As a result, the 2009 MP FEIR concluded that this impact would be significant and unavoidable.

The air quality analysis contained in the 2009 MP FEIR found that implementation of the 2009 Master Plan would increase carbon monoxide concentrations at busy intersections and along congested roadways in the project vicinity but would not expose sensitive receptors to substantial pollution concentrations. The impact would be less than significant. No mitigation is required.

The air quality analysis contained in the 2009 MP FEIR found that implementation of the 2009 Master Plan would not create objectionable odors affecting a substantial number of people. The impact would be less than significant. No mitigation is required.

The air quality analysis contained in the 2009 MP FEIR found that implementation of the 2009 Master Plan could expose individuals to toxic air contaminants (TACs). Sources of TACs around and within the campus include diesel buses and trucks, laboratory emissions, central plant generators and boilers, water heaters/boilers in individual buildings, and emergency generators. New or modified stationary sources of TACs would be required to comply with BAAQMD permit requirements. In addition, the Campus would implement **MP Mitigation Measure AIR-5**. Adherence to BAAQMD permit requirements and implementation of mitigation would reduce this impact to a less than significant level.

The SFBAAB was in 2009 and still is currently designated as a nonattainment area for state and national ozone standards and particulate matter standards. As emissions associated with operation of the 2009 Master Plan would exceed the BAAQMD recommended operational threshold of significance, the 2009 MP FEIR concluded that implementation of the 2009 Master Plan would result in a cumulatively considerable net increase of criteria pollutants for which the project region is in nonattainment under an applicable federal or state ambient air quality standard. Even with the implementation of **MP Mitigation Measures AIR-1** and **AIR-2** discussed above, the emissions of criteria pollutants would still exceed the thresholds and therefore this impact would remain significant and unavoidable.

Change in Circumstances and/or New Information

The analysis of air quality impacts in the 2009 MP FEIR relied on thresholds set forth in an older version of the BAAQMD CEQA Guidelines that dated from 1999. Since then, the BAAQMD's CEQA Guidelines have been updated, with the latest version published in 2017. The updated guidelines include a new set

of significance thresholds and recommended methodologies for evaluation of air quality impacts of projects proposed within the air basin. The current thresholds are summarized below in **Table 1, BAAQMD CEQA Significance Thresholds for Air Pollutant Emissions**, and were used to evaluate the air quality impacts of the proposed project.

**Table 1
BAAQMD CEQA Significance Thresholds for Air Pollutant Emissions**

Pollutant	Construction Thresholds	Operational Thresholds	
	Average Daily emissions (lbs./day)	Average Daily Emissions (lbs./day)	Annual Average Emissions (tons/year)
Criteria Pollutants			
ROG	54	54	10
NOx	54	54	10
PM10	82	82	15
PM2.5	54	54	10
CO	Not Applicable	9.0 ppm (8-hour average) or 20.0 ppm (1-hour average)	
Fugitive Dust	Construction Dust Ordinance or other Best Management Practices	Not Applicable	
Health Risks and Hazards for New Sources			
Excess Cancer Risk	Same as Operational Threshold	10 per one Million	
Chronic or Acute Hazard Index	Same as Operational Threshold	1.0	
Incremental annual average PM2.5	Same as Operational Threshold	0.3 µg/m3	
Health Risks and Hazards for Sensitive Receptors (Cumulative from all sources within 1,000 foot zone of influence) and Cumulative Thresholds for New Sources			
Excess Cancer Risk	Same as Operational Threshold	10 per one Million	
Chronic Hazard Risk	Same as Operational Threshold	1.0	
Annual Average PM2.5	Same as Operational Threshold	0.8 µg/m3	

Source: Bay Area Air Quality Management District, California Environmental Quality Act Air Quality Guidelines, 2017

MP FEIR Mitigation Measures

MP MM AIR-1a: The control measures contained in Table 2 of the *BAAQMD CEQA Guidelines* listed below shall be implemented, as appropriate and feasible, during construction of each project under the proposed Campus Master Plan.

The following Basic Control Measures shall be implemented at all construction sites:

- Water all active construction areas at least twice daily.
- Cover all trucks hauling soil, sand, and other loose materials *or* require all trucks to maintain at least 2 feet of freeboard (i.e., the minimum required space between the top of the load and the top of the trailer).
- Pave, apply water three times daily (or as sufficient to prevent dust from leaving the site), or apply (non-toxic) soil stabilizers on all unpaved access roads, parking areas, and staging areas at construction sites.
- Sweep daily or as appropriate (with water sweepers using reclaimed water if possible) all paved access roads, parking areas, and staging areas at construction sites.
- Sweep streets daily or as appropriate (with water sweepers using reclaimed water if possible) if visible soil material is carried onto adjacent public streets.

In addition to the Basic Control Measures, the following Enhanced Control Measures shall be implemented at construction sites greater than 4 acres in area:

- Hydroseed or apply (non-toxic) soil stabilizers to inactive construction areas (previously graded areas inactive for 10 days or more).
- Enclose, cover, water twice daily (or as sufficient to prevent dust from leaving the site), or apply (non-toxic) soil stabilizers to exposed stockpiles (dirt, sand, etc.).
- Limit traffic speeds on unpaved roads to 15 miles per hour.
- Install sandbags or other erosion control measures to prevent silt runoff to public roadways.
- Replant vegetation in disturbed areas as quickly as possible.

The following Optional Control Measures are strongly encouraged at construction sites that are large in area or located near sensitive receptors, or may, for any other reason, warrant additional emissions reductions:

- Install wheel washers or wash off the tires or tracks of all trucks and equipment leaving the site.
- Install windbreaks or plant trees/vegetative windbreaks at the windward side(s) of construction areas.
- Suspend excavation and grading activity when sustained winds exceed 25 mph.

Analysis of the Proposed Project

The proposed replacement library would be a three story, approximately 100,000 gross square feet (gsf) building. The proposed facility would perform the same functions as the existing library, employ the

same number of library staff as the present library, and serve the same number of patrons as the existing facility; the proposed facility would not result in an increase in campus population.

Construction-related emissions for the proposed project were estimated using the BAAQMD-approved CalEEMod 2016.3.2 model. The project construction would begin in early 2019 and run approximately 24 months. It was assumed that any soil from grading would be balanced on-site without any import or export of soil and that there would be no hauling emissions that would accompany such activities.

Table 2
Unmitigated Construction Emissions by Year (Maximum Daily Pounds Per Day)

Year	ROG	NOx	PM10 (Exhaust)	PM2.5 (Exhaust)
2019	3	20	1	1
2020	52	17	1	1
Maximum	52	20	1	1
<i>Threshold of Significance</i>	54	54	82	54
<i>Exceeds Threshold?</i>	No	No	No	No

Source: Impact Sciences, 2017

As shown in **Table 2, Unmitigated Construction Emissions by Year**, the construction of the proposed project will produce ROG, NOX, PM10 and PM2.5 emissions that do not exceed the BAAQMD’s thresholds. As a result, construction of the proposed project would not contribute substantially to an existing violation or result in a violation of air quality standards for regional pollutants (e.g., ozone). This impact is considered less than significant. In addition, the Campus would implement **MP Mitigation Measure AIR-1a** to further reduce construction emissions. **MP Mitigation Measure AIR-1b** does not apply as construction of the proposed project would not involve demolition. The project would not result in a new or more severe impact related to construction emissions than previously evaluated and disclosed in the 2009 MP FEIR. No new mitigation is required.

The replacement library project would not result in any new operational emissions as there would be no increases in student or employee population at the campus due to the new facility. As a result, no impact would occur with respect to operational emissions of criteria pollutants. For the same reason, carbon monoxide concentrations along congested roadways in the project vicinity would not increase. **MP Mitigation Measure AIR-2** does not apply. The project would not result in new or more severe impacts related to operational emissions and carbon monoxide concentrations than previously evaluated and disclosed in the 2009 MP FEIR. No new mitigation is required.

The proposed project would generate localized emissions of diesel exhaust during construction equipment operation and truck activity. The odor from these emissions may be noticeable from time to time by adjacent receptors. However, they would be localized and are not likely to adversely affect people off site by resulting in confirmed odor complaints. With respect to operation, the proposed project does not include land uses associated with odorous emissions (e.g., waste transfer and recycling stations, wastewater treatment plants, landfills, composting operations, petroleum operations, food and byproduct processes, factories, and agricultural activities, such as livestock operations). For these reasons, the project would have no impact related to generation of odors and would not result in a new or more severe impact related to generation of odors than previously evaluated and disclosed in the 2009 MP FEIR. No new mitigation is required.

The proposed project is a library replacement project and as discussed further below, would not include any operational sources that would emit toxic air contaminants (TACs). However, during the project's 2-year construction period, diesel fuel would be used to operate construction equipment and construction vehicles. Diesel particulate matter (DPM), which is emitted in the exhaust from construction equipment and diesel-fueled vehicles, is listed as a TAC by the California Air Resources Control Board (CARB). In addition to DPM, the BAAQMD guidelines identify PM_{2.5} also as a potential TAC, to be evaluated for its potential to result in health impacts.

Exposure to DPM and PM_{2.5} emissions would have the potential to result in human health effects. Some groups of people are considered more sensitive to adverse effects from air pollution than the general population. The CARB has identified the following persons as most likely to be affected by air pollution: children under 14, the elderly over 65, athletes, and people with cardiovascular and chronic respiratory diseases. These groups are classified as sensitive receptors. Locations that may contain a high concentration of these sensitive population groups include residential areas, hospitals, daycare facilities, elder care facilities, elementary schools, and parks.

According to the BAAQMD CEQA guidelines, a potential for human health effects exists if sensitive receptors are located within 1,000 feet of a TAC source, including construction sites. Sensitive receptors, which include residences, are located near the project site. There are student residences within about 250 feet of the proposed construction, but they do not house small children or infants or elders over 65. The nearest off-campus receptors are approximately 650 feet to the east of the project site. These residences are assumed to include infants or small children, the elderly and people with cardiovascular and chronic respiratory diseases. For typical construction cancer risk assessments, infants are considered the most sensitive receptors because of their higher sensitivity to cancer causing contaminants or TACs, whereas, other populations, including young adults such as college students, are much less sensitive and the exposure periods are relatively short.

A human health risk analysis was conducted using the USEPA AERMOD dispersion model to determine PM2.5 concentrations, and CARB's Hotspots Analysis and Reporting Program (HARP) Risk Assessment Standalone Tool (RAST), and the Office of Environmental Health Hazard Assessment (OEHHA) risk assessment methodology to estimate the potential cancer and non-cancer risk from exposure to the project's construction emissions. Based on the construction schedule for the proposed project, the modeling assumed a two-year exposure period. As noted in the **Project Description**, to minimize TAC emissions, the proposed project includes a best management practice, which requires that all construction equipment used in project construction be equipped with USEPA rated Tier 4 (model year 2008 or newer) engines.

The results of the human health risk assessment indicate that the construction of the proposed project would result in an annual average PM2.5 concentration of approximately 0.002 µg/m³ from construction equipment exhaust, a lifetime excess cancer risk of one per one million at the maximally exposed sensitive receptor to the east of the project site, and a chronic hazard index of less than 0.01 at the same location (see **Appendix A** for detailed calculations). The annual average PM2.5 concentration, excess cancer risk, and chronic hazard risk values are all below the thresholds identified in **Table 1**, and therefore the construction-phase DPM emissions would result in a less than significant impact. The project would not result in a new significant impact related to TACs during construction. No new mitigation is required.

The proposed replacement building would not include any operational sources of toxic air contaminants such as laboratories. Although the project could include a diesel-fired emergency generator, it would be used only to provide power in the event of a disruption in electrical service to the building and therefore would not be a source of ongoing emissions. Although there would be routine testing emissions from the emergency generator, a permit to operate will be required from the BAAQMD that will stipulate the hours of testing yearly and the rate of emissions for the emergency generator. The generator will also comply with the BAAQMD-administrated statewide Air Toxics Control Measure (ATCM) for stationary diesel engines. Furthermore, the project would not generate any new vehicle trips to and from the campus. Therefore, the replacement building would not pose a human health risk to sensitive receptors in proximity of the replacement building site. The impact would be less than significant and **MP Mitigation Measure AIR-5** does not apply as the proposed project does not involve the installation of boilers, chillers, and/or cooling towers. The project would not result in a new or more severe impact related to TACs during operation than previously evaluated and disclosed in the 2009 MP FEIR.

Findings

The potential impacts with respect to air quality from the proposed library replacement project would be similar to or less than the impacts of campus development analyzed in the 2009 MP FEIR. Therefore, no new or substantially increased significant impacts would result from the proposed project beyond those analyzed in the 2009 MP FEIR. No new mitigation is required.

4.4 Biological Resources

	Potentially Significant Impact	Less than Significant New Impact with Mitigation	Less than Significant New Impact	Impacts Fully Analyzed in the FEIR
BIOLOGICAL RESOURCES - Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion:

Summary of Analysis in the 2009 MP FEIR

There is some potential that special status plant species could occur within the grassland and mixed scrub habitats that occur in the potential faculty/staff housing locations. Additionally, three special status bird species (i.e., burrowing owl, Cooper's hawk, white-tailed kite) and five special status bat species (i.e., pallid bat, fringed myotis, long-legged myotis, yuma myotis, and hoary bat) have potential to occur within the central campus and/or the grasslands and mixed scrub area within or bordering the development areas. As a result, the 2009 MP FEIR found that implementation of the 2009 Master Plan could have a substantial adverse effect on special-status plant and wildlife species. **MP Mitigation Measures BIO-1a** through **BIO-1d** would reduce the impact to a less than significant level.

A small drainage and associated bay woodland is located in the far western portion of the campus near a potential faculty/staff housing location. Therefore, the 2009 MP FEIR found that implementation of the 2009 Master Plan could have a substantial adverse effect on a riparian habitat or other sensitive natural community. **MP Mitigation Measure BIO-2** would reduce the impact to a less than significant level.

The small drainage located in the far western portion of the campus near a potential faculty/staff housing location is expected to fall under the jurisdiction of the United States Army Corps of Engineers (USACE). As the final design of faculty/staff housing at this location is not known, there is potential that associated construction activities and infrastructure (e.g., storm drains) could affect areas of the drainage under federal jurisdiction. For this reason, the 2009 MP FEIR found that implementation of the 2009 Master Plan could have a substantial adverse effect on a federally protected wetland. **MP Mitigation Measure BIO-3** would reduce this impact to a less than significant level.

The developed/landscaped central campus supports a high level of human use and activity, which is not favorable for wildlife movement. The undeveloped lands bordering the central campus are also not favorable for wildlife movement given their proximity to development and areas of high human use and activity. As a result, the 2009 MP FEIR concluded that implementation of the 2009 Master Plan would not interfere substantially with the movement of wildlife. This impact would be less than significant. No mitigation is required.

No adopted habitat conservation plan (HCP) or natural community conservation plan (NCCP) applies to the campus. Therefore, the 2009 MP FEIR concluded that there would be no impact with respect to HCP and NCCP. No mitigation is required.

The 2009 MP FEIR concluded that cumulative impacts to sensitive biological resources from reasonably foreseeable development in the City of Hayward and development under the 2009 Master Plan are not anticipated and that development under the 2009 Master Plan would not contribute substantially to the impact.

MP FEIR Mitigation Measures

MP MM BIO-1b: If a construction project is proposed on the campus that would commence anytime during the nesting/breeding season of native bird species potentially nesting/roosting on the site (typically February through August in the project region), a pre-construction survey of the project vicinity for nesting birds shall be conducted.

This survey shall be conducted by a qualified biologist (i.e., experienced with the nesting behavior of bird species of the region) within two weeks of the commencement of construction activities that would occur during the nesting/breeding season. The intent of the survey shall be to determine if active nests of special status bird species or other species protected by the Migratory Bird Treaty Act and/or the California Fish and Game Code are present within the construction zone or within 500 feet of the construction zone. The survey area shall include all trees and shrubs, as well as grassland habitats (which could be utilized by burrowing owls) in the construction zone and a surrounding 500 feet area. The surveys shall be timed such that the last survey is concluded no more than two weeks prior to initiation of construction or tree removal. If ground disturbance activities are delayed following a survey, then an additional pre-construction survey shall be conducted such that no more than two weeks will have elapsed between the last survey and the commencement of ground disturbance activities.

If active nests are found in areas that could be directly affected or are within 500 feet of construction and would be subject to prolonged construction-related noise, a no-disturbance buffer zone shall be created around active nests during the breeding season or until a qualified biologist determines that all young have fledged. The size of the buffer zones and types of construction activities restricted within them will be determined through consultation with the CDFG, taking into account factors such as the following:

- Noise and human disturbance levels at the construction site at the time of the survey and the noise and disturbance expected during the construction activity;
- Distance and amount of vegetation or other screening between the construction site and the nest; and
- Sensitivity of individual nesting species and behaviors of the nesting birds.

Limits of construction to avoid an active nest shall be established in the field with flagging, fencing, or another appropriate barrier, and construction personnel shall be instructed on the sensitivity of nest areas. The biologist shall serve as a construction monitor during those periods when construction activities would occur near active nest areas of special status bird species to ensure that no impacts on these nests occur.

MP MM BIO-1c:

Prior to the commencement of construction activities within grassland habitats occurring during the non-nesting season of burrowing owl (typically September through January), a qualified biologist shall conduct a clearance survey for wintering burrowing owls. The survey shall be conducted no more than 14 days prior to commencement of construction activities. If non-breeding burrowing owls are observed within the disturbance footprint, they would be excluded from all occupied burrows through the use of exclusion devices placed in occupied burrows in accordance with CDFG protocols (CDFG 1995). Specifically, exclusion devices, utilizing one-way doors, shall be installed in the entrance of all active burrows. The devices shall be left in the burrows for at least 48 hours to ensure that all owls have been excluded from the burrows. Each of the burrows would then be excavated by hand and refilled to prevent reoccupation. Exclusion shall continue until the owls have been successfully excluded from the site, as determined by a qualified biologist.

MP MM BIO-1d:

If trees or buildings are to be removed/demolished during the nesting season of native bat species in California (generally April 1 through August 31), the presence of active maternity roosts in trees or buildings shall be evaluated by a qualified biologist prior to their removal. If it is determined that the trees or structures to be removed provide potential bat roosting habitat, a focused survey shall be conducted by a qualified bat biologist to determine if active maternity roosts of special status bats are present. Should an active maternity roost of a special status bat species be identified, the roost shall not be disturbed until the

roost is vacated and juveniles have fledged, as determined by the biologist. Once all young have fledged, the tree or structure may be removed or demolished.

Change in Circumstances and/or New Information

Since the certification of the 2009 MP FEIR both originally in 2009 and its recertification in 2018, there have been no changes in circumstances that would alter the conclusions of the 2009 MP FEIR with respect to biological resource impacts.

Analysis of the Proposed Project

The site of the library replacement project is located in the campus core and thus would not affect special-status plant species that have the potential to be located on the sites of potential faculty/staff housing. No impact would occur and **MP Mitigation Measure BIO-1a** does not apply. The project would not result in a new or more severe impact related to special-status plant species than previously evaluated and disclosed in the 2009 MP FEIR.

Construction of the replacement library project would require the removal of some small trees that are present on the project site and would also occur near trees, and special-status bird and bat species have some limited potential for utilizing the on-site and nearby trees for nesting and/or roosting. **MP Mitigation Measures BIO-1b** through **BIO-1d**, which would be incorporated into the proposed project, would reduce the impacts to special-status birds and bats to a less than significant level. The project would not result in new or more severe impacts related to special-status wildlife species than previously evaluated and disclosed in the 2009 MP FEIR.

No impacts to riparian habitat or wetlands would result due to the proposed replacement library project as it would be located in the campus core and not the far western portion of campus where these resources are present. No impacts would occur and **MP Mitigation Measures BIO-2** and **BIO-3** do not apply. The project would not result in new or more severe impacts related to riparian habitat or wetlands than previously evaluated and disclosed in the 2009 MP FEIR.

The site of the replacement library project is located in the campus core and the area around the campus is not favorable for wildlife movement. In addition, the project site does not fall within the boundaries of, nor is it adjacent to, an area covered by an adopted regional HCP or NCCP. For these reasons, the proposed project would not interfere with wildlife movement nor would it conflict with an adopted regional HCP or NCCP. No impacts would occur and the project would not result in new or more severe impacts related to wildlife movement and an adopted HCP or NCCP than previously evaluated and disclosed in the 2009 MP FEIR. No new mitigation is required.

Findings

The potential impacts with respect to biological resources from the proposed library replacement project would be similar to or less than the impacts of campus development analyzed in the 2009 MP FEIR. Therefore, no new or substantially increased significant impacts would result from the proposed project beyond those analyzed in the 2009 MP FEIR. No new mitigation is required.

4.5 Cultural Resources

	Potentially Significant New Impact	Less than Significant New Impact with Mitigation	Less than Significant New Impact	Impacts Fully Analyzed in the FEIR
CULTURAL RESOURCES - Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion:

Summary of Analysis in the 2009 MP FEIR

There are no known archaeological sites on the campus. Furthermore, much of the development on the campus under the 2009 Master Plan would occur within the previously disturbed and developed central campus. However, since no surveys are known to have been conducted, it is assumed that there is potential for such resources to exist on those portions of the campus that have not been previously graded or disturbed in a substantial manner or even within the central campus in areas where the previous grading was not substantial. As a result, the 2009 MP FEIR concluded that implementation of the 2009 Master Plan could cause a substantial adverse change in the significance of an archaeological resource through damage or destruction that could occur as a result of grading, excavation, ground disturbance or other project development. **MP Mitigation Measures CULT-1a to CULT-1c** would reduce this impact to a less than significant level.

At the time the 2009 MP FEIR was prepared, all of the structures on the campus were less than 50 years of age at this time, and therefore, did not qualify as historic structures at that time. However, the EIR noted that several structures would be over 50 years or older before or by 2030 which is the year of buildout of the 2009 Master Plan, and their historic significance could change between the time that the EIR was prepared and the time that they are proposed for removal or alteration. Therefore, the 2009 MP FEIR

concluded that implementation of the 2009 Master Plan could cause a substantial adverse change in the significance of a historical building or structure, as a result of alteration, removal, or demolition of the building, or alteration of the site associated with campus development. **MP Mitigation Measures CULT-2a** and **CULT-2b** would lessen but not reduce this impact to a less than significant level. As a result, the 2009 MP FEIR concluded that this impact would be significant and unavoidable.

Although no human remains have been encountered during the construction of buildings and other improvements on the campus, development under the 2009 Master Plan that includes excavation and grading has the potential to uncover, displace, and destroy human remains. For this reason, the 2009 MP FEIR concluded that implementation of the 2009 Master Plan could disturb human remains, including those interred outside of formal cemeteries. **MP Mitigation Measures CULT-3a** to **CULT-3d** would reduce this impact to a less than significant level.

Much of the development on the campus under the 2009 Master Plan would occur within the previously disturbed and developed central campus. Because of the extensive grading and disturbance that has already occurred within the central campus, the potential to encounter intact paleontological resources or unique geologic resources in conjunction with future development is very low. In addition, the campus site is not underlain by geologic formations that are considered sensitive for paleontological resources or unique geologic resources. As a result, the 2009 MP FEIR concluded that implementation of the 2009 Master Plan would not disturb or destroy unique paleontological or geologic resources. This impact is less than significant. To ensure that the impact remains less than significant, the Campus would implement **MP Mitigation Measures CULT-4a** and **CULT-4b**.

The 2009 MP FEIR concluded that with mitigation, cumulative impacts to cultural resources from reasonably foreseeable development in the City of Hayward and development under the 2009 Master Plan would be less than significant.

MP FEIR Mitigation Measures

MP MM CULT-1a: During the planning and environmental review of specific development projects under the 2009 Master Plan, for projects proposed on previously undisturbed campus lands, the Campus shall retain a qualified archaeologist to conduct a pedestrian survey of the site to evaluate the potential for archaeological resources to occur on the project site. If archaeological resources are encountered, MP Mitigation Measure CULT-1c will apply.

MP MM CULT-1b: Regardless of the location of the project on the campus, all construction contracts for campus projects shall include a standard inadvertent discovery clause, which

requires that if an archaeological resource is discovered during construction (whether or not an archaeologist is present), all soil-disturbing work within 100 feet of the find shall cease, and the Campus shall implement MP Mitigation Measure CULT-1c.

MP MM CULT-1c: For an archaeological site that is encountered during the pedestrian survey conducted on a project site or during construction, the Campus shall:

- Retain a qualified archaeologist to determine whether the resource qualifies as an historical resource or a unique archaeological resource.
- If the resource is determined to be a historical resource or a unique archaeological resource, the qualified archaeologist, in consultation with the Campus, shall prepare a research design and archaeological data recovery plan for the recovery of the categories of data for which the site is significant, and implement the data recovery plan prior to or during development of the site. The archaeologist shall also perform appropriate technical analyses, prepare a full written report and file it with the appropriate information center, and provide for the permanent curation of recovered materials.

MP MM CULT-3a: The Campus shall implement MP Mitigation Measure CULT-1 to minimize the potential for disturbance or destruction of human remains in an archaeological context and to preserve them in place, if feasible.

MP MM CULT-3b: The Campus shall arrange for a representative of the local Native American community to monitor any excavation (including archaeological excavation) within the boundaries.

MP MM CULT-3c: In the event of a discovery of human bone, suspected human bone, or a burial, all excavation in the vicinity will halt immediately and the area of the find will be protected until a qualified archaeologist determines whether the bone is human. If the qualified archaeologist determines the bone is human, or if a qualified archaeologist is not present, the Campus will notify the County of Alameda Medical Examiner before additional disturbance occurs. The Campus will ensure that the remains and vicinity of the find are protected against further disturbance until the Coroner has made a finding with regard to PRC 5097 procedures, in compliance with California Health and Safety Code Section 7050.5(b). If it is determined that the find is of Native American origin, the Campus will comply with the provisions of PRC Section 5097.98 regarding identification and involvement of the Native American Most Likely Descendant (MLD).

MP MM CULT-3d: If human remains cannot be left in place, the Campus shall ensure that the qualified archaeologist and the MLD consult regarding archaeological treatment of human remains, and that appropriate studies, as identified through this consultation, are carried out prior to interring the remains. The Campus shall provide results of all such studies to the local Native American community, and shall provide an opportunity for local Native American involvement in any interpretative reporting. As stipulated by the provisions of the California Native American Graves Protection and Repatriation Act, the Campus shall ensure that human remains and associated artifacts recovered from campus projects on state lands are repatriated to the appropriate local tribal group if requested.

MP MM CULT-4a: As part of the construction contract, the Campus shall inform construction contractors to watch for paleontological resources during grading and excavation and to inform the campus immediately if such resources are encountered.

MP MM CULT-4b: If paleontological resources are discovered, all ground-disturbing activities within 100 feet of the find will be halted and a qualified paleontologist will be retained by the Campus to evaluate the find and recommend appropriate handling and treatment of the find. If the find is determined to be significant or potentially significant, the paleontologist will design and carry out a data recovery plan consistent with the Standards of the Society of Vertebrate Paleontologists. Adequate recordation and recovery would, at a minimum, include the following:

- Development of a site specific environmental and contextual information
- Archival research
- Excavation of the resource and its accurate recordation
- For a significant major find, identification of a museum or repository for curation of the resource

Change in Circumstances and/or New Information

Since the certification of the 2009 MP FEIR both originally in 2009 and its recertification in 2018, there have been no changes in circumstances that would alter the conclusions of the 2009 MP FEIR with respect to cultural resource impacts. Assembly Bill (AB) 52 was approved in September 2014 and became effective on July 1, 2015. AB 52 is focused on the protection of tribal cultural resources (TRCs) and

requires that CEQA lead agencies consult with California Native American tribes that are traditionally and culturally affiliated with the geographic area of a project, if so requested by the tribes. AB 52 applies only to projects where the Notice of Preparation (NOP) for the EIR was filed after July 1, 2015.

Analysis of the Proposed Project

No structures are located on the project site. No impact would occur and **MP Mitigation Measure CUL-2** would not apply. The project would not result in a new or more severe impact related to historical architectural resources than previously evaluated and disclosed in the 2009 MP FEIR.

As ground disturbing activities will be minimal on the project site, the probability of uncovering archeological and paleontological resources is low. However, unknown archaeological resources, paleontological resources, and/or burial sites have the potential to be present on the project site, similar to the conclusions included in the 2009 MP FEIR. **MP Mitigation Measures CUL-1, CUL-3, and CUL-4** are incorporated into and a part of the project and would ensure that any archaeological resources, paleontological resources or human remains encountered during construction are properly handled and protected. The project would not result in new or more severe impacts related to archaeological resources, paleontological resources or human remains than previously evaluated and disclosed in the 2009 MP FEIR. No new mitigation is required.

The proposed project is within the scope of the 2009 Master Plan and therefore, its cumulative impacts are adequately addressed in the 2009 MP FEIR. Although the 2009 MP FEIR concluded that there would be significant and unavoidable cumulative impacts related to historical architectural resources, the proposed project would not contribute to the impact.

As stated above, AB 52 applies to projects where the Notice of Preparation (NOP) for the EIR was filed after July 1, 2015. The NOP for the 2009 MP FEIR was filed in September 2008, which predates AB 52. Therefore, the 2009 MP FEIR did not include an assessment of impacts on TRCs. As this addendum shows, the proposed project is adequately analyzed in the FEIR and no new EIR or NOP is necessary. Because the project is within the scope of the previously approved planned development and because no new EIR or NOP is required, the proposed project is not subject to AB 52.

Findings

The potential impacts with respect to cultural resources from the proposed library replacement project would be similar to or less than the impacts of campus development analyzed in the 2009 MP FEIR. Therefore, no new or substantially increased significant impacts would result from the proposed project beyond those analyzed in the 2009 MP FEIR. No new mitigation is required.

4.6 Geology and Soils

	Potentially Significant New Impact	Less than Significant New Impact with Mitigation	Less than Significant New Impact	Impacts Fully Analyzed in the FEIR
GEOLOGY AND SOILS - Would the project:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion:

Summary of Analysis in the 2009 MP FEIR

There are no active faults on the campus although the campus is located only 0.18 mile from the active Hayward fault. However, severe seismic ground shaking and related ground failure is a possibility in the

area of the campus, and portions of the campus have potential for ground failure related to liquefaction and landsliding. As a result, the 2009 MP FEIR concluded that while development under the 2009 Master Plan would not expose people and structures on campus to substantial adverse effects associated with fault rupture, it could expose people and structures on campus to substantial adverse effects related to seismic ground shaking or seismic-related ground failure, including liquefaction, lateral spreading, landslides, and/or settlement. Compliance with the California Building Code (CBC) and implementation of **MP Mitigation Measure GEO-1** would reduce this impact to a less than significant level.

Construction of facilities anticipated under the 2009 Master Plan would result in short-term soil-disturbing activities that could lead to increased erosion, including cut and fill, grading, trenching, boring, and removal of trees and other vegetation. To comply with National Pollutant Discharge Elimination System (NPDES) requirements for construction site storm water discharges, projects involving construction sites that are 1 acre or more are required to prepare and implement a storm water pollution prevention plan (SWPPP). Therefore, the 2009 MP FEIR concluded that development under the 2009 Master Plan would not result in substantial erosion of soils during construction. This impact is less than significant. No mitigation is required.

Portions of the campus are located on expansive soils. For this reason, the 2009 MP FEIR concluded that unstable soils could be located where buildings are proposed. Compliance with the CBC and **MP Mitigation Measure GEO-1** would reduce this impact to a less than significant level.

The 2009 MP FEIR concluded that cumulative impacts involving seismic ground shaking and related ground failure will be less than significant as reasonably foreseeable development in the City of Hayward and development under the 2009 Master Plan would comply with CBC requirements.

MP FEIR Mitigation Measures

MP MM GEO-1: Where existing geotechnical information is not adequate, detailed geotechnical investigations shall be performed for areas that will support buildings or foundations. Such investigations for building or foundation projects on the CSUEB Hayward campus will comply with the California Geological Survey's *Guidelines for Evaluating and Mitigating Seismic Hazards in California* (Special Publication 117), which specifically address the mitigation of liquefaction and landslide hazards in designated Seismic Hazard Zones (CGS 2003). All recommendations of the geotechnical investigations will be incorporated into project designs. Recommendations for buildings located near mapped faults,

prepared by the California State University seismic review committee, shall be reviewed prior to project design.

Change in Circumstances and/or New Information

Since the certification of the 2009 MP FEIR both originally in 2009 and its recertification in 2018, there have been no changes in circumstances that would alter the conclusions of the 2009 MP FEIR with respect to soil and geologic impacts.

Analysis of the Proposed Project

The replacement library project could result in the exposure of people or structures to geological hazards associated with severe seismic ground shaking and related ground failure, similar to the conclusions included in the 2009 MP FEIR. In addition, the project site could contain expansive soil, and thus create substantial risks to life and property. The proposed project would comply with the CBC and **MP Mitigation Measure GEO-1** would be incorporated into the project to ensure that the Campus performs a geotechnical investigation of the project site to evaluate the potential for liquefaction and other types of ground failure and expansive soils. This impact is less than significant and the project would not result in a new or more severe impact related to geological hazards than previously evaluated and disclosed in the 2009 MP FEIR. No new mitigation is required.

Similar to campus development analyzed in the 2009 MP FEIR, short-term soil erosion could occur during ground disturbing activities associated with the proposed project. A storm water pollution prevention plan (SWPPP) would be prepared and implemented, as required by state law, that would minimize erosion. The project would not result in a new or more severe impact related to soil erosion than previously evaluated and disclosed in the 2009 MP FEIR. No new mitigation is required.

The proposed project is within the scope of the 2009 Master Plan and therefore, its cumulative impacts are adequately addressed in the 2009 MP FEIR.

Findings

The potential impacts with respect to aesthetics and visual resources from the proposed library replacement project would be similar to or less than the impacts of campus development analyzed in the 2009 MP FEIR. Therefore, no new or substantially increased significant impacts would result from the proposed project beyond those analyzed in the 2009 MP FEIR. No new mitigation is required.

4.7 Greenhouse Gas Emissions

	Potentially Significant New Impact	Less than Significant New Impact with Mitigation	Less than Significant New Impact	Impacts Fully Analyzed in the FEIR
GREENHOUSE GAS EMISSIONS - Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion:

Summary of Analysis in the 2009 MP FEIR

The greenhouse gas (GHG) emissions analysis contained in the 2009 MP FEIR found that although the 2009 Master Plan would result in GHG emissions, its contribution to the significant cumulative impact associated with GHG emissions would not be cumulatively considerable. This impact is less than significant. No mitigation is required.

Change in Circumstances and/or New Information

The analysis of GHG emissions in the 2009 MP FEIR were based on methodology presented by the California Air Resources Board in 2008 which proposed that California Energy Commission Tier II building energy use standards be applied, which generally require a reduction in energy usage of 30 percent beyond Title 24 building code requirements. Since then, the BAAQMD has published updated BAAQMD CEQA Guidelines (BAAQMD 2017) that include a set of significance thresholds and recommended methodologies that may be used to evaluate the impact of a project's GHG emissions. Significance thresholds put forth in the BAAQMD CEQA Guidelines are listed below in **Table 3, GHG Significance Thresholds**.

Table 3
GHG Significance Thresholds

Pollutant	Construction	Operation
Greenhouse Gases	No threshold	1,100 MTCO ₂ e/yr; or 4.6 MTCO ₂ e/SP/yr

*Source: Bay Area Air Quality Management District, California Environmental Quality Act Air Quality Guidelines, (2017) 2-1.
MTCO₂e = metric tons of carbon dioxide equivalents; SP = service persons (residents plus employees) associated with the proposed project.*

The BAAQMD guidelines recommend quantifying and reporting GHG emissions from a project's construction activities, but do not provide quantitative significance thresholds. Operational emissions of a project may be compared to an absolute threshold of 1,100 metric tons of carbon dioxide equivalents per year (MTCO₂e/yr) or an efficiency standard of 4.6 MTCO₂e/SP/yr, where SP refers to service persons (residents plus employees) associated with the proposed project.

Analysis of the Proposed Project

Construction phase GHG emissions were estimated using the CalEEMod model in the same manner as used to predict criteria air pollutants. Construction phases included site preparation, site grading, some paving, building construction, and application of architectural coatings. Annual CO₂ emissions associated with construction would occur from 2019 into 2020. Construction of the project would emit an estimated 295 metric tons (MT) of CO₂e in 2019 and 288 MT of CO₂e in 2020. The BAAQMD has not established quantified thresholds for construction activities. However, given the low emissions during each year of construction and the temporary nature of these emissions, the impact from the project's construction phase GHG emissions is considered less than significant. No mitigation is required.

The proposed project would not result in any new operational GHG emissions as there would be no increases in student or employee population at the campus as a result of the new facility. In fact, the proposed project would likely result in lower GHG emissions during operation as the replacement library would provide less space than the west wing of the existing library that it is replacing and as a new building, it is expected to be more energy efficient than the existing library. As a result, no impact would occur with respect to operational phase GHG emissions. The project would not result in a new or more severe impact related to operational phase GHG emissions than previously evaluated and disclosed in the 2009 MP FEIR. No mitigation is required.

Findings

The potential impacts with respect to GHG emissions from the proposed library replacement project would be similar to or less than the impacts of campus development analyzed in the 2009 MP FEIR. Therefore, no new or substantially increased significant impacts would result from the proposed project beyond those analyzed in the 2009 MP FEIR. No new mitigation is required.

4.8 Hazards and Hazardous Materials

	Potentially Significant New Impact	Less than Significant New Impact with Mitigation	Less than Significant New Impact	Impact Fully Analyzed in the FEIR
HAZARDS AND HAZARDOUS MATERIALS- Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) For a project located within an airport land use plan or, where such plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Expose people or structures to a significant risk of loss, injury or death involving wild land fires, including where wild lands are adjacent to urbanized areas or where residences are intermixed with wild lands?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion:

Summary of Analysis in the 2009 MP FEIR

Laboratories and other facilities constructed under the 2009 Master Plan would comply with all standards related to the use and storage of hazardous materials. In addition, while the use of hazardous materials on the campus would likely increase, the Campus will continue to comply with all hazardous materials standards related to transport. Finally, adherence to the Campus spill response guidelines and compliance with all applicable regulations related to the use, storage, and transport of hazardous materials will minimize the potential for accidental spills and release of materials to the environment. For these reasons, the 2009 MP FEIR concluded that campus development and activities under the 2009 Master Plan would not create significant hazards to the public or the environment from the use, storage and transport of hazardous materials under routine or upset conditions.

At the time the 2009 MP FEIR was prepared there was one existing childcare center on the campus. There are no existing schools within 0.25 mile of the campus boundary and no new schools are planned at this time within this radius of the campus. Although hazardous materials use and waste generation within 0.25 mile of the childcare center will likely increase as a result of campus growth under the 2009 Master Plan, these materials will not exist in quantities sufficient to pose a risk to occupants of the childcare center or campus community. In addition, the Campus will continue to comply with federal and state regulations, and will continue to implement existing campus safety programs and procedures. As a result, the 2009 MP FEIR concluded that campus development and activities under the 2009 Master Plan would not create significant hazards to the public or the environment, such that existing or proposed adjacent schools may be affected. This impact is less than significant. No mitigation is required.

A search of the governmental databases indicated that a leaking underground storage tank (LUST) located west of the Student Services & Administration building released approximately 750 gallons of diesel fuel before removal in 1988. Records did not indicate if the contaminated site was remediated. Therefore, the 2009 MP FEIR concluded that excavation and other ground disturbing activities associated with the construction of a new facility on the campus in the area of the previous LUST could encounter contaminated soils or groundwater, and potentially expose construction workers, campus occupants or the public to these materials. Implementation of **MP Mitigation Measure HAZ-3** would reduce this impact to a less than significant level.

Hazardous materials could be encountered in campus buildings when they are demolished or remodeled under the 2009 Master Plan. For this reason, the 2009 MP FEIR concluded that demolition or renovation of buildings under the 2009 Master Plan could expose construction workers, campus occupants or the

public to contaminated building materials. Implementation of **MP Mitigation Measure HAZ-4** would reduce this impact to a less than significant level.

The 2009 MP FEIR concluded that implementation of the Master Plan would not expose people on the project site to any safety hazards related to public airports or private airstrips because the campus is approximately four miles east of the Hayward Airport, and is also not located in the vicinity of a private airstrip. No impact would occur and no mitigation is required.

Consistent with the Campus' current procedure, as new buildings are built on the campus under the 2009 Master Plan, an Emergency Operations Plan (EOP) would be developed for each new building. Furthermore, campus growth under the 2009 Master Plan would not interfere with the campus EOP through construction-related road closures. As a result, the 2009 MP FEIR concluded that campus development under the 2009 Master Plan would not interfere physically with the Campus' EOP. To ensure that these procedures and notification requirements will continue under the 2009 Master Plan, the Campus would implement **MP Mitigation Measures HAZ-5a and HAZ-5b**.

New buildings and spaces constructed under the 2009 Master Plan in general would be added to the already developed portion of the campus. With the exception of some expansion of student housing in the southern portion of the campus and potential location of faculty/staff housing south of Grandview Avenue, all new development would be sufficiently distant from open space areas that surround the campus and have the potential for wildland fires. With respect to student and faculty/staff housing that is adjacent to open grassland areas, all buildings would be designed and constructed in conformance with the CBC and with applicable fire code safety requirements. In addition, all new landscaping in the areas surrounding the new housing will be developed to minimize the threat of wildland fire damage to facilities and personnel and the Campus will manage vegetation in adjacent areas to reduce fuel load. Therefore, the 2009 MP FEIR concluded that campus development under the 2009 Master Plan would not expose people or structures to a significant risk of loss, injury, or death involving wildland fires. This impact is less than significant. No mitigation is required.

The 2009 MP FEIR concluded that cumulative impacts associated with hazards and hazardous materials will be less than significant as reasonably foreseeable development in the City of Hayward and development under the 2009 Master Plan would comply with hazardous materials laws which are designed to avoid and minimize adverse impacts on public health, safety, and the environment.

MP FEIR Mitigation Measures

MP MM HAZ-5a: The Campus shall require new construction under the 2009 Master Plan to adhere to the following standards already established by Facilities Planning & Operations:

- Construction work shall be conducted so as to ensure the least possible obstruction to traffic.
- Contractors shall notify the Campus Representative at least two weeks before any road closure.
- When paths, lanes, or roadways are blocked, detour signs shall be installed to clearly designate an alternate route.
- Fire hydrants shall be kept accessible to firefighting equipment at all times.
- To ensure adequate access for emergency vehicles when construction projects will result in temporary lane or roadway closures, campus police and dispatchers shall be notified of the closures and alternative travel routes.

MP MM HAZ-5b: New or updated building and/or department-specific EOPs shall be developed for any new development project.

Change in Circumstances and/or New Information

Since the certification of the 2009 MP FEIR both originally in 2009 and its recertification in 2018, there have been no changes in circumstances that would alter the conclusions of the 2009 MP FEIR with respect to hazards and hazardous materials impacts.

Analysis of the Proposed Project

Although small quantities of hazardous materials would be used in the construction of the proposed project, compliance with local, state, and federal regulations would minimize risks associated with the routine transport, use, or disposal of hazardous materials during construction activities. Any hazardous materials used during the occupancy of the proposed building would be limited to those typically used in academic support and standard maintenance activities (e.g., solvents, paints, cleaning agents), similar to materials used for cleaning and maintenance in the existing campus library. The use of all hazardous materials during occupancy would be required to comply with stringent local, state, and federal regulations on hazardous materials use. Given the types and small quantities of hazardous materials that would be used as well as stringent regulations, the impacts related to the routine transport, use, and disposal of hazardous materials or the release of materials into the environment would be less than

significant, similar to the conclusions included in the 2009 MP FEIR. The project would not result in new or more severe impacts related to the routine transport, use, and disposal of hazardous materials or the release of materials into the environment than previously evaluated and disclosed in the 2009 MP FEIR. No mitigation is required.

A childcare center is no longer located on the campus and no existing or proposed schools are within 0.25 mile of the campus boundary. For these reasons, the proposed project would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school. No impact would occur and the project would not result in a new or more severe impact related to hazardous emissions or the handling of hazardous materials within 0.25 mile of a school than previously evaluated and disclosed in the 2009 MP FEIR. No mitigation is required.

The site of the replacement library is located in the campus core approximately 750 feet from the site of the LUST that is to the west of the Student Services & Administration building. Since certification of 2009 MP FEIR, the LUST site has been remediated and the case has been closed (SWRCB 2018). Given the distance of the project site from the LUST site and its status, this impact is less than significant and **MP Mitigation Measure HAZ-3** would not apply. The project would not result in a new or more severe impact related to the exposure of persons to hazardous materials during construction than previously evaluated and disclosed in the 2009 MP FEIR.

As no structures are located on the project site, the proposed library replacement project would not result in the demolition or renovation on an existing structure. No impact would occur and **MP Mitigation Measure HAZ-4** would not apply. The project would not result in a new or more severe impact related to the exposure of persons to hazardous materials during demolition than previously evaluated and disclosed in the 2009 MP FEIR.

The project site is located within the campus core and therefore is not located within the vicinity of a public airport or private airstrip. As a result, the project would not result in a safety hazard for people residing or working on the site. Similar to the conclusion included in the 2009 MP FEIR, no impact would occur. The project would not result in a new or more severe impact related to safety hazards due to aircraft than previously evaluated and disclosed in the 2009 MP FEIR. to the exposure of persons to hazardous materials during construction. No new mitigation is required.

Consistent with the Campus' current procedure, an EOP would be developed for the proposed replacement library. Furthermore, implementation of the proposed project would not interfere with the campus EOP through construction-related road closures. The impact would be less than significant and the project would not result in a new or more severe impact related to interference with an EOP than

previously evaluated and disclosed in the 2009 MP FEIR. To ensure that campus procedures and road closure notification requirements are followed **MP Mitigation Measure HAZ-5** is incorporated into the project to ensure that the construction of the proposed project would adhere to campus standards and that an EOP be developed prior to occupancy. No new mitigation is required.

The site of the replacement library is located in the campus core and thus would be sufficiently distant from open space areas that surround the campus that have the potential for wildland fires. No impact would occur and the project would not result in a new or more severe impact related to wildland fires than previously evaluated and disclosed in the 2009 MP FEIR. No new mitigation is required.

The proposed project is within the scope of the 2009 Master Plan and therefore, its cumulative impacts are adequately addressed in the 2009 MP FEIR.

Findings

The potential impacts with respect to hazards and hazardous materials from the proposed library replacement project would be similar to or less than the impacts of campus development analyzed in the 2009 MP FEIR. Therefore, no new or substantially increased significant impacts would result from the proposed project beyond those analyzed in the 2009 MP FEIR. No new mitigation is required.

4.9 Hydrology and Water Quality

	Potentially Significant New Impact	Less than Significant New Impact with Mitigation	Less than Significant New Impact	Impact Fully Analyzed in the FEIR
HYDROLOGY AND WATER QUALITY - Would the project:				
a) Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner, which would result in substantial erosion or siltation on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner, which would result in flooding on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Place within a 100-year flood hazard area structures, which would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	Potentially Significant New Impact	Less than Significant New Impact with Mitigation	Less than Significant New Impact	Impact Fully Analyzed in the FEIR
j) Inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion:

Summary of Analysis in the 2009 MP FEIR

Individual construction projects associated with the 2009 Master Plan that involve 1 acre or more of land disturbance would be required to comply with the NPDES General Construction Permit, which includes the preparation of a SWPPP. In addition, all construction on campus would comply with CSUEB standard stormwater management practices and engineering controls, which require the control and minimization of stormwater pollutants originating from construction sites as a standard part of contract specifications. As a result, the 2009 MP FEIR concluded that water quality impacts during construction would be less than significant. No mitigation is required.

The 2009 Master Plan would result in a small increase in impervious surfaces on the campus, and this increase in impervious surfaces could potentially increase both the peak flows and the volume of site runoff which in turn could result in erosion and sedimentation in creeks that receive campus runoff (hydromodification impacts). Furthermore, an increase in impervious surfaces and increased human activity could also result in degradation of the quality of site runoff. According to the 2009 Master Plan, in order to encourage sustainable development on the campus, each new building project will be required to develop a stormwater management plan that addresses both the quantity and quality of runoff by reducing impervious cover, promoting infiltration, and capturing and treating stormwater runoff. In addition, future development on the campus will incorporate low impact development (LID) features appropriate for the campus site and the 2009 Master Plan would include several best management practices (BMPs) to encourage infiltration and improve water quality. As a result, it is anticipated that both the peak flows as well as the total volume of stormwater runoff at buildout of the 2009 Master Plan would be significantly less than the existing condition. Therefore, the 2009 MP FEIR concluded that the water quality impacts during operation would be less than significant. To ensure that stormwater controls are carefully evaluated and incorporated into future development projects, the Campus will implement **MP Mitigation Measure HYDRO-2**.

The storm drain system included in the 2009 Master Plan would be designed to convey on-site stormwater flows and prevent on-site or off-site flooding. In addition, the volume of stormwater would

decrease under the 2009 Master Plan as discussed above. For this reason, the 2009 MP FEIR concluded that development of the campus under the 2009 Master Plan would not substantially alter the existing drainage patterns in a way that would result in on- or off-site flooding. This impact is less than significant. No mitigation is required.

The campus and the surrounding area do not have any significant groundwater resources and the City of Hayward does not depend on local groundwater supplies to meet domestic and industrial needs. In addition, although there would be a slight increase in impervious surfaces on the campus, the decrease in groundwater recharge would not be proportional because the Campus plans to infiltrate stormwater to the maximum extent possible. As a result, the 2009 MP FEIR concluded that implementation of the 2009 Master Plan would not substantially deplete groundwater or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table. This impact is less than significant. No mitigation is required.

The campus is not within a FEMA-designated 100-year flood zone. In addition, the campus is not located within the inundation pathways of nearby reservoirs. Therefore, the 2009 MP FEIR concluded that implementation of the 2009 Master Plan would not place housing or structures that would impede or redirect flood flows within a 100-year flood hazard area or dam inundation zone. This impact is less than significant. No mitigation is required.

The campus is located in the Hayward hills approximately 5.5 miles from the San Francisco Bay. For this reason, the 2009 MP FEIR concluded that development on the campus under the 2009 Master Plan would not be affected by inundation associated with a tsunami or seiche event. No impact would occur. No mitigation is required.

The 2009 MP FEIR concluded that cumulative impacts associated with hydrology and water quality would be less than significant as reasonably foreseeable development in the City of Hayward and development under the 2009 Master Plan would adhere to NPDES requirements and existing stormwater regulations, avoid any increases in peak flows, not require the use of groundwater, and would not place structures with a 100-year flood plain.

MP FEIR Mitigation Measures

MP MM HYDRO-2: During the design review phase of each future development project on the campus, the Campus will verify that the stormwater BMPs were evaluated for the proposed project and those determined to be appropriate were incorporated into the proposed project. The Campus will also verify that post-development runoff from the project site will approximate pre-development runoff volumes.

Change in Circumstances and/or New Information

Since the certification of the 2009 MP FEIR both originally in 2009 and its recertification in 2018, there have been no changes in circumstances that would alter the conclusions of the 2009 MP FEIR with respect to hydrology and water quality impacts.

Analysis of the Proposed Project

In compliance with NPDES regulations, the construction contractor would be required to implement a SWPPP, which will include erosion and pollution control measures to control the release of pollutants and sediment into receiving waters. As a result, the impact on water quality from construction activities would be less than significant, similar to the conclusions of the 2009 MP FEIR. The project would not result in a new or more severe impact related to water quality during construction than previously evaluated and disclosed in the 2009 MP FEIR. No new mitigation is required.

The development of the proposed project would slightly increase the amount of impervious surfaces on the project site and thus would increase the amount of runoff generated on the project site. To improve the quality of run-off during operation, the Campus will develop a stormwater management plan for the project that addresses both the quantity and quality of runoff. In addition, the proposed project will incorporate LID features appropriate for the site. Therefore, similar to the conclusions included in the 2009 MP FEIR, water quality impacts during operation would be less than significant. To ensure that storm water controls are carefully evaluated and incorporated into site design and the project does not result in any downstream impacts, **MP Mitigation Measure HYDRO-2** is incorporated into the project. The project would not result in new or more severe impacts related to water quality during operation than previously evaluated and disclosed in the 2009 MP FEIR. No new mitigation is required.

There are no existing flooding problems on the project site, and the project built on-site would be designed to control for on-site flooding. The proposed project will also incorporate LID features appropriate for the site that will at a minimum ensure that project runoff rates and durations not exceed estimated pre-project rates and duration, thus preventing flooding on- or off-site. For these reasons, existing drainage patterns on the site would not be substantially altered in a way that would result in on- or off-site flooding. This impact is less than significant, similar to the conclusions included in the 2009 MP FEIR. The project would not result in a new or more severe impact related to on- or off-site flooding than previously evaluated and disclosed in the 2009 MP FEIR. No new mitigation is required.

The proposed project would not draw water from groundwater sources nor substantially increase impervious surfaces. Therefore, operation of the proposed project would not substantially deplete groundwater supplies such that there would be a net deficit in aquifer volume or a lowering of the local

groundwater table level. As a result, similar to the conclusions included in the 2009 MP FEIR, this impact would be less than significant. The project would not result in a new or more severe impact related to groundwater use and recharge than previously evaluated and disclosed in the 2009 MP FEIR. No new mitigation is required.

The project site is not located within a FEMA-designated 100-year flood zone (FEMA 2009) nor is it located within the inundation area of any nearby dam. Therefore, the proposed project would not place structures that would impede or redirect flood flows within a 100-year flood hazard area or dam inundation zone. As a result, this impact is less than significant, similar to the conclusions included in the 2009 MP FEIR. The project would not result in a new or more severe impact related to impeding or redirecting flood flows than previously evaluated and disclosed in the 2009 MP FEIR. No new mitigation is required.

Due to its elevation and distance from the ocean and San Francisco Bay, the project site would not be affected by inundation by a tsunami or seiche event. Therefore, similar to the conclusions included in the 2009 MP FEIR, no impact would occur. The project would not result in a new or more severe impact related to tsunami or seiche events than previously evaluated and disclosed in the 2009 MP FEIR. No mitigation is required.

The proposed project is within the scope of the 2009 Master Plan and therefore, its cumulative impacts are adequately addressed in the 2009 MP FEIR.

Findings

The potential impacts with respect to hydrology and water quality from the proposed library replacement project would be similar to or less than the impacts of campus development analyzed in the 2009 MP FEIR. Therefore, no new or substantially increased significant impacts would result from the proposed project beyond those analyzed in the 2009 MP FEIR. No new mitigation is required.

4.10 Land Use and Planning

	Potentially Significant New Impact	Less than Significant New Impact with Mitigation	Less than Significant New Impact	Impact Fully Analyzed in the FEIR
LAND USE AND PLANNING - Would the project:				
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to, the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion:

Summary of Analysis in the 2009 MP FEIR

All development associated with the 2009 Master Plan, including the academic, support, recreation, housing, parking, and roadways, would be located within or immediately adjacent to the existing development on the campus. As a result, the 2009 MP FEIR concluded that growth and development under the 2009 Master Plan would not physically divide an established community. No mitigation is required.

While the campus is not subject to local land use regulations, the Campus maintains cooperative relations with local governments regarding planning and land use issues to assure that mutual interests are addressed. The 2009 Master Plan would not conflict with the City's General Plan land use designation and zoning for the campus. In addition, the 2009 Master Plan would not conflict with pertinent strategies listed within the Hayward Highlands Neighborhood Plan, which governs adjacent land uses to the north and east. Finally, the 2009 Master Plan does not propose land uses that are substantially incompatible with uses adjacent to the campus. Therefore, the 2009 MP FEIR concluded that growth and development under the 2009 Master Plan would not conflict with applicable land use plans, policies, or regulations of an agency with jurisdiction over the project adopted for the purposes of avoiding or mitigating an environmental effect. This impact is less than significant. No mitigation is required.

The 2009 MP FEIR concluded that cumulative impacts related to land use and planning would be less than significant as new development on the Hayward campus would not introduce land uses that would be incompatible with surrounding land uses and future development adjacent to campus would be expected to be in general conformance with local land use plans.

Change in Circumstances and/or New Information

Since the certification of the 2009 MP FEIR both originally in 2009 and its recertification in 2018, there have been no changes in circumstances that would alter the conclusions of the 2009 MP FEIR with respect to land use impacts.

Analysis of the Proposed Project

The site of the replacement library is surrounded by other campus facilities. As a result, similar to the conclusion included in the 2009 MP FEIR, the replacement library project would not physically divide an established community. No impact would occur and the project would not result in a new or more severe impact related to physically dividing an established community than previously evaluated and disclosed in the 2009 MP FEIR. No new mitigation is required.

As discussed above, the land use plan in the 2009 Master Plan identified a site adjacent to the east wing of the existing library for expansion of the library. The Campus has reevaluated the previously planned library expansion and determined that a new replacement library located at a site 200 feet to the northeast of the existing library that is south of the existing Science buildings and northwest of the existing Recreation and Wellness Center would be more appropriate. In order to relocate the library to a new location, an amendment to the land use plan in the 2009 Master Plan would be required. The land use plan would be modified to label the proposed project site as the new library building site.

The project site is located within an area designated for academic and administrative use in the 2009 Campus Master Plan. The proposed replacement library is an allowed land use within this functional zone. As the proposed project would be consistent with the 2009 Campus Master Plan functional zone for the project site, the proposed project would not conflict with the Campus Master Plan. Therefore, the project would not conflict with applicable land use plans, policies, or regulations of an agency with jurisdiction over the project adopted for the purposes of avoiding or mitigating an environmental effect, similar to the conclusion included in the 2009 MP FEIR. In addition, as discussed throughout this Addendum, all environmental impacts associated with amending the 2009 Master Plan to relocate the replacement library to a new site would be either less than significant or would be reduced to a less than significant level with the incorporation of mitigation listed in the 2009 Master Plan EIR. As a result, the project, including the proposed 2009 Master Plan minor amendment would not result in a new or more

severe impact related to conflicts with applicable land use plans than previously evaluated and disclosed in the 2009 MP FEIR. No new mitigation is required.

The proposed project is within the scope of the 2009 Master Plan and therefore, its cumulative impacts are adequately addressed in the 2009 MP FEIR.

Findings

The potential impacts with respect to land use and planning from the proposed library replacement project and related Master Plan amendment would be similar to or less than the impacts of campus development analyzed in the 2009 MP FEIR. Therefore, no new or substantially increased significant impacts would result from the proposed project beyond those analyzed in the 2009 MP FEIR. No new mitigation is required.

4.11 Mineral Resources

	Potentially Significant New Impact	Less than Significant New Impact with Mitigation	Less than Significant New Impact	Impact Fully Analyzed in the FEIR
MINERAL RESOURCES - Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of future value to the region and the residents of the State?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion:

Summary of Analysis in the 2009 MP FEIR

The campus is not located within a regionally significant aggregate resources zone. In addition, implementation of the 2009 Master Plan would not result in any substantial loss of known mineral resources that would be of value to the region or state because the campus area is not available for extraction of mineral resources. Further development of the campus would not result in the additional loss of important mineral resource recovery. As a result, the 2009 MP FEIR concluded that there would be no impacts on mineral resources. No mitigation is required.

Change in Circumstances and/or New Information

Since the certification of the 2009 MP FEIR both originally in 2009 and its recertification in 2018, there have been no changes in circumstances that would alter the conclusions of the 2009 MP FEIR with respect to impacts on mineral resources.

Analysis of the Proposed Project

As described in the 2009 MP FEIR, the loss of availability of known mineral resources on the campus would be low. No impacts would occur and the project would not result in new or more severe impacts to mineral resources than previously evaluated and disclosed in the 2009 MP FEIR.. No new mitigation is required.

Findings

The potential impacts with respect to mineral resources from the proposed library replacement project would be similar to or less than the impacts of campus development analyzed in the 2009 MP FEIR. Therefore, no new or substantially increased significant impacts would result from the proposed project beyond those analyzed in the 2009 MP FEIR. No new mitigation is required.

4.12 Noise

	Potentially New Significant Impact	Less than Significant New Impact with Mitigation	Less than Significant new Impact	Impact Fully Analyzed in the FEIR
NOISE - Would the project result in:				
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Exposure of persons to or generation of excessive ground borne vibration or ground borne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion:

Summary of Analysis in the 2009 MP FEIR

Campus development under the 2009 Master Plan, with and without a third campus entrance, would result in increased vehicular traffic on the regional road network by 2030, which would increase ambient traffic noise levels at existing on- and off-site noise sensitive uses. However, the increase in noise levels along study area road segments would not reach levels that are typically noticed by the human ear. As a result, the 2009 MP FEIR concluded that traffic added by campus development under the 2009 Master Plan, with and without a third campus entrance, at buildout in 2030 would not significantly increase

noise levels along any of the roadway segments. The impact would be less than significant. No mitigation is required.

Noise generated by daily campus activities is not expected to exceed the City noise standards at nearby off-site noise-sensitive location (i.e., residences, churches, schools). However, on-site noise-sensitive receptors, including student housing and academic buildings on the campus, could be exposed to excessive noise from other land uses that are developed within the campus. However, the land use plan for the 2009 Master Plan has been designed to avoid the location of sensitive land uses near potential loud noise sources. Therefore, the 2009 MP FEIR concluded that on- and off-site receptors are not expected to be exposed to noise levels in excess of the standards for noise sensitive uses. This impact is less than significant. No mitigation is required.

Construction on the campus pursuant to the 2009 Master Plan could expose existing and future on- and off-site noise-sensitive receptors to elevated construction noise levels. **MP Mitigation Measures NOI-3a** and **NOI-3b** would reduce this impact to a less than significant level.

The campus is not located within an airport land use plan or within 2 miles of a public airport or public use airport. In addition, the campus is not located within 2 miles of a private airstrip. Therefore, no impact would occur and no mitigation is required.

The 2009 MP FEIR concluded that cumulative noise effects from reasonably foreseeable development in the City of Hayward and development under the 2009 Master Plan would be less than significant.

MP FEIR Mitigation Measures

MP MM NOI-3a: Construction activities on campus shall be restricted to between the hours of 7:00 AM and 7:00 PM on weekdays and Saturdays and 10:00 AM to 6:00 PM on Sundays and holidays.

MP MM NOI-3b: Prior to initiation of campus construction within 500 feet of a noise sensitive receptor, the Campus shall approve a construction noise mitigation program including but not limited to the following.

- All noise-producing project equipment and vehicles using internal combustion engines shall be equipped with exhaust mufflers and air-inlet silencers where appropriate, in good operating condition that meet or exceed original factory specification.

- Mobile or fixed “package” equipment (e.g., arc-welders, air compressors) shall be equipped with shrouds and noise control features that are readily available for that type of equipment.
- All mobile or fixed noise producing equipment used on the project, which is regulated for noise output by local, state or federal agency, shall comply with such regulation while engaged in project-related activities.
- Electrically powered equipment shall be used instead of pneumatic or internal combustion powered equipment, where practicable.
- Material stockpiles and mobile equipment staging, construction vehicle parking and maintenance areas shall be located as far as practicable from noise-sensitive land uses.
- Stationary noise sources such as generators or pumps shall be located away from noise-sensitive land uses as feasible.
- The use of noise-producing signals, including horns, whistles, alarms, and bells shall be for safety warning purposes only. No project-related public address loudspeaker, two-way radio, or music system shall be audible at any adjacent noise-sensitive receptor except for emergency use.
- The erection of temporary noise barriers shall be considered where project activity is unavoidably close to noise-sensitive receptors.
- The noisiest construction operations shall be scheduled to occur together to avoid continuing periods of the greatest annoyance, wherever possible.
- Construction vehicle trips be routed as far as practical from existing residential uses.
- The loudest campus construction activities, such as demolition, blasting, and pile driving, shall be scheduled during summer, Thanksgiving, winter, and spring breaks when fewer people would be disturbed by construction noise.
- Whenever possible, academic, administrative, and residential areas that will be subject to construction noise shall be informed a week before the start of each construction project.

Change in Circumstances and/or New Information

Since the certification of the 2009 MP FEIR both originally in 2009 and its recertification in 2018, there have been no changes in circumstances that would alter the conclusions of the 2009 MP FEIR with respect to noise impacts.

Analysis of the Proposed Project

With operation of the proposed replacement library, noise levels at both on-campus and off-campus receptors would be similar to those under existing conditions. This is because the library project does not include any stationary noise source that could elevate noise levels in the project vicinity, and any HVAC equipment that is roof-mounted on the new library building would be enclosed to minimize emission of noise. The proposed project would not result in new operational vehicle trips as the campus population would stay the same; therefore, traffic noise along area roadways would not increase due to the project. Similar to the conclusion included in the 2009 MP FEIR, the impact related to operational noise would be less than significant. The project would not result in a new or more severe impact related to operational noise than previously evaluated and disclosed in the 2009 MP FEIR. No new mitigation is required.

According to the City of Hayward Municipal Code, construction noise levels shall not exceed 86 dBA outside of the property plane. Noise from project construction would be below this level at the campus property boundary, which is approximately 400 feet from the edge of the project site. The nearest off-campus residential receptor is 650 feet from the project site boundary, and would experience a maximum construction noise level of approximately 58.5 dBA (see **Appendix B** for noise data/calculations). Therefore, similar to the conclusion included in the 2009 MP FEIR, project construction noise would not adversely affect nearby off-campus residential receptors. The project would not result in a new or more severe impact related to construction noise impact on off-campus receptors than previously evaluated and disclosed in the 2009 MP FEIR.

With respect to sensitive receptors on the campus, student residences, classrooms, and places used for learning and research are identified as places that would house noise sensitive receptors. According to the 2009 MP FEIR, a significant impact at these campus receptors would occur if construction activity is predicted to result in a sound level that is more than 6 dBA above the ambient sound level at the nearest sensitive receptor between the hours of 7:00 PM and 7:00 AM on weekdays and Saturdays or between the hours of 10 AM and 6 PM on Sundays and holidays. If a construction site is within a distance of about 500 feet of a sensitive receptor, construction noise is likely to increase sound levels at the receptor by 6 dBA or more. The nearest on-site residential receptors are approximately 250 feet to the southeast of the project site. The nearest on-site classroom receptors are approximately 100 feet to the northeast of the project site. As these receptors are within 500 feet of the project construction activities, they are likely to experience increased noise levels above 6 dBA. This represents a potentially significant impact, similar to the conclusion included in the 2009 MP FEIR. **MP Mitigation Measure NOI-3** would be incorporated into the project to reduce the noise impact from construction activities to a less than significant level. The project would not result in a new or more severe impact related to construction noise impacts on on-campus receptors than previously evaluated and disclosed in the 2009 MP FEIR. No new mitigation is required.

The project site is located within the campus core and therefore is not located within the vicinity of a public airport or private airstrip. As a result, the project would not expose people residing or working in the project area to excessive noise levels from aircraft. Similar to the conclusion included in the 2009 MP FEIR, no impact would occur and the project would not result in a new or more severe impact related to aircraft noise than previously evaluated and disclosed in the 2009 MP FEIR. No new mitigation is required.

The proposed project is within the scope of the 2009 Master Plan and therefore, its cumulative impacts are adequately addressed in the 2009 MP FEIR.

Findings

The potential impacts with respect to noise from the proposed library replacement project would be similar to or less than the impacts of campus development analyzed in the 2009 MP FEIR. Therefore, no new or substantially increased significant impacts would result from the proposed project beyond those analyzed in the 2009 MP FEIR. No new mitigation is required.

4.13 Population and Housing

	Potentially Significant New Impact	Less than Significant New Impact with Mitigation	Less than Significant New Impact	Impact Fully Analyzed in the FEIR
POPULATION AND HOUSING – Would the project:				
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion:

Summary of Analysis in the 2009 MP FEIR

All students new to the Bay Area could be housed by new student beds under the 2009 Master Plan. In addition, ABAG housing projections indicate that there would be ample housing available in the City of Hayward and in Alameda County to accommodate new employees to campus. As a result, the 2009 MP FEIR concluded that implementation of the 2009 Master Plan would not substantially increase the population of the City of Hayward or Alameda County such that additional housing would be required, the construction of which could cause significant environmental impacts. This impact is less than significant. No mitigation is required.

The student and faculty housing envisioned under the 2009 Master Plan would be constructed within existing campus boundaries. Other development associated with 2009 Master Plan implementation would occur on the developed portion of the campus. Therefore, the 2009 MP FEIR concluded that implementation of the 2009 Master Plan would not displace existing housing or population. No mitigation is required.

The 2009 MP FEIR concluded that cumulative impacts with respect to population and housing from reasonably foreseeable development in the City of Hayward and development under the 2009 Master Plan would be less than significant.

Change in Circumstances and/or New Information

Since the certification of the 2009 MP FEIR both originally in 2009 and its recertification in 2018, there have been no changes in circumstances that would alter the conclusions of the 2009 MP FEIR with respect to population and housing impacts.

Analysis of the Proposed Project

The proposed project would not increase campus population as the replacement library is a supporting use that would house existing employees and serve the existing and future student population. Furthermore, the west wing of the existing library would stay vacant after the relocation of the library to the replacement facility and would not house any new students or employees. The east wing would continue to house campus support services and library stacks. Therefore, no impacts related to population and housing would occur and the project would not result in new or more severe impacts related to population and housing than previously evaluated and disclosed in the 2009 MP FEIR. No new mitigation is required.

The proposed project is within the scope of the 2009 Master Plan and therefore, its cumulative impacts are adequately addressed in the 2009 MP FEIR.

Findings

The potential impacts with respect to population and housing from the proposed library replacement project would be similar to or less than the impacts of campus development analyzed in the 2009 MP FEIR. Therefore, no new or substantially increased significant impacts would result from the proposed project beyond those analyzed in the 2009 MP FEIR. No new mitigation is required.

4.14 Public Services

	Potentially New Significant Impact	Less than Significant New Impact with Mitigation	Less than Significant New Impact	Impact Fully Analyzed in the FEIR
PUBLIC SERVICES				
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
i) Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ii) Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iii) Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iv) Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
v) Other governmental services?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion:

Summary of Analysis in the 2009 MP FEIR

Implementation of the 2009 Master Plan would result in additional facilities and population on the campus. This increase in campus facilities and population would place incremental additional demand on the Hayward Fire Department (HFD) for fire protection services. The HFD indicated additional facilities such as an additional bay or fire station would need to be constructed. However, expansion or construction of a fire station would not result in significant environmental impacts due to the limited area that is typically required to build a fire station (between 0.5 and 1 acre) and its urban location. As a result, the 2009 MP FEIR concluded that the construction of additional fire facilities would not result in significant environmental impacts. This impact is considered less than significant. No mitigation is required.

The increase in campus facilities and population would also place incremental additional demand on the Campus Police Department and the Hayward Police Department for law enforcement services. The need

for new on- or off-campus police facilities to service the campus at buildout is not anticipated at this time. However, should new or expanded police facilities be required on campus, the development of such facilities would not result in environmental impacts beyond those evaluated in the 2009 MP FEIR. In addition, an expansion of police facilities in Hayward would be unlikely to result in significant environmental impacts due to the urban setting of the City. Therefore, the 2009 MP FEIR concluded that the construction of additional law enforcement facilities would result in less than significant environmental impacts. This impact is considered less than significant. No mitigation is required.

New employees on campus would result in the addition of approximately 196 K-12 students to Hayward area schools over a period of about 21 to 22 years (approximately 10 K-12 students per year). As this increase is not considered substantial, the 2009 MP FEIR concluded that campus development under the 2009 Master Plan would not result in impacts to City of Hayward schools. This impact is less than significant. No mitigation is required.

The 2009 Master Plan FEIR concluded that cumulative impacts with respect to public services from reasonably foreseeable development in the City of Hayward and development under the 2009 Master Plan would be less than significant.

Change in Circumstances and/or New Information

Since the certification of the 2009 MP FEIR both originally in 2009 and its recertification in 2018, there have been no changes in circumstances that would alter the conclusions of the 2009 MP FEIR with respect to public service impacts.

Analysis of the Proposed Project

The proposed replacement library project would not increase campus population and thus demand for public services would not increase compared to the levels analyzed in the 2009 MP FEIR. As a result, the project would not result in new or more severe impacts related to public services than previously evaluated and disclosed in the 2009 MP FEIR. No new mitigation is required.

The proposed project is within the scope of the 2009 Master Plan and therefore, its cumulative impacts are adequately addressed in the 2009 MP FEIR.

Findings

The potential impacts with respect to public services from the proposed library replacement project would be similar to or less than the impacts of campus development analyzed in the 2009 MP FEIR.

Therefore, no new or substantially increased significant impacts would result from the proposed project beyond those analyzed in the 2009 MP FEIR. No new mitigation is required.

4.15 Recreation

	Potentially Significant New Impact	Less than Significant New Impact with Mitigation	Less than Significant New Impact	Impact Fully Analyzed in the FEIR
RECREATION – Would the project:				
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion:

Summary of Analysis in the 2009 MP FEIR

The 2009 Master Plan identified minor modifications to existing recreational facilities on the campus. The 2017 PR-FEIR which is a part of the 2009 MP FEIR noted that all of these facilities are already developed and located in portions of the campus where sensitive environmental resources are not present. In addition, based on the current low levels of usage of the nearby regional parks by campus population, the FEIR concluded that only a small number of additional students, faculty and staff are expected to patronize regional parks and facilities owned and operated by the Hayward Area Recreation and Park District as existing on-campus recreational facilities would satisfy the demands of this campus population (CSUEB 2018). For these reasons, the 2009 MP FEIR concluded that campus growth under the 2009 Master Plan would not result in significant environmental impacts related to the development of new or modified recreational facilities nor 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. This impact is considered less than significant. No mitigation is required.

The 2009 MP FEIR concluded that cumulative impacts with respect to recreation from reasonably foreseeable development in the City of Hayward and development under the 2009 Master Plan would be less than significant.

Change in Circumstances and/or New Information

Since the certification of the 2009 MP FEIR both originally in 2009 and its recertification in 2018, there have been no changes in circumstances that would alter the conclusions of the 2009 MP FEIR with respect to impacts on recreational facilities.

Analysis of the Proposed Project

As there would be no campus population growth due to the proposed replacement library project, no impacts to existing recreational facilities would occur, nor would there be the need to construct new recreation facilities. Thus, the project would not result in new or more severe impacts related to recreation than previously evaluated and disclosed in the 2009 MP FEIR. No new mitigation is required.

The proposed project is within the scope of the 2009 Master Plan and therefore, its cumulative impacts are adequately addressed in the 2009 MP FEIR.

Findings

The potential impacts with respect to recreational resources from the proposed library replacement project would be similar to or less than the impacts of campus development analyzed in the 2009 MP FEIR. Therefore, no new or substantially increased significant impacts would result from the proposed project beyond those analyzed in the 2009 MP FEIR. No new mitigation is required.

4.16 Transportation and Traffic

	Potentially New Significant Impact	Less than Significant New Impact with Mitigation	Less than Significant New Impact	Impact Fully Analyzed in the FEIR
TRANSPORTATION/TRAFFIC - Would the project:				
a) Cause an increase in traffic, which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion:

Summary of Analysis in the 2009 MP FEIR

The traffic analysis in the 2009 MP FEIR found that full buildout of the campus in 2030 under the 2009 Master Plan, with and without the Third Entrance, will contribute to sub-standard intersection operations at eight study intersections, in either the AM peak hour or PM peak hour, or both peak hours. **MP Mitigation Measures TRANS-1a** and **TRANS-1b** would lessen but not reduce this impact to a less than significant level. As a result, the 2009 MP FEIR concluded that this impact would be significant and unavoidable.

The traffic analysis in the 2009 MP FEIR found that campus gateway intersections will operate at unacceptable levels of service in the future. **MP Mitigation Measure TRANS-2** would reduce this impact to a less than significant level.

The traffic analysis in the 2009 MP FEIR found that traffic added by growth and development under the 2009 MP FEIR would not adversely affect intersection operations at Hayward Boulevard and Civic Avenue. This impact is less than significant. No mitigation is required.

The traffic analysis in the 2009 MP FEIR found that pedestrian safety on Harder Road in the vicinity of the student housing area could be affected by traffic volumes and speeds, with the provision of the third entrance on Hayward Boulevard. **MP Mitigation Measure TRANS-4** would reduce this impact to a less than significant level.

The traffic analysis in the 2009 MP FEIR found that campus growth and development under the 2009 Master Plan would substantially increase volumes on several segments of the Congestion Management Program (CMP) or Metropolitan Transportation System (MTS) networks. **MP Mitigation Measure TRANS-5** would lessen but not reduce this impact to a less than significant level. As a result, the 2009 MP FEIR concluded that this impact would be significant and unavoidable.

The traffic analysis in the 2009 MP FEIR found that campus growth and development under the 2009 Master Plan will increase BART ridership, but will not lead to over-capacity conditions in the peak commute hours. This impact is less than significant. No mitigation is required.

The traffic analysis in the 2009 MP FEIR found that campus growth and development under the 2009 Master Plan will increase bus transit demand, particularly for connections between the campus and the Downtown Hayward and Castro Valley BART stations. **MP Mitigation Measure TRANS-7** would reduce this impact to a less than significant level.

The analysis in the 2009 MP FEIR concluded that walking and bicycling trips to the campus may increase moderately with implementation of the 2009 Master Plan. **MP Mitigation Measure TRANS-8** would reduce this impact to a less than significant level.

The analysis in the 2009 MP FEIR concluded that the 2009 Master Plan could result in overflow parking on nearby neighborhood streets, if the supply is not managed to meet demand as the campus grows. **MP Mitigation Measures TRANS-9a** and **TRANS-9b** would reduce this impact to a less than significant level.

The 2009 MP FEIR concluded that significant cumulative traffic effects would occur from reasonably foreseeable development in the City of Hayward and development under the 2009 Master Plan. No feasible mitigation exists to reduce these cumulative impacts to a less than significant level.

Change in Circumstances and/or New Information

Since the certification of the 2009 MP FEIR both originally in 2009 and its recertification in 2018, there have been no changes in circumstances that would alter the conclusions of the 2009 MP FEIR with respect to traffic and transportation impacts.

Analysis of the Proposed Project

Except for an increase in construction vehicles accessing the project site during project construction, there would be no increase in traffic due to the proposed project as it would not result in an increase in campus population or associated vehicle trips. For this reason, no traffic impact would occur and **MP Mitigation Measures TRANS-1, TRANS-2, and TRANS-5** do not apply. Construction vehicles would travel to and from the project site for a period of two years, with most of the construction traffic accessing or leaving the project area during off-peak hours. As a result, construction traffic would not have any adverse effect on the capacity of the roadway system. The impact of the project's construction traffic would be less than significant. No mitigation is required.

The proposed project would not make any changes to area roads and would not result in the creation of dangerous intersections or other road conditions that would substantially increase hazards in the area. There would be no impact and **MP Mitigation Measure TRANS-4** does not apply.

Construction of the proposed project would not result in any road or bicycle lane closures outside of the project site. Roadways adjacent to the project site would remain open to emergency vehicles during project construction. There would be no impact. No mitigation is required.

The proposed project would not conflict with any adopted policies, plans, or programs that support alternative transportation as it would not increase the population of the campus or change the existing land uses. There would be no impact and **MP Mitigation Measures TRANS-7 and TRANS-8** do not apply. No mitigation is required.

The proposed project as it would not result in an increase in campus population or associated vehicle trips that would require parking. As a result, the proposed project would not result in inadequate parking. There would be no impact and **MP Mitigation Measure TRANS-9** does not apply. No mitigation is required.

The proposed project is within the scope of the 2009 MP FEIR and therefore, its cumulative impacts are adequately addressed in the 2009 MP FEIR. Although the 2009 MP FEIR concluded that there would be significant and unavoidable cumulative impacts related to intersection operations and CMP and MTS networks, the proposed project would not contribute to the significant and unavoidable impacts.

Findings

The potential impacts with respect to traffic from the proposed library replacement project would be similar to or less than the impacts of campus development analyzed in the 2009 MP FEIR. Therefore, no new or substantially increased significant impacts would result from the proposed project beyond those analyzed in the 2009 MP FEIR. No new mitigation is required.

4.17 Utilities and Service Systems

	Potentially New Significant Impact	Less than Significant New Impact with Mitigation	Less than Significant New Impact	Impact Fully Analyzed in the FEIR
UTILITIES AND SERVICE SYSTEMS - Would the project:				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new and expanded entitlements needed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Comply with federal, state, and local statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion:

Summary of Analysis in the 2009 MP FEIR

Campus growth and development under the 2009 Master Plan would result in a demand for water not anticipated in the City's 2005 UWMP. As a result, the 2009 MP FEIR conservatively concluded that the impact of growth and development at Master Plan buildout on water supply would be significant. **MP Mitigation Measure UTIL-1** would reduce this impact to a less than significant level.

The City of Hayward Water Pollution Control Facility (WPCF) would have sufficient capacity to treat wastewater generated on the campus through Master Plan buildout. In addition, no major improvements to the City's sewer mains that serve the campus are needed to handle the increased flow from the campus. Therefore, the 2009 MP FEIR concluded that campus growth and development under the 2009 Master Plan would not require the construction or expansion of wastewater conveyance or treatment facilities. This impact is less than significant. No mitigation is required.

Campus growth and development under the 2009 Master Plan would result in the construction of new electrical, natural gas, and heating water facilities. However, the 2009 MP FEIR concluded that the construction of these facilities would not cause significant environmental impacts. This impact is less than significant. No mitigation is required.

Campus growth and development under the 2009 Master Plan would require a minor expansion of the storm water conveyance system. However, the 2009 MP FEIR concluded that the construction of this system would not cause significant environmental impacts. This impact is less than significant. No mitigation is required.

Campus growth and development under the 2009 Master Plan would increase the amount of non-hazardous waste generated on campus. However, at full buildout under the 2009 Master Plan, 75 to 100 percent of solid waste would be diverted from landfills. Additionally, 100 percent of organic waste generated would be composted on the campus. For these reasons, the 2009 MP FEIR concluded that the 2009 Master Plan would not conflict with applicable solid waste regulations, nor would it result in solid waste requiring disposal that would exceed the landfill capacity. This impact is less than significant. No mitigation is required.

Reasonably foreseeable development in the City of Hayward and campus development under the 2009 Master Plan would result in the demand for additional water supply, wastewater treatment, solid waste disposal, electricity, and natural gas. However, the 2009 MP FEIR concluded that the contribution from campus development to the cumulative impact would not be considerable as the 2009 Master Plan includes sustainability goals to reduce the Campus's water use, energy use, wastewater generation, and solid waste generation and disposal. In addition, mitigation discussed above would further reduce campus water demand and thereby also wastewater discharge.

Change in Circumstances and/or New Information

Since the certification of the 2009 MP FEIR both originally in 2009 and its recertification in 2018, there have been no changes in circumstances that would alter the conclusions of the 2009 MP FEIR with respect to utility impacts.

Analysis of the Proposed Project

The proposed project would not increase the campus population. Therefore, there would be no additional demand for water, wastewater treatment, and solid waste facilities. In addition, impervious surfaces on the project site would minimally increase as described above under **Section 4.7 Hydrology and Water Quality**, resulting in a similar amount of storm water runoff when compared to the 2009 Master Plan analysis. No impacts to utilities and service systems would occur and the project would not result in new or more severe impacts related to utilities and services systems than previously evaluated and disclosed in the 2009 MP FEIR. **MP Mitigation Measure UTIL-1** would not apply.

The proposed project is within the scope of the 2009 MP FEIR and therefore, its cumulative impacts are adequately addressed in the 2009 MP FEIR.

Findings

The potential impacts with respect to utilities and service systems from the proposed library replacement project would be similar to or less than the impacts of campus development analyzed in the 2009 MP FEIR. Therefore, no new or substantially increased significant impacts would result from the proposed project beyond those analyzed in the 2009 MP FEIR. No new mitigation is required.

5.0 REFERENCES

- Bay Area Air Quality Management District (BAAQMD). 2017. *BAAQMD Air Quality CEQA Guidelines*. May.
- California State University East Bay (CSUEB). 2018. CSU East Bay Hayward Campus 2009 Master Plan Final EIR, SCH No. 2008042100. January.
- Federal Emergency Management Agency (FEMA). 2009. Flood Insurance Rate Map No. 06001C0293G for Alameda County, California. August 3.
- California State Water Resources Control Board (SWRCB). 2018. GeoTracker database. Cal State University Hayward (T0600100243). Available at: http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0600100243. Accessed: February 26, 2018.

6.0 REPORT PREPARERS

California State University East Bay

Anne Salazar Leung, University Planner

Impact Sciences, Inc.

Shabnam Barati, Ph.D., Principal

Paul Stephenson, AICP, Senior Project Manager

Jared Jerome, Air Quality and Noise Analyst

Van Hoang, Publications Manager

TABLE OF CONTENTS

Section	Page
1.0 Introduction	1
2.0 CEQA Requirements.....	2
3.0 Project Description	3
4.0 Environmental Factors Potentially Affected.....	8
4.1 Aesthetics	10
4.2 Agriculture and Forestry Resources.....	13
4.3 Air Quality	16
4.4 Biological Resources	24
4.5 Cultural Resources	30
4.6 Geology and Soils.....	35
4.7 Greenhouse Gas Emissions.....	38
4.8 Hazards and Hazardous Materials.....	41
4.9 Hydrology and Water Quality	47
4.10 Land Use and Planning.....	52
4.11 Mineral Resources.....	55
4.12 Noise	57
4.13 Population and Housing.....	62
4.14 Public Services	64
4.15 Recreation.....	67
4.16 Transportation and Traffic.....	69
4.17 Utilities and Service Systems.....	73
5.0 References.....	76
6.0 Report Preparers.....	77

LIST OF FIGURES

Figure	Page
Figure 1, Project Location	6
Figure 2, Conceptual Site Plan	7

LIST OF TABLES

Table	Page
Table 1: Significance Thresholds for Criteria Pollutant Emissions	18
Table 2: Estimated Construction Emissions.....	20
Table 3: GHG Significance Thresholds	39

APPENDICES

Appendix A: Emissions Calculations

Appendix B: Noise Calculations

1.0 INTRODUCTION

In September 2009, the CSU Board of Trustees adopted Findings and a Mitigation Monitoring Program pursuant to California Environmental Quality Act (CEQA) for the 2009 California State University, East Bay (CSUEB) Hayward Campus Master Plan ("2009 Master Plan"). The 2009 Final EIR was challenged in court by the City of Hayward (City) and two local neighborhood groups. The Court of Appeal upheld the 2009 Final EIR in all respects, with the exception of the 2009 Final EIR's analysis of impacts to parklands. The Court of Appeal also directed the Board of Trustees to reconsider the feasibility of funding the California State University's (University) fair-share contribution of off-campus traffic mitigation measures.

Accordingly, in 2017, the University prepared a Partial Recirculated Draft and Final Environmental Impact Report (collectively "2017 PR-FEIR") which updated and replaced the parkland analysis in the 2009 Final EIR, and provides an expanded analysis of the project's impacts on nearby parklands in accordance with the opinion of the Court of Appeal and the peremptory writ of administrative mandamus. The 2017 PR-FEIR concluded, consistent with the 2009 Final EIR that the Master Plan project would not result in a significant adverse impact to parklands. In January 2018, the Board of Trustees set aside and vacated its original approval of the CSUEB 2009 Master Plan, de-certified the 2009 Final EIR, certified the 2017 PR-EIR and re-certified 2009 Final EIR as modified by the 2017 PR-EIR, and re-approved the CSUEB 2009 Master Plan. The re-certified 2009 Final EIR as modified by the 2017 PR-EIR is referred to throughout this Addendum as the "2009 MP FEIR."

The 2009 Master Plan addresses the facility needs of the Hayward Campus to meet State-mandated enrollment through 2030. The 2009 Master Plan involves the reorganization of campus facilities and reconfiguration of campus access and circulation. Activities outlined in the 2009 Master Plan include the demolition/removal of some of the existing buildings on the campus, the renovation of some of the existing buildings, and the construction of a number of new buildings. In addition, the 2009 Master Plan includes recommended vehicle and pedestrian circulation plans for the campus and recommended landscape improvements. The 2009 MP FEIR addressed the environmental impacts from the implementation of the 2009 Master Plan and campus growth through 2030.

The 2009 Master Plan states that the existing campus library is no longer able to meet modern criteria for a technologically advanced, attractive venue for learning and that the construction of a new library to replace the existing campus library would be required. The 2009 Master Plan identified a site adjacent to the east wing of the existing library for expansion of the library. The Campus has reevaluated the previously planned library expansion and determined that a new replacement library located at a site 200 feet to the northeast of the existing library that is south of the existing Science buildings and northwest of

the existing Recreation and Wellness Center would be more appropriate. This Addendum analyzes the environmental effects from amending the approved Master Plan and developing the new library on the proposed site instead of the previously identified location.

Where none of the conditions requiring the preparation of a Subsequent EIR are met, the CEQA Guidelines require a lead agency to prepare an Addendum to the previously certified EIR, including a brief explanation of the decision to not prepare a Subsequent EIR supported by substantial evidence (Section 15164). Based on the analysis below, this Addendum concludes that the construction and operation of the new library at the proposed site would not result in any new significant environmental impacts, or an increase in the severity of adverse impacts previously evaluated and disclosed in the 2009 MP FEIR, nor would it require the adoption or consideration of any new or considerably different mitigation measures and alternatives. Therefore this Addendum is the appropriate form of environmental review required under CEQA.

2.0 CEQA REQUIREMENTS

CEQA Guidelines Section 15164(a) states that the lead agency shall prepare an addendum to a previously adopted EIR if some changes or additions are necessary but none of the conditions described in Section 15162 calling for preparation of a subsequent EIR have occurred. Section 15164(c) states that an addendum does not need to be circulated for public review. Section 15164(d) provides that the decision-making body shall consider the addendum in conjunction with the certified EIR prior to making a decision on the project. Section 15164(e) requires documentation of the decision not to prepare a subsequent EIR pursuant to Section 15162.

CEQA Guidelines Section 15162(a) provides that once an EIR has been adopted, no subsequent EIR shall be prepared unless the lead agency determines, on the basis of substantial evidence, one or more of the following:

- Substantial changes are proposed in the project which will require major revisions of the previous EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;
- Substantial changes occur with respect to the circumstances under which the project is undertaken which will require major revisions of the previous EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;
- New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete, shows any of the following:

- The project will have one or more significant effects not discussed in the previous EIR;
- Significant effects previously examined will be substantially more severe than shown in the previous EIR;
- Mitigation measures previously found not to be feasible would in fact be feasible and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or
- Mitigation measures which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative.

This Addendum has been prepared to satisfy the requirements of CEQA Guidelines Sections 15164(b), 15164(d), and 15164(e).

3.0 PROJECT DESCRIPTION

Project Site

The CSUEB Hayward campus is located at 25800 Carlos Bee Boulevard in the Hayward Hills, approximately 2 miles east of downtown Hayward. The replacement library site is located in the center of the Hayward campus south of the Science buildings and northwest of the Recreation and Wellness Center (see **Figure 1, Project Location**). The site is approximately 1.1 acres in size and is partially paved and partially landscaped with trees and shrubs. The site is sloped and rises approximately 20 feet from the south to the north. Institutional uses surround the replacement library site.

Existing Campus Library

The existing campus library building is located in the campus core approximately 200 feet to the southwest of the project site and includes about 204,000 gross square feet (gsf) of building space with approximately 133,000 gsf of space dedicated to library functions and approximately 71,000 gsf of space devoted to campus support services (non-library functions/services). Library functions are housed in both wings of the upper mall level (81,000 gsf), the west wing of the lower mall level (50,000 gsf), and in the basement of the west wing (2,000 gsf) while campus support services are located in the east wing of the lower mall level (20,000 gsf) and the basement level of the west wing (21,000 gsf). The remaining building basement space (30,000 gsf) is dedicated to mechanical spaces, restrooms, corridors and auxiliary spaces.

Proposed Replacement Library

The proposed replacement library would be three stories and reach a maximum of approximately 47 feet in height. It would provide approximately 100,000 gsf of space. The proposed facility would perform the same functions as the existing library, employ the same number of library staff as the present library, and serve the same number of patrons as the existing facility; the proposed facility would not result in an increase in campus population. As indicated in **Figure 2, Conceptual Site Plan**, the proposed structure would occupy most of the project site. The replacement library would also be served by utilities located within the campus core and the design and landscaping of the proposed facility would be similar to that of existing campus buildings near the project site.

After the relocation of library functions to the replacement library, the west wing of the existing library will remain vacant pending the completion of a study to determine future use. With respect to the east wing, it will undergo a seismic retrofit in either late 2018 or early 2019. The lower mall level of the east wing would continue to house campus support services (20,000 gsf) and the upper mall level of the east wing would continue to house library stacks (27,000 gsf) after the planned retrofit.

Construction of the proposed project is anticipated to begin in spring 2019 and last approximately two years. Because the project is within the scope of the 2009 Master Plan, it is required to implement all applicable mitigation measures set forth in the 2009 MP FEIR. All applicable mitigation measures are identified in the Addendum analysis below. In addition, to minimize emissions of toxic air contaminants during construction, the project includes a best management practice (BMP) that requires all construction equipment used in project construction to be equipped with USEPA rated Tier 4 (model year 2008 or newer) engines. This BMP will be incorporated into the project's construction contract.

Proposed 2009 Master Plan Revision

As noted above, as the existing campus library is no longer able to meet modern criteria for a technologically advanced, attractive venue for learning. In response the campus is seeking a master plan revision to create a new library replacement building on the project site by combining space set aside for a library addition with one of the facilities identified a part of the Instructional Support Services Complex. The site of the library addition is located adjacent to the east wing of the existing library while the site of the Instructional Support Services facility is located adjacent to the project site to the west. As the proposed library replacement project is not adding to the building space projections provided in the 2009 Master Plan, the proposed project is therefore within the scope of the 2009 Master Plan, and as such is analyzed in the 2009 MP FEIR for its environmental impacts. The purpose of the evaluation in this document is to disclose any changes to the previously evaluated and disclosed environmental impacts

that could result from relocating the space assigned to the library addition and the Instructional Support Services facility to the project site and the proposed Master Plan revision.



SOURCE: CSU East Bay Hayward Campus Master Plan Study, 2018

FIGURE 1



SOURCE: CSU East Bay Hayward Campus Master Plan Study, 2018

FIGURE 2

Conceptual Site Plan

4.0 ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

This Addendum provides an analysis of each environmental issue identified in the 2009 MP FEIR to determine whether new or more severe effects would occur or new mitigation measures should be required. CEQA Guidelines Section 15164(b) states that the lead agency shall prepare an addendum to a previously adopted EIR if only minor technical changes or additions are necessary or none of the conditions described in Section 15162 calling for the preparation of a subsequent EIR have occurred. Here, an addendum is appropriate to address additional project-specific details of the proposed project. This document assesses the proposed replacement library to determine whether it is within the scope of the 2009 MP FEIR or whether the construction and/or the operation of the proposed replacement library would result in new significant impacts or substantially more severe impacts under CEQA Guidelines Section 15162.

In the following evaluation each topic section includes the following sub-sections:

- **Environmental Checklist.** Contains a modified form of the Appendix G Initial Study environmental checklist. Each checklist question has been modified to characterize the potentially significant impact, less than significant impact, no impact and other categories in the context of whether or not the project would result in new significant impacts or substantially more severe impacts when compared to the FEIR and the 15162 triggers as follows:
 - Would the project result in substantial changes which will require major revisions of the certified EIR due to new significant environmental effects or a substantial increase in the severity of previously identified effects;
 - Would the project result in substantial changes with respect to the circumstances in which the project is undertaken which will require major revisions of the certified EIR due new significant environmental effects or a substantial increase in the severity of previously identified significant effects;
 - Would the project have one or more significant effects not discussed in the certified EIR or that will be substantially more severe than shown in the EIR, or are there mitigation measures or alternatives previously found not to be feasible or that are considerably different, that would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternatives.

The checklist presented in the following analysis classifies impacts in one of four ways:

- **Potentially Significant New Impact.** This category is for any potentially significant impact that was not analyzed in the 2009 MP FEIR. A potentially significant impact is an effect that may be significant based on substantial evidence and the significance criteria for the proposed project. If the project may result in one or more Potentially Significant Impacts, further environmental documentation is required.

- **Less than Significant New Impact with Mitigation.** This category is for any impacts which were not analyzed or found in the 2009 MP FEIR, but are nonetheless found to be less than significant with mitigation incorporated. This impact is an effect that with the implementation of project-specific mitigation measures is reduced from potentially significant to a less than significant level.
- **Less than Significant New Impact.** This category is for any impacts which were not analyzed or found in the 2009 MP FEIR, but which are nonetheless less than significant.
- **Impacts Fully Analyzed in the FEIR.** This category is for impacts which are equal to or less than the impacts found and analyzed in the 2009 MP FEIR.

4.1 Aesthetics

	Potentially Significant New Impact	Less than Significant New Impact with Mitigation	Less than Significant New Impact	Impacts Fully Analyzed in the FEIR
AESTHETICS - Would the project:				
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion:

Summary of Analysis in the 2009 MP FEIR

A scenic vista is generally defined as an expansive view of highly valued landscape as observable from a publicly accessible vantage point. Scenic vistas of the City of Hayward and San Francisco Bay are offered from vantage points within several neighborhoods north and east of the campus in the Hayward Hills. Implementation of the majority of the 2009 Master Plan would not adversely affect scenic vistas in the Hayward Hills. However, the potential construction of faculty/staff housing adjacent to Grand Avenue would have a substantial adverse effect on a scenic vista from this publicly accessible roadway. **MP Mitigation Measure AES-1** would lessen but not reduce this impact to a less than significant level. As a result, the 2009 MP FEIR concluded that this impact would be significant and unavoidable.

There are no designated state scenic highways located within the vicinity of the campus. Therefore, the 2009 MP FEIR concluded that implementation of the 2009 Master Plan would not substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway. This impact would be less than significant. No mitigation is required.

Buildout of the 2009 Master Plan would alter the existing visual character or quality of the campus. However, implementation of the 2009 Master Plan would enhance, as opposed to degrade, the visual

quality and character of the campus by implementing more cohesive architecture, improving campus entry sequences, and enhancing open space and landscaping. For this reason, the 2009 MP FEIR concluded that implementation of the 2009 Master Plan would not substantially degrade the existing visual character or quality of the site and its surroundings. This impact would be less than significant. No mitigation is required.

Most new construction and reconfiguration under the 2009 Master Plan would occur on the central portion of the campus that is currently developed with light sources. However, projects located along the edges of the campus would introduce new light and glare into areas that are generally dark at night. As a result, the 2009 MP FEIR found that implementation of the 2009 Master Plan would create new sources of light or glare which could adversely affect day or nighttime views in the area. **MP Mitigation Measure AES-4** would reduce this impact to a less than significant level.

The 2009 MP FEIR concluded that cumulative impacts to aesthetics and visual resources from reasonably foreseeable development in the City of Hayward and development under the 2009 Master Plan would be less than significant. No mitigation is required.

Change in Circumstances and/or New Information

Since the certification of the 2009 MP FEIR both originally in 2009 and its recertification in 2018, there have been no changes in circumstances that would alter the conclusions of the 2009 MP FEIR with respect to aesthetics and visual resources.

Analysis of the Proposed Project

Instead of the adding additional space to the east wing of the existing library, the proposed replacement library project would be located 200 feet to the northeast of the existing library in the campus core and would be lower in elevation than the scenic vista points recognized in the Hayward Hills. Building heights within the campus core range from two to four stories. The proposed replacement library would be three stories and reach a maximum of 47 feet in height. While the proposed project would be visible from adjacent areas, at a height of three stories, it would be consistent with the heights of buildings in this portion of the campus and would not exceed the heights of existing and planned buildings in the campus core under the 2009 Master Plan. In addition, the design and landscaping of the proposed project would be compatible with the design and landscaping of existing campus buildings within the campus core. As a result, the impacts to scenic vistas and scenic resources from project development would be less than significant and **MP Mitigation Measure AES-1** would not apply. The project would not result in new or more severe impacts on scenic vistas and scenic resources than previously evaluated and disclosed in the 2009 MP FEIR.

New permanent sources of lighting would be established on the project site with the development of the proposed project that would increase the level of light on the site from current levels. The exterior light proposed would be limited to the amount required to safely light the entrance, sidewalks, and other pedestrian areas within the project site. The interior lighting associated with the proposed project would be similar to that emitted by other such structures on the campus, such as the Sciences Buildings to the north and the Recreation and Wellness Center to the southeast. Furthermore, the replacement library would be at a distance from the campus edges and therefore any exterior lighting associated with the replacement building would not result in light spill on off-campus lands or otherwise result in light and glare impacts. Therefore, impacts from light and glare would be less than significant and **MP Mitigation Measure AES-4** would not apply. The project would not result in a new or more severe impact related to light and glare than previously evaluated and disclosed in the 2009 MP FEIR.

The proposed project is within the scope of the 2009 Master Plan and therefore, its cumulative impacts are adequately addressed in the 2009 MP FEIR. Although the 2009 MP FEIR concluded that there would be a significant and unavoidable cumulative impact related to scenic vistas, the proposed project would not contribute to the impact.

Findings

The potential impacts with respect to aesthetics and visual resources from the proposed library replacement project would be similar to or less than the impacts of campus development analyzed in the 2009 MP FEIR. Therefore, no new or substantially increased significant impacts would result from the proposed project beyond those analyzed in the 2009 MP FEIR. No new mitigation is required

4.2 Agriculture and Forestry Resources

	Potentially Significant New Impact	Less than Significant New Impact with Mitigation	Less than Significant New Impact	Impacts Fully Analyzed in the FEIR
AGRICULTURAL AND FORESTRY RESOURCES - In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in the Forest Protocols adopted by the California Air Resources Board. Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Discussion:

Summary of Analysis in the 2009 MP FEIR

The campus is developed with buildings, paved areas, or landscaped open space and is surrounded by suburban uses and open space. No farmland or agricultural activities are present in the vicinity of the campus. Therefore, implementation of the 2009 Master Plan would not result in conversion of farmland—including Prime Farmland, Unique Farmland, or Farmland of Statewide Importance—to non-agricultural uses. Next, the campus is currently designated for academic uses by the City of Hayward and is surrounded by urban/suburban development and open space. No impacts related to possible conflicts with zoning for agricultural uses or a Williamson Act contract would occur. Finally, as no farmland, agricultural land, or related uses are found in the area or on the campus, implementation of the 2009 Master Plan would not involve changes in the existing environment that could result in conversion of farmland to non-agricultural use. For these reasons, the 2009 MP FEIR concluded that growth and development under the 2009 Master Plan would not impact agriculture resources. No mitigation is required.

Change in Circumstances and/or New Information

Since the certification of the 2009 MP FEIR both originally in 2009 and its recertification in 2018, there have been no changes in circumstances that would alter the conclusions of the 2009 MP FEIR with respect to impacts on agricultural resources. However, since original certification of the 2009 MP FEIR in 2009, Appendix G of the CEQA Guidelines has been updated to include impacts on forestry resources.

Analysis of the Proposed Project

The replacement library project site is within the developed campus. All of the developed areas of the campus as well as additional lands to be developed under the 2009 Master Plan were already assessed for impacts on agricultural resources in the 2009 MP FEIR. The proposed project will result in no impact on agricultural resources. The project would not result in a new or more severe impacts related to agricultural resources than previously evaluated and disclosed in the 2009 MP FEIR. No new mitigation is required.

The project site is not zoned as forest land or for timberland production. No forestry resources occur on the site. For these reasons, the proposed project will result in no impact on forestry resources. No mitigation is required.

Findings

For reasons stated above, implementation of the proposed project would result in no impacts on agriculture and forestry resources. Therefore, no new or substantially increased significant impacts would result from the proposed project beyond those analyzed in the 2009 MP FEIR. No new mitigation is required.

4.3 Air Quality

	Potentially Significant New Impact	Less than Significant New Impact with Mitigation	Less than Significant New Impact	Impacts Fully Analyzed in the FEIR
AIR QUALITY - Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions, which exceed quantitative thresholds for ozone precursors)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion

Summary of Analysis in the 2009 MP FEIR

The campus is within the San Francisco Bay Area Air Basin (SFBAAB) which is under the jurisdiction of the Bay Area Air Quality Management District (BAAQMD), the governing authority for air quality planning in the region. The air quality analysis contained in the 2009 MP FEIR found that construction of the facilities associated with implementation of the 2009 Master Plan would generate short-term emissions of fugitive dust and asbestos that could adversely affect local air quality in the vicinity of the construction site. **MP Mitigation Measures AIR-1a** and **AIR-1b** would reduce the impact to a less than significant level.

The air quality analysis contained in the 2009 MP FEIR found that operation of the facilities associated with implementation of the 2009 Master Plan would generate long-term operational emissions of criteria pollutants that would exceed the BAAQMD thresholds and could therefore conflict with or obstruct the implementation of the regional air quality plan. **MP Mitigation Measures AIR-2a** through **AIR-2c** would reduce but not lessen this impact to a less than significant level. As a result, the 2009 MP FEIR concluded that this impact would be significant and unavoidable.

The air quality analysis contained in the 2009 MP FEIR found that implementation of the 2009 Master Plan would increase carbon monoxide concentrations at busy intersections and along congested roadways in the project vicinity but would not expose sensitive receptors to substantial pollution concentrations. The impact would be less than significant. No mitigation is required.

The air quality analysis contained in the 2009 MP FEIR found that implementation of the 2009 Master Plan would not create objectionable odors affecting a substantial number of people. The impact would be less than significant. No mitigation is required.

The air quality analysis contained in the 2009 MP FEIR found that implementation of the 2009 Master Plan could expose individuals to toxic air contaminants (TACs). Sources of TACs around and within the campus include diesel buses and trucks, laboratory emissions, central plant generators and boilers, water heaters/boilers in individual buildings, and emergency generators. New or modified stationary sources of TACs would be required to comply with BAAQMD permit requirements. In addition, the Campus would implement **MP Mitigation Measure AIR-5**. Adherence to BAAQMD permit requirements and implementation of mitigation would reduce this impact to a less than significant level.

The SFBAAB was in 2009 and still is currently designated as a nonattainment area for state and national ozone standards and particulate matter standards. As emissions associated with operation of the 2009 Master Plan would exceed the BAAQMD recommended operational threshold of significance, the 2009 MP FEIR concluded that implementation of the 2009 Master Plan would result in a cumulatively considerable net increase of criteria pollutants for which the project region is in nonattainment under an applicable federal or state ambient air quality standard. Even with the implementation of **MP Mitigation Measures AIR-1** and **AIR-2** discussed above, the emissions of criteria pollutants would still exceed the thresholds and therefore this impact would remain significant and unavoidable.

Change in Circumstances and/or New Information

The analysis of air quality impacts in the 2009 MP FEIR relied on thresholds set forth in an older version of the BAAQMD CEQA Guidelines that dated from 1999. Since then, the BAAQMD's CEQA Guidelines have been updated, with the latest version published in 2017. The updated guidelines include a new set

of significance thresholds and recommended methodologies for evaluation of air quality impacts of projects proposed within the air basin. The current thresholds are summarized below in **Table 1, BAAQMD CEQA Significance Thresholds for Air Pollutant Emissions**, and were used to evaluate the air quality impacts of the proposed project.

**Table 1
BAAQMD CEQA Significance Thresholds for Air Pollutant Emissions**

Pollutant	Construction Thresholds	Operational Thresholds	
	Average Daily emissions (lbs./day)	Average Daily Emissions (lbs./day)	Annual Average Emissions (tons/year)
Criteria Pollutants			
ROG	54	54	10
NOx	54	54	10
PM10	82	82	15
PM2.5	54	54	10
CO	Not Applicable	9.0 ppm (8-hour average) or 20.0 ppm (1-hour average)	
Fugitive Dust	Construction Dust Ordinance or other Best Management Practices	Not Applicable	
Health Risks and Hazards for New Sources			
Excess Cancer Risk	Same as Operational Threshold	10 per one Million	
Chronic or Acute Hazard Index	Same as Operational Threshold	1.0	
Incremental annual average PM2.5	Same as Operational Threshold	0.3 µg/m3	
Health Risks and Hazards for Sensitive Receptors (Cumulative from all sources within 1,000 foot zone of influence) and Cumulative Thresholds for New Sources			
Excess Cancer Risk	Same as Operational Threshold	10 per one Million	
Chronic Hazard Risk	Same as Operational Threshold	1.0	
Annual Average PM2.5	Same as Operational Threshold	0.8 µg/m3	

Source: Bay Area Air Quality Management District, California Environmental Quality Act Air Quality Guidelines, 2017

MP FEIR Mitigation Measures

MP MM AIR-1a: The control measures contained in Table 2 of the *BAAQMD CEQA Guidelines* listed below shall be implemented, as appropriate and feasible, during construction of each project under the proposed Campus Master Plan.

The following Basic Control Measures shall be implemented at all construction sites:

- Water all active construction areas at least twice daily.
- Cover all trucks hauling soil, sand, and other loose materials *or* require all trucks to maintain at least 2 feet of freeboard (i.e., the minimum required space between the top of the load and the top of the trailer).
- Pave, apply water three times daily (or as sufficient to prevent dust from leaving the site), or apply (non-toxic) soil stabilizers on all unpaved access roads, parking areas, and staging areas at construction sites.
- Sweep daily or as appropriate (with water sweepers using reclaimed water if possible) all paved access roads, parking areas, and staging areas at construction sites.
- Sweep streets daily or as appropriate (with water sweepers using reclaimed water if possible) if visible soil material is carried onto adjacent public streets.

In addition to the Basic Control Measures, the following Enhanced Control Measures shall be implemented at construction sites greater than 4 acres in area:

- Hydroseed or apply (non-toxic) soil stabilizers to inactive construction areas (previously graded areas inactive for 10 days or more).
- Enclose, cover, water twice daily (or as sufficient to prevent dust from leaving the site), or apply (non-toxic) soil stabilizers to exposed stockpiles (dirt, sand, etc.).
- Limit traffic speeds on unpaved roads to 15 miles per hour.
- Install sandbags or other erosion control measures to prevent silt runoff to public roadways.
- Replant vegetation in disturbed areas as quickly as possible.

The following Optional Control Measures are strongly encouraged at construction sites that are large in area or located near sensitive receptors, or may, for any other reason, warrant additional emissions reductions:

- Install wheel washers or wash off the tires or tracks of all trucks and equipment leaving the site.
- Install windbreaks or plant trees/vegetative windbreaks at the windward side(s) of construction areas.
- Suspend excavation and grading activity when sustained winds exceed 25 mph.

Analysis of the Proposed Project

The proposed replacement library would be a three story, approximately 100,000 gross square feet (gsf) building. The proposed facility would perform the same functions as the existing library, employ the

same number of library staff as the present library, and serve the same number of patrons as the existing facility; the proposed facility would not result in an increase in campus population.

Construction-related emissions for the proposed project were estimated using the BAAQMD-approved CalEEMod 2016.3.2 model. The project construction would begin in early 2019 and run approximately 24 months. It was assumed that any soil from grading would be balanced on-site without any import or export of soil and that there would be no hauling emissions that would accompany such activities.

Table 2
Unmitigated Construction Emissions by Year (Maximum Daily Pounds Per Day)

Year	ROG	NOx	PM10 (Exhaust)	PM2.5 (Exhaust)
2019	3	20	1	1
2020	52	17	1	1
Maximum	52	20	1	1
<i>Threshold of Significance</i>	54	54	82	54
<i>Exceeds Threshold?</i>	No	No	No	No

Source: Impact Sciences, 2017

As shown in **Table 2, Unmitigated Construction Emissions by Year**, the construction of the proposed project will produce ROG, NOX, PM10 and PM2.5 emissions that do not exceed the BAAQMD’s thresholds. As a result, construction of the proposed project would not contribute substantially to an existing violation or result in a violation of air quality standards for regional pollutants (e.g., ozone). This impact is considered less than significant. In addition, the Campus would implement **MP Mitigation Measure AIR-1a** to further reduce construction emissions. **MP Mitigation Measure AIR-1b** does not apply as construction of the proposed project would not involve demolition. The project would not result in a new or more severe impact related to construction emissions than previously evaluated and disclosed in the 2009 MP FEIR. No new mitigation is required.

The replacement library project would not result in any new operational emissions as there would be no increases in student or employee population at the campus due to the new facility. As a result, no impact would occur with respect to operational emissions of criteria pollutants. For the same reason, carbon monoxide concentrations along congested roadways in the project vicinity would not increase. **MP Mitigation Measure AIR-2** does not apply. The project would not result in new or more severe impacts related to operational emissions and carbon monoxide concentrations than previously evaluated and disclosed in the 2009 MP FEIR. No new mitigation is required.

The proposed project would generate localized emissions of diesel exhaust during construction equipment operation and truck activity. The odor from these emissions may be noticeable from time to time by adjacent receptors. However, they would be localized and are not likely to adversely affect people off site by resulting in confirmed odor complaints. With respect to operation, the proposed project does not include land uses associated with odorous emissions (e.g., waste transfer and recycling stations, wastewater treatment plants, landfills, composting operations, petroleum operations, food and byproduct processes, factories, and agricultural activities, such as livestock operations). For these reasons, the project would have no impact related to generation of odors and would not result in a new or more severe impact related to generation of odors than previously evaluated and disclosed in the 2009 MP FEIR. No new mitigation is required.

The proposed project is a library replacement project and as discussed further below, would not include any operational sources that would emit toxic air contaminants (TACs). However, during the project's 2-year construction period, diesel fuel would be used to operate construction equipment and construction vehicles. Diesel particulate matter (DPM), which is emitted in the exhaust from construction equipment and diesel-fueled vehicles, is listed as a TAC by the California Air Resources Control Board (CARB). In addition to DPM, the BAAQMD guidelines identify PM_{2.5} also as a potential TAC, to be evaluated for its potential to result in health impacts.

Exposure to DPM and PM_{2.5} emissions would have the potential to result in human health effects. Some groups of people are considered more sensitive to adverse effects from air pollution than the general population. The CARB has identified the following persons as most likely to be affected by air pollution: children under 14, the elderly over 65, athletes, and people with cardiovascular and chronic respiratory diseases. These groups are classified as sensitive receptors. Locations that may contain a high concentration of these sensitive population groups include residential areas, hospitals, daycare facilities, elder care facilities, elementary schools, and parks.

According to the BAAQMD CEQA guidelines, a potential for human health effects exists if sensitive receptors are located within 1,000 feet of a TAC source, including construction sites. Sensitive receptors, which include residences, are located near the project site. There are student residences within about 250 feet of the proposed construction, but they do not house small children or infants or elders over 65. The nearest off-campus receptors are approximately 650 feet to the east of the project site. These residences are assumed to include infants or small children, the elderly and people with cardiovascular and chronic respiratory diseases. For typical construction cancer risk assessments, infants are considered the most sensitive receptors because of their higher sensitivity to cancer causing contaminants or TACs, whereas, other populations, including young adults such as college students, are much less sensitive and the exposure periods are relatively short.

A human health risk analysis was conducted using the USEPA AERMOD dispersion model to determine PM2.5 concentrations, and CARB's Hotspots Analysis and Reporting Program (HARP) Risk Assessment Standalone Tool (RAST), and the Office of Environmental Health Hazard Assessment (OEHHA) risk assessment methodology to estimate the potential cancer and non-cancer risk from exposure to the project's construction emissions. Based on the construction schedule for the proposed project, the modeling assumed a two-year exposure period. As noted in the **Project Description**, to minimize TAC emissions, the proposed project includes a best management practice, which requires that all construction equipment used in project construction be equipped with USEPA rated Tier 4 (model year 2008 or newer) engines.

The results of the human health risk assessment indicate that the construction of the proposed project would result in an annual average PM2.5 concentration of approximately 0.002 µg/m³ from construction equipment exhaust, a lifetime excess cancer risk of one per one million at the maximally exposed sensitive receptor to the east of the project site, and a chronic hazard index of less than 0.01 at the same location (see **Appendix A** for detailed calculations). The annual average PM2.5 concentration, excess cancer risk, and chronic hazard risk values are all below the thresholds identified in **Table 1**, and therefore the construction-phase DPM emissions would result in a less than significant impact. The project would not result in a new significant impact related to TACs during construction. No new mitigation is required.

The proposed replacement building would not include any operational sources of toxic air contaminants such as laboratories. Although the project could include a diesel-fired emergency generator, it would be used only to provide power in the event of a disruption in electrical service to the building and therefore would not be a source of ongoing emissions. Although there would be routine testing emissions from the emergency generator, a permit to operate will be required from the BAAQMD that will stipulate the hours of testing yearly and the rate of emissions for the emergency generator. The generator will also comply with the BAAQMD-administrated statewide Air Toxics Control Measure (ATCM) for stationary diesel engines. Furthermore, the project would not generate any new vehicle trips to and from the campus. Therefore, the replacement building would not pose a human health risk to sensitive receptors in proximity of the replacement building site. The impact would be less than significant and **MP Mitigation Measure AIR-5** does not apply as the proposed project does not involve the installation of boilers, chillers, and/or cooling towers. The project would not result in a new or more severe impact related to TACs during operation than previously evaluated and disclosed in the 2009 MP FEIR.

Findings

The potential impacts with respect to air quality from the proposed library replacement project would be similar to or less than the impacts of campus development analyzed in the 2009 MP FEIR. Therefore, no new or substantially increased significant impacts would result from the proposed project beyond those analyzed in the 2009 MP FEIR. No new mitigation is required.

4.4 Biological Resources

	Potentially Significant Impact	Less than Significant New Impact with Mitigation	Less than Significant New Impact	Impacts Fully Analyzed in the FEIR
BIOLOGICAL RESOURCES - Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion:

Summary of Analysis in the 2009 MP FEIR

There is some potential that special status plant species could occur within the grassland and mixed scrub habitats that occur in the potential faculty/staff housing locations. Additionally, three special status bird species (i.e., burrowing owl, Cooper's hawk, white-tailed kite) and five special status bat species (i.e., pallid bat, fringed myotis, long-legged myotis, yuma myotis, and hoary bat) have potential to occur within the central campus and/or the grasslands and mixed scrub area within or bordering the development areas. As a result, the 2009 MP FEIR found that implementation of the 2009 Master Plan could have a substantial adverse effect on special-status plant and wildlife species. **MP Mitigation Measures BIO-1a** through **BIO-1d** would reduce the impact to a less than significant level.

A small drainage and associated bay woodland is located in the far western portion of the campus near a potential faculty/staff housing location. Therefore, the 2009 MP FEIR found that implementation of the 2009 Master Plan could have a substantial adverse effect on a riparian habitat or other sensitive natural community. **MP Mitigation Measure BIO-2** would reduce the impact to a less than significant level.

The small drainage located in the far western portion of the campus near a potential faculty/staff housing location is expected to fall under the jurisdiction of the United States Army Corps of Engineers (USACE). As the final design of faculty/staff housing at this location is not known, there is potential that associated construction activities and infrastructure (e.g., storm drains) could affect areas of the drainage under federal jurisdiction. For this reason, the 2009 MP FEIR found that implementation of the 2009 Master Plan could have a substantial adverse effect on a federally protected wetland. **MP Mitigation Measure BIO-3** would reduce this impact to a less than significant level.

The developed/landscaped central campus supports a high level of human use and activity, which is not favorable for wildlife movement. The undeveloped lands bordering the central campus are also not favorable for wildlife movement given their proximity to development and areas of high human use and activity. As a result, the 2009 MP FEIR concluded that implementation of the 2009 Master Plan would not interfere substantially with the movement of wildlife. This impact would be less than significant. No mitigation is required.

No adopted habitat conservation plan (HCP) or natural community conservation plan (NCCP) applies to the campus. Therefore, the 2009 MP FEIR concluded that there would be no impact with respect to HCP and NCCP. No mitigation is required.

The 2009 MP FEIR concluded that cumulative impacts to sensitive biological resources from reasonably foreseeable development in the City of Hayward and development under the 2009 Master Plan are not anticipated and that development under the 2009 Master Plan would not contribute substantially to the impact.

MP FEIR Mitigation Measures

MP MM BIO-1b: If a construction project is proposed on the campus that would commence anytime during the nesting/breeding season of native bird species potentially nesting/roosting on the site (typically February through August in the project region), a pre-construction survey of the project vicinity for nesting birds shall be conducted.

This survey shall be conducted by a qualified biologist (i.e., experienced with the nesting behavior of bird species of the region) within two weeks of the commencement of construction activities that would occur during the nesting/breeding season. The intent of the survey shall be to determine if active nests of special status bird species or other species protected by the Migratory Bird Treaty Act and/or the California Fish and Game Code are present within the construction zone or within 500 feet of the construction zone. The survey area shall include all trees and shrubs, as well as grassland habitats (which could be utilized by burrowing owls) in the construction zone and a surrounding 500 feet area. The surveys shall be timed such that the last survey is concluded no more than two weeks prior to initiation of construction or tree removal. If ground disturbance activities are delayed following a survey, then an additional pre-construction survey shall be conducted such that no more than two weeks will have elapsed between the last survey and the commencement of ground disturbance activities.

If active nests are found in areas that could be directly affected or are within 500 feet of construction and would be subject to prolonged construction-related noise, a no-disturbance buffer zone shall be created around active nests during the breeding season or until a qualified biologist determines that all young have fledged. The size of the buffer zones and types of construction activities restricted within them will be determined through consultation with the CDFG, taking into account factors such as the following:

- Noise and human disturbance levels at the construction site at the time of the survey and the noise and disturbance expected during the construction activity;
- Distance and amount of vegetation or other screening between the construction site and the nest; and
- Sensitivity of individual nesting species and behaviors of the nesting birds.

Limits of construction to avoid an active nest shall be established in the field with flagging, fencing, or another appropriate barrier, and construction personnel shall be instructed on the sensitivity of nest areas. The biologist shall serve as a construction monitor during those periods when construction activities would occur near active nest areas of special status bird species to ensure that no impacts on these nests occur.

MP MM BIO-1c:

Prior to the commencement of construction activities within grassland habitats occurring during the non-nesting season of burrowing owl (typically September through January), a qualified biologist shall conduct a clearance survey for wintering burrowing owls. The survey shall be conducted no more than 14 days prior to commencement of construction activities. If non-breeding burrowing owls are observed within the disturbance footprint, they would be excluded from all occupied burrows through the use of exclusion devices placed in occupied burrows in accordance with CDFG protocols (CDFG 1995). Specifically, exclusion devices, utilizing one-way doors, shall be installed in the entrance of all active burrows. The devices shall be left in the burrows for at least 48 hours to ensure that all owls have been excluded from the burrows. Each of the burrows would then be excavated by hand and refilled to prevent reoccupation. Exclusion shall continue until the owls have been successfully excluded from the site, as determined by a qualified biologist.

MP MM BIO-1d:

If trees or buildings are to be removed/demolished during the nesting season of native bat species in California (generally April 1 through August 31), the presence of active maternity roosts in trees or buildings shall be evaluated by a qualified biologist prior to their removal. If it is determined that the trees or structures to be removed provide potential bat roosting habitat, a focused survey shall be conducted by a qualified bat biologist to determine if active maternity roosts of special status bats are present. Should an active maternity roost of a special status bat species be identified, the roost shall not be disturbed until the

roost is vacated and juveniles have fledged, as determined by the biologist. Once all young have fledged, the tree or structure may be removed or demolished.

Change in Circumstances and/or New Information

Since the certification of the 2009 MP FEIR both originally in 2009 and its recertification in 2018, there have been no changes in circumstances that would alter the conclusions of the 2009 MP FEIR with respect to biological resource impacts.

Analysis of the Proposed Project

The site of the library replacement project is located in the campus core and thus would not affect special-status plant species that have the potential to be located on the sites of potential faculty/staff housing. No impact would occur and **MP Mitigation Measure BIO-1a** does not apply. The project would not result in a new or more severe impact related to special-status plant species than previously evaluated and disclosed in the 2009 MP FEIR.

Construction of the replacement library project would require the removal of some small trees that are present on the project site and would also occur near trees, and special-status bird and bat species have some limited potential for utilizing the on-site and nearby trees for nesting and/or roosting. **MP Mitigation Measures BIO-1b** through **BIO-1d**, which would be incorporated into the proposed project, would reduce the impacts to special-status birds and bats to a less than significant level. The project would not result in new or more severe impacts related to special-status wildlife species than previously evaluated and disclosed in the 2009 MP FEIR.

No impacts to riparian habitat or wetlands would result due to the proposed replacement library project as it would be located in the campus core and not the far western portion of campus where these resources are present. No impacts would occur and **MP Mitigation Measures BIO-2** and **BIO-3** do not apply. The project would not result in new or more severe impacts related to riparian habitat or wetlands than previously evaluated and disclosed in the 2009 MP FEIR.

The site of the replacement library project is located in the campus core and the area around the campus is not favorable for wildlife movement. In addition, the project site does not fall within the boundaries of, nor is it adjacent to, an area covered by an adopted regional HCP or NCCP. For these reasons, the proposed project would not interfere with wildlife movement nor would it conflict with an adopted regional HCP or NCCP. No impacts would occur and the project would not result in new or more severe impacts related to wildlife movement and an adopted HCP or NCCP than previously evaluated and disclosed in the 2009 MP FEIR. No new mitigation is required.

Findings

The potential impacts with respect to biological resources from the proposed library replacement project would be similar to or less than the impacts of campus development analyzed in the 2009 MP FEIR. Therefore, no new or substantially increased significant impacts would result from the proposed project beyond those analyzed in the 2009 MP FEIR. No new mitigation is required.

4.5 Cultural Resources

	Potentially Significant New Impact	Less than Significant New Impact with Mitigation	Less than Significant New Impact	Impacts Fully Analyzed in the FEIR
CULTURAL RESOURCES - Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion:

Summary of Analysis in the 2009 MP FEIR

There are no known archaeological sites on the campus. Furthermore, much of the development on the campus under the 2009 Master Plan would occur within the previously disturbed and developed central campus. However, since no surveys are known to have been conducted, it is assumed that there is potential for such resources to exist on those portions of the campus that have not been previously graded or disturbed in a substantial manner or even within the central campus in areas where the previous grading was not substantial. As a result, the 2009 MP FEIR concluded that implementation of the 2009 Master Plan could cause a substantial adverse change in the significance of an archaeological resource through damage or destruction that could occur as a result of grading, excavation, ground disturbance or other project development. **MP Mitigation Measures CULT-1a to CULT-1c** would reduce this impact to a less than significant level.

At the time the 2009 MP FEIR was prepared, all of the structures on the campus were less than 50 years of age at this time, and therefore, did not qualify as historic structures at that time. However, the EIR noted that several structures would be over 50 years or older before or by 2030 which is the year of buildout of the 2009 Master Plan, and their historic significance could change between the time that the EIR was prepared and the time that they are proposed for removal or alteration. Therefore, the 2009 MP FEIR

concluded that implementation of the 2009 Master Plan could cause a substantial adverse change in the significance of a historical building or structure, as a result of alteration, removal, or demolition of the building, or alteration of the site associated with campus development. **MP Mitigation Measures CULT-2a** and **CULT-2b** would lessen but not reduce this impact to a less than significant level. As a result, the 2009 MP FEIR concluded that this impact would be significant and unavoidable.

Although no human remains have been encountered during the construction of buildings and other improvements on the campus, development under the 2009 Master Plan that includes excavation and grading has the potential to uncover, displace, and destroy human remains. For this reason, the 2009 MP FEIR concluded that implementation of the 2009 Master Plan could disturb human remains, including those interred outside of formal cemeteries. **MP Mitigation Measures CULT-3a** to **CULT-3d** would reduce this impact to a less than significant level.

Much of the development on the campus under the 2009 Master Plan would occur within the previously disturbed and developed central campus. Because of the extensive grading and disturbance that has already occurred within the central campus, the potential to encounter intact paleontological resources or unique geologic resources in conjunction with future development is very low. In addition, the campus site is not underlain by geologic formations that are considered sensitive for paleontological resources or unique geologic resources. As a result, the 2009 MP FEIR concluded that implementation of the 2009 Master Plan would not disturb or destroy unique paleontological or geologic resources. This impact is less than significant. To ensure that the impact remains less than significant, the Campus would implement **MP Mitigation Measures CULT-4a** and **CULT-4b**.

The 2009 MP FEIR concluded that with mitigation, cumulative impacts to cultural resources from reasonably foreseeable development in the City of Hayward and development under the 2009 Master Plan would be less than significant.

MP FEIR Mitigation Measures

MP MM CULT-1a: During the planning and environmental review of specific development projects under the 2009 Master Plan, for projects proposed on previously undisturbed campus lands, the Campus shall retain a qualified archaeologist to conduct a pedestrian survey of the site to evaluate the potential for archaeological resources to occur on the project site. If archaeological resources are encountered, MP Mitigation Measure CULT-1c will apply.

MP MM CULT-1b: Regardless of the location of the project on the campus, all construction contracts for campus projects shall include a standard inadvertent discovery clause, which

requires that if an archaeological resource is discovered during construction (whether or not an archaeologist is present), all soil-disturbing work within 100 feet of the find shall cease, and the Campus shall implement MP Mitigation Measure CULT-1c.

MP MM CULT-1c: For an archaeological site that is encountered during the pedestrian survey conducted on a project site or during construction, the Campus shall:

- Retain a qualified archaeologist to determine whether the resource qualifies as an historical resource or a unique archaeological resource.
- If the resource is determined to be a historical resource or a unique archaeological resource, the qualified archaeologist, in consultation with the Campus, shall prepare a research design and archaeological data recovery plan for the recovery of the categories of data for which the site is significant, and implement the data recovery plan prior to or during development of the site. The archaeologist shall also perform appropriate technical analyses, prepare a full written report and file it with the appropriate information center, and provide for the permanent curation of recovered materials.

MP MM CULT-3a: The Campus shall implement MP Mitigation Measure CULT-1 to minimize the potential for disturbance or destruction of human remains in an archaeological context and to preserve them in place, if feasible.

MP MM CULT-3b: The Campus shall arrange for a representative of the local Native American community to monitor any excavation (including archaeological excavation) within the boundaries.

MP MM CULT-3c: In the event of a discovery of human bone, suspected human bone, or a burial, all excavation in the vicinity will halt immediately and the area of the find will be protected until a qualified archaeologist determines whether the bone is human. If the qualified archaeologist determines the bone is human, or if a qualified archaeologist is not present, the Campus will notify the County of Alameda Medical Examiner before additional disturbance occurs. The Campus will ensure that the remains and vicinity of the find are protected against further disturbance until the Coroner has made a finding with regard to PRC 5097 procedures, in compliance with California Health and Safety Code Section 7050.5(b). If it is determined that the find is of Native American origin, the Campus will comply with the provisions of PRC Section 5097.98 regarding identification and involvement of the Native American Most Likely Descendant (MLD).

MP MM CULT-3d: If human remains cannot be left in place, the Campus shall ensure that the qualified archaeologist and the MLD consult regarding archaeological treatment of human remains, and that appropriate studies, as identified through this consultation, are carried out prior to interring the remains. The Campus shall provide results of all such studies to the local Native American community, and shall provide an opportunity for local Native American involvement in any interpretative reporting. As stipulated by the provisions of the California Native American Graves Protection and Repatriation Act, the Campus shall ensure that human remains and associated artifacts recovered from campus projects on state lands are repatriated to the appropriate local tribal group if requested.

MP MM CULT-4a: As part of the construction contract, the Campus shall inform construction contractors to watch for paleontological resources during grading and excavation and to inform the campus immediately if such resources are encountered.

MP MM CULT-4b: If paleontological resources are discovered, all ground-disturbing activities within 100 feet of the find will be halted and a qualified paleontologist will be retained by the Campus to evaluate the find and recommend appropriate handling and treatment of the find. If the find is determined to be significant or potentially significant, the paleontologist will design and carry out a data recovery plan consistent with the Standards of the Society of Vertebrate Paleontologists. Adequate recordation and recovery would, at a minimum, include the following:

- Development of a site specific environmental and contextual information
- Archival research
- Excavation of the resource and its accurate recordation
- For a significant major find, identification of a museum or repository for curation of the resource

Change in Circumstances and/or New Information

Since the certification of the 2009 MP FEIR both originally in 2009 and its recertification in 2018, there have been no changes in circumstances that would alter the conclusions of the 2009 MP FEIR with respect to cultural resource impacts. Assembly Bill (AB) 52 was approved in September 2014 and became effective on July 1, 2015. AB 52 is focused on the protection of tribal cultural resources (TRCs) and

requires that CEQA lead agencies consult with California Native American tribes that are traditionally and culturally affiliated with the geographic area of a project, if so requested by the tribes. AB 52 applies only to projects where the Notice of Preparation (NOP) for the EIR was filed after July 1, 2015.

Analysis of the Proposed Project

No structures are located on the project site. No impact would occur and **MP Mitigation Measure CUL-2** would not apply. The project would not result in a new or more severe impact related to historical architectural resources than previously evaluated and disclosed in the 2009 MP FEIR.

As ground disturbing activities will be minimal on the project site, the probability of uncovering archeological and paleontological resources is low. However, unknown archaeological resources, paleontological resources, and/or burial sites have the potential to be present on the project site, similar to the conclusions included in the 2009 MP FEIR. **MP Mitigation Measures CUL-1, CUL-3, and CUL-4** are incorporated into and a part of the project and would ensure that any archaeological resources, paleontological resources or human remains encountered during construction are properly handled and protected. The project would not result in new or more severe impacts related to archaeological resources, paleontological resources or human remains than previously evaluated and disclosed in the 2009 MP FEIR. No new mitigation is required.

The proposed project is within the scope of the 2009 Master Plan and therefore, its cumulative impacts are adequately addressed in the 2009 MP FEIR. Although the 2009 MP FEIR concluded that there would be significant and unavoidable cumulative impacts related to historical architectural resources, the proposed project would not contribute to the impact.

As stated above, AB 52 applies to projects where the Notice of Preparation (NOP) for the EIR was filed after July 1, 2015. The NOP for the 2009 MP FEIR was filed in September 2008, which predates AB 52. Therefore, the 2009 MP FEIR did not include an assessment of impacts on TRCs. As this addendum shows, the proposed project is adequately analyzed in the FEIR and no new EIR or NOP is necessary. Because the project is within the scope of the previously approved planned development and because no new EIR or NOP is required, the proposed project is not subject to AB 52.

Findings

The potential impacts with respect to cultural resources from the proposed library replacement project would be similar to or less than the impacts of campus development analyzed in the 2009 MP FEIR. Therefore, no new or substantially increased significant impacts would result from the proposed project beyond those analyzed in the 2009 MP FEIR. No new mitigation is required.

4.6 Geology and Soils

	Potentially Significant New Impact	Less than Significant New Impact with Mitigation	Less than Significant New Impact	Impacts Fully Analyzed in the FEIR
GEOLOGY AND SOILS - Would the project:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion:

Summary of Analysis in the 2009 MP FEIR

There are no active faults on the campus although the campus is located only 0.18 mile from the active Hayward fault. However, severe seismic ground shaking and related ground failure is a possibility in the

area of the campus, and portions of the campus have potential for ground failure related to liquefaction and landsliding. As a result, the 2009 MP FEIR concluded that while development under the 2009 Master Plan would not expose people and structures on campus to substantial adverse effects associated with fault rupture, it could expose people and structures on campus to substantial adverse effects related to seismic ground shaking or seismic-related ground failure, including liquefaction, lateral spreading, landslides, and/or settlement. Compliance with the California Building Code (CBC) and implementation of **MP Mitigation Measure GEO-1** would reduce this impact to a less than significant level.

Construction of facilities anticipated under the 2009 Master Plan would result in short-term soil-disturbing activities that could lead to increased erosion, including cut and fill, grading, trenching, boring, and removal of trees and other vegetation. To comply with National Pollutant Discharge Elimination System (NPDES) requirements for construction site storm water discharges, projects involving construction sites that are 1 acre or more are required to prepare and implement a storm water pollution prevention plan (SWPPP). Therefore, the 2009 MP FEIR concluded that development under the 2009 Master Plan would not result in substantial erosion of soils during construction. This impact is less than significant. No mitigation is required.

Portions of the campus are located on expansive soils. For this reason, the 2009 MP FEIR concluded that unstable soils could be located where buildings are proposed. Compliance with the CBC and **MP Mitigation Measure GEO-1** would reduce this impact to a less than significant level.

The 2009 MP FEIR concluded that cumulative impacts involving seismic ground shaking and related ground failure will be less than significant as reasonably foreseeable development in the City of Hayward and development under the 2009 Master Plan would comply with CBC requirements.

MP FEIR Mitigation Measures

MP MM GEO-1: Where existing geotechnical information is not adequate, detailed geotechnical investigations shall be performed for areas that will support buildings or foundations. Such investigations for building or foundation projects on the CSUEB Hayward campus will comply with the California Geological Survey's *Guidelines for Evaluating and Mitigating Seismic Hazards in California* (Special Publication 117), which specifically address the mitigation of liquefaction and landslide hazards in designated Seismic Hazard Zones (CGS 2003). All recommendations of the geotechnical investigations will be incorporated into project designs. Recommendations for buildings located near mapped faults,

prepared by the California State University seismic review committee, shall be reviewed prior to project design.

Change in Circumstances and/or New Information

Since the certification of the 2009 MP FEIR both originally in 2009 and its recertification in 2018, there have been no changes in circumstances that would alter the conclusions of the 2009 MP FEIR with respect to soil and geologic impacts.

Analysis of the Proposed Project

The replacement library project could result in the exposure of people or structures to geological hazards associated with severe seismic ground shaking and related ground failure, similar to the conclusions included in the 2009 MP FEIR. In addition, the project site could contain expansive soil, and thus create substantial risks to life and property. The proposed project would comply with the CBC and **MP Mitigation Measure GEO-1** would be incorporated into the project to ensure that the Campus performs a geotechnical investigation of the project site to evaluate the potential for liquefaction and other types of ground failure and expansive soils. This impact is less than significant and the project would not result in a new or more severe impact related to geological hazards than previously evaluated and disclosed in the 2009 MP FEIR. No new mitigation is required.

Similar to campus development analyzed in the 2009 MP FEIR, short-term soil erosion could occur during ground disturbing activities associated with the proposed project. A storm water pollution prevention plan (SWPPP) would be prepared and implemented, as required by state law, that would minimize erosion. The project would not result in a new or more severe impact related to soil erosion than previously evaluated and disclosed in the 2009 MP FEIR. No new mitigation is required.

The proposed project is within the scope of the 2009 Master Plan and therefore, its cumulative impacts are adequately addressed in the 2009 MP FEIR.

Findings

The potential impacts with respect to aesthetics and visual resources from the proposed library replacement project would be similar to or less than the impacts of campus development analyzed in the 2009 MP FEIR. Therefore, no new or substantially increased significant impacts would result from the proposed project beyond those analyzed in the 2009 MP FEIR. No new mitigation is required.

4.7 Greenhouse Gas Emissions

	Potentially Significant New Impact	Less than Significant New Impact with Mitigation	Less than Significant New Impact	Impacts Fully Analyzed in the FEIR
GREENHOUSE GAS EMISSIONS - Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion:

Summary of Analysis in the 2009 MP FEIR

The greenhouse gas (GHG) emissions analysis contained in the 2009 MP FEIR found that although the 2009 Master Plan would result in GHG emissions, its contribution to the significant cumulative impact associated with GHG emissions would not be cumulatively considerable. This impact is less than significant. No mitigation is required.

Change in Circumstances and/or New Information

The analysis of GHG emissions in the 2009 MP FEIR were based on methodology presented by the California Air Resources Board in 2008 which proposed that California Energy Commission Tier II building energy use standards be applied, which generally require a reduction in energy usage of 30 percent beyond Title 24 building code requirements. Since then, the BAAQMD has published updated BAAQMD CEQA Guidelines (BAAQMD 2017) that include a set of significance thresholds and recommended methodologies that may be used to evaluate the impact of a project's GHG emissions. Significance thresholds put forth in the BAAQMD CEQA Guidelines are listed below in **Table 3, GHG Significance Thresholds**.

Table 3
GHG Significance Thresholds

Pollutant	Construction	Operation
Greenhouse Gases	No threshold	1,100 MTCO ₂ e/yr; or 4.6 MTCO ₂ e/SP/yr

*Source: Bay Area Air Quality Management District, California Environmental Quality Act Air Quality Guidelines, (2017) 2-1.
MTCO₂e = metric tons of carbon dioxide equivalents; SP = service persons (residents plus employees) associated with the proposed project.*

The BAAQMD guidelines recommend quantifying and reporting GHG emissions from a project’s construction activities, but do not provide quantitative significance thresholds. Operational emissions of a project may be compared to an absolute threshold of 1,100 metric tons of carbon dioxide equivalents per year (MTCO₂e/yr) or an efficiency standard of 4.6 MTCO₂e/SP/yr, where SP refers to service persons (residents plus employees) associated with the proposed project.

Analysis of the Proposed Project

Construction phase GHG emissions were estimated using the CalEEMod model in the same manner as used to predict criteria air pollutants. Construction phases included site preparation, site grading, some paving, building construction, and application of architectural coatings. Annual CO₂ emissions associated with construction would occur from 2019 into 2020. Construction of the project would emit an estimated 295 metric tons (MT) of CO₂e in 2019 and 288 MT of CO₂e in 2020. The BAAQMD has not established quantified thresholds for construction activities. However, given the low emissions during each year of construction and the temporary nature of these emissions, the impact from the project’s construction phase GHG emissions is considered less than significant. No mitigation is required.

The proposed project would not result in any new operational GHG emissions as there would be no increases in student or employee population at the campus as a result of the new facility. In fact, the proposed project would likely result in lower GHG emissions during operation as the replacement library would provide less space than the west wing of the existing library that it is replacing and as a new building, it is expected to be more energy efficient than the existing library. As a result, no impact would occur with respect to operational phase GHG emissions. The project would not result in a new or more severe impact related to operational phase GHG emissions than previously evaluated and disclosed in the 2009 MP FEIR. No mitigation is required.

Findings

The potential impacts with respect to GHG emissions from the proposed library replacement project would be similar to or less than the impacts of campus development analyzed in the 2009 MP FEIR. Therefore, no new or substantially increased significant impacts would result from the proposed project beyond those analyzed in the 2009 MP FEIR. No new mitigation is required.

4.8 Hazards and Hazardous Materials

	Potentially Significant New Impact	Less than Significant New Impact with Mitigation	Less than Significant New Impact	Impact Fully Analyzed in the FEIR
HAZARDS AND HAZARDOUS MATERIALS- Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) For a project located within an airport land use plan or, where such plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Expose people or structures to a significant risk of loss, injury or death involving wild land fires, including where wild lands are adjacent to urbanized areas or where residences are intermixed with wild lands?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion:

Summary of Analysis in the 2009 MP FEIR

Laboratories and other facilities constructed under the 2009 Master Plan would comply with all standards related to the use and storage of hazardous materials. In addition, while the use of hazardous materials on the campus would likely increase, the Campus will continue to comply with all hazardous materials standards related to transport. Finally, adherence to the Campus spill response guidelines and compliance with all applicable regulations related to the use, storage, and transport of hazardous materials will minimize the potential for accidental spills and release of materials to the environment. For these reasons, the 2009 MP FEIR concluded that campus development and activities under the 2009 Master Plan would not create significant hazards to the public or the environment from the use, storage and transport of hazardous materials under routine or upset conditions.

At the time the 2009 MP FEIR was prepared there was one existing childcare center on the campus. There are no existing schools within 0.25 mile of the campus boundary and no new schools are planned at this time within this radius of the campus. Although hazardous materials use and waste generation within 0.25 mile of the childcare center will likely increase as a result of campus growth under the 2009 Master Plan, these materials will not exist in quantities sufficient to pose a risk to occupants of the childcare center or campus community. In addition, the Campus will continue to comply with federal and state regulations, and will continue to implement existing campus safety programs and procedures. As a result, the 2009 MP FEIR concluded that campus development and activities under the 2009 Master Plan would not create significant hazards to the public or the environment, such that existing or proposed adjacent schools may be affected. This impact is less than significant. No mitigation is required.

A search of the governmental databases indicated that a leaking underground storage tank (LUST) located west of the Student Services & Administration building released approximately 750 gallons of diesel fuel before removal in 1988. Records did not indicate if the contaminated site was remediated. Therefore, the 2009 MP FEIR concluded that excavation and other ground disturbing activities associated with the construction of a new facility on the campus in the area of the previous LUST could encounter contaminated soils or groundwater, and potentially expose construction workers, campus occupants or the public to these materials. Implementation of **MP Mitigation Measure HAZ-3** would reduce this impact to a less than significant level.

Hazardous materials could be encountered in campus buildings when they are demolished or remodeled under the 2009 Master Plan. For this reason, the 2009 MP FEIR concluded that demolition or renovation of buildings under the 2009 Master Plan could expose construction workers, campus occupants or the

public to contaminated building materials. Implementation of **MP Mitigation Measure HAZ-4** would reduce this impact to a less than significant level.

The 2009 MP FEIR concluded that implementation of the Master Plan would not expose people on the project site to any safety hazards related to public airports or private airstrips because the campus is approximately four miles east of the Hayward Airport, and is also not located in the vicinity of a private airstrip. No impact would occur and no mitigation is required.

Consistent with the Campus' current procedure, as new buildings are built on the campus under the 2009 Master Plan, an Emergency Operations Plan (EOP) would be developed for each new building. Furthermore, campus growth under the 2009 Master Plan would not interfere with the campus EOP through construction-related road closures. As a result, the 2009 MP FEIR concluded that campus development under the 2009 Master Plan would not interfere physically with the Campus' EOP. To ensure that these procedures and notification requirements will continue under the 2009 Master Plan, the Campus would implement **MP Mitigation Measures HAZ-5a and HAZ-5b**.

New buildings and spaces constructed under the 2009 Master Plan in general would be added to the already developed portion of the campus. With the exception of some expansion of student housing in the southern portion of the campus and potential location of faculty/staff housing south of Grandview Avenue, all new development would be sufficiently distant from open space areas that surround the campus and have the potential for wildland fires. With respect to student and faculty/staff housing that is adjacent to open grassland areas, all buildings would be designed and constructed in conformance with the CBC and with applicable fire code safety requirements. In addition, all new landscaping in the areas surrounding the new housing will be developed to minimize the threat of wildland fire damage to facilities and personnel and the Campus will manage vegetation in adjacent areas to reduce fuel load. Therefore, the 2009 MP FEIR concluded that campus development under the 2009 Master Plan would not expose people or structures to a significant risk of loss, injury, or death involving wildland fires. This impact is less than significant. No mitigation is required.

The 2009 MP FEIR concluded that cumulative impacts associated with hazards and hazardous materials will be less than significant as reasonably foreseeable development in the City of Hayward and development under the 2009 Master Plan would comply with hazardous materials laws which are designed to avoid and minimize adverse impacts on public health, safety, and the environment.

MP FEIR Mitigation Measures

MP MM HAZ-5a: The Campus shall require new construction under the 2009 Master Plan to adhere to the following standards already established by Facilities Planning & Operations:

- Construction work shall be conducted so as to ensure the least possible obstruction to traffic.
- Contractors shall notify the Campus Representative at least two weeks before any road closure.
- When paths, lanes, or roadways are blocked, detour signs shall be installed to clearly designate an alternate route.
- Fire hydrants shall be kept accessible to firefighting equipment at all times.
- To ensure adequate access for emergency vehicles when construction projects will result in temporary lane or roadway closures, campus police and dispatchers shall be notified of the closures and alternative travel routes.

MP MM HAZ-5b: New or updated building and/or department-specific EOPs shall be developed for any new development project.

Change in Circumstances and/or New Information

Since the certification of the 2009 MP FEIR both originally in 2009 and its recertification in 2018, there have been no changes in circumstances that would alter the conclusions of the 2009 MP FEIR with respect to hazards and hazardous materials impacts.

Analysis of the Proposed Project

Although small quantities of hazardous materials would be used in the construction of the proposed project, compliance with local, state, and federal regulations would minimize risks associated with the routine transport, use, or disposal of hazardous materials during construction activities. Any hazardous materials used during the occupancy of the proposed building would be limited to those typically used in academic support and standard maintenance activities (e.g., solvents, paints, cleaning agents), similar to materials used for cleaning and maintenance in the existing campus library. The use of all hazardous materials during occupancy would be required to comply with stringent local, state, and federal regulations on hazardous materials use. Given the types and small quantities of hazardous materials that would be used as well as stringent regulations, the impacts related to the routine transport, use, and disposal of hazardous materials or the release of materials into the environment would be less than

significant, similar to the conclusions included in the 2009 MP FEIR. The project would not result in new or more severe impacts related to the routine transport, use, and disposal of hazardous materials or the release of materials into the environment than previously evaluated and disclosed in the 2009 MP FEIR. No mitigation is required.

A childcare center is no longer located on the campus and no existing or proposed schools are within 0.25 mile of the campus boundary. For these reasons, the proposed project would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school. No impact would occur and the project would not result in a new or more severe impact related to hazardous emissions or the handling of hazardous materials within 0.25 mile of a school than previously evaluated and disclosed in the 2009 MP FEIR. No mitigation is required.

The site of the replacement library is located in the campus core approximately 750 feet from the site of the LUST that is to the west of the Student Services & Administration building. Since certification of 2009 MP FEIR, the LUST site has been remediated and the case has been closed (SWRCB 2018). Given the distance of the project site from the LUST site and its status, this impact is less than significant and **MP Mitigation Measure HAZ-3** would not apply. The project would not result in a new or more severe impact related to the exposure of persons to hazardous materials during construction than previously evaluated and disclosed in the 2009 MP FEIR.

As no structures are located on the project site, the proposed library replacement project would not result in the demolition or renovation on an existing structure. No impact would occur and **MP Mitigation Measure HAZ-4** would not apply. The project would not result in a new or more severe impact related to the exposure of persons to hazardous materials during demolition than previously evaluated and disclosed in the 2009 MP FEIR.

The project site is located within the campus core and therefore is not located within the vicinity of a public airport or private airstrip. As a result, the project would not result in a safety hazard for people residing or working on the site. Similar to the conclusion included in the 2009 MP FEIR, no impact would occur. The project would not result in a new or more severe impact related to safety hazards due to aircraft than previously evaluated and disclosed in the 2009 MP FEIR. to the exposure of persons to hazardous materials during construction. No new mitigation is required.

Consistent with the Campus' current procedure, an EOP would be developed for the proposed replacement library. Furthermore, implementation of the proposed project would not interfere with the campus EOP through construction-related road closures. The impact would be less than significant and the project would not result in a new or more severe impact related to interference with an EOP than

previously evaluated and disclosed in the 2009 MP FEIR. To ensure that campus procedures and road closure notification requirements are followed **MP Mitigation Measure HAZ-5** is incorporated into the project to ensure that the construction of the proposed project would adhere to campus standards and that an EOP be developed prior to occupancy. No new mitigation is required.

The site of the replacement library is located in the campus core and thus would be sufficiently distant from open space areas that surround the campus that have the potential for wildland fires. No impact would occur and the project would not result in a new or more severe impact related to wildland fires than previously evaluated and disclosed in the 2009 MP FEIR. No new mitigation is required.

The proposed project is within the scope of the 2009 Master Plan and therefore, its cumulative impacts are adequately addressed in the 2009 MP FEIR.

Findings

The potential impacts with respect to hazards and hazardous materials from the proposed library replacement project would be similar to or less than the impacts of campus development analyzed in the 2009 MP FEIR. Therefore, no new or substantially increased significant impacts would result from the proposed project beyond those analyzed in the 2009 MP FEIR. No new mitigation is required.

4.9 Hydrology and Water Quality

	Potentially Significant New Impact	Less than Significant New Impact with Mitigation	Less than Significant New Impact	Impact Fully Analyzed in the FEIR
HYDROLOGY AND WATER QUALITY - Would the project:				
a) Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner, which would result in substantial erosion or siltation on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner, which would result in flooding on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Place within a 100-year flood hazard area structures, which would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	Potentially Significant New Impact	Less than Significant New Impact with Mitigation	Less than Significant New Impact	Impact Fully Analyzed in the FEIR
j) Inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion:

Summary of Analysis in the 2009 MP FEIR

Individual construction projects associated with the 2009 Master Plan that involve 1 acre or more of land disturbance would be required to comply with the NPDES General Construction Permit, which includes the preparation of a SWPPP. In addition, all construction on campus would comply with CSUEB standard stormwater management practices and engineering controls, which require the control and minimization of stormwater pollutants originating from construction sites as a standard part of contract specifications. As a result, the 2009 MP FEIR concluded that water quality impacts during construction would be less than significant. No mitigation is required.

The 2009 Master Plan would result in a small increase in impervious surfaces on the campus, and this increase in impervious surfaces could potentially increase both the peak flows and the volume of site runoff which in turn could result in erosion and sedimentation in creeks that receive campus runoff (hydromodification impacts). Furthermore, an increase in impervious surfaces and increased human activity could also result in degradation of the quality of site runoff. According to the 2009 Master Plan, in order to encourage sustainable development on the campus, each new building project will be required to develop a stormwater management plan that addresses both the quantity and quality of runoff by reducing impervious cover, promoting infiltration, and capturing and treating stormwater runoff. In addition, future development on the campus will incorporate low impact development (LID) features appropriate for the campus site and the 2009 Master Plan would include several best management practices (BMPs) to encourage infiltration and improve water quality. As a result, it is anticipated that both the peak flows as well as the total volume of stormwater runoff at buildout of the 2009 Master Plan would be significantly less than the existing condition. Therefore, the 2009 MP FEIR concluded that the water quality impacts during operation would be less than significant. To ensure that stormwater controls are carefully evaluated and incorporated into future development projects, the Campus will implement **MP Mitigation Measure HYDRO-2**.

The storm drain system included in the 2009 Master Plan would be designed to convey on-site stormwater flows and prevent on-site or off-site flooding. In addition, the volume of stormwater would

decrease under the 2009 Master Plan as discussed above. For this reason, the 2009 MP FEIR concluded that development of the campus under the 2009 Master Plan would not substantially alter the existing drainage patterns in a way that would result in on- or off-site flooding. This impact is less than significant. No mitigation is required.

The campus and the surrounding area do not have any significant groundwater resources and the City of Hayward does not depend on local groundwater supplies to meet domestic and industrial needs. In addition, although there would be a slight increase in impervious surfaces on the campus, the decrease in groundwater recharge would not be proportional because the Campus plans to infiltrate stormwater to the maximum extent possible. As a result, the 2009 MP FEIR concluded that implementation of the 2009 Master Plan would not substantially deplete groundwater or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table. This impact is less than significant. No mitigation is required.

The campus is not within a FEMA-designated 100-year flood zone. In addition, the campus is not located within the inundation pathways of nearby reservoirs. Therefore, the 2009 MP FEIR concluded that implementation of the 2009 Master Plan would not place housing or structures that would impede or redirect flood flows within a 100-year flood hazard area or dam inundation zone. This impact is less than significant. No mitigation is required.

The campus is located in the Hayward hills approximately 5.5 miles from the San Francisco Bay. For this reason, the 2009 MP FEIR concluded that development on the campus under the 2009 Master Plan would not be affected by inundation associated with a tsunami or seiche event. No impact would occur. No mitigation is required.

The 2009 MP FEIR concluded that cumulative impacts associated with hydrology and water quality would be less than significant as reasonably foreseeable development in the City of Hayward and development under the 2009 Master Plan would adhere to NPDES requirements and existing stormwater regulations, avoid any increases in peak flows, not require the use of groundwater, and would not place structures with a 100-year flood plain.

MP FEIR Mitigation Measures

MP MM HYDRO-2: During the design review phase of each future development project on the campus, the Campus will verify that the stormwater BMPs were evaluated for the proposed project and those determined to be appropriate were incorporated into the proposed project. The Campus will also verify that post-development runoff from the project site will approximate pre-development runoff volumes.

Change in Circumstances and/or New Information

Since the certification of the 2009 MP FEIR both originally in 2009 and its recertification in 2018, there have been no changes in circumstances that would alter the conclusions of the 2009 MP FEIR with respect to hydrology and water quality impacts.

Analysis of the Proposed Project

In compliance with NPDES regulations, the construction contractor would be required to implement a SWPPP, which will include erosion and pollution control measures to control the release of pollutants and sediment into receiving waters. As a result, the impact on water quality from construction activities would be less than significant, similar to the conclusions of the 2009 MP FEIR. The project would not result in a new or more severe impact related to water quality during construction than previously evaluated and disclosed in the 2009 MP FEIR. No new mitigation is required.

The development of the proposed project would slightly increase the amount of impervious surfaces on the project site and thus would increase the amount of runoff generated on the project site. To improve the quality of run-off during operation, the Campus will develop a stormwater management plan for the project that addresses both the quantity and quality of runoff. In addition, the proposed project will incorporate LID features appropriate for the site. Therefore, similar to the conclusions included in the 2009 MP FEIR, water quality impacts during operation would be less than significant. To ensure that storm water controls are carefully evaluated and incorporated into site design and the project does not result in any downstream impacts, **MP Mitigation Measure HYDRO-2** is incorporated into the project. The project would not result in new or more severe impacts related to water quality during operation than previously evaluated and disclosed in the 2009 MP FEIR. No new mitigation is required.

There are no existing flooding problems on the project site, and the project built on-site would be designed to control for on-site flooding. The proposed project will also incorporate LID features appropriate for the site that will at a minimum ensure that project runoff rates and durations not exceed estimated pre-project rates and duration, thus preventing flooding on- or off-site. For these reasons, existing drainage patterns on the site would not be substantially altered in a way that would result in on- or off-site flooding. This impact is less than significant, similar to the conclusions included in the 2009 MP FEIR. The project would not result in a new or more severe impact related to on- or off-site flooding than previously evaluated and disclosed in the 2009 MP FEIR. No new mitigation is required.

The proposed project would not draw water from groundwater sources nor substantially increase impervious surfaces. Therefore, operation of the proposed project would not substantially deplete groundwater supplies such that there would be a net deficit in aquifer volume or a lowering of the local

groundwater table level. As a result, similar to the conclusions included in the 2009 MP FEIR, this impact would be less than significant. The project would not result in a new or more severe impact related to groundwater use and recharge than previously evaluated and disclosed in the 2009 MP FEIR. No new mitigation is required.

The project site is not located within a FEMA-designated 100-year flood zone (FEMA 2009) nor is it located within the inundation area of any nearby dam. Therefore, the proposed project would not place structures that would impede or redirect flood flows within a 100-year flood hazard area or dam inundation zone. As a result, this impact is less than significant, similar to the conclusions included in the 2009 MP FEIR. The project would not result in a new or more severe impact related to impeding or redirecting flood flows than previously evaluated and disclosed in the 2009 MP FEIR. No new mitigation is required.

Due to its elevation and distance from the ocean and San Francisco Bay, the project site would not be affected by inundation by a tsunami or seiche event. Therefore, similar to the conclusions included in the 2009 MP FEIR, no impact would occur. The project would not result in a new or more severe impact related to tsunami or seiche events than previously evaluated and disclosed in the 2009 MP FEIR. No mitigation is required.

The proposed project is within the scope of the 2009 Master Plan and therefore, its cumulative impacts are adequately addressed in the 2009 MP FEIR.

Findings

The potential impacts with respect to hydrology and water quality from the proposed library replacement project would be similar to or less than the impacts of campus development analyzed in the 2009 MP FEIR. Therefore, no new or substantially increased significant impacts would result from the proposed project beyond those analyzed in the 2009 MP FEIR. No new mitigation is required.

4.10 Land Use and Planning

	Potentially Significant New Impact	Less than Significant New Impact with Mitigation	Less than Significant New Impact	Impact Fully Analyzed in the FEIR
LAND USE AND PLANNING - Would the project:				
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to, the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion:

Summary of Analysis in the 2009 MP FEIR

All development associated with the 2009 Master Plan, including the academic, support, recreation, housing, parking, and roadways, would be located within or immediately adjacent to the existing development on the campus. As a result, the 2009 MP FEIR concluded that growth and development under the 2009 Master Plan would not physically divide an established community. No mitigation is required.

While the campus is not subject to local land use regulations, the Campus maintains cooperative relations with local governments regarding planning and land use issues to assure that mutual interests are addressed. The 2009 Master Plan would not conflict with the City's General Plan land use designation and zoning for the campus. In addition, the 2009 Master Plan would not conflict with pertinent strategies listed within the Hayward Highlands Neighborhood Plan, which governs adjacent land uses to the north and east. Finally, the 2009 Master Plan does not propose land uses that are substantially incompatible with uses adjacent to the campus. Therefore, the 2009 MP FEIR concluded that growth and development under the 2009 Master Plan would not conflict with applicable land use plans, policies, or regulations of an agency with jurisdiction over the project adopted for the purposes of avoiding or mitigating an environmental effect. This impact is less than significant. No mitigation is required.

The 2009 MP FEIR concluded that cumulative impacts related to land use and planning would be less than significant as new development on the Hayward campus would not introduce land uses that would be incompatible with surrounding land uses and future development adjacent to campus would be expected to be in general conformance with local land use plans.

Change in Circumstances and/or New Information

Since the certification of the 2009 MP FEIR both originally in 2009 and its recertification in 2018, there have been no changes in circumstances that would alter the conclusions of the 2009 MP FEIR with respect to land use impacts.

Analysis of the Proposed Project

The site of the replacement library is surrounded by other campus facilities. As a result, similar to the conclusion included in the 2009 MP FEIR, the replacement library project would not physically divide an established community. No impact would occur and the project would not result in a new or more severe impact related to physically dividing an established community than previously evaluated and disclosed in the 2009 MP FEIR. No new mitigation is required.

As discussed above, the land use plan in the 2009 Master Plan identified a site adjacent to the east wing of the existing library for expansion of the library. The Campus has reevaluated the previously planned library expansion and determined that a new replacement library located at a site 200 feet to the northeast of the existing library that is south of the existing Science buildings and northwest of the existing Recreation and Wellness Center would be more appropriate. In order to relocate the library to a new location, an amendment to the land use plan in the 2009 Master Plan would be required. The land use plan would be modified to label the proposed project site as the new library building site.

The project site is located within an area designated for academic and administrative use in the 2009 Campus Master Plan. The proposed replacement library is an allowed land use within this functional zone. As the proposed project would be consistent with the 2009 Campus Master Plan functional zone for the project site, the proposed project would not conflict with the Campus Master Plan. Therefore, the project would not conflict with applicable land use plans, policies, or regulations of an agency with jurisdiction over the project adopted for the purposes of avoiding or mitigating an environmental effect, similar to the conclusion included in the 2009 MP FEIR. In addition, as discussed throughout this Addendum, all environmental impacts associated with amending the 2009 Master Plan to relocate the replacement library to a new site would be either less than significant or would be reduced to a less than significant level with the incorporation of mitigation listed in the 2009 Master Plan EIR. As a result, the project, including the proposed 2009 Master Plan minor amendment would not result in a new or more

severe impact related to conflicts with applicable land use plans than previously evaluated and disclosed in the 2009 MP FEIR. No new mitigation is required.

The proposed project is within the scope of the 2009 Master Plan and therefore, its cumulative impacts are adequately addressed in the 2009 MP FEIR.

Findings

The potential impacts with respect to land use and planning from the proposed library replacement project and related Master Plan amendment would be similar to or less than the impacts of campus development analyzed in the 2009 MP FEIR. Therefore, no new or substantially increased significant impacts would result from the proposed project beyond those analyzed in the 2009 MP FEIR. No new mitigation is required.

4.11 Mineral Resources

	Potentially Significant New Impact	Less than Significant New Impact with Mitigation	Less than Significant New Impact	Impact Fully Analyzed in the FEIR
MINERAL RESOURCES - Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of future value to the region and the residents of the State?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion:

Summary of Analysis in the 2009 MP FEIR

The campus is not located within a regionally significant aggregate resources zone. In addition, implementation of the 2009 Master Plan would not result in any substantial loss of known mineral resources that would be of value to the region or state because the campus area is not available for extraction of mineral resources. Further development of the campus would not result in the additional loss of important mineral resource recovery. As a result, the 2009 MP FEIR concluded that there would be no impacts on mineral resources. No mitigation is required.

Change in Circumstances and/or New Information

Since the certification of the 2009 MP FEIR both originally in 2009 and its recertification in 2018, there have been no changes in circumstances that would alter the conclusions of the 2009 MP FEIR with respect to impacts on mineral resources.

Analysis of the Proposed Project

As described in the 2009 MP FEIR, the loss of availability of known mineral resources on the campus would be low. No impacts would occur and the project would not result in new or more severe impacts to mineral resources than previously evaluated and disclosed in the 2009 MP FEIR.. No new mitigation is required.

Findings

The potential impacts with respect to mineral resources from the proposed library replacement project would be similar to or less than the impacts of campus development analyzed in the 2009 MP FEIR. Therefore, no new or substantially increased significant impacts would result from the proposed project beyond those analyzed in the 2009 MP FEIR. No new mitigation is required.

4.12 Noise

	Potentially New Significant Impact	Less than Significant New Impact with Mitigation	Less than Significant new Impact	Impact Fully Analyzed in the FEIR
NOISE - Would the project result in:				
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Exposure of persons to or generation of excessive ground borne vibration or ground borne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion:

Summary of Analysis in the 2009 MP FEIR

Campus development under the 2009 Master Plan, with and without a third campus entrance, would result in increased vehicular traffic on the regional road network by 2030, which would increase ambient traffic noise levels at existing on- and off-site noise sensitive uses. However, the increase in noise levels along study area road segments would not reach levels that are typically noticed by the human ear. As a result, the 2009 MP FEIR concluded that traffic added by campus development under the 2009 Master Plan, with and without a third campus entrance, at buildout in 2030 would not significantly increase

noise levels along any of the roadway segments. The impact would be less than significant. No mitigation is required.

Noise generated by daily campus activities is not expected to exceed the City noise standards at nearby off-site noise-sensitive location (i.e., residences, churches, schools). However, on-site noise-sensitive receptors, including student housing and academic buildings on the campus, could be exposed to excessive noise from other land uses that are developed within the campus. However, the land use plan for the 2009 Master Plan has been designed to avoid the location of sensitive land uses near potential loud noise sources. Therefore, the 2009 MP FEIR concluded that on- and off-site receptors are not expected to be exposed to noise levels in excess of the standards for noise sensitive uses. This impact is less than significant. No mitigation is required.

Construction on the campus pursuant to the 2009 Master Plan could expose existing and future on- and off-site noise-sensitive receptors to elevated construction noise levels. **MP Mitigation Measures NOI-3a** and **NOI-3b** would reduce this impact to a less than significant level.

The campus is not located within an airport land use plan or within 2 miles of a public airport or public use airport. In addition, the campus is not located within 2 miles of a private airstrip. Therefore, no impact would occur and no mitigation is required.

The 2009 MP FEIR concluded that cumulative noise effects from reasonably foreseeable development in the City of Hayward and development under the 2009 Master Plan would be less than significant.

MP FEIR Mitigation Measures

MP MM NOI-3a: Construction activities on campus shall be restricted to between the hours of 7:00 AM and 7:00 PM on weekdays and Saturdays and 10:00 AM to 6:00 PM on Sundays and holidays.

MP MM NOI-3b: Prior to initiation of campus construction within 500 feet of a noise sensitive receptor, the Campus shall approve a construction noise mitigation program including but not limited to the following.

- All noise-producing project equipment and vehicles using internal combustion engines shall be equipped with exhaust mufflers and air-inlet silencers where appropriate, in good operating condition that meet or exceed original factory specification.

- Mobile or fixed “package” equipment (e.g., arc-welders, air compressors) shall be equipped with shrouds and noise control features that are readily available for that type of equipment.
- All mobile or fixed noise producing equipment used on the project, which is regulated for noise output by local, state or federal agency, shall comply with such regulation while engaged in project-related activities.
- Electrically powered equipment shall be used instead of pneumatic or internal combustion powered equipment, where practicable.
- Material stockpiles and mobile equipment staging, construction vehicle parking and maintenance areas shall be located as far as practicable from noise-sensitive land uses.
- Stationary noise sources such as generators or pumps shall be located away from noise-sensitive land uses as feasible.
- The use of noise-producing signals, including horns, whistles, alarms, and bells shall be for safety warning purposes only. No project-related public address loudspeaker, two-way radio, or music system shall be audible at any adjacent noise-sensitive receptor except for emergency use.
- The erection of temporary noise barriers shall be considered where project activity is unavoidably close to noise-sensitive receptors.
- The noisiest construction operations shall be scheduled to occur together to avoid continuing periods of the greatest annoyance, wherever possible.
- Construction vehicle trips be routed as far as practical from existing residential uses.
- The loudest campus construction activities, such as demolition, blasting, and pile driving, shall be scheduled during summer, Thanksgiving, winter, and spring breaks when fewer people would be disturbed by construction noise.
- Whenever possible, academic, administrative, and residential areas that will be subject to construction noise shall be informed a week before the start of each construction project.

Change in Circumstances and/or New Information

Since the certification of the 2009 MP FEIR both originally in 2009 and its recertification in 2018, there have been no changes in circumstances that would alter the conclusions of the 2009 MP FEIR with respect to noise impacts.

Analysis of the Proposed Project

With operation of the proposed replacement library, noise levels at both on-campus and off-campus receptors would be similar to those under existing conditions. This is because the library project does not include any stationary noise source that could elevate noise levels in the project vicinity, and any HVAC equipment that is roof-mounted on the new library building would be enclosed to minimize emission of noise. The proposed project would not result in new operational vehicle trips as the campus population would stay the same; therefore, traffic noise along area roadways would not increase due to the project. Similar to the conclusion included in the 2009 MP FEIR, the impact related to operational noise would be less than significant. The project would not result in a new or more severe impact related to operational noise than previously evaluated and disclosed in the 2009 MP FEIR. No new mitigation is required.

According to the City of Hayward Municipal Code, construction noise levels shall not exceed 86 dBA outside of the property plane. Noise from project construction would be below this level at the campus property boundary, which is approximately 400 feet from the edge of the project site. The nearest off-campus residential receptor is 650 feet from the project site boundary, and would experience a maximum construction noise level of approximately 58.5 dBA (see **Appendix B** for noise data/calculations). Therefore, similar to the conclusion included in the 2009 MP FEIR, project construction noise would not adversely affect nearby off-campus residential receptors. The project would not result in a new or more severe impact related to construction noise impact on off-campus receptors than previously evaluated and disclosed in the 2009 MP FEIR.

With respect to sensitive receptors on the campus, student residences, classrooms, and places used for learning and research are identified as places that would house noise sensitive receptors. According to the 2009 MP FEIR, a significant impact at these campus receptors would occur if construction activity is predicted to result in a sound level that is more than 6 dBA above the ambient sound level at the nearest sensitive receptor between the hours of 7:00 PM and 7:00 AM on weekdays and Saturdays or between the hours of 10 AM and 6 PM on Sundays and holidays. If a construction site is within a distance of about 500 feet of a sensitive receptor, construction noise is likely to increase sound levels at the receptor by 6 dBA or more. The nearest on-site residential receptors are approximately 250 feet to the southeast of the project site. The nearest on-site classroom receptors are approximately 100 feet to the northeast of the project site. As these receptors are within 500 feet of the project construction activities, they are likely to experience increased noise levels above 6 dBA. This represents a potentially significant impact, similar to the conclusion included in the 2009 MP FEIR. **MP Mitigation Measure NOI-3** would be incorporated into the project to reduce the noise impact from construction activities to a less than significant level. The project would not result in a new or more severe impact related to construction noise impacts on on-campus receptors than previously evaluated and disclosed in the 2009 MP FEIR. No new mitigation is required.

The project site is located within the campus core and therefore is not located within the vicinity of a public airport or private airstrip. As a result, the project would not expose people residing or working in the project area to excessive noise levels from aircraft. Similar to the conclusion included in the 2009 MP FEIR, no impact would occur and the project would not result in a new or more severe impact related to aircraft noise than previously evaluated and disclosed in the 2009 MP FEIR. No new mitigation is required.

The proposed project is within the scope of the 2009 Master Plan and therefore, its cumulative impacts are adequately addressed in the 2009 MP FEIR.

Findings

The potential impacts with respect to noise from the proposed library replacement project would be similar to or less than the impacts of campus development analyzed in the 2009 MP FEIR. Therefore, no new or substantially increased significant impacts would result from the proposed project beyond those analyzed in the 2009 MP FEIR. No new mitigation is required.

4.13 Population and Housing

	Potentially Significant New Impact	Less than Significant New Impact with Mitigation	Less than Significant New Impact	Impact Fully Analyzed in the FEIR
POPULATION AND HOUSING – Would the project:				
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion:

Summary of Analysis in the 2009 MP FEIR

All students new to the Bay Area could be housed by new student beds under the 2009 Master Plan. In addition, ABAG housing projections indicate that there would be ample housing available in the City of Hayward and in Alameda County to accommodate new employees to campus. As a result, the 2009 MP FEIR concluded that implementation of the 2009 Master Plan would not substantially increase the population of the City of Hayward or Alameda County such that additional housing would be required, the construction of which could cause significant environmental impacts. This impact is less than significant. No mitigation is required.

The student and faculty housing envisioned under the 2009 Master Plan would be constructed within existing campus boundaries. Other development associated with 2009 Master Plan implementation would occur on the developed portion of the campus. Therefore, the 2009 MP FEIR concluded that implementation of the 2009 Master Plan would not displace existing housing or population. No mitigation is required.

The 2009 MP FEIR concluded that cumulative impacts with respect to population and housing from reasonably foreseeable development in the City of Hayward and development under the 2009 Master Plan would be less than significant.

Change in Circumstances and/or New Information

Since the certification of the 2009 MP FEIR both originally in 2009 and its recertification in 2018, there have been no changes in circumstances that would alter the conclusions of the 2009 MP FEIR with respect to population and housing impacts.

Analysis of the Proposed Project

The proposed project would not increase campus population as the replacement library is a supporting use that would house existing employees and serve the existing and future student population. Furthermore, the west wing of the existing library would stay vacant after the relocation of the library to the replacement facility and would not house any new students or employees. The east wing would continue to house campus support services and library stacks. Therefore, no impacts related to population and housing would occur and the project would not result in new or more severe impacts related to population and housing than previously evaluated and disclosed in the 2009 MP FEIR. No new mitigation is required.

The proposed project is within the scope of the 2009 Master Plan and therefore, its cumulative impacts are adequately addressed in the 2009 MP FEIR.

Findings

The potential impacts with respect to population and housing from the proposed library replacement project would be similar to or less than the impacts of campus development analyzed in the 2009 MP FEIR. Therefore, no new or substantially increased significant impacts would result from the proposed project beyond those analyzed in the 2009 MP FEIR. No new mitigation is required.

4.14 Public Services

	Potentially New Significant Impact	Less than Significant New Impact with Mitigation	Less than Significant New Impact	Impact Fully Analyzed in the FEIR
PUBLIC SERVICES				
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
i) Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ii) Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iii) Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iv) Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
v) Other governmental services?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion:

Summary of Analysis in the 2009 MP FEIR

Implementation of the 2009 Master Plan would result in additional facilities and population on the campus. This increase in campus facilities and population would place incremental additional demand on the Hayward Fire Department (HFD) for fire protection services. The HFD indicated additional facilities such as an additional bay or fire station would need to be constructed. However, expansion or construction of a fire station would not result in significant environmental impacts due to the limited area that is typically required to build a fire station (between 0.5 and 1 acre) and its urban location. As a result, the 2009 MP FEIR concluded that the construction of additional fire facilities would not result in significant environmental impacts. This impact is considered less than significant. No mitigation is required.

The increase in campus facilities and population would also place incremental additional demand on the Campus Police Department and the Hayward Police Department for law enforcement services. The need

for new on- or off-campus police facilities to service the campus at buildout is not anticipated at this time. However, should new or expanded police facilities be required on campus, the development of such facilities would not result in environmental impacts beyond those evaluated in the 2009 MP FEIR. In addition, an expansion of police facilities in Hayward would be unlikely to result in significant environmental impacts due to the urban setting of the City. Therefore, the 2009 MP FEIR concluded that the construction of additional law enforcement facilities would result in less than significant environmental impacts. This impact is considered less than significant. No mitigation is required.

New employees on campus would result in the addition of approximately 196 K-12 students to Hayward area schools over a period of about 21 to 22 years (approximately 10 K-12 students per year). As this increase is not considered substantial, the 2009 MP FEIR concluded that campus development under the 2009 Master Plan would not result in impacts to City of Hayward schools. This impact is less than significant. No mitigation is required.

The 2009 Master Plan FEIR concluded that cumulative impacts with respect to public services from reasonably foreseeable development in the City of Hayward and development under the 2009 Master Plan would be less than significant.

Change in Circumstances and/or New Information

Since the certification of the 2009 MP FEIR both originally in 2009 and its recertification in 2018, there have been no changes in circumstances that would alter the conclusions of the 2009 MP FEIR with respect to public service impacts.

Analysis of the Proposed Project

The proposed replacement library project would not increase campus population and thus demand for public services would not increase compared to the levels analyzed in the 2009 MP FEIR. As a result, the project would not result in new or more severe impacts related to public services than previously evaluated and disclosed in the 2009 MP FEIR. No new mitigation is required.

The proposed project is within the scope of the 2009 Master Plan and therefore, its cumulative impacts are adequately addressed in the 2009 MP FEIR.

Findings

The potential impacts with respect to public services from the proposed library replacement project would be similar to or less than the impacts of campus development analyzed in the 2009 MP FEIR.

Therefore, no new or substantially increased significant impacts would result from the proposed project beyond those analyzed in the 2009 MP FEIR. No new mitigation is required.

4.15 Recreation

	Potentially Significant New Impact	Less than Significant New Impact with Mitigation	Less than Significant New Impact	Impact Fully Analyzed in the FEIR
RECREATION – Would the project:				
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion:

Summary of Analysis in the 2009 MP FEIR

The 2009 Master Plan identified minor modifications to existing recreational facilities on the campus. The 2017 PR-FEIR which is a part of the 2009 MP FEIR noted that all of these facilities are already developed and located in portions of the campus where sensitive environmental resources are not present. In addition, based on the current low levels of usage of the nearby regional parks by campus population, the FEIR concluded that only a small number of additional students, faculty and staff are expected to patronize regional parks and facilities owned and operated by the Hayward Area Recreation and Park District as existing on-campus recreational facilities would satisfy the demands of this campus population (CSUEB 2018). For these reasons, the 2009 MP FEIR concluded that campus growth under the 2009 Master Plan would not result in significant environmental impacts related to the development of new or modified recreational facilities nor 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. This impact is considered less than significant. No mitigation is required.

The 2009 MP FEIR concluded that cumulative impacts with respect to recreation from reasonably foreseeable development in the City of Hayward and development under the 2009 Master Plan would be less than significant.

Change in Circumstances and/or New Information

Since the certification of the 2009 MP FEIR both originally in 2009 and its recertification in 2018, there have been no changes in circumstances that would alter the conclusions of the 2009 MP FEIR with respect to impacts on recreational facilities.

Analysis of the Proposed Project

As there would be no campus population growth due to the proposed replacement library project, no impacts to existing recreational facilities would occur, nor would there be the need to construct new recreation facilities. Thus, the project would not result in new or more severe impacts related to recreation than previously evaluated and disclosed in the 2009 MP FEIR. No new mitigation is required.

The proposed project is within the scope of the 2009 Master Plan and therefore, its cumulative impacts are adequately addressed in the 2009 MP FEIR.

Findings

The potential impacts with respect to recreational resources from the proposed library replacement project would be similar to or less than the impacts of campus development analyzed in the 2009 MP FEIR. Therefore, no new or substantially increased significant impacts would result from the proposed project beyond those analyzed in the 2009 MP FEIR. No new mitigation is required.

4.16 Transportation and Traffic

	Potentially New Significant Impact	Less than Significant New Impact with Mitigation	Less than Significant New Impact	Impact Fully Analyzed in the FEIR
TRANSPORTATION/TRAFFIC - Would the project:				
a) Cause an increase in traffic, which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion:

Summary of Analysis in the 2009 MP FEIR

The traffic analysis in the 2009 MP FEIR found that full buildout of the campus in 2030 under the 2009 Master Plan, with and without the Third Entrance, will contribute to sub-standard intersection operations at eight study intersections, in either the AM peak hour or PM peak hour, or both peak hours. **MP Mitigation Measures TRANS-1a** and **TRANS-1b** would lessen but not reduce this impact to a less than significant level. As a result, the 2009 MP FEIR concluded that this impact would be significant and unavoidable.

The traffic analysis in the 2009 MP FEIR found that campus gateway intersections will operate at unacceptable levels of service in the future. **MP Mitigation Measure TRANS-2** would reduce this impact to a less than significant level.

The traffic analysis in the 2009 MP FEIR found that traffic added by growth and development under the 2009 MP FEIR would not adversely affect intersection operations at Hayward Boulevard and Civic Avenue. This impact is less than significant. No mitigation is required.

The traffic analysis in the 2009 MP FEIR found that pedestrian safety on Harder Road in the vicinity of the student housing area could be affected by traffic volumes and speeds, with the provision of the third entrance on Hayward Boulevard. **MP Mitigation Measure TRANS-4** would reduce this impact to a less than significant level.

The traffic analysis in the 2009 MP FEIR found that campus growth and development under the 2009 Master Plan would substantially increase volumes on several segments of the Congestion Management Program (CMP) or Metropolitan Transportation System (MTS) networks. **MP Mitigation Measure TRANS-5** would lessen but not reduce this impact to a less than significant level. As a result, the 2009 MP FEIR concluded that this impact would be significant and unavoidable.

The traffic analysis in the 2009 MP FEIR found that campus growth and development under the 2009 Master Plan will increase BART ridership, but will not lead to over-capacity conditions in the peak commute hours. This impact is less than significant. No mitigation is required.

The traffic analysis in the 2009 MP FEIR found that campus growth and development under the 2009 Master Plan will increase bus transit demand, particularly for connections between the campus and the Downtown Hayward and Castro Valley BART stations. **MP Mitigation Measure TRANS-7** would reduce this impact to a less than significant level.

The analysis in the 2009 MP FEIR concluded that walking and bicycling trips to the campus may increase moderately with implementation of the 2009 Master Plan. **MP Mitigation Measure TRANS-8** would reduce this impact to a less than significant level.

The analysis in the 2009 MP FEIR concluded that the 2009 Master Plan could result in overflow parking on nearby neighborhood streets, if the supply is not managed to meet demand as the campus grows. **MP Mitigation Measures TRANS-9a** and **TRANS-9b** would reduce this impact to a less than significant level.

The 2009 MP FEIR concluded that significant cumulative traffic effects would occur from reasonably foreseeable development in the City of Hayward and development under the 2009 Master Plan. No feasible mitigation exists to reduce these cumulative impacts to a less than significant level.

Change in Circumstances and/or New Information

Since the certification of the 2009 MP FEIR both originally in 2009 and its recertification in 2018, there have been no changes in circumstances that would alter the conclusions of the 2009 MP FEIR with respect to traffic and transportation impacts.

Analysis of the Proposed Project

Except for an increase in construction vehicles accessing the project site during project construction, there would be no increase in traffic due to the proposed project as it would not result in an increase in campus population or associated vehicle trips. For this reason, no traffic impact would occur and **MP Mitigation Measures TRANS-1, TRANS-2, and TRANS-5** do not apply. Construction vehicles would travel to and from the project site for a period of two years, with most of the construction traffic accessing or leaving the project area during off-peak hours. As a result, construction traffic would not have any adverse effect on the capacity of the roadway system. The impact of the project's construction traffic would be less than significant. No mitigation is required.

The proposed project would not make any changes to area roads and would not result in the creation of dangerous intersections or other road conditions that would substantially increase hazards in the area. There would be no impact and **MP Mitigation Measure TRANS-4** does not apply.

Construction of the proposed project would not result in any road or bicycle lane closures outside of the project site. Roadways adjacent to the project site would remain open to emergency vehicles during project construction. There would be no impact. No mitigation is required.

The proposed project would not conflict with any adopted policies, plans, or programs that support alternative transportation as it would not increase the population of the campus or change the existing land uses. There would be no impact and **MP Mitigation Measures TRANS-7 and TRANS-8** do not apply. No mitigation is required.

The proposed project as it would not result in an increase in campus population or associated vehicle trips that would require parking. As a result, the proposed project would not result in inadequate parking. There would be no impact and **MP Mitigation Measure TRANS-9** does not apply. No mitigation is required.

The proposed project is within the scope of the 2009 MP FEIR and therefore, its cumulative impacts are adequately addressed in the 2009 MP FEIR. Although the 2009 MP FEIR concluded that there would be significant and unavoidable cumulative impacts related to intersection operations and CMP and MTS networks, the proposed project would not contribute to the significant and unavoidable impacts.

Findings

The potential impacts with respect to traffic from the proposed library replacement project would be similar to or less than the impacts of campus development analyzed in the 2009 MP FEIR. Therefore, no new or substantially increased significant impacts would result from the proposed project beyond those analyzed in the 2009 MP FEIR. No new mitigation is required.

4.17 Utilities and Service Systems

	Potentially New Significant Impact	Less than Significant New Impact with Mitigation	Less than Significant New Impact	Impact Fully Analyzed in the FEIR
UTILITIES AND SERVICE SYSTEMS - Would the project:				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new and expanded entitlements needed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Comply with federal, state, and local statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion:

Summary of Analysis in the 2009 MP FEIR

Campus growth and development under the 2009 Master Plan would result in a demand for water not anticipated in the City's 2005 UWMP. As a result, the 2009 MP FEIR conservatively concluded that the impact of growth and development at Master Plan buildout on water supply would be significant. **MP Mitigation Measure UTIL-1** would reduce this impact to a less than significant level.

The City of Hayward Water Pollution Control Facility (WPCF) would have sufficient capacity to treat wastewater generated on the campus through Master Plan buildout. In addition, no major improvements to the City's sewer mains that serve the campus are needed to handle the increased flow from the campus. Therefore, the 2009 MP FEIR concluded that campus growth and development under the 2009 Master Plan would not require the construction or expansion of wastewater conveyance or treatment facilities. This impact is less than significant. No mitigation is required.

Campus growth and development under the 2009 Master Plan would result in the construction of new electrical, natural gas, and heating water facilities. However, the 2009 MP FEIR concluded that the construction of these facilities would not cause significant environmental impacts. This impact is less than significant. No mitigation is required.

Campus growth and development under the 2009 Master Plan would require a minor expansion of the storm water conveyance system. However, the 2009 MP FEIR concluded that the construction of this system would not cause significant environmental impacts. This impact is less than significant. No mitigation is required.

Campus growth and development under the 2009 Master Plan would increase the amount of non-hazardous waste generated on campus. However, at full buildout under the 2009 Master Plan, 75 to 100 percent of solid waste would be diverted from landfills. Additionally, 100 percent of organic waste generated would be composted on the campus. For these reasons, the 2009 MP FEIR concluded that the 2009 Master Plan would not conflict with applicable solid waste regulations, nor would it result in solid waste requiring disposal that would exceed the landfill capacity. This impact is less than significant. No mitigation is required.

Reasonably foreseeable development in the City of Hayward and campus development under the 2009 Master Plan would result in the demand for additional water supply, wastewater treatment, solid waste disposal, electricity, and natural gas. However, the 2009 MP FEIR concluded that the contribution from campus development to the cumulative impact would not be considerable as the 2009 Master Plan includes sustainability goals to reduce the Campus's water use, energy use, wastewater generation, and solid waste generation and disposal. In addition, mitigation discussed above would further reduce campus water demand and thereby also wastewater discharge.

Change in Circumstances and/or New Information

Since the certification of the 2009 MP FEIR both originally in 2009 and its recertification in 2018, there have been no changes in circumstances that would alter the conclusions of the 2009 MP FEIR with respect to utility impacts.

Analysis of the Proposed Project

The proposed project would not increase the campus population. Therefore, there would be no additional demand for water, wastewater treatment, and solid waste facilities. In addition, impervious surfaces on the project site would minimally increase as described above under **Section 4.7 Hydrology and Water Quality**, resulting in a similar amount of storm water runoff when compared to the 2009 Master Plan analysis. No impacts to utilities and service systems would occur and the project would not result in new or more severe impacts related to utilities and services systems than previously evaluated and disclosed in the 2009 MP FEIR. **MP Mitigation Measure UTIL-1** would not apply.

The proposed project is within the scope of the 2009 MP FEIR and therefore, its cumulative impacts are adequately addressed in the 2009 MP FEIR.

Findings

The potential impacts with respect to utilities and service systems from the proposed library replacement project would be similar to or less than the impacts of campus development analyzed in the 2009 MP FEIR. Therefore, no new or substantially increased significant impacts would result from the proposed project beyond those analyzed in the 2009 MP FEIR. No new mitigation is required.

5.0 REFERENCES

- Bay Area Air Quality Management District (BAAQMD). 2017. *BAAQMD Air Quality CEQA Guidelines*. May.
- California State University East Bay (CSUEB). 2018. CSU East Bay Hayward Campus 2009 Master Plan Final EIR, SCH No. 2008042100. January.
- Federal Emergency Management Agency (FEMA). 2009. Flood Insurance Rate Map No. 06001C0293G for Alameda County, California. August 3.
- California State Water Resources Control Board (SWRCB). 2018. GeoTracker database. Cal State University Hayward (T0600100243). Available at: http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0600100243. Accessed: February 26, 2018.

6.0 REPORT PREPARERS

California State University East Bay

Anne Salazar Leung, University Planner

Impact Sciences, Inc.

Shabnam Barati, Ph.D., Principal

Paul Stephenson, AICP, Senior Project Manager

Jared Jerome, Air Quality and Noise Analyst

Van Hoang, Publications Manager

APPENDIX A

Emissions Calculations

CSUEB Library - Alameda County, Annual

CSUEB Library
Alameda County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Library	100.00	1000sqft	1.10	100,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	63
Climate Zone	5			Operational Year	2021
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MW hr)	641.35	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Acrage based on information provided by the university.

Construction Phase - Construction is anticipated to begin in February 2019 and have a 24-month duration. The library would go on the existing campus, so lesser days of paving was assumed to reflect no new parking lots/driveways.

Grading - Site is 1.1 acres. Assumed any soil work would be balanced on-site.

Vehicle Trips - The existing library on site will be closed when the project is opened. No new trips would be created.

Construction Off-road Equipment Mitigation - Mitigation measure reflect Table 8-2 "Basic Construction Mitigation Measures Recommended for ALL Proposed Projects" from the 2017 BAAQMD CEQA Guidelines.

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15

CSUEB Library - Alameda County, Annual

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstructionPhase	NumDays	10.00	20.00
tblConstructionPhase	NumDays	200.00	390.00
tblConstructionPhase	NumDays	4.00	10.00

CSUEB Library - Alameda County, Annual

tblConstructionPhase	NumDays	2.00	10.00
tblGrading	AcresOfGrading	3.75	1.10
tblGrading	AcresOfGrading	5.00	1.10
tblLandUse	LotAcreage	2.30	1.10
tblVehicleTrips	ST_TR	46.55	0.00
tblVehicleTrips	SU_TR	25.49	0.00
tblVehicleTrips	WD_TR	56.24	0.00

2.0 Emissions Summary

CSUEB Library - Alameda County, Annual

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	2-1-2019	4-30-2019	0.6437	0.1503
2	5-1-2019	7-31-2019	0.6775	0.2093
3	8-1-2019	10-31-2019	0.6781	0.2100
4	11-1-2019	1-31-2020	0.6613	0.2090
5	2-1-2020	4-30-2020	0.6113	0.1995
6	5-1-2020	7-31-2020	0.6238	0.2028
7	8-1-2020	9-30-2020	0.6165	0.4381
		Highest	0.6781	0.4381

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.4428	1.0000e-005	9.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.7900e-003	1.7900e-003	0.0000	0.0000	1.9100e-003
Energy	0.0134	0.1213	0.1019	7.3000e-004		9.2200e-003	9.2200e-003		9.2200e-003	9.2200e-003	0.0000	352.0045	352.0045	0.0125	4.4800e-003	353.6511
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	18.6934	0.0000	18.6934	1.1048	0.0000	46.3122
Water						0.0000	0.0000		0.0000	0.0000	0.9927	9.9082	10.9008	0.1024	2.5000e-003	14.2059
Total	0.4561	0.1213	0.1028	7.3000e-004	0.0000	9.2200e-003	9.2200e-003	0.0000	9.2200e-003	9.2200e-003	19.6861	361.9145	381.6006	1.2196	6.9800e-003	414.1711

CSUEB Library - Alameda County, Annual

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.4428	1.0000e-005	9.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.7900e-003	1.7900e-003	0.0000	0.0000	1.9100e-003
Energy	0.0134	0.1213	0.1019	7.3000e-004		9.2200e-003	9.2200e-003		9.2200e-003	9.2200e-003	0.0000	352.0045	352.0045	0.0125	4.4800e-003	353.6511
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	18.6934	0.0000	18.6934	1.1048	0.0000	46.3122
Water						0.0000	0.0000		0.0000	0.0000	0.9927	9.9082	10.9008	0.1024	2.5000e-003	14.2059
Total	0.4561	0.1213	0.1028	7.3000e-004	0.0000	9.2200e-003	9.2200e-003	0.0000	9.2200e-003	9.2200e-003	19.6861	361.9145	381.6006	1.2196	6.9800e-003	414.1711

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

CSUEB Library - Alameda County, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	2/1/2019	2/14/2019	5	10	
2	Grading	Grading	2/15/2019	2/28/2019	5	10	
3	Building Construction	Building Construction	3/1/2019	8/27/2020	5	390	
4	Paving	Paving	8/28/2020	9/10/2020	5	10	
5	Architectural Coating	Architectural Coating	9/11/2020	10/8/2020	5	20	

Acres of Grading (Site Preparation Phase): 1.1

Acres of Grading (Grading Phase): 1.1

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 150,000; Non-Residential Outdoor: 50,000; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

CSUEB Library - Alameda County, Annual

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

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	42.00	16.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

CSUEB Library - Alameda County, Annual

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Site Preparation - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0269	0.0000	0.0269	0.0146	0.0000	0.0146	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	8.5600e-003	0.0974	0.0395	9.0000e-005		4.4100e-003	4.4100e-003		4.0600e-003	4.0600e-003	0.0000	7.7334	7.7334	2.4500e-003	0.0000	7.7946
Total	8.5600e-003	0.0974	0.0395	9.0000e-005	0.0269	4.4100e-003	0.0313	0.0146	4.0600e-003	0.0186	0.0000	7.7334	7.7334	2.4500e-003	0.0000	7.7946

CSUEB Library - Alameda County, Annual

3.2 Site Preparation - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.5000e-004	1.2000e-004	1.1700e-003	0.0000	3.2000e-004	0.0000	3.2000e-004	8.0000e-005	0.0000	9.0000e-005	0.0000	0.2901	0.2901	1.0000e-005	0.0000	0.2903
Total	1.5000e-004	1.2000e-004	1.1700e-003	0.0000	3.2000e-004	0.0000	3.2000e-004	8.0000e-005	0.0000	9.0000e-005	0.0000	0.2901	0.2901	1.0000e-005	0.0000	0.2903

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0121	0.0000	0.0121	6.5500e-003	0.0000	6.5500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.0500e-003	4.5600e-003	0.0434	9.0000e-005		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004	0.0000	7.7334	7.7334	2.4500e-003	0.0000	7.7945
Total	1.0500e-003	4.5600e-003	0.0434	9.0000e-005	0.0121	1.4000e-004	0.0123	6.5500e-003	1.4000e-004	6.6900e-003	0.0000	7.7334	7.7334	2.4500e-003	0.0000	7.7945

CSUEB Library - Alameda County, Annual

3.2 Site Preparation - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.5000e-004	1.2000e-004	1.1700e-003	0.0000	3.2000e-004	0.0000	3.2000e-004	8.0000e-005	0.0000	9.0000e-005	0.0000	0.2901	0.2901	1.0000e-005	0.0000	0.2903
Total	1.5000e-004	1.2000e-004	1.1700e-003	0.0000	3.2000e-004	0.0000	3.2000e-004	8.0000e-005	0.0000	9.0000e-005	0.0000	0.2901	0.2901	1.0000e-005	0.0000	0.2903

3.3 Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0232	0.0000	0.0232	0.0125	0.0000	0.0125	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.1000e-003	0.0802	0.0330	7.0000e-005		3.6800e-003	3.6800e-003		3.3900e-003	3.3900e-003	0.0000	6.3339	6.3339	2.0000e-003	0.0000	6.3840
Total	7.1000e-003	0.0802	0.0330	7.0000e-005	0.0232	3.6800e-003	0.0269	0.0125	3.3900e-003	0.0159	0.0000	6.3339	6.3339	2.0000e-003	0.0000	6.3840

CSUEB Library - Alameda County, Annual

3.3 Grading - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.5000e-004	1.2000e-004	1.1700e-003	0.0000	3.2000e-004	0.0000	3.2000e-004	8.0000e-005	0.0000	9.0000e-005	0.0000	0.2901	0.2901	1.0000e-005	0.0000	0.2903
Total	1.5000e-004	1.2000e-004	1.1700e-003	0.0000	3.2000e-004	0.0000	3.2000e-004	8.0000e-005	0.0000	9.0000e-005	0.0000	0.2901	0.2901	1.0000e-005	0.0000	0.2903

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0104	0.0000	0.0104	5.6100e-003	0.0000	5.6100e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	8.6000e-004	3.7400e-003	0.0358	7.0000e-005		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004	0.0000	6.3339	6.3339	2.0000e-003	0.0000	6.3840
Total	8.6000e-004	3.7400e-003	0.0358	7.0000e-005	0.0104	1.1000e-004	0.0105	5.6100e-003	1.1000e-004	5.7200e-003	0.0000	6.3339	6.3339	2.0000e-003	0.0000	6.3840

CSUEB Library - Alameda County, Annual

3.3 Grading - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.5000e-004	1.2000e-004	1.1700e-003	0.0000	3.2000e-004	0.0000	3.2000e-004	8.0000e-005	0.0000	9.0000e-005	0.0000	0.2901	0.2901	1.0000e-005	0.0000	0.2903
Total	1.5000e-004	1.2000e-004	1.1700e-003	0.0000	3.2000e-004	0.0000	3.2000e-004	8.0000e-005	0.0000	9.0000e-005	0.0000	0.2901	0.2901	1.0000e-005	0.0000	0.2903

3.4 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2477	1.7418	1.4701	2.4000e-003		0.0998	0.0998		0.0964	0.0964	0.0000	199.5484	199.5484	0.0384	0.0000	200.5074
Total	0.2477	1.7418	1.4701	2.4000e-003		0.0998	0.0998		0.0964	0.0964	0.0000	199.5484	199.5484	0.0384	0.0000	200.5074

CSUEB Library - Alameda County, Annual

3.4 Building Construction - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	7.8600e-003	0.2230	0.0493	4.9000e-004	0.0115	1.4300e-003	0.0129	3.3100e-003	1.3600e-003	4.6800e-003	0.0000	46.4558	46.4558	2.8600e-003	0.0000	46.5274
Worker	0.0173	0.0132	0.1335	3.7000e-004	0.0362	2.6000e-004	0.0365	9.6300e-003	2.4000e-004	9.8700e-003	0.0000	33.2039	33.2039	9.5000e-004	0.0000	33.2275
Total	0.0252	0.2363	0.1829	8.6000e-004	0.0477	1.6900e-003	0.0493	0.0129	1.6000e-003	0.0146	0.0000	79.6597	79.6597	3.8100e-003	0.0000	79.7549

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0319	0.4046	1.4305	2.4000e-003		3.3000e-003	3.3000e-003		3.3000e-003	3.3000e-003	0.0000	199.5482	199.5482	0.0384	0.0000	200.5072
Total	0.0319	0.4046	1.4305	2.4000e-003		3.3000e-003	3.3000e-003		3.3000e-003	3.3000e-003	0.0000	199.5482	199.5482	0.0384	0.0000	200.5072

CSUEB Library - Alameda County, Annual

3.4 Building Construction - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	7.8600e-003	0.2230	0.0493	4.9000e-004	0.0115	1.4300e-003	0.0129	3.3100e-003	1.3600e-003	4.6800e-003	0.0000	46.4558	46.4558	2.8600e-003	0.0000	46.5274
Worker	0.0173	0.0132	0.1335	3.7000e-004	0.0362	2.6000e-004	0.0365	9.6300e-003	2.4000e-004	9.8700e-003	0.0000	33.2039	33.2039	9.5000e-004	0.0000	33.2275
Total	0.0252	0.2363	0.1829	8.6000e-004	0.0477	1.6900e-003	0.0493	0.0129	1.6000e-003	0.0146	0.0000	79.6597	79.6597	3.8100e-003	0.0000	79.7549

3.4 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1746	1.2718	1.1342	1.9000e-003		0.0685	0.0685		0.0661	0.0661	0.0000	156.1262	156.1262	0.0290	0.0000	156.8508
Total	0.1746	1.2718	1.1342	1.9000e-003		0.0685	0.0685		0.0661	0.0661	0.0000	156.1262	156.1262	0.0290	0.0000	156.8508

CSUEB Library - Alameda County, Annual

3.4 Building Construction - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.1700e-003	0.1617	0.0349	3.8000e-004	9.0400e-003	7.5000e-004	9.7900e-003	2.6100e-003	7.2000e-004	3.3300e-003	0.0000	36.3966	36.3966	2.0900e-003	0.0000	36.4490
Worker	0.0125	9.2200e-003	0.0945	2.8000e-004	0.0286	2.0000e-004	0.0288	7.6000e-003	1.8000e-004	7.7800e-003	0.0000	25.3871	25.3871	6.6000e-004	0.0000	25.4035
Total	0.0177	0.1710	0.1294	6.6000e-004	0.0376	9.5000e-004	0.0386	0.0102	9.0000e-004	0.0111	0.0000	61.7838	61.7838	2.7500e-003	0.0000	61.8525

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0252	0.3192	1.1287	1.9000e-003		2.6100e-003	2.6100e-003		2.6100e-003	2.6100e-003	0.0000	156.1261	156.1261	0.0290	0.0000	156.8506
Total	0.0252	0.3192	1.1287	1.9000e-003		2.6100e-003	2.6100e-003		2.6100e-003	2.6100e-003	0.0000	156.1261	156.1261	0.0290	0.0000	156.8506

CSUEB Library - Alameda County, Annual

3.4 Building Construction - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.1700e-003	0.1617	0.0349	3.8000e-004	9.0400e-003	7.5000e-004	9.7900e-003	2.6100e-003	7.2000e-004	3.3300e-003	0.0000	36.3966	36.3966	2.0900e-003	0.0000	36.4490
Worker	0.0125	9.2200e-003	0.0945	2.8000e-004	0.0286	2.0000e-004	0.0288	7.6000e-003	1.8000e-004	7.7800e-003	0.0000	25.3871	25.3871	6.6000e-004	0.0000	25.4035
Total	0.0177	0.1710	0.1294	6.6000e-004	0.0376	9.5000e-004	0.0386	0.0102	9.0000e-004	0.0111	0.0000	61.7838	61.7838	2.7500e-003	0.0000	61.8525

3.5 Paving - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	4.2000e-003	0.0423	0.0444	7.0000e-005		2.3500e-003	2.3500e-003		2.1600e-003	2.1600e-003	0.0000	5.8829	5.8829	1.8600e-003	0.0000	5.9295
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	4.2000e-003	0.0423	0.0444	7.0000e-005		2.3500e-003	2.3500e-003		2.1600e-003	2.1600e-003	0.0000	5.8829	5.8829	1.8600e-003	0.0000	5.9295

CSUEB Library - Alameda County, Annual

3.5 Paving - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.2000e-004	1.7000e-004	1.7000e-003	1.0000e-005	5.1000e-004	0.0000	5.2000e-004	1.4000e-004	0.0000	1.4000e-004	0.0000	0.4569	0.4569	1.0000e-005	0.0000	0.4572
Total	2.2000e-004	1.7000e-004	1.7000e-003	1.0000e-005	5.1000e-004	0.0000	5.2000e-004	1.4000e-004	0.0000	1.4000e-004	0.0000	0.4569	0.4569	1.0000e-005	0.0000	0.4572

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	8.0000e-004	3.4600e-003	0.0493	7.0000e-005		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004	0.0000	5.8828	5.8828	1.8600e-003	0.0000	5.9295
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	8.0000e-004	3.4600e-003	0.0493	7.0000e-005		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004	0.0000	5.8828	5.8828	1.8600e-003	0.0000	5.9295

CSUEB Library - Alameda County, Annual

3.5 Paving - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.2000e-004	1.7000e-004	1.7000e-003	1.0000e-005	5.1000e-004	0.0000	5.2000e-004	1.4000e-004	0.0000	1.4000e-004	0.0000	0.4569	0.4569	1.0000e-005	0.0000	0.4572
Total	2.2000e-004	1.7000e-004	1.7000e-003	1.0000e-005	5.1000e-004	0.0000	5.2000e-004	1.4000e-004	0.0000	1.4000e-004	0.0000	0.4569	0.4569	1.0000e-005	0.0000	0.4572

3.6 Architectural Coating - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.5214					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.4200e-003	0.0168	0.0183	3.0000e-005		1.1100e-003	1.1100e-003		1.1100e-003	1.1100e-003	0.0000	2.5533	2.5533	2.0000e-004	0.0000	2.5582
Total	0.5239	0.0168	0.0183	3.0000e-005		1.1100e-003	1.1100e-003		1.1100e-003	1.1100e-003	0.0000	2.5533	2.5533	2.0000e-004	0.0000	2.5582

CSUEB Library - Alameda County, Annual

3.6 Architectural Coating - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.8000e-004	2.0000e-004	2.0900e-003	1.0000e-005	6.3000e-004	0.0000	6.4000e-004	1.7000e-004	0.0000	1.7000e-004	0.0000	0.5623	0.5623	1.0000e-005	0.0000	0.5627
Total	2.8000e-004	2.0000e-004	2.0900e-003	1.0000e-005	6.3000e-004	0.0000	6.4000e-004	1.7000e-004	0.0000	1.7000e-004	0.0000	0.5623	0.5623	1.0000e-005	0.0000	0.5627

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.5214					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.0000e-004	1.2900e-003	0.0183	3.0000e-005		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	2.5533	2.5533	2.0000e-004	0.0000	2.5582
Total	0.5217	1.2900e-003	0.0183	3.0000e-005		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	2.5533	2.5533	2.0000e-004	0.0000	2.5582

CSUEB Library - Alameda County, Annual

3.6 Architectural Coating - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.8000e-004	2.0000e-004	2.0900e-003	1.0000e-005	6.3000e-004	0.0000	6.4000e-004	1.7000e-004	0.0000	1.7000e-004	0.0000	0.5623	0.5623	1.0000e-005	0.0000	0.5627
Total	2.8000e-004	2.0000e-004	2.0900e-003	1.0000e-005	6.3000e-004	0.0000	6.4000e-004	1.7000e-004	0.0000	1.7000e-004	0.0000	0.5623	0.5623	1.0000e-005	0.0000	0.5627

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

CSUEB Library - Alameda County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Library	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Library	9.50	7.30	7.30	52.00	43.00	5.00	44	44	12

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Library	0.559358	0.040058	0.190549	0.109335	0.016678	0.005213	0.023344	0.044042	0.002152	0.002669	0.005545	0.000316	0.000739

5.0 Energy Detail

Historical Energy Use: N

CSUEB Library - Alameda County, Annual

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	219.9291	219.9291	9.9400e-003	2.0600e-003	220.7908
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	219.9291	219.9291	9.9400e-003	2.0600e-003	220.7908
NaturalGas Mitigated	0.0134	0.1213	0.1019	7.3000e-004		9.2200e-003	9.2200e-003		9.2200e-003	9.2200e-003	0.0000	132.0754	132.0754	2.5300e-003	2.4200e-003	132.8603
NaturalGas Unmitigated	0.0134	0.1213	0.1019	7.3000e-004		9.2200e-003	9.2200e-003		9.2200e-003	9.2200e-003	0.0000	132.0754	132.0754	2.5300e-003	2.4200e-003	132.8603

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Library	2.475e+006	0.0134	0.1213	0.1019	7.3000e-004		9.2200e-003	9.2200e-003		9.2200e-003	9.2200e-003	0.0000	132.0754	132.0754	2.5300e-003	2.4200e-003	132.8603
Total		0.0134	0.1213	0.1019	7.3000e-004		9.2200e-003	9.2200e-003		9.2200e-003	9.2200e-003	0.0000	132.0754	132.0754	2.5300e-003	2.4200e-003	132.8603

CSUEB Library - Alameda County, Annual

5.2 Energy by Land Use - Natural Gas

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Library	2.475e+006	0.0134	0.1213	0.1019	7.3000e-004		9.2200e-003	9.2200e-003		9.2200e-003	9.2200e-003	0.0000	132.0754	132.0754	2.5300e-003	2.4200e-003	132.8603
Total		0.0134	0.1213	0.1019	7.3000e-004		9.2200e-003	9.2200e-003		9.2200e-003	9.2200e-003	0.0000	132.0754	132.0754	2.5300e-003	2.4200e-003	132.8603

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Library	756000	219.9291	9.9400e-003	2.0600e-003	220.7908
Total		219.9291	9.9400e-003	2.0600e-003	220.7908

CSUEB Library - Alameda County, Annual

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Library	756000	219.9291	9.9400e-003	2.0600e-003	220.7908
Total		219.9291	9.9400e-003	2.0600e-003	220.7908

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.4428	1.0000e-005	9.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.7900e-003	1.7900e-003	0.0000	0.0000	1.9100e-003
Unmitigated	0.4428	1.0000e-005	9.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.7900e-003	1.7900e-003	0.0000	0.0000	1.9100e-003

CSUEB Library - Alameda County, Annual

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0521					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.3906					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	9.0000e-005	1.0000e-005	9.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.7900e-003	1.7900e-003	0.0000	0.0000	1.9100e-003
Total	0.4428	1.0000e-005	9.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.7900e-003	1.7900e-003	0.0000	0.0000	1.9100e-003

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0521					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.3906					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	9.0000e-005	1.0000e-005	9.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.7900e-003	1.7900e-003	0.0000	0.0000	1.9100e-003
Total	0.4428	1.0000e-005	9.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.7900e-003	1.7900e-003	0.0000	0.0000	1.9100e-003

7.0 Water Detail

CSUEB Library - Alameda County, Annual

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	10.9008	0.1024	2.5000e-003	14.2059
Unmitigated	10.9008	0.1024	2.5000e-003	14.2059

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Library	3.12889 / 4.89391	10.9008	0.1024	2.5000e-003	14.2059
Total		10.9008	0.1024	2.5000e-003	14.2059

CSUEB Library - Alameda County, Annual

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Library	3.12889 / 4.89391	10.9008	0.1024	2.5000e-003	14.2059
Total		10.9008	0.1024	2.5000e-003	14.2059

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	18.6934	1.1048	0.0000	46.3122
Unmitigated	18.6934	1.1048	0.0000	46.3122

CSUEB Library - Alameda County, Annual

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Library	92.09	18.6934	1.1048	0.0000	46.3122
Total		18.6934	1.1048	0.0000	46.3122

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Library	92.09	18.6934	1.1048	0.0000	46.3122
Total		18.6934	1.1048	0.0000	46.3122

9.0 Operational Offroad

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

CSUEB Library - Alameda County, Annual

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number
----------------	--------

11.0 Vegetation

CSUEB Library - Alameda County, Summer

CSUEB Library
Alameda County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Library	100.00	1000sqft	1.10	100,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	63
Climate Zone	5			Operational Year	2021
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MW hr)	641.35	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Acrage based on information provided by the university.

Construction Phase - Construction is anticipated to begin in February 2019 and have a 24-month duration. The library would go on the existing campus, so lesser days of paving was assumed to reflect no new parking lots/driveways.

Grading - Site is 1.1 acres. Assumed any soil work would be balanced on-site.

Vehicle Trips - The existing library on site will be closed when the project is opened. No new trips would be created.

Construction Off-road Equipment Mitigation - Mitigation measure reflect Table 8-2 "Basic Construction Mitigation Measures Recommended for ALL Proposed Projects" from the 2017 BAAQMD CEQA Guidelines.

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15

CSUEB Library - Alameda County, Summer

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstructionPhase	NumDays	10.00	20.00
tblConstructionPhase	NumDays	200.00	390.00
tblConstructionPhase	NumDays	4.00	10.00

CSUEB Library - Alameda County, Summer

tblConstructionPhase	NumDays	2.00	10.00
tblGrading	AcresOfGrading	3.75	1.10
tblGrading	AcresOfGrading	5.00	1.10
tblLandUse	LotAcreage	2.30	1.10
tblVehicleTrips	ST_TR	46.55	0.00
tblVehicleTrips	SU_TR	25.49	0.00
tblVehicleTrips	WD_TR	56.24	0.00

2.0 Emissions Summary

CSUEB Library - Alameda County, Summer

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.4267	9.0000e-005	0.0103	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0219	0.0219	6.0000e-005		0.0233
Energy	0.0731	0.6648	0.5584	3.9900e-003		0.0505	0.0505		0.0505	0.0505		797.7438	797.7438	0.0153	0.0146	802.4844
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	2.4998	0.6649	0.5687	3.9900e-003	0.0000	0.0506	0.0506	0.0000	0.0506	0.0506		797.7657	797.7657	0.0154	0.0146	802.5077

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.4267	9.0000e-005	0.0103	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0219	0.0219	6.0000e-005		0.0233
Energy	0.0731	0.6648	0.5584	3.9900e-003		0.0505	0.0505		0.0505	0.0505		797.7438	797.7438	0.0153	0.0146	802.4844
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	2.4998	0.6649	0.5687	3.9900e-003	0.0000	0.0506	0.0506	0.0000	0.0506	0.0506		797.7657	797.7657	0.0154	0.0146	802.5077

CSUEB Library - Alameda County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	2/1/2019	2/14/2019	5	10	
2	Grading	Grading	2/15/2019	2/28/2019	5	10	
3	Building Construction	Building Construction	3/1/2019	8/27/2020	5	390	
4	Paving	Paving	8/28/2020	9/10/2020	5	10	
5	Architectural Coating	Architectural Coating	9/11/2020	10/8/2020	5	20	

Acres of Grading (Site Preparation Phase): 1.1

Acres of Grading (Grading Phase): 1.1

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 150,000; Non-Residential Outdoor: 50,000; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

CSUEB Library - Alameda County, Summer

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

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	42.00	16.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

CSUEB Library - Alameda County, Summer

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Site Preparation - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					5.3860	0.0000	5.3860	2.9091	0.0000	2.9091			0.0000			0.0000
Off-Road	1.7123	19.4821	7.8893	0.0172		0.8824	0.8824		0.8118	0.8118		1,704.9189	1,704.9189	0.5394		1,718.4044
Total	1.7123	19.4821	7.8893	0.0172	5.3860	0.8824	6.2683	2.9091	0.8118	3.7208		1,704.9189	1,704.9189	0.5394		1,718.4044

CSUEB Library - Alameda County, Summer

3.2 Site Preparation - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0320	0.0204	0.2536	6.9000e-004	0.0657	4.5000e-004	0.0662	0.0174	4.2000e-004	0.0179		68.9591	68.9591	1.9500e-003		69.0078
Total	0.0320	0.0204	0.2536	6.9000e-004	0.0657	4.5000e-004	0.0662	0.0174	4.2000e-004	0.0179		68.9591	68.9591	1.9500e-003		69.0078

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.4237	0.0000	2.4237	1.3091	0.0000	1.3091			0.0000			0.0000
Off-Road	0.2106	0.9126	8.6714	0.0172		0.0281	0.0281		0.0281	0.0281	0.0000	1,704.9189	1,704.9189	0.5394		1,718.4044
Total	0.2106	0.9126	8.6714	0.0172	2.4237	0.0281	2.4518	1.3091	0.0281	1.3372	0.0000	1,704.9189	1,704.9189	0.5394		1,718.4044

CSUEB Library - Alameda County, Summer

3.2 Site Preparation - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0320	0.0204	0.2536	6.9000e-004	0.0657	4.5000e-004	0.0662	0.0174	4.2000e-004	0.0179		68.9591	68.9591	1.9500e-003		69.0078
Total	0.0320	0.0204	0.2536	6.9000e-004	0.0657	4.5000e-004	0.0662	0.0174	4.2000e-004	0.0179		68.9591	68.9591	1.9500e-003		69.0078

3.3 Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					4.6332	0.0000	4.6332	2.4953	0.0000	2.4953			0.0000			0.0000
Off-Road	1.4197	16.0357	6.6065	0.0141		0.7365	0.7365		0.6775	0.6775		1,396.3909	1,396.3909	0.4418		1,407.4359
Total	1.4197	16.0357	6.6065	0.0141	4.6332	0.7365	5.3697	2.4953	0.6775	3.1728		1,396.3909	1,396.3909	0.4418		1,407.4359

CSUEB Library - Alameda County, Summer

3.3 Grading - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0320	0.0204	0.2536	6.9000e-004	0.0657	4.5000e-004	0.0662	0.0174	4.2000e-004	0.0179		68.9591	68.9591	1.9500e-003		69.0078
Total	0.0320	0.0204	0.2536	6.9000e-004	0.0657	4.5000e-004	0.0662	0.0174	4.2000e-004	0.0179		68.9591	68.9591	1.9500e-003		69.0078

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.0850	0.0000	2.0850	1.1229	0.0000	1.1229			0.0000			0.0000
Off-Road	0.1725	0.7475	7.1557	0.0141		0.0230	0.0230		0.0230	0.0230	0.0000	1,396.3909	1,396.3909	0.4418		1,407.4359
Total	0.1725	0.7475	7.1557	0.0141	2.0850	0.0230	2.1080	1.1229	0.0230	1.1459	0.0000	1,396.3909	1,396.3909	0.4418		1,407.4359

CSUEB Library - Alameda County, Summer

3.3 Grading - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0320	0.0204	0.2536	6.9000e-004	0.0657	4.5000e-004	0.0662	0.0174	4.2000e-004	0.0179		68.9591	68.9591	1.9500e-003		69.0078
Total	0.0320	0.0204	0.2536	6.9000e-004	0.0657	4.5000e-004	0.0662	0.0174	4.2000e-004	0.0179		68.9591	68.9591	1.9500e-003		69.0078

3.4 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.2721	15.9802	13.4870	0.0220		0.9158	0.9158		0.8846	0.8846		2,018.0224	2,018.0224	0.3879		2,027.7210
Total	2.2721	15.9802	13.4870	0.0220		0.9158	0.9158		0.8846	0.8846		2,018.0224	2,018.0224	0.3879		2,027.7210

CSUEB Library - Alameda County, Summer

3.4 Building Construction - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0708	2.0202	0.4225	4.5100e-003	0.1084	0.0130	0.1214	0.0312	0.0124	0.0437		475.2245	475.2245	0.0277		475.9171
Worker	0.1681	0.1070	1.3314	3.6400e-003	0.3450	2.3700e-003	0.3474	0.0915	2.1800e-003	0.0937		362.0354	362.0354	0.0102		362.2908
Total	0.2388	2.1272	1.7539	8.1500e-003	0.4534	0.0154	0.4688	0.1227	0.0146	0.1374		837.2600	837.2600	0.0379		838.2079

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2930	3.7120	13.1241	0.0220		0.0303	0.0303		0.0303	0.0303	0.0000	2,018.0224	2,018.0224	0.3879		2,027.7210
Total	0.2930	3.7120	13.1241	0.0220		0.0303	0.0303		0.0303	0.0303	0.0000	2,018.0224	2,018.0224	0.3879		2,027.7210

CSUEB Library - Alameda County, Summer

3.4 Building Construction - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0708	2.0202	0.4225	4.5100e-003	0.1084	0.0130	0.1214	0.0312	0.0124	0.0437		475.2245	475.2245	0.0277		475.9171
Worker	0.1681	0.1070	1.3314	3.6400e-003	0.3450	2.3700e-003	0.3474	0.0915	2.1800e-003	0.0937		362.0354	362.0354	0.0102		362.2908
Total	0.2388	2.1272	1.7539	8.1500e-003	0.4534	0.0154	0.4688	0.1227	0.0146	0.1374		837.2600	837.2600	0.0379		838.2079

3.4 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.0305	14.7882	13.1881	0.0220		0.7960	0.7960		0.7688	0.7688		2,001.1595	2,001.1595	0.3715		2,010.4467
Total	2.0305	14.7882	13.1881	0.0220		0.7960	0.7960		0.7688	0.7688		2,001.1595	2,001.1595	0.3715		2,010.4467

CSUEB Library - Alameda County, Summer

3.4 Building Construction - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0589	1.8594	0.3776	4.4700e-003	0.1084	8.6700e-003	0.1171	0.0312	8.2900e-003	0.0395		471.9658	471.9658	0.0257		472.6077
Worker	0.1537	0.0946	1.1981	3.5200e-003	0.3450	2.3000e-003	0.3473	0.0915	2.1200e-003	0.0936		350.8519	350.8519	8.9900e-003		351.0767
Total	0.2125	1.9539	1.5757	7.9900e-003	0.4534	0.0110	0.4644	0.1227	0.0104	0.1332		822.8177	822.8177	0.0347		823.6844

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2930	3.7120	13.1241	0.0220		0.0303	0.0303		0.0303	0.0303	0.0000	2,001.1595	2,001.1595	0.3715		2,010.4467
Total	0.2930	3.7120	13.1241	0.0220		0.0303	0.0303		0.0303	0.0303	0.0000	2,001.1595	2,001.1595	0.3715		2,010.4467

CSUEB Library - Alameda County, Summer

3.4 Building Construction - 2020**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0589	1.8594	0.3776	4.4700e-003	0.1084	8.6700e-003	0.1171	0.0312	8.2900e-003	0.0395		471.9658	471.9658	0.0257		472.6077
Worker	0.1537	0.0946	1.1981	3.5200e-003	0.3450	2.3000e-003	0.3473	0.0915	2.1200e-003	0.0936		350.8519	350.8519	8.9900e-003		351.0767
Total	0.2125	1.9539	1.5757	7.9900e-003	0.4534	0.0110	0.4644	0.1227	0.0104	0.1332		822.8177	822.8177	0.0347		823.6844

3.5 Paving - 2020**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8402	8.4514	8.8758	0.0135		0.4695	0.4695		0.4328	0.4328		1,296.9461	1,296.9461	0.4111		1,307.2246
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.8402	8.4514	8.8758	0.0135		0.4695	0.4695		0.4328	0.4328		1,296.9461	1,296.9461	0.4111		1,307.2246

CSUEB Library - Alameda County, Summer

3.5 Paving - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0476	0.0293	0.3708	1.0900e-003	0.1068	7.1000e-004	0.1075	0.0283	6.6000e-004	0.0290		108.5970	108.5970	2.7800e-003		108.6666
Total	0.0476	0.0293	0.3708	1.0900e-003	0.1068	7.1000e-004	0.1075	0.0283	6.6000e-004	0.0290		108.5970	108.5970	2.7800e-003		108.6666

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.1598	0.6922	9.8512	0.0135		0.0213	0.0213		0.0213	0.0213	0.0000	1,296.9461	1,296.9461	0.4111		1,307.2246
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.1598	0.6922	9.8512	0.0135		0.0213	0.0213		0.0213	0.0213	0.0000	1,296.9461	1,296.9461	0.4111		1,307.2246

CSUEB Library - Alameda County, Summer

3.5 Paving - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0476	0.0293	0.3708	1.0900e-003	0.1068	7.1000e-004	0.1075	0.0283	6.6000e-004	0.0290		108.5970	108.5970	2.7800e-003		108.6666
Total	0.0476	0.0293	0.3708	1.0900e-003	0.1068	7.1000e-004	0.1075	0.0283	6.6000e-004	0.0290		108.5970	108.5970	2.7800e-003		108.6666

3.6 Architectural Coating - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	52.1438					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109		281.4481	281.4481	0.0218		281.9928
Total	52.3859	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109		281.4481	281.4481	0.0218		281.9928

CSUEB Library - Alameda County, Summer

3.6 Architectural Coating - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0293	0.0180	0.2282	6.7000e-004	0.0657	4.4000e-004	0.0662	0.0174	4.0000e-004	0.0178		66.8289	66.8289	1.7100e-003		66.8718
Total	0.0293	0.0180	0.2282	6.7000e-004	0.0657	4.4000e-004	0.0662	0.0174	4.0000e-004	0.0178		66.8289	66.8289	1.7100e-003		66.8718

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	52.1438					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0297	0.1288	1.8324	2.9700e-003		3.9600e-003	3.9600e-003		3.9600e-003	3.9600e-003	0.0000	281.4481	281.4481	0.0218		281.9928
Total	52.1735	0.1288	1.8324	2.9700e-003		3.9600e-003	3.9600e-003		3.9600e-003	3.9600e-003	0.0000	281.4481	281.4481	0.0218		281.9928

CSUEB Library - Alameda County, Summer

3.6 Architectural Coating - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0293	0.0180	0.2282	6.7000e-004	0.0657	4.4000e-004	0.0662	0.0174	4.0000e-004	0.0178		66.8289	66.8289	1.7100e-003		66.8718
Total	0.0293	0.0180	0.2282	6.7000e-004	0.0657	4.4000e-004	0.0662	0.0174	4.0000e-004	0.0178		66.8289	66.8289	1.7100e-003		66.8718

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

CSUEB Library - Alameda County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Library	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Library	9.50	7.30	7.30	52.00	43.00	5.00	44	44	12

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Library	0.559358	0.040058	0.190549	0.109335	0.016678	0.005213	0.023344	0.044042	0.002152	0.002669	0.005545	0.000316	0.000739

5.0 Energy Detail

Historical Energy Use: N

CSUEB Library - Alameda County, Summer

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0731	0.6648	0.5584	3.9900e-003		0.0505	0.0505		0.0505	0.0505		797.7438	797.7438	0.0153	0.0146	802.4844
NaturalGas Unmitigated	0.0731	0.6648	0.5584	3.9900e-003		0.0505	0.0505		0.0505	0.0505		797.7438	797.7438	0.0153	0.0146	802.4844

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Library	6780.82	0.0731	0.6648	0.5584	3.9900e-003		0.0505	0.0505		0.0505	0.0505		797.7438	797.7438	0.0153	0.0146	802.4844
Total		0.0731	0.6648	0.5584	3.9900e-003		0.0505	0.0505		0.0505	0.0505		797.7438	797.7438	0.0153	0.0146	802.4844

CSUEB Library - Alameda County, Summer

5.2 Energy by Land Use - Natural Gas

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Library	6.78082	0.0731	0.6648	0.5584	3.9900e-003		0.0505	0.0505		0.0505	0.0505		797.7438	797.7438	0.0153	0.0146	802.4844
Total		0.0731	0.6648	0.5584	3.9900e-003		0.0505	0.0505		0.0505	0.0505		797.7438	797.7438	0.0153	0.0146	802.4844

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2.4267	9.0000e-005	0.0103	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0219	0.0219	6.0000e-005		0.0233
Unmitigated	2.4267	9.0000e-005	0.0103	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0219	0.0219	6.0000e-005		0.0233

CSUEB Library - Alameda County, Summer

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.2857					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.1400					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	9.6000e-004	9.0000e-005	0.0103	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0219	0.0219	6.0000e-005		0.0233
Total	2.4267	9.0000e-005	0.0103	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0219	0.0219	6.0000e-005		0.0233

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.2857					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.1400					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	9.6000e-004	9.0000e-005	0.0103	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0219	0.0219	6.0000e-005		0.0233
Total	2.4267	9.0000e-005	0.0103	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0219	0.0219	6.0000e-005		0.0233

7.0 Water Detail

CSUEB Library - Alameda County, Summer

7.1 Mitigation Measures Water**8.0 Waste Detail**

8.1 Mitigation Measures Waste**9.0 Operational Offroad**

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number
----------------	--------

11.0 Vegetation

CSUEB Library - Alameda County, Winter

CSUEB Library
Alameda County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Library	100.00	1000sqft	1.10	100,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	63
Climate Zone	5			Operational Year	2021
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MW hr)	641.35	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Acrage based on information provided by the university.

Construction Phase - Construction is anticipated to begin in February 2019 and have a 24-month duration. The library would go on the existing campus, so lesser days of paving was assumed to reflect no new parking lots/driveways.

Grading - Site is 1.1 acres. Assumed any soil work would be balanced on-site.

Vehicle Trips - The existing library on site will be closed when the project is opened. No new trips would be created.

Construction Off-road Equipment Mitigation - Mitigation measure reflect Table 8-2 "Basic Construction Mitigation Measures Recommended for ALL Proposed Projects" from the 2017 BAAQMD CEQA Guidelines.

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15

CSUEB Library - Alameda County, Winter

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstructionPhase	NumDays	10.00	20.00
tblConstructionPhase	NumDays	200.00	390.00
tblConstructionPhase	NumDays	4.00	10.00

CSUEB Library - Alameda County, Winter

tblConstructionPhase	NumDays	2.00	10.00
tblGrading	AcresOfGrading	3.75	1.10
tblGrading	AcresOfGrading	5.00	1.10
tblLandUse	LotAcreage	2.30	1.10
tblVehicleTrips	ST_TR	46.55	0.00
tblVehicleTrips	SU_TR	25.49	0.00
tblVehicleTrips	WD_TR	56.24	0.00

2.0 Emissions Summary

CSUEB Library - Alameda County, Winter

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.4267	9.0000e-005	0.0103	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0219	0.0219	6.0000e-005		0.0233
Energy	0.0731	0.6648	0.5584	3.9900e-003		0.0505	0.0505		0.0505	0.0505		797.7438	797.7438	0.0153	0.0146	802.4844
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	2.4998	0.6649	0.5687	3.9900e-003	0.0000	0.0506	0.0506	0.0000	0.0506	0.0506		797.7657	797.7657	0.0154	0.0146	802.5077

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.4267	9.0000e-005	0.0103	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0219	0.0219	6.0000e-005		0.0233
Energy	0.0731	0.6648	0.5584	3.9900e-003		0.0505	0.0505		0.0505	0.0505		797.7438	797.7438	0.0153	0.0146	802.4844
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	2.4998	0.6649	0.5687	3.9900e-003	0.0000	0.0506	0.0506	0.0000	0.0506	0.0506		797.7657	797.7657	0.0154	0.0146	802.5077

CSUEB Library - Alameda County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	2/1/2019	2/14/2019	5	10	
2	Grading	Grading	2/15/2019	2/28/2019	5	10	
3	Building Construction	Building Construction	3/1/2019	8/27/2020	5	390	
4	Paving	Paving	8/28/2020	9/10/2020	5	10	
5	Architectural Coating	Architectural Coating	9/11/2020	10/8/2020	5	20	

Acres of Grading (Site Preparation Phase): 1.1

Acres of Grading (Grading Phase): 1.1

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 150,000; Non-Residential Outdoor: 50,000; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

CSUEB Library - Alameda County, Winter

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

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	42.00	16.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

CSUEB Library - Alameda County, Winter

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Site Preparation - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					5.3860	0.0000	5.3860	2.9091	0.0000	2.9091			0.0000			0.0000
Off-Road	1.7123	19.4821	7.8893	0.0172		0.8824	0.8824		0.8118	0.8118		1,704.9189	1,704.9189	0.5394		1,718.4044
Total	1.7123	19.4821	7.8893	0.0172	5.3860	0.8824	6.2683	2.9091	0.8118	3.7208		1,704.9189	1,704.9189	0.5394		1,718.4044

CSUEB Library - Alameda County, Winter

3.2 Site Preparation - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0334	0.0253	0.2406	6.4000e-004	0.0657	4.5000e-004	0.0662	0.0174	4.2000e-004	0.0179		63.4601	63.4601	1.8300e-003		63.5060
Total	0.0334	0.0253	0.2406	6.4000e-004	0.0657	4.5000e-004	0.0662	0.0174	4.2000e-004	0.0179		63.4601	63.4601	1.8300e-003		63.5060

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.4237	0.0000	2.4237	1.3091	0.0000	1.3091			0.0000			0.0000
Off-Road	0.2106	0.9126	8.6714	0.0172		0.0281	0.0281		0.0281	0.0281	0.0000	1,704.9189	1,704.9189	0.5394		1,718.4044
Total	0.2106	0.9126	8.6714	0.0172	2.4237	0.0281	2.4518	1.3091	0.0281	1.3372	0.0000	1,704.9189	1,704.9189	0.5394		1,718.4044

CSUEB Library - Alameda County, Winter

3.2 Site Preparation - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0334	0.0253	0.2406	6.4000e-004	0.0657	4.5000e-004	0.0662	0.0174	4.2000e-004	0.0179		63.4601	63.4601	1.8300e-003		63.5060
Total	0.0334	0.0253	0.2406	6.4000e-004	0.0657	4.5000e-004	0.0662	0.0174	4.2000e-004	0.0179		63.4601	63.4601	1.8300e-003		63.5060

3.3 Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					4.6332	0.0000	4.6332	2.4953	0.0000	2.4953			0.0000			0.0000
Off-Road	1.4197	16.0357	6.6065	0.0141		0.7365	0.7365		0.6775	0.6775		1,396.3909	1,396.3909	0.4418		1,407.4359
Total	1.4197	16.0357	6.6065	0.0141	4.6332	0.7365	5.3697	2.4953	0.6775	3.1728		1,396.3909	1,396.3909	0.4418		1,407.4359

CSUEB Library - Alameda County, Winter

3.3 Grading - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0334	0.0253	0.2406	6.4000e-004	0.0657	4.5000e-004	0.0662	0.0174	4.2000e-004	0.0179		63.4601	63.4601	1.8300e-003		63.5060
Total	0.0334	0.0253	0.2406	6.4000e-004	0.0657	4.5000e-004	0.0662	0.0174	4.2000e-004	0.0179		63.4601	63.4601	1.8300e-003		63.5060

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.0850	0.0000	2.0850	1.1229	0.0000	1.1229			0.0000			0.0000
Off-Road	0.1725	0.7475	7.1557	0.0141		0.0230	0.0230		0.0230	0.0230	0.0000	1,396.3909	1,396.3909	0.4418		1,407.4359
Total	0.1725	0.7475	7.1557	0.0141	2.0850	0.0230	2.1080	1.1229	0.0230	1.1459	0.0000	1,396.3909	1,396.3909	0.4418		1,407.4359

CSUEB Library - Alameda County, Winter

3.3 Grading - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0334	0.0253	0.2406	6.4000e-004	0.0657	4.5000e-004	0.0662	0.0174	4.2000e-004	0.0179		63.4601	63.4601	1.8300e-003		63.5060
Total	0.0334	0.0253	0.2406	6.4000e-004	0.0657	4.5000e-004	0.0662	0.0174	4.2000e-004	0.0179		63.4601	63.4601	1.8300e-003		63.5060

3.4 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.2721	15.9802	13.4870	0.0220		0.9158	0.9158		0.8846	0.8846		2,018.0224	2,018.0224	0.3879		2,027.7210
Total	2.2721	15.9802	13.4870	0.0220		0.9158	0.9158		0.8846	0.8846		2,018.0224	2,018.0224	0.3879		2,027.7210

CSUEB Library - Alameda County, Winter

3.4 Building Construction - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0741	2.0443	0.4877	4.3800e-003	0.1084	0.0132	0.1216	0.0312	0.0126	0.0438		462.3262	462.3262	0.0305		463.0897
Worker	0.1755	0.1331	1.2631	3.3500e-003	0.3450	2.3700e-003	0.3474	0.0915	2.1800e-003	0.0937		333.1655	333.1655	9.6300e-003		333.4062
Total	0.2496	2.1774	1.7508	7.7300e-003	0.4534	0.0156	0.4690	0.1227	0.0148	0.1375		795.4917	795.4917	0.0402		796.4959

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2930	3.7120	13.1241	0.0220		0.0303	0.0303		0.0303	0.0303	0.0000	2,018.0224	2,018.0224	0.3879		2,027.7210
Total	0.2930	3.7120	13.1241	0.0220		0.0303	0.0303		0.0303	0.0303	0.0000	2,018.0224	2,018.0224	0.3879		2,027.7210

CSUEB Library - Alameda County, Winter

3.4 Building Construction - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0741	2.0443	0.4877	4.3800e-003	0.1084	0.0132	0.1216	0.0312	0.0126	0.0438		462.3262	462.3262	0.0305		463.0897
Worker	0.1755	0.1331	1.2631	3.3500e-003	0.3450	2.3700e-003	0.3474	0.0915	2.1800e-003	0.0937		333.1655	333.1655	9.6300e-003		333.4062
Total	0.2496	2.1774	1.7508	7.7300e-003	0.4534	0.0156	0.4690	0.1227	0.0148	0.1375		795.4917	795.4917	0.0402		796.4959

3.4 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.0305	14.7882	13.1881	0.0220		0.7960	0.7960		0.7688	0.7688		2,001.1595	2,001.1595	0.3715		2,010.4467
Total	2.0305	14.7882	13.1881	0.0220		0.7960	0.7960		0.7688	0.7688		2,001.1595	2,001.1595	0.3715		2,010.4467

CSUEB Library - Alameda County, Winter

3.4 Building Construction - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0619	1.8776	0.4372	4.3500e-003	0.1084	8.8000e-003	0.1172	0.0312	8.4200e-003	0.0396		458.9963	458.9963	0.0283		459.7038
Worker	0.1603	0.1176	1.1313	3.2400e-003	0.3450	2.3000e-003	0.3473	0.0915	2.1200e-003	0.0936		322.8576	322.8576	8.4300e-003		323.0682
Total	0.2221	1.9952	1.5685	7.5900e-003	0.4534	0.0111	0.4645	0.1227	0.0105	0.1333		781.8538	781.8538	0.0367		782.7720

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2930	3.7120	13.1241	0.0220		0.0303	0.0303		0.0303	0.0303	0.0000	2,001.1595	2,001.1595	0.3715		2,010.4467
Total	0.2930	3.7120	13.1241	0.0220		0.0303	0.0303		0.0303	0.0303	0.0000	2,001.1595	2,001.1595	0.3715		2,010.4467

CSUEB Library - Alameda County, Winter

3.4 Building Construction - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0619	1.8776	0.4372	4.3500e-003	0.1084	8.8000e-003	0.1172	0.0312	8.4200e-003	0.0396		458.9963	458.9963	0.0283		459.7038
Worker	0.1603	0.1176	1.1313	3.2400e-003	0.3450	2.3000e-003	0.3473	0.0915	2.1200e-003	0.0936		322.8576	322.8576	8.4300e-003		323.0682
Total	0.2221	1.9952	1.5685	7.5900e-003	0.4534	0.0111	0.4645	0.1227	0.0105	0.1333		781.8538	781.8538	0.0367		782.7720

3.5 Paving - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8402	8.4514	8.8758	0.0135		0.4695	0.4695		0.4328	0.4328		1,296.9461	1,296.9461	0.4111		1,307.2246
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.8402	8.4514	8.8758	0.0135		0.4695	0.4695		0.4328	0.4328		1,296.9461	1,296.9461	0.4111		1,307.2246

CSUEB Library - Alameda County, Winter

3.5 Paving - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0496	0.0364	0.3502	1.0000e-003	0.1068	7.1000e-004	0.1075	0.0283	6.6000e-004	0.0290		99.9321	99.9321	2.6100e-003		99.9973
Total	0.0496	0.0364	0.3502	1.0000e-003	0.1068	7.1000e-004	0.1075	0.0283	6.6000e-004	0.0290		99.9321	99.9321	2.6100e-003		99.9973

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.1598	0.6922	9.8512	0.0135		0.0213	0.0213		0.0213	0.0213	0.0000	1,296.9461	1,296.9461	0.4111		1,307.2246
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.1598	0.6922	9.8512	0.0135		0.0213	0.0213		0.0213	0.0213	0.0000	1,296.9461	1,296.9461	0.4111		1,307.2246

CSUEB Library - Alameda County, Winter

3.5 Paving - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0496	0.0364	0.3502	1.0000e-003	0.1068	7.1000e-004	0.1075	0.0283	6.6000e-004	0.0290		99.9321	99.9321	2.6100e-003		99.9973
Total	0.0496	0.0364	0.3502	1.0000e-003	0.1068	7.1000e-004	0.1075	0.0283	6.6000e-004	0.0290		99.9321	99.9321	2.6100e-003		99.9973

3.6 Architectural Coating - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	52.1438					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109		281.4481	281.4481	0.0218		281.9928
Total	52.3859	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109		281.4481	281.4481	0.0218		281.9928

CSUEB Library - Alameda County, Winter

3.6 Architectural Coating - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0305	0.0224	0.2155	6.2000e-004	0.0657	4.4000e-004	0.0662	0.0174	4.0000e-004	0.0178		61.4967	61.4967	1.6100e-003		61.5368
Total	0.0305	0.0224	0.2155	6.2000e-004	0.0657	4.4000e-004	0.0662	0.0174	4.0000e-004	0.0178		61.4967	61.4967	1.6100e-003		61.5368

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	52.1438					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0297	0.1288	1.8324	2.9700e-003		3.9600e-003	3.9600e-003		3.9600e-003	3.9600e-003	0.0000	281.4481	281.4481	0.0218		281.9928
Total	52.1735	0.1288	1.8324	2.9700e-003		3.9600e-003	3.9600e-003		3.9600e-003	3.9600e-003	0.0000	281.4481	281.4481	0.0218		281.9928

CSUEB Library - Alameda County, Winter

3.6 Architectural Coating - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0305	0.0224	0.2155	6.2000e-004	0.0657	4.4000e-004	0.0662	0.0174	4.0000e-004	0.0178		61.4967	61.4967	1.6100e-003		61.5368
Total	0.0305	0.0224	0.2155	6.2000e-004	0.0657	4.4000e-004	0.0662	0.0174	4.0000e-004	0.0178		61.4967	61.4967	1.6100e-003		61.5368

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

CSUEB Library - Alameda County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Library	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Library	9.50	7.30	7.30	52.00	43.00	5.00	44	44	12

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Library	0.559358	0.040058	0.190549	0.109335	0.016678	0.005213	0.023344	0.044042	0.002152	0.002669	0.005545	0.000316	0.000739

5.0 Energy Detail

Historical Energy Use: N

CSUEB Library - Alameda County, Winter

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0731	0.6648	0.5584	3.9900e-003		0.0505	0.0505		0.0505	0.0505		797.7438	797.7438	0.0153	0.0146	802.4844
NaturalGas Unmitigated	0.0731	0.6648	0.5584	3.9900e-003		0.0505	0.0505		0.0505	0.0505		797.7438	797.7438	0.0153	0.0146	802.4844

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Library	6780.82	0.0731	0.6648	0.5584	3.9900e-003		0.0505	0.0505		0.0505	0.0505		797.7438	797.7438	0.0153	0.0146	802.4844
Total		0.0731	0.6648	0.5584	3.9900e-003		0.0505	0.0505		0.0505	0.0505		797.7438	797.7438	0.0153	0.0146	802.4844

CSUEB Library - Alameda County, Winter

5.2 Energy by Land Use - Natural Gas

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Library	6.78082	0.0731	0.6648	0.5584	3.9900e-003		0.0505	0.0505		0.0505	0.0505		797.7438	797.7438	0.0153	0.0146	802.4844
Total		0.0731	0.6648	0.5584	3.9900e-003		0.0505	0.0505		0.0505	0.0505		797.7438	797.7438	0.0153	0.0146	802.4844

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2.4267	9.0000e-005	0.0103	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0219	0.0219	6.0000e-005		0.0233
Unmitigated	2.4267	9.0000e-005	0.0103	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0219	0.0219	6.0000e-005		0.0233

CSUEB Library - Alameda County, Winter

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.2857					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.1400					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	9.6000e-004	9.0000e-005	0.0103	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0219	0.0219	6.0000e-005		0.0233
Total	2.4267	9.0000e-005	0.0103	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0219	0.0219	6.0000e-005		0.0233

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.2857					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.1400					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	9.6000e-004	9.0000e-005	0.0103	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0219	0.0219	6.0000e-005		0.0233
Total	2.4267	9.0000e-005	0.0103	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0219	0.0219	6.0000e-005		0.0233

7.0 Water Detail

CSUEB Library - Alameda County, Winter

7.1 Mitigation Measures Water**8.0 Waste Detail**

8.1 Mitigation Measures Waste**9.0 Operational Offroad**

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number
----------------	--------

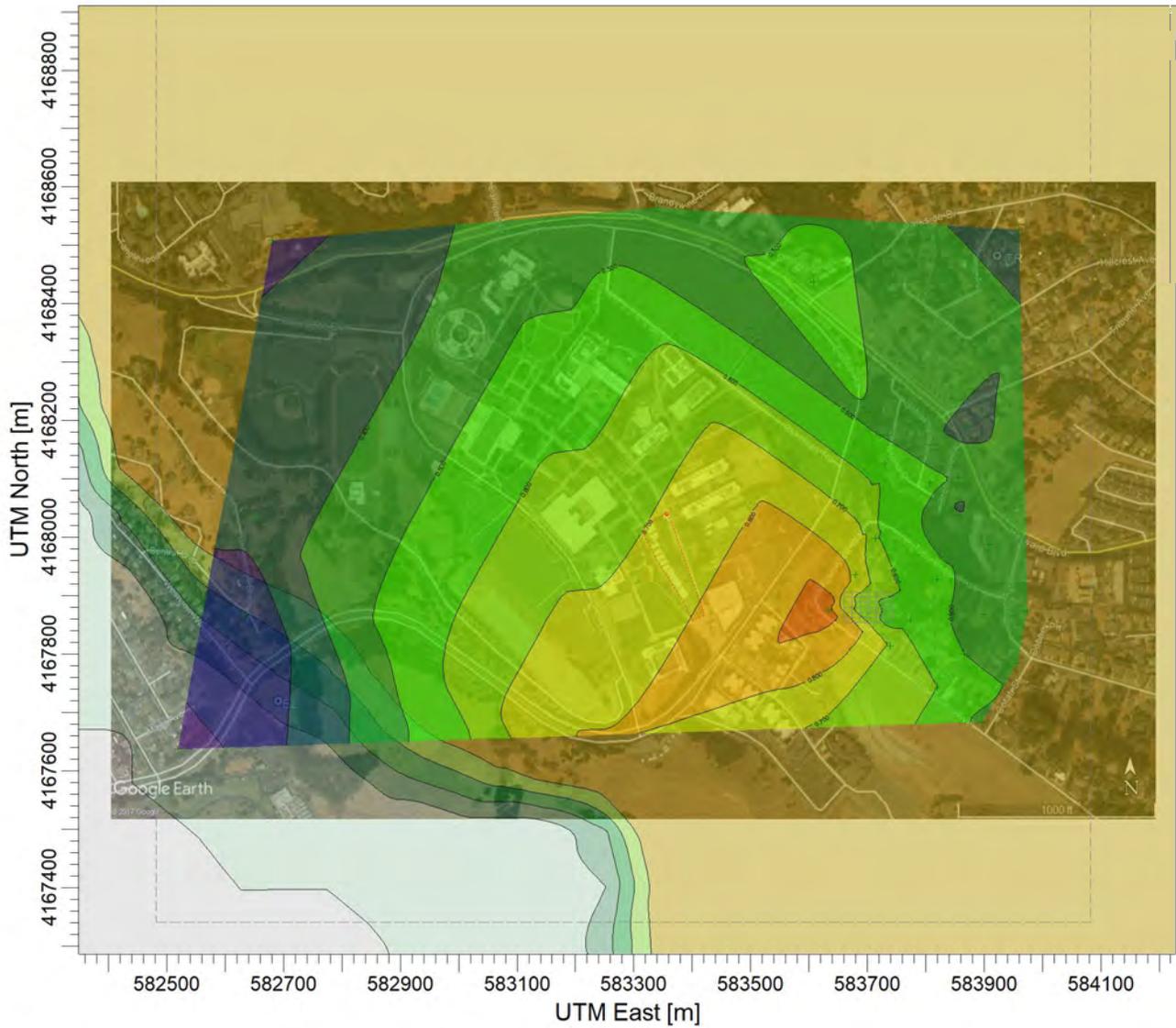
11.0 Vegetation

CSUEB Library Replacement Construction Health and Hazard Analysis

CalEEMod PM2.5 Exhaust	Unmitigated (2 year exposure)	Tier 3 (2 year exposure) 0.08480	Tier 4 (2 year exposure) 0.00516
tons/year	0.1055	169.6	10.32
lbs/year (2,000)	211	0.464657534	0.028273973
lbs/day (365)	0.578082192	0.019360731	0.001178082
lbs/hour (24)	0.024086758	0.03838	0.00234
Annual Average Concentration	0.04775	0.75491	0.04594
1-hour Concentration	0.93919		
CSUEB RAST Outputs		13.10	
Cancer	16.34	0.008	0.80
Chronic	0.010		0.000

PROJECT TITLE:

CSUEB Construction PM2.5 Unmitigated



PLOT FILE OF HIGH 1ST HIGH 1-HR VALUES FOR SOURCE GROUP: ALL

ug/m³

Max: 0.939 [ug/m³] at (583632.86, 4167874.97)



COMMENTS:	SOURCES:	COMPANY NAME:	
	1	Impact Sciences	
	RECEPTORS:		
	77		
OUTPUT TYPE:	SCALE:	1:11,819	
Concentration			
MAX:	DATE:	PROJECT NO.:	
0.939 ug/m³	1/16/2018		

Results Summary

C:\Users\jjerome\Desktop\csueb_library_offsite\csueb_library_offsite

PM2.5 - Concentration - Source Group: ALL

Averaging Period	Rank	Peak	Units	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
1-HR	1ST	0.93919	ug/m ³	583632.86	4167874.97	170.79	0.00	182.00	4/21/2013, 22
24-HR	1ST	0.13662	ug/m ³	583632.86	4167874.97	170.79	0.00	182.00	9/12/2013, 24
ANNUAL		0.04775	ug/m ³	583632.86	4167874.97	170.79	0.00	182.00	

*** AERMOD - VERSION 16216r *** *** C:\Users\jjerome\Desktop
\csueb_library_offsite\csueb_library_offsite *** 01/16/18
*** AERMET - VERSION 14134 *** ***
*** 11:54:03

PAGE 1

*** MODELOPTs: RegDEFAULT CONC ELEV URBAN

*** MODEL SETUP

OPTIONS SUMMARY ***

**Model Is Setup For Calculation of Average CONCentration Values.

-- DEPOSITION LOGIC --

**NO GAS DEPOSITION Data Provided.

**NO PARTICLE DEPOSITION Data Provided.

**Model Uses NO DRY DEPLETION. DRYDPLT = F

**Model Uses NO WET DEPLETION. WETDPLT = F

**Model Uses URBAN Dispersion Algorithm for the SBL for 1 Source(s),
for Total of 1 Urban Area(s):
Urban Population = 1647704.0 ; Urban Roughness Length = 1.000 m

**Model Uses Regulatory DEFAULT Options:

1. Stack-tip Downwash.
2. Model Accounts for ELEVated Terrain Effects.
3. Use Calms Processing Routine.
4. Use Missing Data Processing Routine.
5. No Exponential Decay.
6. Urban Roughness Length of 1.0 Meter Assumed.

**Other Options Specified:

CCVR_Sub - Meteorological data includes CCVR substitutions

TEMP_Sub - Meteorological data includes TEMP substitutions

**Model Assumes No FLAGPOLE Receptor Heights.

**The User Specified a Pollutant Type of: PM_2.5

**Model Calculates 2 Short Term Average(s) of: 1-HR 24-HR
and Calculates ANNUAL Averages

**This Run Includes: 1 Source(s); 1 Source Group(s);
and 77 Receptor(s)

with: 0 POINT(s), including
0 POINTCAP(s) and 0 POINTHOR(s)
and: 0 VOLUME source(s)
and: 1 AREA type source(s)
and: 0 LINE source(s)
and: 0 OPENPIT source(s)
and: 0 BUOYANT LINE source(s) with 0
line(s)

**Model Set To Continue RUNNING After the Setup Testing.

**The AERMET Input Meteorological Data Version Date: 14134

**Output Options Selected:

Model Outputs Tables of ANNUAL Averages by Receptor
Model Outputs Tables of Highest Short Term Values by
Receptor (RECTABLE Keyword)
Model Outputs External File(s) of High Values for
Plotting (PLOTFILE Keyword)
Model Outputs Separate Summary File of High Ranked
Values (SUMMFILE Keyword)

**NOTE: The Following Flags May Appear Following CONC Values:
c for Calm Hours

m for Missing Hours

b for Both Calm and Missing Hours

**Misc. Inputs: Base Elev. for Pot. Temp. Profile (m MSL) =
13.10 ; Decay Coef. = 0.000 ; Rot. Angle = 0.0

Emission Units =
GRAMS/SEC ; Emission Rate Unit
Factor = 0.10000E+07
Output Units = MICROGRAMS/M**3

**Approximate Storage Requirements of Model = 3.5 MB of
RAM.

**Detailed Error/Message File: csueb_library_offsite.err

**File for Summary of Results: csueb_library_offsite.sum

*** AERMOD - VERSION 16216r *** *** C:\Users\jjerome\Desktop
 \csueb_library_offsite\csueb_library_offsite *** 01/16/18
 *** AERMET - VERSION 14134 *** ***
 *** 11:54:03

PAGE 2

*** MODELOPTs: RegDEFAULT CONC ELEV URBAN

*** METEOROLOGICAL

DAYS SELECTED FOR PROCESSING ***

(1

=YES; 0=NO)

1 1 1 1 1	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1
1 1 1 1 1	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1
1 1 1 1 1	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1
1 1 1 1 1	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1
1 1 1 1 1	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1
1 1 1 1 1	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1
1 1 1 1 1	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1
1 1 1 1 1	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1
1 1 1 1 1	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1
1 1 1 1 1	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1

NOTE: METEOROLOGICAL DATA ACTUALLY PROCESSED
 WILL ALSO DEPEND ON WHAT IS INCLUDED IN THE DATA FILE.

*** UPPER BOUND OF FIRST
 THROUGH FIFTH WIND SPEED CATEGORIES ***

(METERS/SEC)

5.14, 8.23, 10.80, 1.54, 3.09,

13	01	01	1	13	121.1	0.543	1.446	0.006	910.	959.	-120.3
0.15	1.31	0.20			5.39	59.	10.0	285.4	2.0		
13	01	01	1	14	105.1	0.671	1.395	0.005	942.	1317.	-262.1
0.15	1.31	0.21			6.86	63.	10.0	284.9	2.0		
13	01	01	1	15	70.5	0.676	1.230	0.005	963.	1332.	-398.2
0.15	1.31	0.24			6.97	72.	10.0	285.4	2.0		
13	01	01	1	16	19.8	0.636	0.808	0.005	968.	1221.	-1181.9
0.15	1.31	0.33			6.65	58.	10.0	284.9	2.0		
13	01	01	1	17	-43.3	0.454	-9.000	-9.000	-999.	767.	196.6
0.15	1.31	0.56			5.07	58.	10.0	283.8	2.0		
13	01	01	1	18	-4.8	0.072	-9.000	-9.000	-999.	413.	7.0
0.15	1.31	1.00			1.52	95.	10.0	282.5	2.0		
13	01	01	1	19	-6.4	0.082	-9.000	-9.000	-999.	141.	8.0
0.15	1.31	1.00			1.74	112.	10.0	282.0	2.0		
13	01	01	1	20	-13.2	0.117	-9.000	-9.000	-999.	96.	11.0
0.12	1.31	1.00			2.61	35.	10.0	280.4	2.0		
13	01	01	1	21	-16.7	0.144	-9.000	-9.000	-999.	132.	16.4
0.15	1.31	1.00			2.62	80.	10.0	278.8	2.0		
13	01	01	1	22	-6.6	0.084	-9.000	-9.000	-999.	59.	8.1
0.15	1.31	1.00			1.77	87.	10.0	278.8	2.0		
13	01	01	1	23	-11.0	0.108	-9.000	-9.000	-999.	85.	10.5
0.15	1.31	1.00			2.28	71.	10.0	278.1	2.0		
13	01	01	1	24	-9.0	0.098	-9.000	-9.000	-999.	73.	9.4
0.15	1.31	1.00			2.06	68.	10.0	278.1	2.0		

First hour of profile data

YR	MO	DY	HR	HEIGHT	F	WDIR	WSPD	AMB_TMP	sigmaA	sigmaW	sigmaV
13	01	01	01	10.0	1	80.	1.67	277.1			
99.0	-99.00	-99.00									

F indicates top of profile (=1) or below (=0)

*** AERMOD - VERSION 16216r *** *** C:\Users\jjerome\Desktop
 \csueb_library_offsite\csueb_library_offsite *** 01/16/18
 *** AERMET - VERSION 14134 *** ***
 *** 11:54:03

PAGE 5

*** MODELOPTs: RegDEFAULT CONC ELEV URBAN

*** THE SUMMARY

OF HIGHEST 1-HR RESULTS ***

MICROGRAMS/M**3

** CONC OF PM_2.5 IN
 **

DATE

NETWORK	GROUP ID	AVERAGE CONC			(YYMMDDHH)
RECEPTOR	(XR, YR, ZELEV, ZHILL, ZFLAG)	OF	TYPE	GRID-ID	
ALL	HIGH	1ST HIGH VALUE IS	0.93919	ON 13042122:	AT
(	583632.86,	4167874.97,	170.79,	182.00,	0.00) DC

*** RECEPTOR TYPES: GC = GRIDCART
 GP = GRIDPOLR
 DC = DISCCART
 DP = DISCPOLR

*** AERMOD - VERSION 16216r *** *** C:\Users\jjerome\Desktop
 \csueb_library_offsite\csueb_library_offsite *** 01/16/18
 *** AERMET - VERSION 14134 *** ***
 *** 11:54:03

PAGE 6

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE SUMMARY

OF HIGHEST 24-HR RESULTS ***

MICROGRAMS/M**3

** CONC OF PM_2.5 IN
 **

DATE

NETWORK	GROUP ID	AVERAGE CONC				(YYMMDDHH)
RECEPTOR	(XR, YR, ZELEV, ZHILL, ZFLAG)	OF TYPE		GRID-ID		
---	---	---	---	---	---	
---	---	---	---	---	---	

ALL HIGH 1ST HIGH VALUE IS 0.13662 ON 13091224: AT
 (583632.86, 4167874.97, 170.79, 182.00, 0.00) DC

*** RECEPTOR TYPES: GC = GRIDCART
 GP = GRIDPOLR
 DC = DISCCART
 DP = DISCPOLR

*** AERMOD - VERSION 16216r *** *** C:\Users\jjerome\Desktop
\csueb_library_offsite\csueb_library_offsite *** 01/16/18
*** AERMET - VERSION 14134 *** ***
*** 11:54:03

PAGE 7

*** MODELOPTs: RegDEFAULT CONC ELEV URBAN

*** Message Summary : AERMOD Model Execution ***

----- Summary of Total Messages -----

A Total of 0 Fatal Error Message(s)
A Total of 2 Warning Message(s)
A Total of 1085 Informational Message(s)

A Total of 8784 Hours Were Processed

A Total of 121 Calm Hours Identified

A Total of 964 Missing Hours Identified (10.97
Percent)

CAUTION!: Number of Missing Hours Exceeds 10 Percent of Total!
Data May Not Be Acceptable for Regulatory

Applications.

See Section 5.3.2 of "Meteorological Monitoring

Guidance

for Regulatory Modeling Applications"

(EPA-454/R-99-005).

***** FATAL ERROR MESSAGES *****

*** NONE ***

***** WARNING MESSAGES *****

ME W186 71 MEOPEN: THRESH_1MIN 1-min ASOS wind speed
threshold used 0.50

MX W481 8785 MAIN: Data Remaining After End of Year.
Number of Hours= 24

```

**
*****
**
** AERMOD Input Produced by:
** AERMOD View Ver. 9.5.0
** Lakes Environmental Software Inc.
** Date: 1/16/2018
** File: C:\Users\jjerome\Desktop\csueb_library_offsite
\csueb_library_offsite.ADI
**
*****
**
**
*****
** AERMOD Control Pathway
*****
**
**
CO STARTING
  TITLEONE C:\Users\jjerome\Desktop\csueb_library_offsite
\csueb_library_offsite
  MODELOPT DFAULT CONC
  AVERTIME 1 24 ANNUAL
  URBANOPT 1647704 Alameda_County
  POLLUTID PM_2.5
  RUNORNOT RUN
  ERRORFIL csueb_library_offsite.err
CO FINISHED
**
*****
** AERMOD Source Pathway
*****
**
**
SO STARTING
** Source Location **
** Source ID - Type - X Coord. - Y Coord. **
  LOCATION CONSTEQPMT  AREAPOLY  583355.727  4168040.059
140.430
** DESCRSRC Construction Equipment
** Source Parameters **
  SRCPARAM CONSTEQPMT  4.3275E-07  4.300  13
  AREAVERT CONSTEQPMT  583355.727  4168040.059  583316.290
4168018.548
  AREAVERT CONSTEQPMT  583318.082  4168011.736  583319.516
4167997.754
  AREAVERT CONSTEQPMT  583339.952  4167960.109  583382.974
4167892.350
  AREAVERT CONSTEQPMT  583403.051  4167857.215  583420.260
4167865.819
  AREAVERT CONSTEQPMT  583414.524  4167888.047  583403.051
4167919.955

```

```

    AREAVERT CONSTEQPMT    583389.786 4167955.090 583376.521
4167989.508
    AREAVERT CONSTEQPMT    583365.765 4168023.925
    URBANSRC ALL
    SRCGROUP ALL
SO FINISHED
**
*****
** AERMOD Receptor Pathway
*****
**
**
RE STARTING
    INCLUDED csueb_library_offsite.rou
RE FINISHED
**
*****
** AERMOD Meteorology Pathway
*****
**
**
ME STARTING
    SURFFILE "..\Hayward Airport Met Data\KHWD_2013.SFC"
    PROFFILE "..\Hayward Airport Met Data\KHWD_2013.PFL"
    SURFDATA 93228 2013
    UAIRDATA 23230 2013 OAKLAND/WSO_AP
    PROFBASE 13.1 METERS
ME FINISHED
**
*****
** AERMOD Output Pathway
*****
**
**
OU STARTING
    RECTABLE ALLAVE 1ST
    RECTABLE 1 1ST
    RECTABLE 24 1ST
** Auto-Generated Plotfiles
    PLOTFILE 1 ALL 1ST CSUEB_LIBRARY_OFFSITE.AD\01H1GALL.PLT 31
    PLOTFILE 24 ALL 1ST CSUEB_LIBRARY_OFFSITE.AD\24H1GALL.PLT 32
    PLOTFILE ANNUAL ALL CSUEB_LIBRARY_OFFSITE.AD\AN00GALL.PLT 33
    SUMMFILE csueb_library_offsite.sum
OU FINISHED

```

*** Message Summary For AERMOD Model Setup ***

----- Summary of Total Messages -----

```

A Total of                0 Fatal Error Message(s)
A Total of                1 Warning Message(s)

```

A Total of 0 Informational Message(s)

***** FATAL ERROR MESSAGES *****
*** NONE ***

***** WARNING MESSAGES *****
ME W186 71 MEOPEN: THRESH_LMIN 1-min ASOS wind speed
threshold used 0.50

*** SETUP Finishes Successfully ***

*** AERMOD - VERSION 16216r *** *** C:\Users\jjerome\Desktop
\csueb_library_offsite\csueb_library_offsite *** 01/16/18
*** AERMET - VERSION 14134 *** ***
*** 11:54:03

PAGE 1

*** MODELOPTs: RegDEFAULT CONC ELEV URBAN

*** MODEL SETUP

OPTIONS SUMMARY ***

**Model Is Setup For Calculation of Average CONCentration
Values.

-- DEPOSITION LOGIC --

**NO GAS DEPOSITION Data Provided.
**NO PARTICLE DEPOSITION Data Provided.
**Model Uses NO DRY DEPLETION. DRYDPLT = F
**Model Uses NO WET DEPLETION. WETDPLT = F

**Model Uses URBAN Dispersion Algorithm for the SBL for 1
Source(s),
for Total of 1 Urban Area(s):
Urban Population = 1647704.0 ; Urban Roughness Length =
1.000 m

**Model Uses Regulatory DEFAULT Options:
1. Stack-tip Downwash.
2. Model Accounts for ELEVated Terrain Effects.
3. Use Calms Processing Routine.
4. Use Missing Data Processing Routine.
5. No Exponential Decay.
6. Urban Roughness Length of 1.0 Meter Assumed.

**Other Options Specified:
CCVR_Sub - Meteorological data includes CCVR
substitutions
TEMP_Sub - Meteorological data includes TEMP
substitutions

**Model Assumes No FLAGPOLE Receptor Heights.

**The User Specified a Pollutant Type of: PM_2.5

**Model Calculates 2 Short Term Average(s) of: 1-HR 24-HR
and Calculates ANNUAL Averages

**This Run Includes: 1 Source(s); 1 Source Group(s);
and 77 Receptor(s)

with: 0 POINT(s), including
0 POINTCAP(s) and 0 POINTHOR(s)
and: 0 VOLUME source(s)
and: 1 AREA type source(s)
and: 0 LINE source(s)
and: 0 OPENPIT source(s)
and: 0 BUOYANT LINE source(s) with 0
line(s)

**Model Set To Continue RUNNING After the Setup Testing.

**The AERMET Input Meteorological Data Version Date: 14134

**Output Options Selected:

Model Outputs Tables of ANNUAL Averages by Receptor
Model Outputs Tables of Highest Short Term Values by
Receptor (RECTABLE Keyword)
Model Outputs External File(s) of High Values for
Plotting (PLOTFILE Keyword)
Model Outputs Separate Summary File of High Ranked
Values (SUMMFILE Keyword)

**NOTE: The Following Flags May Appear Following CONC Values:
c for Calm Hours

m for Missing Hours

b for Both Calm and Missing Hours

**Misc. Inputs: Base Elev. for Pot. Temp. Profile (m MSL) =
13.10 ; Decay Coef. = 0.000 ; Rot. Angle = 0.0

Emission Units =
GRAMS/SEC ; Emission Rate Unit
Factor = 0.10000E+07
Output Units = MICROGRAMS/M**3

**Approximate Storage Requirements of Model = 3.5 MB of
RAM.

**Detailed Error/Message File: csueb_library_offsite.err

**File for Summary of Results: csueb_library_offsite.sum

```

*** AERMOD - VERSION 16216r ***   *** C:\Users\jjerome\Desktop
\csueb_library_offsite\csueb_library_offsite ***   01/16/18
*** AERMET - VERSION 14134 ***   ***
***   11:54:03

```

PAGE 2

*** MODELOPTs: RegDFault CONC ELEV URBAN

*** AREAPOLY

SOURCE DATA ***

RELEASE	NUMBER	NUMBER	EMISSION RATE	LOCATION OF AREA	BASE
SOURCE	PART.	INIT.	URBAN	EMISSION RATE	ELEV.
HEIGHT OF VERTS.	SZ	(GRAMS/SEC	X	Y	(METERS)
ID	CATS.	/METER**2)	SCALAR VARY	(METERS)	(METERS)
(METERS)	(METERS)		BY		
CONSTEQPMT	0	0.43275E-06	583355.7	4168040.1	140.4
4.30	13	0.00	YES		

*** AERMOD - VERSION 16216r *** *** C:\Users\jjerome\Desktop
\csueb_library_offsite\csueb_library_offsite *** 01/16/18
*** AERMET - VERSION 14134 *** ***
*** 11:54:03

PAGE 3

*** MODELOPTs: RegDEFAULT CONC ELEV URBAN

*** SOURCE IDs

DEFINING SOURCE GROUPS ***

SRCGROUP ID	SOURCE
IDs	
-----	-----

ALL CONSTEQPMT ,

*** AERMOD - VERSION 16216r *** *** C:\Users\jjerome\Desktop
\csueb_library_offsite\csueb_library_offsite *** 01/16/18
*** AERMET - VERSION 14134 *** ***
*** 11:54:03

PAGE 4

*** MODELOPTs: RegDEFAULT CONC ELEV URBAN

*** SOURCE IDs DEFINED

AS URBAN SOURCES ***

URBAN ID	URBAN POP	SOURCE
IDs		
-----	-----	-----

	1647704.	CONSTEQPMT ,

*** AERMOD - VERSION 16216r *** *** C:\Users\jjerome\Desktop
\csueb_library_offsite\csueb_library_offsite *** 01/16/18
*** AERMET - VERSION 14134 *** ***
*** 11:54:03

PAGE 5

*** MODELOPTs: RegDEFAULT CONC ELEV URBAN

*** GRIDDED RECEPTOR

NETWORK SUMMARY ***

*** NETWORK ID: UCART1 ;

NETWORK TYPE: GRIDCART ***

*** X-COORDINATES OF

GRID ***

(METERS)

583659.4, 583673.4, 583687.4, 583701.3, 583715.3,
583729.3, 583743.3,

*** Y-COORDINATES OF

GRID ***

(METERS)

4167853.8, 4167862.5, 4167871.2, 4167879.9, 4167888.6,
4167897.3, 4167906.0,

```

*** AERMOD - VERSION 16216r ***   *** C:\Users\jjerome\Desktop
\csueb_library_offsite\csueb_library_offsite ***   01/16/18
*** AERMET - VERSION 14134 ***   ***
***   11:54:03

```

PAGE 6

*** MODELOPTs: RegDEFAULT CONC ELEV URBAN

*** NETWORK ID: UCART1 ;

NETWORK TYPE: GRIDCART ***

* ELEVATION

HEIGHTS IN METERS *

Y-COORD COORD (METERS) (METERS)	X-			
583701.35	583715.33	583729.31	583743.29	
4167906.02	171.50	173.00	174.60	
176.20	177.70	178.90	179.40	
4167897.32	172.00	173.60	175.20	
176.80	178.50	179.60	179.90	
4167888.62	172.60	174.20	175.90	
177.50	179.20	180.30	180.50	
4167879.92	173.20	174.90	176.50	
178.20	179.90	181.00	181.00	
4167871.22	173.80	175.50	177.20	
178.90	180.60	181.80	181.60	
4167862.52	174.00	175.70	177.40	
179.10	180.80	181.90	181.80	
4167853.82	173.90	175.70	177.40	
179.10	180.80	182.00	181.80	

*** AERMOD - VERSION 16216r *** *** C:\Users\jjerome\Desktop
 \csueb_library_offsite\csueb_library_offsite *** 01/16/18
 *** AERMET - VERSION 14134 *** ***
 *** 11:54:03

PAGE 7

*** MODELOPTs: RegDEFAULT CONC ELEV URBAN

*** NETWORK ID: UCART1 ;

NETWORK TYPE: GRIDCART ***

* HILL HEIGHT

SCALES IN METERS *

Y-COORD COORD (METERS) (METERS)	X-			
583701.35	583715.33	583729.31	583743.29	
4167906.02	182.00	182.00	182.00	
182.00	182.00	178.90	179.40	
4167897.32	182.00	182.00	182.00	
182.00	182.00	179.60	179.90	
4167888.62	182.00	182.00	182.00	
182.00	182.00	180.30	180.50	
4167879.92	182.00	182.00	182.00	
182.00	182.00	181.00	181.00	
4167871.22	182.00	182.00	182.00	
182.00	182.00	181.80	181.60	
4167862.52	182.00	182.00	182.00	
182.00	182.00	181.90	181.80	
4167853.82	182.00	182.00	182.00	
182.00	180.80	182.00	181.80	

*** AERMOD - VERSION 16216r *** *** C:\Users\jjerome\Desktop
\csueb_library_offsite\csueb_library_offsite *** 01/16/18
*** AERMET - VERSION 14134 *** ***
*** 11:54:03

PAGE 8

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** DISCRETE

CARTESIAN RECEPTORS ***

(X-COORD, Y-COORD,

ZELEV, ZHILL, ZFLAG)

(METERS)

(583632.9, 4167875.0, 170.8, 182.0, 0.0);
(583730.8, 4168125.4, 172.7, 172.7, 0.0);
(583607.5, 4168436.9, 147.4, 182.0, 0.0);
(583340.8, 4168564.4, 123.4, 243.0, 0.0);
(582680.4, 4168508.2, 121.0, 121.0, 0.0);
(582652.4, 4168035.1, 119.5, 119.5, 0.0);
(582632.5, 4167869.1, 89.5, 121.0, 0.0);
(582518.9, 4167637.0, 60.0, 182.0, 0.0);
(583959.7, 4168526.4, 181.3, 243.0, 0.0);
(583714.2, 4167998.3, 172.3, 172.3, 0.0);
(583679.5, 4167936.0, 171.5, 182.0, 0.0);
(583739.4, 4167813.8, 181.9, 181.9, 0.0);
(583774.1, 4167859.3, 181.4, 181.4, 0.0);
(583818.5, 4167927.6, 181.1, 181.1, 0.0);
(583819.7, 4167743.1, 182.0, 182.0, 0.0);
(583865.2, 4167799.4, 182.0, 182.0, 0.0);
(583897.5, 4167867.7, 182.0, 182.0, 0.0);
(583896.3, 4167683.2, 182.0, 182.0, 0.0);
(583928.7, 4167740.7, 182.0, 182.0, 0.0);
(583956.2, 4167783.8, 182.0, 243.0, 0.0);
(583907.1, 4167987.6, 180.9, 180.9, 0.0);
(583974.2, 4167872.5, 182.0, 243.0, 0.0);
(583722.3, 4168175.4, 172.0, 172.0, 0.0);
(583807.2, 4168093.1, 178.3, 178.3, 0.0);
(583817.0, 4168157.8, 178.6, 178.6, 0.0);
(583854.5, 4168103.3, 179.6, 179.6, 0.0);
(583870.2, 4168189.8, 180.5, 180.5, 0.0);
(583853.5, 4168054.9, 179.6, 179.6, 0.0);

*** AERMOD - VERSION 16216r *** *** C:\Users\jjerome\Desktop
 \csueb_library_offsite\csueb_library_offsite *** 01/16/18
 *** AERMET - VERSION 14134 *** ***
 *** 11:54:03

PAGE 9

*** MODELOPTs: RegDEFAULT CONC ELEV URBAN

*** METEOROLOGICAL

DAYS SELECTED FOR PROCESSING ***

(1

=YES; 0=NO)

1 1 1 1 1	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1
1 1 1 1 1	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1
1 1 1 1 1	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1
1 1 1 1 1	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1
1 1 1 1 1	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1
1 1 1 1 1	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1
1 1 1 1 1	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1
1 1 1 1 1	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1
1 1 1 1 1	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1
1 1 1 1 1	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1

NOTE: METEOROLOGICAL DATA ACTUALLY PROCESSED
 WILL ALSO DEPEND ON WHAT IS INCLUDED IN THE DATA FILE.

*** UPPER BOUND OF FIRST
 THROUGH FIFTH WIND SPEED CATEGORIES ***

(METERS/SEC)

5.14, 8.23, 10.80, 1.54, 3.09,

*** AERMOD - VERSION 16216r *** *** C:\Users\jjerome\Desktop
 \csueb_library_offsite\csueb_library_offsite *** 01/16/18
 *** AERMET - VERSION 14134 *** ***
 *** 11:54:03

PAGE 10

*** MODELOPTs: RegDEFAULT CONC ELEV URBAN

*** UP TO THE FIRST 24 HOURS

OF METEOROLOGICAL DATA ***

Surface file: ..\Hayward Airport Met Data\KHWD_2013.SFC
 Met Version: 14134
 Profile file: ..\Hayward Airport Met Data\KHWD_2013.PFL
 Surface format: FREE
 Profile format: FREE
 Surface station no.: 93228 Upper air
 station no.: 23230
 Name: UNKNOWN
 Name: OAKLAND/WSO_AP
 Year: 2013
 Year: 2013

First 24 hours of scalar data

YR	MO	DY	JDY	HR	H0	U*	W*	DT/DZ	ZICNV	ZIMCH	M-O	LEN
Z0	BOWEN	ALBEDO	REF	WS	WD	HT	REF	TA	HT			
13	01	01	1	01	-5.9	0.079	-9.000	-9.000	-999.	53.		7.6
0.15	1.31	1.00			1.67	80.	10.0	277.0	2.0			
13	01	01	1	02	-6.4	0.082	-9.000	-9.000	-999.	57.		7.9
0.15	1.31	1.00			1.74	64.	10.0	276.4	2.0			
13	01	01	1	03	-10.0	0.144	-9.000	-9.000	-999.	132.		27.5
0.15	1.31	1.00			2.18	95.	10.0	277.0	2.0			
13	01	01	1	04	-13.1	0.227	-9.000	-9.000	-999.	259.		80.9
0.15	1.31	1.00			2.74	70.	10.0	278.1	2.0			
13	01	01	1	05	-19.2	0.333	-9.000	-9.000	-999.	462.		175.7
0.15	1.31	1.00			3.75	54.	10.0	279.2	2.0			
13	01	01	1	06	-20.7	0.301	-9.000	-9.000	-999.	398.		120.8
0.12	1.31	1.00			3.68	45.	10.0	279.2	2.0			
13	01	01	1	07	-16.3	0.161	-9.000	-9.000	-999.	168.		23.2
0.12	1.31	1.00			2.66	45.	10.0	278.1	2.0			
13	01	01	1	08	-13.8	0.125	-9.000	-9.000	-999.	106.		12.8
0.12	1.31	0.75			2.61	48.	10.0	278.1	2.0			
13	01	01	1	09	-3.7	0.271	-9.000	-9.000	-999.	339.		489.6
0.15	1.31	0.39			2.93	52.	10.0	279.2	2.0			
13	01	01	1	10	50.8	0.342	0.568	0.005	131.	479.		-71.7
0.15	1.31	0.27			3.30	81.	10.0	280.9	2.0			
13	01	01	1	11	92.7	0.446	0.952	0.008	340.	715.		-87.5
0.15	1.31	0.22			4.36	97.	10.0	282.0	2.0			
13	01	01	1	12	116.6	0.428	1.377	0.008	818.	672.		-61.2
0.15	1.31	0.21			4.09	81.	10.0	283.8	2.0			

13	01	01	1	13	121.1	0.543	1.446	0.006	910.	959.	-120.3
0.15	1.31	0.20			5.39	59.	10.0	285.4	2.0		
13	01	01	1	14	105.1	0.671	1.395	0.005	942.	1317.	-262.1
0.15	1.31	0.21			6.86	63.	10.0	284.9	2.0		
13	01	01	1	15	70.5	0.676	1.230	0.005	963.	1332.	-398.2
0.15	1.31	0.24			6.97	72.	10.0	285.4	2.0		
13	01	01	1	16	19.8	0.636	0.808	0.005	968.	1221.	-1181.9
0.15	1.31	0.33			6.65	58.	10.0	284.9	2.0		
13	01	01	1	17	-43.3	0.454	-9.000	-9.000	-999.	767.	196.6
0.15	1.31	0.56			5.07	58.	10.0	283.8	2.0		
13	01	01	1	18	-4.8	0.072	-9.000	-9.000	-999.	413.	7.0
0.15	1.31	1.00			1.52	95.	10.0	282.5	2.0		
13	01	01	1	19	-6.4	0.082	-9.000	-9.000	-999.	141.	8.0
0.15	1.31	1.00			1.74	112.	10.0	282.0	2.0		
13	01	01	1	20	-13.2	0.117	-9.000	-9.000	-999.	96.	11.0
0.12	1.31	1.00			2.61	35.	10.0	280.4	2.0		
13	01	01	1	21	-16.7	0.144	-9.000	-9.000	-999.	132.	16.4
0.15	1.31	1.00			2.62	80.	10.0	278.8	2.0		
13	01	01	1	22	-6.6	0.084	-9.000	-9.000	-999.	59.	8.1
0.15	1.31	1.00			1.77	87.	10.0	278.8	2.0		
13	01	01	1	23	-11.0	0.108	-9.000	-9.000	-999.	85.	10.5
0.15	1.31	1.00			2.28	71.	10.0	278.1	2.0		
13	01	01	1	24	-9.0	0.098	-9.000	-9.000	-999.	73.	9.4
0.15	1.31	1.00			2.06	68.	10.0	278.1	2.0		

First hour of profile data

YR	MO	DY	HR	HEIGHT	F	WDIR	WSPD	AMB_TMP	sigmaA	sigmaW	sigmaV
13	01	01	01	10.0	1	80.	1.67	277.1			
99.0	-99.00	-99.00									

F indicates top of profile (=1) or below (=0)

*** AERMOD - VERSION 16216r *** *** C:\Users\jjerome\Desktop
 \csueb_library_offsite\csueb_library_offsite *** 01/16/18
 *** AERMET - VERSION 14134 *** ***
 *** 11:54:03

PAGE 11

*** MODELOPTs: RegDEFAULT CONC ELEV URBAN

 *** THE ANNUAL AVERAGE CONCENTRATION VALUES
 AVERAGED OVER 1 YEARS FOR SOURCE GROUP: ALL ***
 INCLUDING SOURCE(S):
 CONSTEQPMT ,

 *** NETWORK ID: UCART1 ;
 NETWORK TYPE: GRIDCART ***

 ** CONC OF PM_{2.5} IN
 MICROGRAMS/M**3 **

Y-COORD	|				X-
COORD (METERS)	|				
(METERS)	|	583659.41	583673.39	583687.37	
583701.35	|	583715.33	583729.31	583743.29	
- - - - -		- - - - -	- - - - -	- - - - -	- - - - -
- - - - -		- - - - -	- - - - -	- - - - -	- - - - -
-					

4167906.02	|	0.04063	0.03748	0.03467
0.03216	|	0.02992	0.02794	0.02621
4167897.32	|	0.04105	0.03789	0.03508
0.03257	|	0.03031	0.02833	0.02662
4167888.62	|	0.04124	0.03813	0.03533
0.03285	|	0.03060	0.02863	0.02692
4167879.92	|	0.04123	0.03816	0.03544
0.03298	|	0.03077	0.02882	0.02715
4167871.22	|	0.04101	0.03804	0.03538
0.03298	|	0.03082	0.02890	0.02728
4167862.52	|	0.04069	0.03783	0.03525
0.03292	|	0.03080	0.02894	0.02735
4167853.82	|	0.04025	0.03748	0.03499
0.03274	|	0.03070	0.02888	0.02734

*** AERMOD - VERSION 16216r *** *** C:\Users\jjerome\Desktop
 \csueb_library_offsite\csueb_library_offsite *** 01/16/18
 *** AERMET - VERSION 14134 *** ***
 *** 11:54:03

PAGE 13

*** MODELOPTs: RegDEFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 1-HR AVERAGE
 CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
 INCLUDING SOURCE(S):

CONSTEQPMT ,

*** NETWORK ID: UCART1 ;

NETWORK TYPE: GRIDCART ***

MICROGRAMS/M**3 ** CONC OF PM_2.5 IN **

Y-COORD COORD (METERS) (METERS)	X-
583687.37	583701.35
583659.41	583673.39
583715.33	

4167906.0 |	0.76776 (13043003)	0.73609 (13043003)
0.70536 (13043003)	0.67679 (13043003)	0.65098
(13043003)		
4167897.3 |	0.75591 (13113019)	0.71098 (13113019)
0.67120 (13043003)	0.64597 (13043003)	0.62145
(13043003)		
4167888.6 |	0.75613 (13113019)	0.71749 (13113019)
0.67884 (13113019)	0.64239 (13113019)	0.60609
(13113019)		
4167879.9 |	0.76250 (13042122)	0.71057 (13113019)
0.67893 (13113019)	0.64687 (13113019)	0.61554
(13113019)		
4167871.2 |	0.81252 (13042122)	0.73848 (13042122)
0.66796 (13042122)	0.64070 (13113019)	0.61456
(13113019)		
4167862.5 |	0.85297 (13042122)	0.78500 (13042122)
0.71883 (13042122)	0.65511 (13042122)	0.60740
(13113019)		
4167853.8 |	0.88213 (13042122)	0.82009 (13042122)
0.75987 (13042122)	0.70070 (13042122)	0.64315
(13042122)		

*** AERMOD - VERSION 16216r *** *** C:\Users\jjjerome\Desktop
 \csueb_library_offsite\csueb_library_offsite *** 01/16/18
 *** AERMET - VERSION 14134 *** ***
 *** 11:54:03

PAGE 16

*** MODELOPTs: RegDEFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 24-HR AVERAGE
 CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
 INCLUDING SOURCE(S):

CONSTEQPMT ,

*** NETWORK ID: UCART1 ;

NETWORK TYPE: GRIDCART ***

MICROGRAMS/M**3 ** CONC OF PM_2.5 IN **

Y-COORD COORD (METERS) (METERS)	X-
583687.37	583659.41 583673.39
	583701.35 583715.33

4167906.0 |	0.12461 (13091324)	0.11711 (13091324)
0.11026 (13091324)	0.10400 (13091324)	0.09829 (13091324)
4167897.3 |	0.12460 (13091324)	0.11723 (13091324)
0.11049 (13091324)	0.10432 (13091324)	0.09863 (13091324)
4167888.6 |	0.12341 (13091324)	0.11632 (13091324)
0.10979 (13091324)	0.10380 (13091324)	0.09825 (13091324)
4167879.9 |	0.12106 (13091324)	0.11437 (13091324)
0.10820 (13091324)	0.10246 (13091324)	0.09715 (13091324)
4167871.2 |	0.11976 (13051024)	0.11335 (13051024)
0.10724 (13051024)	0.10140 (13051024)	0.09582 (13051024)
4167862.5 |	0.12363 (13091224)	0.11359 (13091224)
0.10628 (13051024)	0.10104 (13051024)	0.09596 (13051024)
4167853.8 |	0.12857 (13091224)	0.11882 (13091224)
0.10973 (13091224)	0.10126 (13091224)	0.09510 (13051024)

*** AERMOD - VERSION 16216r *** *** C:\Users\jjerome\Desktop
 \csueb_library_offsite\csueb_library_offsite *** 01/16/18
 *** AERMET - VERSION 14134 *** ***
 *** 11:54:03

PAGE 18

*** MODELOPTs: RegDEFAULT CONC ELEV URBAN

*** THE 1ST HIGHEST 24-HR AVERAGE
 CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
 INCLUDING SOURCE(S):

CONSTEQPMT ,

*** DISCRETE

CARTESIAN RECEPTOR POINTS ***

MICROGRAMS/M**3 ** CONC OF PM_2.5 IN
 **

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
583632.86	4167874.97	0.13662	(13091224)
583730.78	4168125.43	0.05504	(13080124)
583607.54	4168436.91	0.07187	(13083024)
583340.80	4168564.37	0.05048	(13110724)
582680.41	4168508.23	0.02967	(13010524)
582652.37	4168035.06	0.06825c	(13011824)
582632.51	4167869.15	0.06729	(13122824)
582518.86	4167637.00	0.05246m	(13092624)
583959.71	4168526.41	0.02310	(13100124)
583714.20	4167998.34	0.08702	(13051724)
583679.45	4167936.03	0.10653	(13091324)
583739.37	4167813.81	0.09799	(13091224)
583774.12	4167859.34	0.07752	(13051024)
583818.45	4167927.64	0.06681	(13061724)
583819.65	4167743.11	0.08715	(13070124)
583865.18	4167799.43	0.06085	(13091224)
583897.54	4167867.73	0.05908	(13061724)
583896.34	4167683.20	0.07086	(13070124)
583928.69	4167740.71	0.05779	(13070124)
583956.25	4167783.85	0.04784	(13061524)
583907.12	4167987.56	0.05083	(13051724)
583974.23	4167872.52	0.05026	(13061724)
583722.26	4168175.43	0.05461	(13041324)
583807.16	4168093.14	0.05315	(13091424)
583816.95	4168157.80	0.04221	(13080124)
583854.51	4168103.27	0.04759	(13091424)
583870.18	4168189.80	0.03537	(13080124)
583853.53	4168054.94	0.05267	(13091424)

*** AERMOD - VERSION 16216r *** *** C:\Users\jjerome\Desktop
 \csueb_library_offsite\csueb_library_offsite *** 01/16/18
 *** AERMET - VERSION 14134 *** ***
 *** 11:54:03

PAGE 20

*** MODELOPTs: RegDEFAULT CONC ELEV URBAN

*** THE SUMMARY

OF HIGHEST 1-HR RESULTS ***

MICROGRAMS/M**3

** CONC OF PM_2.5 IN
 **

DATE

NETWORK	GROUP ID	AVERAGE CONC				(YYMMDDHH)
RECEPTOR	(XR, YR, ZELEV, ZHILL, ZFLAG)	OF TYPE		GRID-ID		
ALL	HIGH	1ST HIGH VALUE IS		0.93919	ON 13042122: AT	
(	583632.86,	4167874.97,	170.79,	182.00,	0.00) DC

*** RECEPTOR TYPES: GC = GRIDCART
 GP = GRIDPOLR
 DC = DISCCART
 DP = DISCPOLR

*** AERMOD - VERSION 16216r *** *** C:\Users\jjerome\Desktop
 \csueb_library_offsite\csueb_library_offsite *** 01/16/18
 *** AERMET - VERSION 14134 *** ***
 *** 11:54:03

PAGE 21

*** MODELOPTs: RegDEFAULT CONC ELEV URBAN

*** THE SUMMARY

OF HIGHEST 24-HR RESULTS ***

MICROGRAMS/M**3

** CONC OF PM_{2.5} IN
 **

DATE

NETWORK	GROUP ID	AVERAGE CONC				(YYMMDDHH)
RECEPTOR	(XR, YR, ZELEV, ZHILL, ZFLAG)	OF TYPE		GRID-ID		
---	---	---	---	---	---	
---	---	---	---	---	---	

ALL HIGH 1ST HIGH VALUE IS 0.13662 ON 13091224: AT
 (583632.86, 4167874.97, 170.79, 182.00, 0.00) DC

*** RECEPTOR TYPES: GC = GRIDCART
 GP = GRIDPOLR
 DC = DISCCART
 DP = DISCPOLR

*** AERMOD - VERSION 16216r *** *** C:\Users\jjjerome\Desktop
\csueb_library_offsite\csueb_library_offsite *** 01/16/18
*** AERMET - VERSION 14134 *** ***
*** 11:54:03

PAGE 22

*** MODELOPTs: RegDEFAULT CONC ELEV URBAN

*** Message Summary : AERMOD Model Execution ***

----- Summary of Total Messages -----

A Total of 0 Fatal Error Message(s)
A Total of 2 Warning Message(s)
A Total of 1085 Informational Message(s)

A Total of 8784 Hours Were Processed

A Total of 121 Calm Hours Identified

A Total of 964 Missing Hours Identified (10.97
Percent)

CAUTION!: Number of Missing Hours Exceeds 10 Percent of Total!
Data May Not Be Acceptable for Regulatory
Applications.
See Section 5.3.2 of "Meteorological Monitoring
Guidance
for Regulatory Modeling Applications"
(EPA-454/R-99-005).

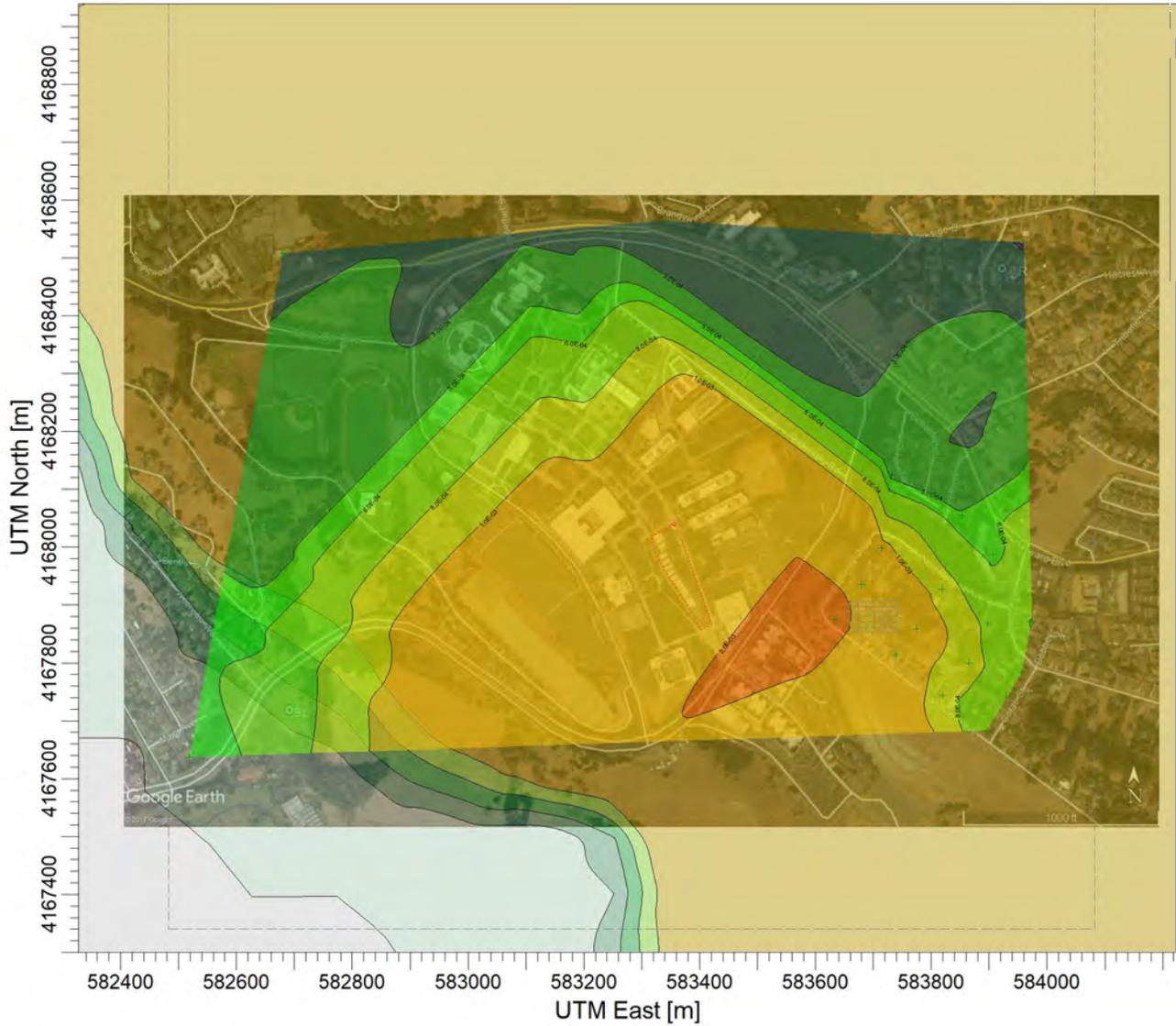
***** FATAL ERROR MESSAGES *****
*** NONE ***

***** WARNING MESSAGES *****
ME W186 71 MEOPEN: THRESH_1MIN 1-min ASOS wind speed
threshold used 0.50
MX W481 8785 MAIN: Data Remaining After End of Year.
Number of Hours= 24

*** AERMOD Finishes Successfully ***

PROJECT TITLE:

CSUEB Library Construction PM2.5 Tier 4



PLOT FILE OF ANNUAL VALUES AVERAGED ACROSS 1 YEARS FOR SOURCE GROUP: ALL

ug/m³

Max: 2.3E-03 [ug/m³] at (583632.86, 4167874.97)



COMMENTS:	SOURCES: 1	COMPANY NAME: Impact Sciences
	RECEPTORS: 77	
	OUTPUT TYPE: Concentration	SCALE: 1:11,920 0  0.4 km
	MAX: 2.3E-03 ug/m³	DATE: 2/26/2018
		PROJECT NO.:

Results Summary

C:\Users\jjerome\Desktop\csueb_library_mitigated\csueb_library_TIER4

PM2.5 - Concentration - Source Group: ALL

Averaging Period	Rank	Peak	Units	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
1-HR	1ST	0.04594	ug/m^3	583632.86	4167874.97	170.79	0.00	182.00	4/21/2013, 22
24-HR	1ST	0.00668	ug/m^3	583632.86	4167874.97	170.79	0.00	182.00	9/12/2013, 24
ANNUAL		0.00234	ug/m^3	583632.86	4167874.97	170.79	0.00	182.00	

*** AERMOD - VERSION 16216r *** *** C:\Users\jjerome\Desktop
\csueb_library_TIER4 *** 02/26/18
*** AERMET - VERSION 14134 *** ***
*** 12:00:01

PAGE 1

*** MODELOPTs: RegDEFAULT CONC ELEV URBAN

*** MODEL SETUP

OPTIONS SUMMARY ***

**Model Is Setup For Calculation of Average CONCentration Values.

-- DEPOSITION LOGIC --

**NO GAS DEPOSITION Data Provided.

**NO PARTICLE DEPOSITION Data Provided.

**Model Uses NO DRY DEPLETION. DRYDPLT = F

**Model Uses NO WET DEPLETION. WETDPLT = F

**Model Uses URBAN Dispersion Algorithm for the SBL for 1 Source(s),

for Total of 1 Urban Area(s):

Urban Population = 1647704.0 ; Urban Roughness Length = 1.000 m

**Model Uses Regulatory DEFAULT Options:

1. Stack-tip Downwash.

2. Model Accounts for ELEVated Terrain Effects.

3. Use Calms Processing Routine.

4. Use Missing Data Processing Routine.

5. No Exponential Decay.

6. Urban Roughness Length of 1.0 Meter Assumed.

**Other Options Specified:

CCVR_Sub - Meteorological data includes CCVR substitutions

TEMP_Sub - Meteorological data includes TEMP substitutions

**Model Assumes No FLAGPOLE Receptor Heights.

**The User Specified a Pollutant Type of: PM_2.5

**Model Calculates 2 Short Term Average(s) of: 1-HR 24-HR
and Calculates ANNUAL Averages

**This Run Includes: 1 Source(s); 1 Source Group(s);
and 77 Receptor(s)

with: 0 POINT(s), including
0 POINTCAP(s) and 0 POINTHOR(s)
and: 0 VOLUME source(s)
and: 1 AREA type source(s)
and: 0 LINE source(s)
and: 0 OPENPIT source(s)
and: 0 BUOYANT LINE source(s) with 0
line(s)

**Model Set To Continue RUNNING After the Setup Testing.

**The AERMET Input Meteorological Data Version Date: 14134

**Output Options Selected:
Model Outputs Tables of ANNUAL Averages by Receptor
Model Outputs Tables of Highest Short Term Values by
Receptor (RECTABLE Keyword)
Model Outputs External File(s) of High Values for
Plotting (PLOTFILE Keyword)
Model Outputs Separate Summary File of High Ranked
Values (SUMMFILE Keyword)

**NOTE: The Following Flags May Appear Following CONC Values:
c for Calm Hours

m for Missing Hours

b for Both Calm and Missing Hours

**Misc. Inputs: Base Elev. for Pot. Temp. Profile (m MSL) =
13.10 ; Decay Coef. = 0.000 ; Rot. Angle = 0.0
Emission Units =
GRAMS/SEC ; Emission Rate Unit
Factor = 0.10000E+07
Output Units = MICROGRAMS/M**3

**Approximate Storage Requirements of Model = 3.5 MB of
RAM.

**Detailed Error/Message File: csueb_library_tier4.err

**File for Summary of Results: csueb_library_tier4.sum

13	01	01	1	13	121.1	0.543	1.446	0.006	910.	959.	-120.3
0.15	1.31	0.20			5.39	59.	10.0	285.4	2.0		
13	01	01	1	14	105.1	0.671	1.395	0.005	942.	1317.	-262.1
0.15	1.31	0.21			6.86	63.	10.0	284.9	2.0		
13	01	01	1	15	70.5	0.676	1.230	0.005	963.	1332.	-398.2
0.15	1.31	0.24			6.97	72.	10.0	285.4	2.0		
13	01	01	1	16	19.8	0.636	0.808	0.005	968.	1221.	-1181.9
0.15	1.31	0.33			6.65	58.	10.0	284.9	2.0		
13	01	01	1	17	-43.3	0.454	-9.000	-9.000	-999.	767.	196.6
0.15	1.31	0.56			5.07	58.	10.0	283.8	2.0		
13	01	01	1	18	-4.8	0.072	-9.000	-9.000	-999.	413.	7.0
0.15	1.31	1.00			1.52	95.	10.0	282.5	2.0		
13	01	01	1	19	-6.4	0.082	-9.000	-9.000	-999.	141.	8.0
0.15	1.31	1.00			1.74	112.	10.0	282.0	2.0		
13	01	01	1	20	-13.2	0.117	-9.000	-9.000	-999.	96.	11.0
0.12	1.31	1.00			2.61	35.	10.0	280.4	2.0		
13	01	01	1	21	-16.7	0.144	-9.000	-9.000	-999.	132.	16.4
0.15	1.31	1.00			2.62	80.	10.0	278.8	2.0		
13	01	01	1	22	-6.6	0.084	-9.000	-9.000	-999.	59.	8.1
0.15	1.31	1.00			1.77	87.	10.0	278.8	2.0		
13	01	01	1	23	-11.0	0.108	-9.000	-9.000	-999.	85.	10.5
0.15	1.31	1.00			2.28	71.	10.0	278.1	2.0		
13	01	01	1	24	-9.0	0.098	-9.000	-9.000	-999.	73.	9.4
0.15	1.31	1.00			2.06	68.	10.0	278.1	2.0		

First hour of profile data
 YR MO DY HR HEIGHT F WDIR WSPD AMB_TMP sigmaA sigmaW
 sigmaV
 13 01 01 01 10.0 1 80. 1.67 277.1
 99.0 -99.00 -99.00

F indicates top of profile (=1) or below (=0)

*** AERMOD - VERSION 16216r *** *** C:\Users\jjerome\Desktop
 \csueb_library_TIER4 *** 02/26/18
 *** AERMET - VERSION 14134 *** ***
 *** 12:00:01

PAGE 5
 *** MODELOPTs: RegDEFAULT CONC ELEV URBAN

*** THE SUMMARY
 OF HIGHEST 1-HR RESULTS ***

MICROGRAMS/M**3 ** CONC OF PM_2.5 IN
 **

NETWORK	GROUP ID	RECEPTOR	(XR, YR, ZELEV, ZHILL, ZFLAG)	AVERAGE CONC	CONC	OF TYPE	DATE	(YYMMDDHH)	GRID-ID
ALL	HIGH	1ST HIGH VALUE IS		0.04594	ON	13042122:	AT		
(	583632.86,	4167874.97,	170.79,	182.00,	0.00)	DC			

*** RECEPTOR TYPES: GC = GRIDCART
 GP = GRIDPOLR
 DC = DISCCART
 DP = DISCPOLR

*** AERMOD - VERSION 16216r *** *** C:\Users\jjjerome\Desktop
\csueb_library_TIER4 *** 02/26/18
*** AERMET - VERSION 14134 *** ***
*** 12:00:01

PAGE 7

*** MODELOPTs: RegDEFAULT CONC ELEV URBAN

*** Message Summary : AERMOD Model Execution ***

----- Summary of Total Messages -----

A Total of 0 Fatal Error Message(s)
A Total of 2 Warning Message(s)
A Total of 1085 Informational Message(s)

A Total of 8784 Hours Were Processed

A Total of 121 Calm Hours Identified

A Total of 964 Missing Hours Identified (10.97
Percent)

CAUTION!: Number of Missing Hours Exceeds 10 Percent of Total!
Data May Not Be Acceptable for Regulatory
Applications.
See Section 5.3.2 of "Meteorological Monitoring
Guidance
for Regulatory Modeling Applications"
(EPA-454/R-99-005).

***** FATAL ERROR MESSAGES *****
*** NONE ***

***** WARNING MESSAGES *****
ME W186 71 MEOPEN: THRESH_1MIN 1-min ASOS wind speed
threshold used 0.50
MX W481 8785 MAIN: Data Remaining After End of Year.
Number of Hours= 24

```

**
*****
**
** AERMOD Input Produced by:
** AERMOD View Ver. 9.5.0
** Lakes Environmental Software Inc.
** Date: 2/26/2018
** File: C:\Users\jjerome\Desktop\csueb_library_tier4
\csueb_library_tier4.ADI
**
*****
**
**
*****
** AERMOD Control Pathway
*****
**
**
CO STARTING
  TITLEONE C:\Users\jjerome\Desktop\csueb_library_TIER4
  MODELOPT DFAULT CONC
  AVERTIME 1 24 ANNUAL
  URBANOPT 1647704 Alameda_County
  POLLUTID PM_2.5
  RUNORNOT RUN
  ERRORFIL csueb_library_tier4.err
CO FINISHED
**
*****
** AERMOD Source Pathway
*****
**
**
SO STARTING
** Source Location **
** Source ID - Type - X Coord. - Y Coord. **
  LOCATION CONSTEQPMT  AREAPOLY  583355.727  4168040.059
140.430
** DESCRSRC Construction Equipment Tier 4
** Source Parameters **
  SRCPARAM CONSTEQPMT  2.1166E-08  4.300  13
  AREAVERT CONSTEQPMT  583355.727  4168040.059  583316.290
4168018.548
  AREAVERT CONSTEQPMT  583318.082  4168011.736  583319.516
4167997.754
  AREAVERT CONSTEQPMT  583339.952  4167960.109  583382.974
4167892.350
  AREAVERT CONSTEQPMT  583403.051  4167857.215  583420.260
4167865.819
  AREAVERT CONSTEQPMT  583414.524  4167888.047  583403.051
4167919.955
  AREAVERT CONSTEQPMT  583389.786  4167955.090  583376.521

```

```

4167989.508
  AREAVERT CONSTEQPMT    583365.765 4168023.925
  URBANSRC ALL
  SRCGROUP ALL
SO FINISHED
**
*****
** AERMOD Receptor Pathway
*****
**
**
RE STARTING
  INCLUDED csueb_library_tier4.rou
RE FINISHED
**
*****
** AERMOD Meteorology Pathway
*****
**
**
ME STARTING
  SURFFILE KHWD_2013.SFC
  PROFFILE KHWD_2013.PFL
  SURFDATA 93228 2013
  UAIRDATA 23230 2013 OAKLAND/WSO_AP
  PROFBASE 13.1 METERS
ME FINISHED
**
*****
** AERMOD Output Pathway
*****
**
**
OU STARTING
  RECTABLE ALLAVE 1ST
  RECTABLE 1 1ST
  RECTABLE 24 1ST
** Auto-Generated Plotfiles
  PLOTFILE 1 ALL 1ST CSUEB_LIBRARY_TIER4.AD\01H1GALL.PLT 31
  PLOTFILE 24 ALL 1ST CSUEB_LIBRARY_TIER4.AD\24H1GALL.PLT 32
  PLOTFILE ANNUAL ALL CSUEB_LIBRARY_TIER4.AD\AN00GALL.PLT 33
  SUMMFILE csueb_library_tier4.sum
OU FINISHED

```

*** Message Summary For AERMOD Model Setup ***

----- Summary of Total Messages -----

```

A Total of           0 Fatal Error Message(s)
A Total of           1 Warning Message(s)
A Total of           0 Informational Message(s)

```

***** FATAL ERROR MESSAGES *****
*** NONE ***

***** WARNING MESSAGES *****
ME W186 71 MEOPEN: THRESH_1MIN 1-min ASOS wind speed
threshold used 0.50

*** SETUP Finishes Successfully ***

*** AERMOD - VERSION 16216r *** *** C:\Users\jjjerome\Desktop
\csueb_library_TIER4 *** 02/26/18
*** AERMET - VERSION 14134 *** ***
*** 12:00:01

PAGE 1

*** MODELOPTs: RegDEFAULT CONC ELEV URBAN

*** MODEL SETUP

OPTIONS SUMMARY ***

**Model Is Setup For Calculation of Average CONCentration Values.

-- DEPOSITION LOGIC --

**NO GAS DEPOSITION Data Provided.

**NO PARTICLE DEPOSITION Data Provided.

**Model Uses NO DRY DEPLETION. DRYDPLT = F

**Model Uses NO WET DEPLETION. WETDPLT = F

**Model Uses URBAN Dispersion Algorithm for the SBL for 1 Source(s),

for Total of 1 Urban Area(s):

Urban Population = 1647704.0 ; Urban Roughness Length = 1.000 m

**Model Uses Regulatory DEFAULT Options:

1. Stack-tip Downwash.

2. Model Accounts for ELEVated Terrain Effects.

3. Use Calms Processing Routine.

4. Use Missing Data Processing Routine.

5. No Exponential Decay.

6. Urban Roughness Length of 1.0 Meter Assumed.

**Other Options Specified:

CCVR_Sub - Meteorological data includes CCVR substitutions

TEMP_Sub - Meteorological data includes TEMP substitutions

**Model Assumes No FLAGPOLE Receptor Heights.

**The User Specified a Pollutant Type of: PM_2.5

**Model Calculates 2 Short Term Average(s) of: 1-HR 24-HR
and Calculates ANNUAL Averages

**This Run Includes: 1 Source(s); 1 Source Group(s);
and 77 Receptor(s)

with: 0 POINT(s), including
0 POINTCAP(s) and 0 POINTHOR(s)
and: 0 VOLUME source(s)
and: 1 AREA type source(s)
and: 0 LINE source(s)
and: 0 OPENPIT source(s)
and: 0 BUOYANT LINE source(s) with 0
line(s)

**Model Set To Continue RUNNING After the Setup Testing.

**The AERMET Input Meteorological Data Version Date: 14134

**Output Options Selected:
Model Outputs Tables of ANNUAL Averages by Receptor
Model Outputs Tables of Highest Short Term Values by
Receptor (RECTABLE Keyword)
Model Outputs External File(s) of High Values for
Plotting (PLOTFILE Keyword)
Model Outputs Separate Summary File of High Ranked
Values (SUMMFILE Keyword)

**NOTE: The Following Flags May Appear Following CONC Values:
c for Calm Hours

m for Missing Hours

b for Both Calm and Missing Hours

**Misc. Inputs: Base Elev. for Pot. Temp. Profile (m MSL) =
13.10 ; Decay Coef. = 0.000 ; Rot. Angle = 0.0
Emission Units =
GRAMS/SEC ; Emission Rate Unit
Factor = 0.10000E+07
Output Units = MICROGRAMS/M**3

**Approximate Storage Requirements of Model = 3.5 MB of
RAM.

**Detailed Error/Message File: csueb_library_tier4.err

**File for Summary of Results: csueb_library_tier4.sum

*** AERMOD - VERSION 16216r *** *** C:\Users\jjjerome\Desktop
 \csueb_library_TIER4 *** 02/26/18
 *** AERMET - VERSION 14134 *** ***
 *** 12:00:01

PAGE 2

*** MODELOPTs: RegDFault CONC ELEV URBAN

*** AREAPOLY

SOURCE DATA ***

RELEASE	NUMBER	NUMBER	EMISSION	RATE	LOCATION	OF	AREA	BASE
SOURCE	PART.	INIT.	URBAN	EMISSION	X	Y	ELEV.	
HEIGHT	OF	VERTS.	SZ	SOURCE	SCALAR	VARY		
ID	CATS.	/METER**2)	(METERS)	(METERS)	(METERS)	(METERS)	(METERS)	
(METERS)	(METERS)		BY					
CONSTEQPMT	0	0.21166E-07	583355.7	4168040.1	140.4			
4.30	13	0.00	YES					

*** AERMOD - VERSION 16216r *** *** C:\Users\jjjerome\Desktop
\csueb_library_TIER4 *** 02/26/18
*** AERMET - VERSION 14134 *** ***
*** 12:00:01

PAGE 3

*** MODELOPTs: RegDEFAULT CONC ELEV URBAN

*** SOURCE IDs

DEFINING SOURCE GROUPS ***

SRCGROUP ID	SOURCE
IDs	
-----	-----

ALL	CONSTEQPMT ,

*** AERMOD - VERSION 16216r *** *** C:\Users\jjjerome\Desktop
\csueb_library_TIER4 *** 02/26/18
*** AERMET - VERSION 14134 *** ***
*** 12:00:01

PAGE 4

*** MODELOPTs: RegDEFAULT CONC ELEV URBAN

*** SOURCE IDs DEFINED

AS URBAN SOURCES ***

URBAN ID	URBAN POP	SOURCE
IDs		
-----	-----	-----

1647704. CONSTEQPMT ,

*** AERMOD - VERSION 16216r *** *** C:\Users\jjerome\Desktop
\csueb_library_TIER4 *** 02/26/18
*** AERMET - VERSION 14134 *** ***
*** 12:00:01

PAGE 5

*** MODELOPTs: RegDEFAULT CONC ELEV URBAN

*** GRIDDED RECEPTOR

NETWORK SUMMARY ***

*** NETWORK ID: UCART1 ;

NETWORK TYPE: GRIDCART ***

*** X-COORDINATES OF

GRID ***

(METERS)

583659.4, 583673.4, 583687.4, 583701.3, 583715.3,
583729.3, 583743.3,

*** Y-COORDINATES OF

GRID ***

(METERS)

4167853.8, 4167862.5, 4167871.2, 4167879.9, 4167888.6,
4167897.3, 4167906.0,

```

*** AERMOD - VERSION 16216r ***   *** C:\Users\jjerome\Desktop
\csueb_library_TIER4 ***         02/26/18
*** AERMET - VERSION 14134 ***   ***
***           12:00:01

```

PAGE 6

*** MODELOPTs: RegDEFAULT CONC ELEV URBAN

*** NETWORK ID: UCART1 ;

NETWORK TYPE: GRIDCART ***

* ELEVATION

HEIGHTS IN METERS *

Y-COORD COORD (METERS) (METERS)				X-
583701.35	583715.33	583729.31	583743.29	

4167906.02	177.70	178.90	179.40	
4167897.32	178.50	179.60	179.90	
4167888.62	179.20	180.30	180.50	
4167879.92	179.90	181.00	181.00	
4167871.22	180.60	181.80	181.60	
4167862.52	174.00	175.70	177.40	
4167853.82	173.90	175.70	177.40	
4167844.12	180.80	181.90	181.80	
4167835.42	180.80	182.00	181.80	

```

*** AERMOD - VERSION 16216r ***   *** C:\Users\jjjerome\Desktop
\csueb_library_TIER4 ***         02/26/18
*** AERMET - VERSION 14134 ***   ***
***                               12:00:01

```

PAGE 7

```

*** MODELOPTs:      RegDEFAULT  CONC  ELEV  URBAN

```

```

*** NETWORK ID: UCART1 ;

```

NETWORK TYPE: GRIDCART ***

* HILL HEIGHT

SCALES IN METERS *

Y-COORD COORD (METERS) (METERS)				X-
583701.35	583715.33	583729.31	583743.29	

4167906.02	182.00	182.00	182.00	
182.00	182.00	178.90	179.40	
4167897.32	182.00	182.00	182.00	
182.00	182.00	179.60	179.90	
4167888.62	182.00	182.00	182.00	
182.00	182.00	180.30	180.50	
4167879.92	182.00	182.00	182.00	
182.00	182.00	181.00	181.00	
4167871.22	182.00	182.00	182.00	
182.00	182.00	181.80	181.60	
4167862.52	182.00	182.00	182.00	
182.00	182.00	181.90	181.80	
4167853.82	182.00	182.00	182.00	
182.00	180.80	182.00	181.80	

*** AERMOD - VERSION 16216r *** *** C:\Users\jjerome\Desktop
\csueb_library_TIER4 *** 02/26/18
*** AERMET - VERSION 14134 *** ***
*** 12:00:01

PAGE 8

*** MODELOPTs: RegDEFAULT CONC ELEV URBAN

*** DISCRETE

CARTESIAN RECEPTORS ***

(X-COORD, Y-COORD,

ZELEV, ZHILL, ZFLAG)

(METERS)

(583632.9, 4167875.0, 170.8, 182.0, 0.0);
(583730.8, 4168125.4, 172.7, 172.7, 0.0);
(583607.5, 4168436.9, 147.4, 182.0, 0.0);
(583340.8, 4168564.4, 123.4, 243.0, 0.0);
(582680.4, 4168508.2, 121.0, 121.0, 0.0);
(582652.4, 4168035.1, 119.5, 119.5, 0.0);
(582632.5, 4167869.1, 89.5, 121.0, 0.0);
(582518.9, 4167637.0, 60.0, 182.0, 0.0);
(583959.7, 4168526.4, 181.3, 243.0, 0.0);
(583714.2, 4167998.3, 172.3, 172.3, 0.0);
(583679.5, 4167936.0, 171.5, 182.0, 0.0);
(583739.4, 4167813.8, 181.9, 181.9, 0.0);
(583774.1, 4167859.3, 181.4, 181.4, 0.0);
(583818.5, 4167927.6, 181.1, 181.1, 0.0);
(583819.7, 4167743.1, 182.0, 182.0, 0.0);
(583865.2, 4167799.4, 182.0, 182.0, 0.0);
(583897.5, 4167867.7, 182.0, 182.0, 0.0);
(583896.3, 4167683.2, 182.0, 182.0, 0.0);
(583928.7, 4167740.7, 182.0, 182.0, 0.0);
(583956.2, 4167783.8, 182.0, 243.0, 0.0);
(583907.1, 4167987.6, 180.9, 180.9, 0.0);
(583974.2, 4167872.5, 182.0, 243.0, 0.0);
(583722.3, 4168175.4, 172.0, 172.0, 0.0);
(583807.2, 4168093.1, 178.3, 178.3, 0.0);
(583817.0, 4168157.8, 178.6, 178.6, 0.0);
(583854.5, 4168103.3, 179.6, 179.6, 0.0);
(583870.2, 4168189.8, 180.5, 180.5, 0.0);
(583853.5, 4168054.9, 179.6, 179.6, 0.0);

13	01	01	1	13	121.1	0.543	1.446	0.006	910.	959.	-120.3
0.15	1.31	0.20			5.39	59.	10.0	285.4	2.0		
13	01	01	1	14	105.1	0.671	1.395	0.005	942.	1317.	-262.1
0.15	1.31	0.21			6.86	63.	10.0	284.9	2.0		
13	01	01	1	15	70.5	0.676	1.230	0.005	963.	1332.	-398.2
0.15	1.31	0.24			6.97	72.	10.0	285.4	2.0		
13	01	01	1	16	19.8	0.636	0.808	0.005	968.	1221.	-1181.9
0.15	1.31	0.33			6.65	58.	10.0	284.9	2.0		
13	01	01	1	17	-43.3	0.454	-9.000	-9.000	-999.	767.	196.6
0.15	1.31	0.56			5.07	58.	10.0	283.8	2.0		
13	01	01	1	18	-4.8	0.072	-9.000	-9.000	-999.	413.	7.0
0.15	1.31	1.00			1.52	95.	10.0	282.5	2.0		
13	01	01	1	19	-6.4	0.082	-9.000	-9.000	-999.	141.	8.0
0.15	1.31	1.00			1.74	112.	10.0	282.0	2.0		
13	01	01	1	20	-13.2	0.117	-9.000	-9.000	-999.	96.	11.0
0.12	1.31	1.00			2.61	35.	10.0	280.4	2.0		
13	01	01	1	21	-16.7	0.144	-9.000	-9.000	-999.	132.	16.4
0.15	1.31	1.00			2.62	80.	10.0	278.8	2.0		
13	01	01	1	22	-6.6	0.084	-9.000	-9.000	-999.	59.	8.1
0.15	1.31	1.00			1.77	87.	10.0	278.8	2.0		
13	01	01	1	23	-11.0	0.108	-9.000	-9.000	-999.	85.	10.5
0.15	1.31	1.00			2.28	71.	10.0	278.1	2.0		
13	01	01	1	24	-9.0	0.098	-9.000	-9.000	-999.	73.	9.4
0.15	1.31	1.00			2.06	68.	10.0	278.1	2.0		

First hour of profile data
 YR MO DY HR HEIGHT F WDIR WSPD AMB_TMP sigmaA sigmaW
 sigmaV
 13 01 01 01 10.0 1 80. 1.67 277.1
 99.0 -99.00 -99.00

F indicates top of profile (=1) or below (=0)

*** AERMOD - VERSION 16216r *** *** C:\Users\jjerome\Desktop
 \csueb_library_TIER4 *** 02/26/18
 *** AERMET - VERSION 14134 *** ***
 *** 12:00:01

PAGE 11

*** MODELOPTs: RegDFault CONC ELEV URBAN

*** THE ANNUAL AVERAGE CONCENTRATION VALUES
 AVERAGED OVER 1 YEARS FOR SOURCE GROUP: ALL ***
 INCLUDING SOURCE(S):

CONSTEQPMT ,

*** NETWORK ID: UCART1 ;

NETWORK TYPE: GRIDCART ***

MICROGRAMS/M**3 ** CONC OF PM_2.5 IN
 **

Y-COORD	|				X-
COORD (METERS)	|				
(METERS)	|	583659.41	583673.39	583687.37	
583701.35	|	583715.33	583729.31	583743.29	

4167906.02	|	0.00199	0.00183	0.00170
0.00157	|	0.00146	0.00137	0.00128
4167897.32	|	0.00201	0.00185	0.00172
0.00159	|	0.00148	0.00139	0.00130
4167888.62	|	0.00202	0.00186	0.00173
0.00161	|	0.00150	0.00140	0.00132
4167879.92	|	0.00202	0.00187	0.00173
0.00161	|	0.00150	0.00141	0.00133
4167871.22	|	0.00201	0.00186	0.00173
0.00161	|	0.00151	0.00141	0.00133
4167862.52	|	0.00199	0.00185	0.00172
0.00161	|	0.00151	0.00142	0.00134
4167853.82	|	0.00197	0.00183	0.00171
0.00160	|	0.00150	0.00141	0.00134

*** AERMOD - VERSION 16216r *** *** C:\Users\jjerome\Desktop
 \csueb_library_TIER4 *** 02/26/18
 *** AERMET - VERSION 14134 *** ***
 *** 12:00:01

PAGE 13

*** MODELOPTs: RegDEFAULT CONC ELEV URBAN

 *** THE 1ST HIGHEST 1-HR AVERAGE
 CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
 INCLUDING SOURCE(S):

CONSTEQPMT ,

*** NETWORK ID: UCART1 ;

NETWORK TYPE: GRIDCART ***

 ** CONC OF PM_2.5 IN
 **

Y-COORD	|			X-
COORD (METERS)	|			
(METERS)	|	583659.41	583673.39	
583687.37	|	583701.35	583715.33	

4167906.0	|	0.03755 (13043003)	0.03600 (13043003)
0.03450 (13043003)		0.03310 (13043003)	0.03184
(13043003)			
4167897.3	|	0.03697 (13113019)	0.03477 (13113019)
0.03283 (13043003)		0.03159 (13043003)	0.03040
(13043003)			
4167888.6	|	0.03698 (13113019)	0.03509 (13113019)
0.03320 (13113019)		0.03142 (13113019)	0.02964
(13113019)			
4167879.9	|	0.03729 (13042122)	0.03475 (13113019)
0.03321 (13113019)		0.03164 (13113019)	0.03011
(13113019)			
4167871.2	|	0.03974 (13042122)	0.03612 (13042122)
0.03267 (13042122)		0.03134 (13113019)	0.03006
(13113019)			
4167862.5	|	0.04172 (13042122)	0.03839 (13042122)
0.03516 (13042122)		0.03204 (13042122)	0.02971
(13113019)			
4167853.8	|	0.04315 (13042122)	0.04011 (13042122)
0.03717 (13042122)		0.03427 (13042122)	0.03146
(13042122)			

*** AERMOD - VERSION 16216r *** *** C:\Users\jjjerome\Desktop
 \csueb_library_TIER4 *** 02/26/18
 *** AERMET - VERSION 14134 *** ***
 *** 12:00:01

PAGE 14

*** MODELOPTs: RegDEFAULT CONC ELEV URBAN

 *** THE 1ST HIGHEST 1-HR AVERAGE
 CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
 INCLUDING SOURCE(S):

CONSTEQPMT ,

*** NETWORK ID: UCART1 ;

NETWORK TYPE: GRIDCART ***

 ** CONC OF PM_2.5 IN
 MICROGRAMS/M**3 **

Y-COORD	|		X-
COORD (METERS)	|		
(METERS)	|	583729.31	583743.29

-			

4167906.0	|	0.03080 (13043003)	0.03010 (13043003)
4167897.3	|	0.02954 (13043003)	0.02903 (13043003)
4167888.6	|	0.02814 (13113019)	0.02758 (13043003)
4167879.9	|	0.02882 (13113019)	0.02789 (13113019)
4167871.2	|	0.02895 (13113019)	0.02829 (13113019)
4167862.5	|	0.02885 (13113019)	0.02835 (13113019)
4167853.8	|	0.02893 (13042122)	0.02802 (13113019)

*** AERMOD - VERSION 16216r *** *** C:\Users\jjerome\Desktop
 \csueb_library_TIER4 *** 02/26/18
 *** AERMET - VERSION 14134 *** ***
 *** 12:00:01

PAGE 15

*** MODELOPTs: RegDEFAULT CONC ELEV URBAN

 *** THE 1ST HIGHEST 1-HR AVERAGE
 CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
 INCLUDING SOURCE(S):

CONSTEQPMT ,

*** DISCRETE

CARTESIAN RECEPTOR POINTS ***

 ** CONC OF PM_2.5 IN
 MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
583632.86	4167874.97	0.04594	(13042122)
583730.78	4168125.43	0.02760	(13092401)
583607.54	4168436.91	0.02628	(13051903)
583340.80	4168564.37	0.02121	(13092222)
582680.41	4168508.23	0.01280	(13021605)
582652.37	4168035.06	0.01659	(13062901)
582632.51	4167869.15	0.01072	(13042303)
582518.86	4167637.00	0.00769	(13010208)
583959.71	4168526.41	0.01551	(13100104)
583714.20	4167998.34	0.02970	(13012407)
583679.45	4167936.03	0.03816	(13043003)
583739.37	4167813.81	0.03365	(13042122)
583774.12	4167859.34	0.02721	(13113019)
583818.45	4167927.64	0.02623	(13043003)
583819.65	4167743.11	0.02934	(13051923)
583865.18	4167799.43	0.02449	(13042122)
583897.54	4167867.73	0.02177	(13043003)
583896.34	4167683.20	0.02317	(13051923)
583928.69	4167740.71	0.02518	(13042122)
583956.25	4167783.85	0.02014	(13113019)
583907.12	4167987.56	0.02135	(13012407)
583974.23	4167872.52	0.02113	(13043003)
583722.26	4168175.43	0.02433	(13020320)
583807.16	4168093.14	0.02608	(13092401)
583816.95	4168157.80	0.02156	(13092401)
583854.51	4168103.27	0.02397	(13092401)
583870.18	4168189.80	0.01731	(13021701)
583853.53	4168054.94	0.01913	(13012221)

*** AERMOD - VERSION 16216r *** *** C:\Users\jjjerome\Desktop
 \csueb_library_TIER4 *** 02/26/18
 *** AERMET - VERSION 14134 *** ***
 *** 12:00:01

PAGE 18

*** MODELOPTs: RegDEFAULT CONC ELEV URBAN

 *** THE 1ST HIGHEST 24-HR AVERAGE
 CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
 INCLUDING SOURCE(S):

CONSTEQPMT ,

*** DISCRETE

CARTESIAN RECEPTOR POINTS ***

 ** CONC OF PM_2.5 IN
 MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
583632.86	4167874.97	0.00668	(13091224)
583730.78	4168125.43	0.00269	(13080124)
583607.54	4168436.91	0.00352	(13083024)
583340.80	4168564.37	0.00247	(13110724)
582680.41	4168508.23	0.00145	(13010524)
582652.37	4168035.06	0.00334c	(13011824)
582632.51	4167869.15	0.00329	(13122824)
582518.86	4167637.00	0.00257m	(13092624)
583959.71	4168526.41	0.00113	(13100124)
583714.20	4167998.34	0.00426	(13051724)
583679.45	4167936.03	0.00521	(13091324)
583739.37	4167813.81	0.00479	(13091224)
583774.12	4167859.34	0.00379	(13051024)
583818.45	4167927.64	0.00327	(13061724)
583819.65	4167743.11	0.00426	(13070124)
583865.18	4167799.43	0.00298	(13091224)
583897.54	4167867.73	0.00289	(13061724)
583896.34	4167683.20	0.00347	(13070124)
583928.69	4167740.71	0.00283	(13070124)
583956.25	4167783.85	0.00234	(13061524)
583907.12	4167987.56	0.00249	(13051724)
583974.23	4167872.52	0.00246	(13061724)
583722.26	4168175.43	0.00267	(13041324)
583807.16	4168093.14	0.00260	(13091424)
583816.95	4168157.80	0.00206	(13080124)
583854.51	4168103.27	0.00233	(13091424)
583870.18	4168189.80	0.00173	(13080124)
583853.53	4168054.94	0.00258	(13091424)

*** AERMOD - VERSION 16216r *** ** C:\Users\jjerome\Desktop
\csueb_library_TIER4 *** 02/26/18
*** AERMET - VERSION 14134 *** **
*** 12:00:01

PAGE 22

*** MODELOPTs: RegDEFAULT CONC ELEV URBAN

*** Message Summary : AERMOD Model Execution ***

----- Summary of Total Messages -----

A Total of 0 Fatal Error Message(s)
A Total of 2 Warning Message(s)
A Total of 1085 Informational Message(s)

A Total of 8784 Hours Were Processed

A Total of 121 Calm Hours Identified

A Total of 964 Missing Hours Identified (10.97
Percent)

CAUTION!: Number of Missing Hours Exceeds 10 Percent of Total!
Data May Not Be Acceptable for Regulatory
Applications.
See Section 5.3.2 of "Meteorological Monitoring
Guidance
for Regulatory Modeling Applications"
(EPA-454/R-99-005).

***** FATAL ERROR MESSAGES *****
*** NONE ***

***** WARNING MESSAGES *****
ME W186 71 MEOPEN: THRESH_1MIN 1-min ASOS wind speed
threshold used 0.50
MX W481 8785 MAIN: Data Remaining After End of Year.
Number of Hours= 24

*** AERMOD Finishes Successfully ***

APPENDIX B

Noise Calculations



SOURCE: Google Maps, 2017

Classrooms (Location #1)

1/9/2018

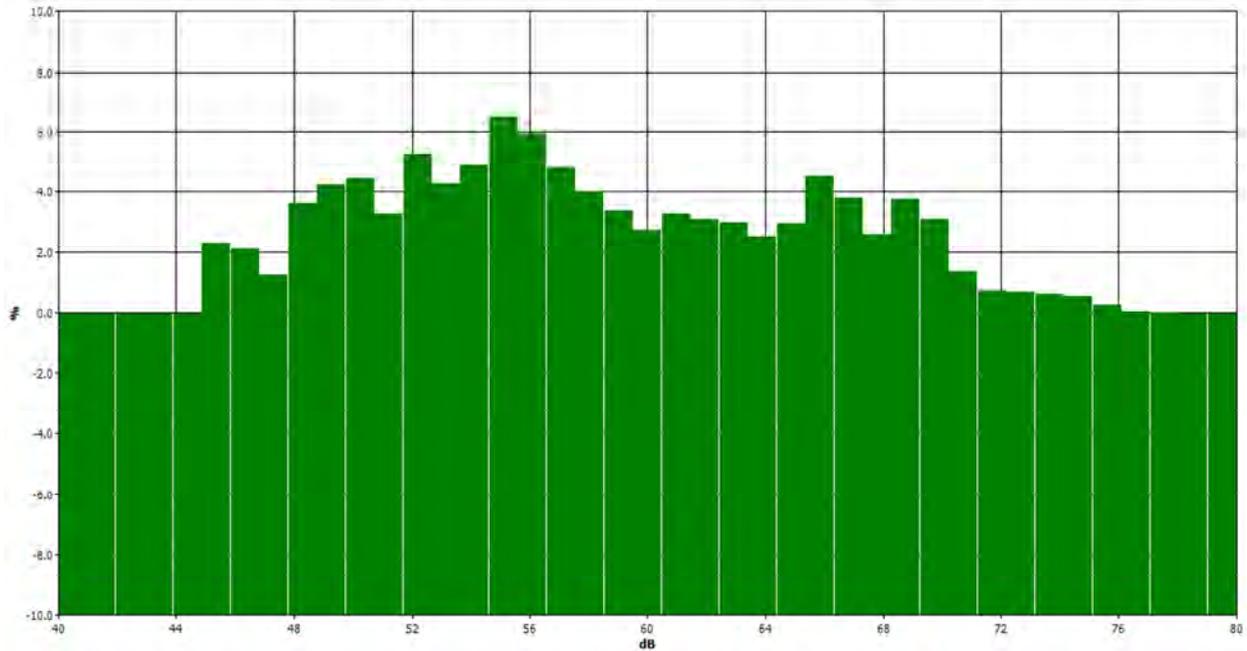
Information Panel

Name S523
Start Time Tuesday, January 9, 2018, 11:29am
Stop Time Tuesday, January 9, 2018, 11:44am
Device Model Type SoundPro DL

General Data Panel

<u>Description</u>	<u>Meter</u>	<u>Value</u>	<u>Description</u>	<u>Meter</u>	<u>Value</u>
Leq	1	64.4dB	Exchange Rate	1	3dB
Weighting	1	A	Response	1	SLOW
Bandwidth	1	OFF	Exchange Rate	2	3dB
Weighting	2	C	Response	2	SLOW

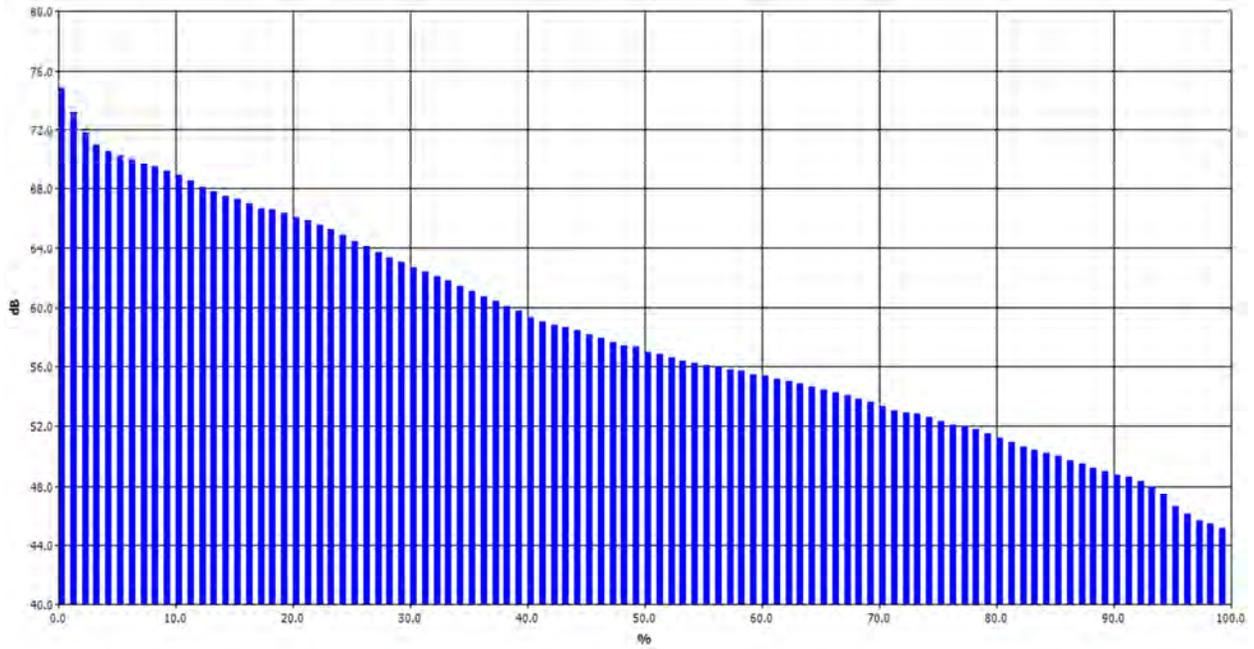
Statistics Chart



Statistics Table

dB	0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	%
40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
41	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
42	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
43	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
44	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
45	0.00	0.00	0.09	0.29	0.55	0.54	0.39	0.13	0.16	0.16	2.32
46	0.17	0.50	0.24	0.33	0.11	0.17	0.13	0.16	0.13	0.18	2.11
47	0.12	0.09	0.06	0.10	0.11	0.19	0.10	0.14	0.14	0.19	1.25
48	0.13	0.31	0.31	0.33	0.39	0.41	0.33	0.56	0.47	0.36	3.62
49	0.42	0.46	0.41	0.42	0.43	0.42	0.45	0.41	0.40	0.39	4.21
50	0.39	0.47	0.24	0.41	0.74	0.73	0.40	0.24	0.43	0.40	4.45
51	0.35	0.31	0.30	0.29	0.24	0.23	0.34	0.36	0.45	0.41	3.28
52	0.56	0.75	0.49	0.49	0.46	0.49	0.44	0.49	0.53	0.57	5.27
53	0.63	0.51	0.34	0.40	0.42	0.38	0.33	0.29	0.42	0.52	4.25
54	0.49	0.46	0.43	0.45	0.45	0.52	0.45	0.43	0.65	0.54	4.87
55	0.49	0.74	0.80	0.59	0.48	0.64	0.67	0.71	0.78	0.60	6.49
56	0.75	0.90	0.62	0.69	0.51	0.62	0.51	0.53	0.37	0.47	5.95
57	0.53	0.48	0.39	0.48	0.57	0.60	0.48	0.45	0.38	0.45	4.80
58	0.37	0.34	0.44	0.38	0.34	0.31	0.34	0.49	0.52	0.47	4.00
59	0.43	0.40	0.32	0.40	0.35	0.35	0.30	0.30	0.28	0.28	3.39
60	0.27	0.25	0.25	0.26	0.26	0.27	0.27	0.33	0.31	0.30	2.76
61	0.29	0.35	0.41	0.31	0.34	0.33	0.34	0.30	0.31	0.32	3.29
62	0.33	0.34	0.27	0.26	0.34	0.33	0.30	0.30	0.33	0.30	3.10
63	0.34	0.31	0.33	0.35	0.28	0.26	0.29	0.28	0.32	0.26	3.01
64	0.24	0.24	0.22	0.23	0.24	0.28	0.28	0.25	0.29	0.26	2.54
65	0.24	0.28	0.28	0.18	0.31	0.31	0.33	0.37	0.33	0.34	2.96
66	0.46	0.37	0.35	0.38	0.40	0.57	0.44	0.56	0.54	0.44	4.51
67	0.35	0.36	0.35	0.42	0.47	0.44	0.31	0.35	0.36	0.39	3.80
68	0.35	0.35	0.30	0.16	0.23	0.19	0.22	0.28	0.28	0.25	2.61
69	0.31	0.32	0.34	0.27	0.34	0.39	0.41	0.38	0.43	0.55	3.74
70	0.39	0.30	0.28	0.33	0.34	0.32	0.29	0.30	0.26	0.28	3.10
71	0.31	0.22	0.18	0.07	0.11	0.10	0.10	0.09	0.09	0.07	1.34
72	0.07	0.07	0.07	0.09	0.05	0.06	0.11	0.06	0.06	0.09	0.73
73	0.14	0.09	0.10	0.11	0.05	0.04	0.05	0.05	0.04	0.05	0.71
74	0.05	0.05	0.06	0.08	0.07	0.07	0.06	0.06	0.06	0.05	0.63
75	0.07	0.08	0.09	0.07	0.05	0.02	0.03	0.02	0.03	0.08	0.55
76	0.05	0.04	0.08	0.03	0.03	0.03	0.00	0.01	0.01	0.01	0.28
77	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.07
78	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02
79	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

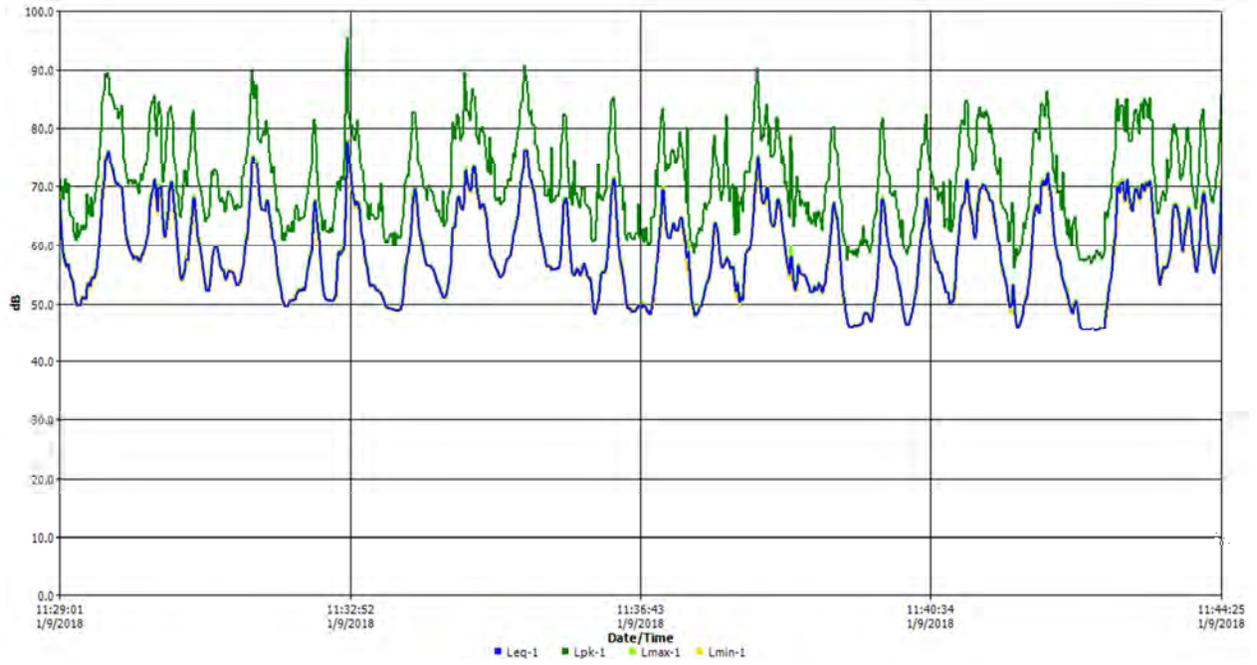
Exceedance Chart



Exceedance Table

	0%	1%	2%	3%	4%	5%	6%	7%	8%	9%
0%		74.7	73.1	71.8	71	70.6	70.3	70	69.7	69.5
10%	69.2	68.9	68.5	68.1	67.8	67.5	67.3	67	66.7	66.6
20%	66.4	66.1	65.9	65.6	65.3	64.9	64.5	64.1	63.7	63.3
30%	63	62.7	62.4	62.1	61.8	61.4	61.1	60.8	60.5	60.1
40%	59.8	59.4	59.1	58.9	58.7	58.4	58.1	57.9	57.6	57.4
50%	57.3	57	56.8	56.6	56.4	56.2	56.1	56	55.8	55.7
60%	55.5	55.4	55.2	55.1	54.9	54.7	54.5	54.3	54.1	53.9
70%	53.7	53.4	53.1	52.9	52.8	52.6	52.3	52.1	52	51.8
80%	51.5	51.2	50.9	50.6	50.4	50.2	50	49.7	49.5	49.2
90%	49	48.8	48.6	48.3	48	47.4	46.6	46.1	45.6	45.4
100%	45.1									

Logged Data Chart



Student Housing (Location #2)

1/9/2018

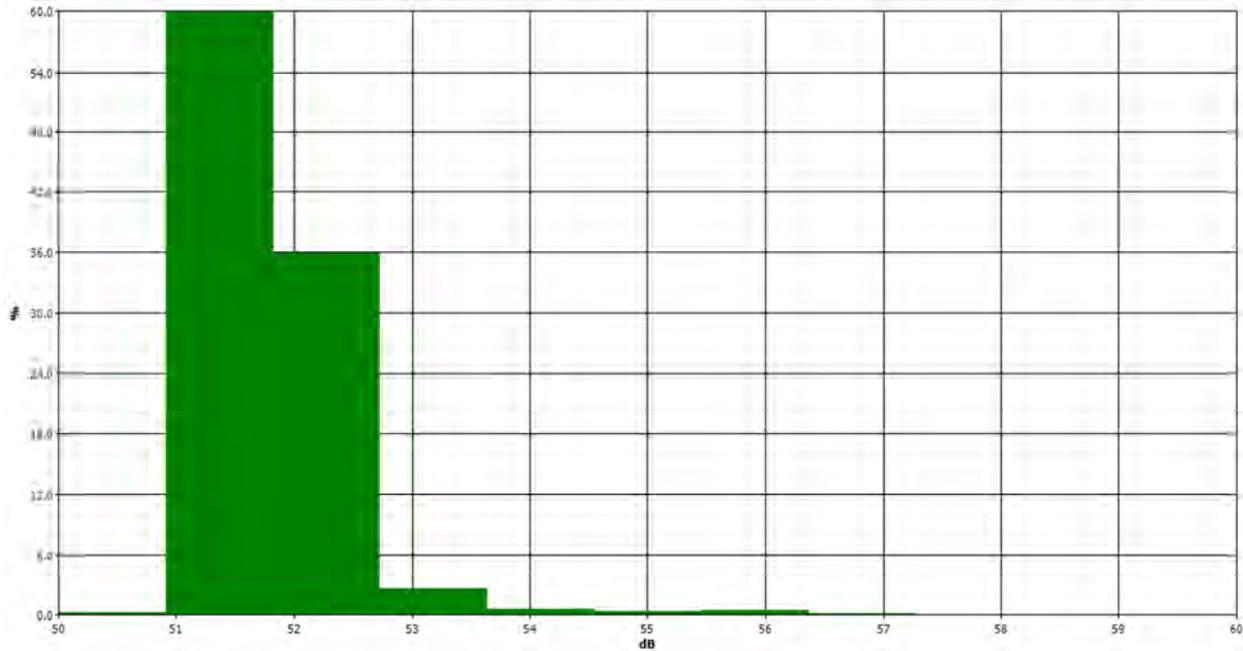
Information Panel

Name S524
Start Time Tuesday, January 9, 2018, 12:03pm
Stop Time Tuesday, January 9, 2018, 12:19pm
Device Model Type SoundPro DL

General Data Panel

<u>Description</u>	<u>Meter</u>	<u>Value</u>	<u>Description</u>	<u>Meter</u>	<u>Value</u>
Leq	1	51.9dB	Exchange Rate	1	3dB
Weighting	1	A	Response	1	SLOW
Bandwidth	1	OFF	Exchange Rate	2	3dB
Weighting	2	C	Response	2	SLOW

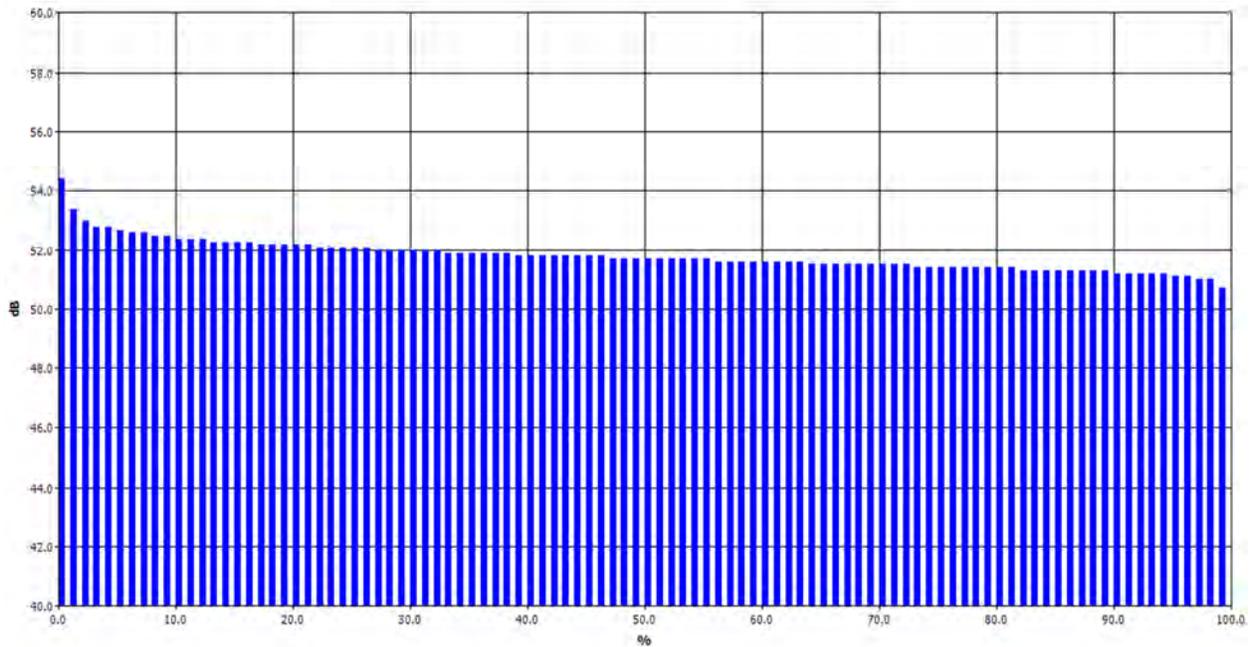
Statistics Chart



Statistics Table

dB	0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	%
50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.24	0.25
51	0.59	1.36	2.40	4.97	7.82	9.55	8.20	8.82	8.74	7.41	59.87
52	6.31	5.84	5.55	4.56	3.76	3.15	2.21	2.13	1.34	1.06	35.92
53	0.55	0.60	0.25	0.25	0.23	0.13	0.10	0.14	0.20	0.13	2.58
54	0.07	0.09	0.09	0.08	0.04	0.04	0.04	0.04	0.03	0.03	0.54
55	0.02	0.03	0.02	0.04	0.03	0.03	0.03	0.03	0.03	0.05	0.29
56	0.09	0.07	0.03	0.04	0.07	0.04	0.02	0.01	0.01	0.01	0.39
57	0.01	0.01	0.01	0.01	0.03	0.02	0.02	0.00	0.00	0.00	0.12
58	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03
59	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02
60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

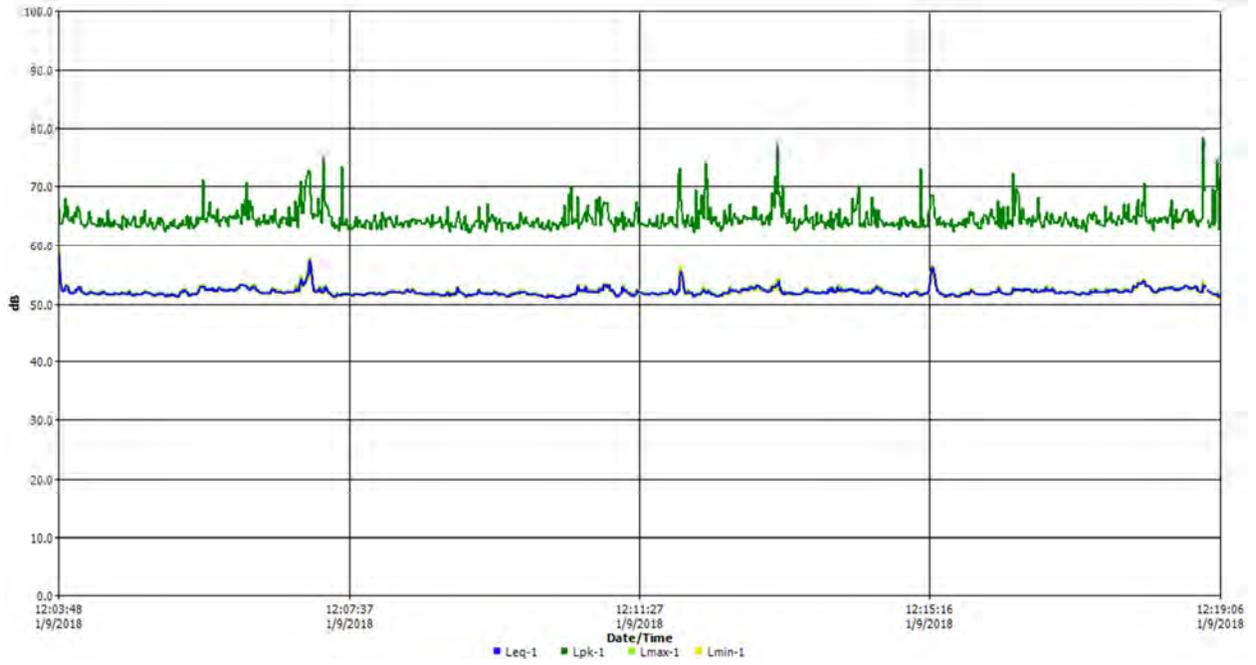
Exceedance Chart



Exceedance Table

	0%	1%	2%	3%	4%	5%	6%	7%	8%	9%
0%		54.4	53.4	53	52.8	52.8	52.7	52.6	52.6	52.5
10%	52.5	52.4	52.4	52.4	52.3	52.3	52.3	52.3	52.2	52.2
20%	52.2	52.2	52.2	52.1	52.1	52.1	52.1	52.1	52	52
30%	52	52	52	52	51.9	51.9	51.9	51.9	51.9	51.9
40%	51.8	51.8	51.8	51.8	51.8	51.8	51.8	51.8	51.7	51.7
50%	51.7	51.7	51.7	51.7	51.7	51.7	51.7	51.6	51.6	51.6
60%	51.6	51.6	51.6	51.6	51.6	51.5	51.5	51.5	51.5	51.5
70%	51.5	51.5	51.5	51.5	51.4	51.4	51.4	51.4	51.4	51.4
80%	51.4	51.4	51.4	51.3	51.3	51.3	51.3	51.3	51.3	51.3
90%	51.3	51.2	51.2	51.2	51.2	51.2	51.1	51.1	51	51
100%	50.7									

Logged Data Chart



Residences at Grandview Avenue (Location #3)

1/9/2018

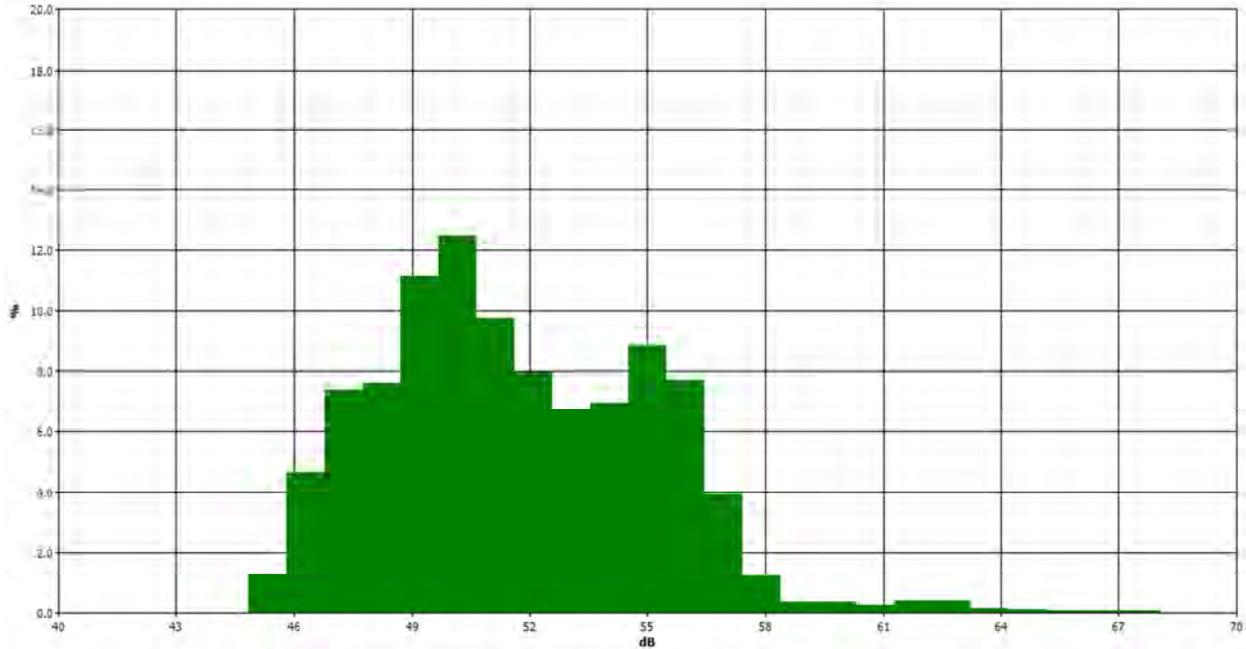
Information Panel

Name S525
Start Time Tuesday, January 9, 2018, 12:49pm
Stop Time Tuesday, January 9, 2018, 1:04pm
Device Model Type SoundPro DL

General Data Panel

<u>Description</u>	<u>Meter</u>	<u>Value</u>	<u>Description</u>	<u>Meter</u>	<u>Value</u>
Leq	1	53.8dB	Exchange Rate	1	3dB
Weighting	1	A	Response	1	SLOW
Bandwidth	1	OFF	Exchange Rate	2	3dB
Weighting	2	C	Response	2	SLOW

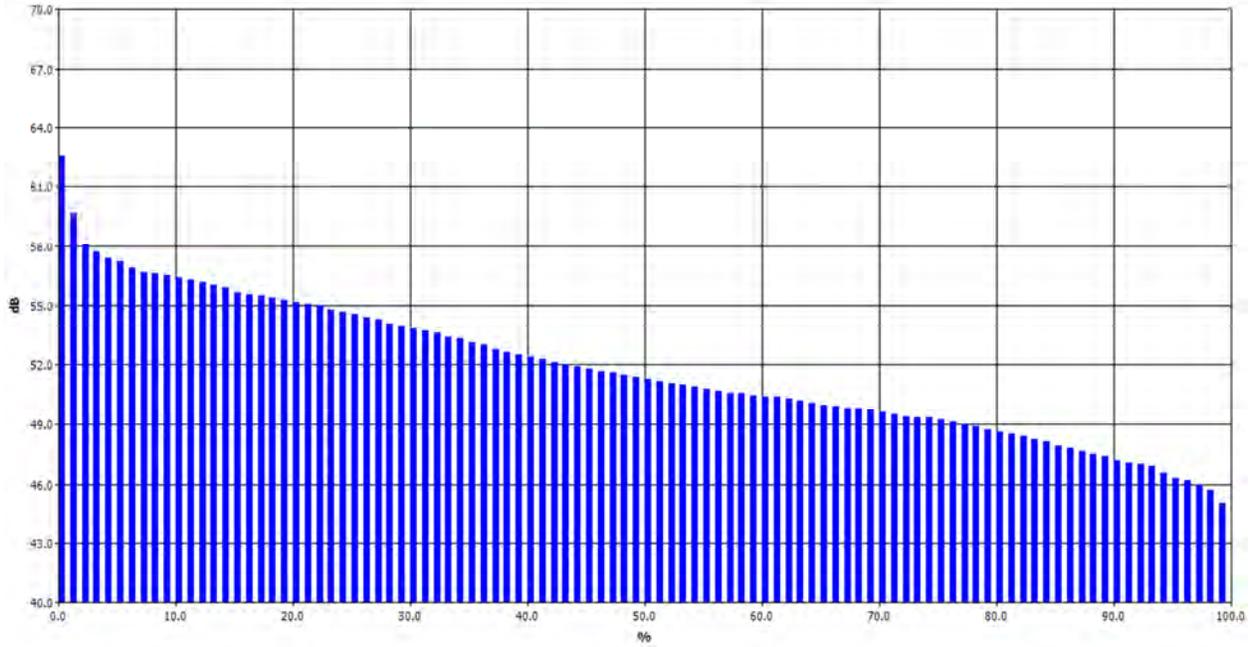
Statistics Chart



Statistics Table

dB	0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	%
40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
41	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
42	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
43	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
44	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
45	0.00	0.01	0.07	0.20	0.11	0.17	0.07	0.15	0.29	0.24	1.30
46	0.38	0.58	0.62	0.62	0.52	0.45	0.32	0.33	0.34	0.48	4.65
47	0.78	0.84	0.67	1.01	0.65	0.77	0.67	0.78	0.55	0.69	7.40
48	0.70	0.66	0.73	0.66	0.88	0.86	0.81	0.72	0.68	0.93	7.63
49	0.98	1.03	0.92	0.90	1.20	1.07	1.20	1.39	1.21	1.23	11.13
50	1.51	1.31	0.79	0.98	1.18	1.31	1.73	1.52	1.18	0.98	12.50
51	0.91	0.98	0.96	1.01	1.04	0.96	1.05	0.95	0.83	1.08	9.77
52	0.89	0.80	0.94	0.84	0.87	1.01	0.84	0.66	0.54	0.61	7.99
53	0.63	0.66	0.49	0.59	0.65	0.74	0.80	0.73	0.64	0.77	6.71
54	0.68	0.58	0.73	0.65	0.86	0.66	0.76	0.68	0.70	0.68	6.97
55	0.86	0.78	0.98	0.93	1.02	0.94	0.84	0.82	0.85	0.80	8.82
56	0.86	0.77	0.45	0.74	0.76	0.81	0.88	1.05	0.88	0.50	7.71
57	0.46	0.42	0.40	0.36	0.49	0.54	0.38	0.34	0.35	0.16	3.91
58	0.15	0.22	0.22	0.12	0.18	0.17	0.07	0.04	0.03	0.03	1.23
59	0.03	0.04	0.03	0.03	0.04	0.04	0.02	0.04	0.03	0.03	0.35
60	0.03	0.03	0.05	0.06	0.04	0.07	0.02	0.02	0.02	0.02	0.38
61	0.02	0.03	0.02	0.03	0.02	0.02	0.03	0.04	0.02	0.04	0.26
62	0.02	0.03	0.03	0.03	0.03	0.03	0.05	0.10	0.05	0.04	0.41
63	0.04	0.05	0.07	0.06	0.02	0.02	0.03	0.05	0.03	0.02	0.39
64	0.01	0.02	0.01	0.02	0.01	0.01	0.01	0.01	0.02	0.02	0.14
65	0.01	0.01	0.01	0.01	0.03	0.00	0.00	0.01	0.01	0.01	0.11
66	0.01	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.08
67	0.01	0.00	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.08
68	0.01	0.01	0.01	0.01	0.01	0.03	0.00	0.00	0.00	0.00	0.09
69	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

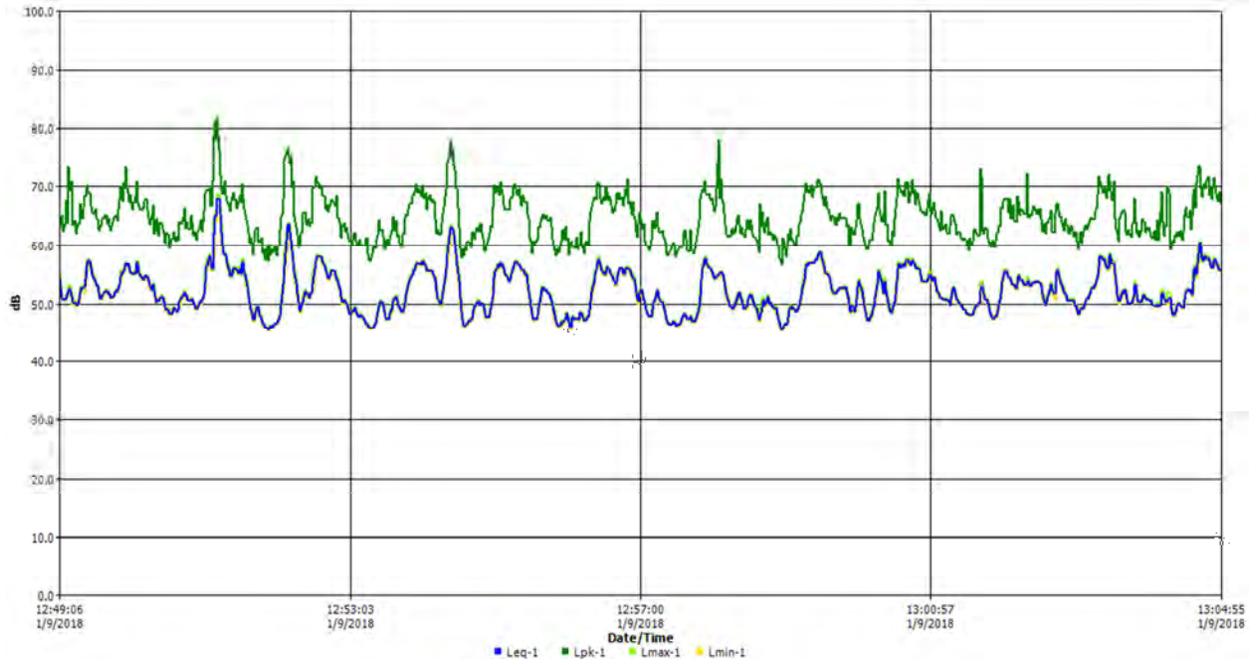
Exceedance Chart



Exceedance Table

	0%	1%	2%	3%	4%	5%	6%	7%	8%	9%
0%	62.6	59.7	58.1	57.7	57.4	57.2	56.9	56.7	56.6	
10%	56.5	56.4	56.3	56.2	56	55.9	55.7	55.6	55.5	55.4
20%	55.3	55.2	55.1	55	54.8	54.7	54.6	54.4	54.3	54.1
30%	54	53.8	53.7	53.6	53.4	53.3	53.1	53	52.8	52.6
40%	52.5	52.4	52.3	52.1	52	51.9	51.8	51.7	51.6	51.5
50%	51.4	51.3	51.2	51.1	51	50.9	50.8	50.7	50.6	50.6
60%	50.5	50.4	50.4	50.3	50.2	50.1	50	49.9	49.8	49.8
70%	49.7	49.6	49.5	49.4	49.3	49.3	49.2	49.1	49	48.9
80%	48.7	48.6	48.5	48.4	48.2	48.1	47.9	47.8	47.6	47.5
90%	47.4	47.2	47.1	47	46.9	46.6	46.3	46.2	46	45.7
100%	45									

Logged Data Chart



CSUEB Library - Construction Noise - Unmitigated

Reference Noise Distance 50

Reference Noise Level 85

Sensitive Receptor	Distance (feet)	Attenuation Factors	Maximum Construction Noise Level (dBA)	Existing Ambient (dBA, Leq)	New Ambient (dBA, Leq)	Increase
Adjacent On-site classrooms	100	6	73.0	64.4	73.5	9.1
Property Boundary	400	6	60.9	51.9	61.4	9.5
Pioneer Heights Student Housing	250	6	65.0	51.9	65.2	13.3
Off-site Residential (Grandview Ave)	650	6	56.7	53.8	58.5	4.7

A 6 dBA attenuation was given for hard ground surface, and 3 dBA reduction was given for the first row of buildings intervening between the construction site and sensitive receptors (1.5 dBA for subsequent intervening structures), as recommended by the Caltrans Technical Noise Supplement.

Worst case construction equipment noise would occur during the site preparation and grading phases of construction.

Roadway Construction Noise Model (RCNM), Version 1.1

Report date: 12/13/2017
 Case Description: CSUEB Library Architectural Coating

---- Receptor #1 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
50 Foot Receptor	Residential	60	60	60

Description	Device	Usage(%)	Equipment			
			Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Compressor (air)	No	40	77.7	77.7	50	0

Equipment	Calculated (dBA)	Results												
		Noise Limits (dBA)						Noise Limit Exceedance (dBA)						
		Day		Evening		Night		Day		Evening		Night		
	*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Compressor (air)	77.7	73.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	77.7	73.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM), Version 1.1

Report date: 12/13/2017
 Case Description: CSUEB Library Building Construction

---- Receptor #1 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
50 Foot Receptor	Residential	60	60	60

Description	Impact Device	Usage(%)	Equipment			Estimated Shielding (dBA)
			Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	
Generator	No	50		80.6	50	0
Crane	No	16		80.6	50	0
Man Lift	No	20		74.7	50	0
Tractor	No	40	84		50	0
Welder / Torch	No	40		74	50	0

Equipment	Calculated (dBA)		Noise Limits (dBA)						Noise Limit Exceedance (dBA)					
	*Lmax	Leq	Day		Evening		Night		Day		Evening		Night	
			Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Generator	80.6	77.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Crane	80.6	72.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Man Lift	74.7	67.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tractor	84	80	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Welder / Torch	74	70	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	84	82.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM), Version 1.1

Report date: 12/13/2017
 Case Description: CSUEB Library Paving

---- Receptor #1 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
50 Foot Receptor	Residential	60	60	60

Description	Impact Device	Usage(%)	Equipment			
			Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Concrete Mixer Truck	No	40		78.8	50	0
Paver	No	50		77.2	50	0
Roller	No	20		80	50	0
Tractor	No	40	84		50	0
Compactor (ground)	No	20		83.2	50	0

Results

Equipment	Calculated (dBA)		Noise Limits (dBA)						Noise Limit Exceedance (dBA)					
	*Lmax	Leq	Day		Evening		Night		Day		Evening		Night	
			Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Concrete Mixer Truck	78.8	74.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Paver	77.2	74.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Roller	80	73	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tractor	84	80	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Compactor (ground)	83.2	76.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	84	83.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 12/13/2017
 Case Description: CSUEB Library Site Preparation

---- Receptor #1 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
50 Foot Receptor	Residential	60	60	60

		Equipment				
Description	Impact	Spec	Actual	Receptor	Estimated	
		Usage(%)	Lmax (dBA)	Lmax (dBA)	Distance (feet)	Shielding (dBA)
Grader	No	40	85	50	0	
Tractor	No	40	84	50	0	
Dozer	No	40	81.7	50	0	

		Results													
		Calculated (dBA)		Noise Limits (dBA)						Noise Limit Exceedance (dBA)					
Equipment		*Lmax	Leq	Day		Evening		Night		Day		Evening		Night	
				Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Grader		85	81	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tractor		84	80	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dozer		81.7	77.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Total	85	84.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

CSUEB Library		Receptor at 100 feet
Ref=	Reference vibration level (PPV)	
RefD=	Reference distance for Reference vibration level (Feet)	
Vibration PPV		
Ref=	0.21	Based on type of equipment
RefD=	25	
D=	100	Distance from equipment to sensitive receptor
Equip=	0.026	
Annoyance VdB		
Ref=	94	Based on type of equipment
RefD=	25	
D=	100	Distance from equipment to sensitive receptor
Equip=	76	
Vibratory Roller		
Source: FTA Transit Noise and Vibration Impact Assessment, 2006.		

CSUEB Library		Receptor at 100 feet
Ref=	Reference vibration level (PPV)	
RefD=	Reference distance for Reference vibration level (Feet)	
Vibration PPV		
Ref=	0.089	Based on type of equipment
RefD=	25	
D=	100	Distance from equipment to sensitive receptor
Equip=	0.011	
Annoyance VdB		
Ref=	87	Based on type of equipment
RefD=	25	
D=	100	Distance from equipment to sensitive receptor
Equip=	69	
Large Bulldozer		
Source: FTA Transit Noise and Vibration Impact Assessment, 2006.		

CSUEB Library		Receptor at 100 feet
Ref=	Reference vibration level (PPV)	
RefD=	Reference distance for Reference vibration level (Feet)	
Vibration PPV		
Ref=	0.076	Based on type of equipment
RefD=	25	
D=	100	Distance from equipment to sensitive receptor
Equip=	0.010	
Annoyance VdB		
Ref=	86	Based on type of equipment
RefD=	25	
D=	100	Distance from equipment to sensitive receptor
Equip=	68	
Loaded Trucks		
Source: FTA Transit Noise and Vibration Impact Assessment, 2006.		

CSUEB Library		Receptor at 100 feet
Ref=	Reference vibration level (PPV)	
RefD=	Reference distance for Reference vibration level (Feet)	
Vibration PPV		
Ref=	0.035	Based on type of equipment
RefD=	25	
D=	100	Distance from equipment to sensitive receptor
Equip=	0.004	
Annoyance VdB		
Ref=	79	Based on type of equipment
RefD=	25	
D=	100	Distance from equipment to sensitive receptor
Equip=	61	
Jackhammer		
Source: FTA Transit Noise and Vibration Impact Assessment, 2006.		

CSUEB Library		Receptor at 100 feet
Ref=	Reference vibration level (PPV)	
RefD=	Reference distance for Reference vibration level (Feet)	
Vibration PPV		
Ref=	0.003	Based on type of equipment
RefD=	25	
D=	100	Distance from equipment to sensitive receptor
Equip=	0.000	
Annoyance VdB		
Ref=	58	Based on type of equipment
RefD=	25	
D=	100	Distance from equipment to sensitive receptor
Equip=	40	
Small Bulldozer		
Source: FTA Transit Noise and Vibration Impact Assessment, 2006.		

CSUEB Library		Receptor at 250 feet
Ref=	Reference vibration level (PPV)	
RefD=	Reference distance for Reference vibration level (Feet)	
Vibration PPV		
Ref=	0.21	Based on type of equipment
RefD=	25	
D=	250	Distance from equipment to sensitive receptor
Equip=	0.007	
Annoyance VdB		
Ref=	94	Based on type of equipment
RefD=	25	
D=	250	Distance from equipment to sensitive receptor
Equip=	64	
Vibratory Roller		
Source: FTA Transit Noise and Vibration Impact Assessment, 2006.		

CSUEB Library		Receptor at 250 feet
Ref=	Reference vibration level (PPV)	
RefD=	Reference distance for Reference vibration level (Feet)	
Vibration PPV		
Ref=	0.089	Based on type of equipment
RefD=	25	
D=	250	Distance from equipment to sensitive receptor
Equip=	0.003	
Annoyance VdB		
Ref=	87	Based on type of equipment
RefD=	25	
D=	250	Distance from equipment to sensitive receptor
Equip=	57	
Large Bulldozer		
Source: FTA Transit Noise and Vibration Impact Assessment, 2006.		

CSUEB Library		Receptor at 250 feet
Ref=	Reference vibration level (PPV)	
RefD=	Reference distance for Reference vibration level (Feet)	
Vibration PPV		
Ref=	0.076	Based on type of equipment
RefD=	25	
D=	250	Distance from equipment to sensitive receptor
Equip=	0.002	
Annoyance VdB		
Ref=	86	Based on type of equipment
RefD=	25	
D=	250	Distance from equipment to sensitive receptor
Equip=	56	
Loaded Trucks		
Source: FTA Transit Noise and Vibration Impact Assessment, 2006.		

CSUEB Library		Receptor at 250 feet
Ref=	Reference vibration level (PPV)	
RefD=	Reference distance for Reference vibration level (Feet)	
Vibration PPV		
Ref=	0.035	Based on type of equipment
RefD=	25	
D=	250	Distance from equipment to sensitive receptor
Equip=	0.001	
Annoyance VdB		
Ref=	79	Based on type of equipment
RefD=	25	
D=	250	Distance from equipment to sensitive receptor
Equip=	49	
Jackhammer		
Source: FTA Transit Noise and Vibration Impact Assessment, 2006.		

CSUEB Library		Receptor at 250 feet
Ref=	Reference vibration level (PPV)	
RefD=	Reference distance for Reference vibration level (Feet)	
Vibration PPV		
Ref=	0.003	Based on type of equipment
RefD=	25	
D=	250	Distance from equipment to sensitive receptor
Equip=	0.000	
Annoyance VdB		
Ref=	58	Based on type of equipment
RefD=	25	
D=	250	Distance from equipment to sensitive receptor
Equip=	28	
Small Bulldozer		
Source: FTA Transit Noise and Vibration Impact Assessment, 2006.		