UCMERCED

SOLAR PHOTOVOLTAIC ARRAY

Addendum No. 1 to the 2009 UC Merced Long Range Development Plan
Environmental Impact Statement / Environmental Impact Report

The following Addendum has been prepared in compliance with CEQA.

Prepared By:

OFFICE OF PHYSICAL PLANNING DESIGN & CONSTRUCTION

University of California
5200 N. Lake Road,
Merced, California 95434

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June 2009

Contact: Thomas A. Lollini, Associate Vice Chancellor for
Physical Planning Design & Construction
209-228-4475

I. PROJECT INFORMATION

1. Project title:

   Solar Photovoltaic Array

2. Lead agency name and address:

   Office of Physical Planning Design & Construction
   University of California
   5200 N. Lake Road,
   Merced, California 95434

3. Contact person and phone number:

   Thomas A. Lollini, Associate Vice Chancellor for
   Physical Planning Design & Construction
   209-228-4475

4. Project location:

   University of California, Merced
   Merced County

5. Project sponsor's name and address: (See #2 & #3)

   See Lead Agency

6. Custodian of the administrative record for this project (if different from response to item 3 above.):

   See Lead Agency

7. Identification of previous EIRs relied upon for tiering purposes (including all applicable LRDP and project EIRs) and address where a copy is available for inspection.)

   The 2009 UC Merced Long Range Development Plan Environmental Impact Statement/Environmental Impact Report (EIS/EIR). Copies of the document can be found at:

   Office of Physical Planning Design & Construction
   University of California
   5200 N. Lake Road,
   Merced, California 95434

II. PROJECT LOCATION AND DESCRIPTION

1. Description of project: The Solar Photovoltaic Array (Project) site is located in the Central Campus East subarea of the UC Merced campus. The Project site occupies portions of Sections 34, and 35, Township 6 South, Range 14 East. The site is south-southeast of Lake Yosemite Regional Park and east of Lake Road. The future alignment of Bellevue Road forms the southern project site boundary. UC Merced is located in an unincorporated area of eastern Merced County, approximately 2 miles northeast of the limits of the City of Merced (see Figure 1, Location of the Proposed Action).

Under the proposed Project, a solar photovoltaic (PV) system would be installed on an approximately 10-acre site in the UCM Central Campus East subarea. The system would consist of an array of approximately 4,870 ground-mounted solar photovoltaic panels that would generate electricity for use on the UC Merced campus, together with supporting infrastructure such as electrical cabling and connections and safety lighting. The system would be designed to supply 1.12 MW of power to the campus through connections to the existing electrical system.

The solar panels would be approximately 12 feet high. The site would be surrounded by fencing that would partially screen the panels from view from surrounding areas. No landscaping is proposed as part of the Project. The Project site will have a small number of security lights, sufficient to check on the system at night if necessary. Safety lighting within and around the facility would be shielded in a manner that would avoid light spillage into surrounding areas.

The Project would require offsite improvements including utility trenching. The off-site improvements will connect utilities from the Project site to the existing campus central plant, approximately 0.25 mile northwest of the Project site. The infrastructure will generally follow the planned grid leading toward the central plant. A temporary unpaved roadway in this area will be used solely for transporting construction related material to the Project site and will be abandoned and restored to its original use upon completion of construction. An additional service access route is planned to enter the Project site from the south. The southern access route utilizes an existing unpaved roadway from Lake Road to the west, and traveling east crossing over the Fairfield Canal to then head north to the Project site. "Meyers Gate" is the entry point on Lake Road, which is a County maintained roadway.

The solar panels will be oriented in a manner that maximizes their exposure to the rays of the sun. This will be achieved through a single axis, horizontal tracking system configured to optimize energy capture by following the path of the sun throughout the day. The panels will be configured as an array of north-south oriented tracking units tilted south that rotate to track the daily east-west motion of the sun. The rows will be linked together in building blocks and are actuated in unison by an industrial system controller and drive unit. The panels will be positioned in rows in a manner that each module continues to have complete unshaded exposure during all hours of the day. The 12' high panels will be mounted on above-ground pre-cast foundations which will require grading of the entire site. In addition to the panels, tracking, and mounting systems, the system will include transfer equipment that includes CD-AC inverters, cable boxes and a data acquisition system. These components will be localized on the project site and will require a concrete foundation. No building structures are proposed as part of the project design.

Construction of the Project is anticipated to be completed within 3 months of the start date, in late 2009.

Mechanical maintenance/repair, programming, panel replacement will be conducted on an as-needed basis and triggered by 24/7 remote performance monitoring. Typical operations during these sight visits include light truck operations and the utilization of hand tools. In the coming years, the system may include replacement of electrical equipment, which will require the utilization of a forklift and/or a small crane. No full time on-site employee is proposed as part of the proposed Project for its daily operations. The system is self sufficient and will be operating at different capacities throughout the day, mainly during daylight hours.

2. Project Objectives: The objective of the proposed Project is to maximize the use of the UC Merced campus to produce renewable electricity and to leverage the operation and monitoring of the solar PV system to educate the campus community and support the University's research objective. The Campus is being created utilizing the latest sustainable, environmentally-sensitive techniques. The goal for the university is to create an environment that is welcoming to students, reflects new technologies in building design, and sets the standard for environmental stewardship and sustainability while providing a model for growth in the San Joaquin Valley.

3. Surrounding land uses and environmental setting: The Project would be located on a previously undeveloped site in the UC Merced Central Campus East subarea. Surrounding lands immediately to the north, east, south, and west of the project site are undeveloped grasslands used for grazing. The existing UC Merced main campus is located approximately 0.25 mile northwest of the project site. The existing campus Central Plant is the closest existing facility to the proposed project. The Le Grand Canal is located directly east of the Project site and Fairfield Canal is located approximately 0.25 mile west of the project site.

4. Discretionary approval authority: As a public agency principally responsible for approving or carrying out the proposed Project, the University of California is the Lead Agency under CEQA and is responsible for reviewing the adequacy of the environmental document, determining whether further environmental review is required as a result of the minor changes to the Project, and approving the proposed Project. Approval of the proposed Project has been delegated to the UC Merced's Division of Administration, by The Board of Regents of the University of California (The Regents) and is expected to be considered by the Division in June, 2009.

5. Consistency with the LRDP: The following discussion describes the proposed Project's relationship to and consistency with the development projections, population projections, land use designations, objectives, and cumulative impacts analyses contained in the 2009 LRDP.

5.1 2009 LRDP Scope of Development

The existing UCM campus currently consumes 1.7 MW of energy during the peak window. The maximum electric demand at full development of the campus is estimated at 18MW. The LRDP sets the goal to achieve zero net energy by generating power through renewable energy. The proposed Project, of approximately 4,870 ground-mounted solar photovoltaic panels, is designed to supply 1.12 MW of power to the campus through connections to the existing electrical system.

The proposed project would supply approximately 6.2% of the Campus' total energy needs at full build out. Therefore, the proposed project is within the 2009 LRDP's scope of renewable energy development.

5.2 2009 LRDP Land Use Designation

The 2009 LRDP identifies the land uses in the main 10-acre Project site as areas intended for academic use/laboratory; campus services; and parking. Additionally, off-site infrastructure will be partially located within the circulation corridors of the Phase 3 and 4 campus and north of the Project site. Each of the land uses occupied by the proposed Project includes provisions for on-site utility services. As such, the proposed Project would provide renewable energy utility services supporting each of the land use designations noted in the 2009 LRDP.

4.3 2009 LRDP Population Projections

The 2009 LRDP projects that, through 2020-21, the on-campus population will increase to include approximately 11,094 students and 3093 faculty and staff. The spring 2009 campus faculty and staff headcount was approximately 790, and the 2008-09 student population was approximately 2,736. The proposed Project, which would introduce no new students and no new members of the faculty and staff population, would not increase the campus population to a level that would approach that projected for 2020-21. Therefore, the proposed Project is within the 2009 LRDP's campus population projections.

4.4 2009 LRDP Objectives

The primary objective of the 2009 LRDP is to plan for the Merced campus' share of the University of California's short- and long- term enrollment demands. In addition, the 2009 LRDP aims to model environmental stewardship and to provide a high-quality campus setting. The proposed Project would support these main 2009 LRDP objectives by providing a means for renewable energy production that enhances the campus' ability to meet the demands of a continuously growing student body. Additionally, the proposed Project will promote environmentally sustainable designs through the use of green technologies. As such, the proposal will ultimately contribute to the conservation efforts promoting a high quality campus setting.

In addition, the 2009 LRDP includes specific objectives that are relevant to the proposed Project, including the following:

Zero Net Energy Commitment: Achieve zero net energy by 2020 through aggressive conservation efforts and development of renewable power. Zero net energy means producing the same amount of renewable energy that is consumed. Buildings will be designed to consume half of the energy and demand of other University buildings in California, surpass Title 24 minimum efficiency standards by 30%, and achieve all 10 LEED credits for optimizing energy efficiency.

Architecture: Minimize grid connected peak electricity loads shifting electricity cooling (approximately 25% of total) away from peak electricity demand periods through chilled water thermal storage, gas or cogeneration-driven cooling, and/or solar power.

The proposed Project would support the 2009 LRDP's "Zero Net Energy Commitment" objectives by creating a solar array complex that would assist in the campus' conservation efforts leading toward energy independence.

The proposed Project would also support the 2009 LRDP's "architecture" objective by developing a renewable energy system capable of providing electricity to the campus during peak grid demand periods.

Relationship to the 2009 UCM LRDP EIS/EIR: The proposed Project was evaluated in Volume 3 of the 2009 UC Merced Long Range Development Plan Draft Environmental Impact Statement/Environmental Impact Report (2009 UCM LRDP EIS/EIR). Volume 3 of the 2009 UCM LRDP EIS/EIR is a project-level analysis assessing the potentially significant environmental effects of the UCM 2020 Project. The UCM 2020 Project, of which the proposed Solar PV project is a part, would develop the UC Merced Campus with facilities needed to support an enrollment level of approximately 10,000 full-time equivalent (FTE) students. The project-specific environmental analyses in Volume 3 builds upon the broader programmatic analysis of campus development in 2009 UCM LRDP EIS/EIR Volumes 1 and 2, and focus on evaluating and disclosing environmental impacts that could potentially result if the development proposed as part of the UCM 2020 Project is implemented.

This Addendum takes into consideration the minor modifications to the description of the proposed Solar PV Project provided in Volume 3 of the 2009 UCM LRDP EIS/EIR. The project changes consist of the following:

- *Increased size from 8 to 10 acres:* The proposed Solar PV project as modified is 10 acres in size, a 2 acre increase in size from the 8 acre project identified and analyzed in the 2009 UCM LRDP EIS/EIR.

- *Modified project boundaries beyond the UCM 2020 Project boundary:* The proposed Solar PV project changes the limits of project site to extend beyond the boundaries of the UCM 2020 Project identified in Volume 3 of the 2009 UCM LRDP EIS/EIR and into land area identified for development under Phases 3 and 4 of campus development. This project change would result in the partial placement of 10 acres of PV panels and associated utility infrastructure on Phase 3 and 4 lands.

- *Type of visual screening used:* The type of visual screening used for this project has changed from landscape to fence screening. The Project will utilize security fencing to surround the site and consist of chain link material that will be erected at a height of 6 feet. This type of fencing material will partially screen the panels from view in surrounding areas while providing added security to the site.

- *A technical correction regarding the amount of energy the project would generate:* The description of Solar PV project provided in Volume 3 of the 2009 UCM LRDP EIS/EIR incorrectly stated the project would be designed to supply 2,100 MW of power to the campus, which is greater than the total maximum electric demand of the campus, estimated to be 18MW. This Addendum clarifies a technical correction to the Solar PV

project, which would supply 1.12 MW of power to the campus.

III. ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

☐ Aesthetics	☐ Agriculture Resources	☐ Air Quality
☐ Biological Resources	☐ Cultural Resources	☐ Geology/Soils
☐ Hazards & Hazardous Materials	☐ Hydrology/Water Quality	☐ Land Use/Planning
☐ Noise	☐ Population and Housing	☐ Public Services
☐ Recreation	☐ Transportation/Traffic	☐ Utilities/Service Systems
☐ Mandatory Findings of Significance		

IV. DETERMINATION:

On the basis of the initial evaluation that follows:

☐ I find that the proposed project could have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, and that these effects have not been adequately analyzed by an earlier EIR. A TIERED ENVIRONMENTAL IMPACT REPORT will be prepared.

☒ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (1) have been addressed adequately in an earlier environmental document pursuant to applicable standards, and (2) either no changes or no substantial changes to the project are proposed, and no new information of substantial importance has been identified. An ADDENDUM and/or FINDINGS will be prepared.

_____ _____

Signature Date

_____ _____

Printed Name For

V. EVALUATION OF ENVIRONMENTAL IMPACTS

The University has defined the column headings in the Initial Study checklist as follows:

A) "Additional Project-level Impact Analysis Required" applies where the project may result in an environmental impact that was not considered in an earlier document, or not considered in sufficient detail, and/or substantial project changes, changed circumstances, or new information of substantial importance triggering CEQA Section 15162 has occurred since certification of the earlier document.

B) "Project Impact Adequately Addressed in Earlier Environmental Document" applies where the potential impacts of the proposed project were adequately addressed in an earlier environmental document and either no changes or no substantial changes to the project are proposed, and no new information of substantial importance has been identified.

Impact Questions and Responses

	(A)	(B)
Issues	Additional Project-level Impact Analysis Required	Project Impact Adequately Addressed in Earlier Environmental Document
1. AESTHETICS – Would the project:		
a) Have a substantial adverse effect on a scenic vista?	☐	☒
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☒
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☒
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☒

Describe relevant elements of project

The Project site is situated southeast of Lake Yosemite and comprises approximately 10 acres of the 815-acre area that would be developed with campus facilities. Two approximately 50-foot-wide irrigation canals, the Le Grand Canal and the Fairfield Canal, convey water from the lake to agricultural areas to the south. Both canals meander along the north, east and west sides of the Project site, generally following the contours of the land.

The Project site consists of grazing land uses and would be developed with a solar photovoltaic system. The solar panels would be installed to a height of approximately 12 feet. The site would be surrounded by fencing that would partially screen the panels from view in surrounding areas. Safety lighting within and around the facility would be shielded in a manner that would avoid light spillage into surrounding areas. The proposed Project includes the development of offsite infrastructure to include underground and overhead electrical utility installation. The routing of the offsite infrastructure would be located to the north of the Project site and traverse land within Phase 3 development. Phase 4 lands will also be utilized to accommodate service access to the site from the southern portion of the Project site.

Describe how project was analyzed in earlier environmental document

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

On-campus views – The 2009 UCM LRDP EIS/EIR concluded that construction of the UC Merced campus, including the UCM 2020 Project, of which the proposed Solar PV project is a part, would interrupt existing views of the Sierra Nevada range from certain campus vantage points but this is not a significant adverse impact because views would still be available from other campus vantage points.

Off-campus views – The 2009 UCM LRDP EIS/EIR concluded that construction of the UC Merced campus, including the UCM 2020 Project, of which the proposed Solar PV project is a part, would not result in a significant impact from loss of the views of scenic vistas of the Sierra Nevada from off-campus locations because only a small portion of the development proposed as part of the project adjoins the portion of Lake Road south of Bellevue Road. Furthermore, there is a drop in elevation between Lake Road and where campus facilities would be located; therefore, a significant interruption of views of the Sierra Nevada due to campus development would not occur. Additionally, the view blockage for persons traveling along Lake Road or using the bike path adjacent to it to access the regional park would be transitory.

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

As identified in Section 4.1, Volume 1 of the 2009 UCM LRDP EIS/EIR, development under the UC Merced Project would not adversely affect scenic resources (Impact AES-2). The campus site is not located near any state-designated scenic highways and there are no resources present on the site that would qualify as scenic resources.

c) Substantially degrade the existing visual character or quality of the site and its surroundings?

Development of the UC Merced campus, including the UCM 2020 Project, would change the visual characteristics of the campus site from largely undeveloped grasslands and irrigated pasture to a fully urbanized area, developed with buildings, sidewalks, paved parking lots, and landscaping. Although the campus has been carefully designed with attention to placement of appropriate land uses at key campus entrances and all future facilities built on the campus would be required to comply with campus design guidelines, any development of the site would result in a visual landscape different from the existing character of the site. The analysis in the 2009 UCM LRDP EIS/EIS concluded that the development of the campus including implementation of the UCM 2020 Project would permanently and substantially alter the visual character of the Campus. This impact is considered significant and unavoidable even after mitigation (See Table ES-1 / 2009 UC Merced LRDP EIS/EIR Mitigation Measures).

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

The 2009 UCM LRDP EIS/EIR concluded that due to the distance of the Solar PV project from existing roads and because the PV panels would be installed not to produce excessive glare, the impact related to glare from the PV facility would be less than significant.

Describe any minor changes to the project since earlier environmental analysis

This Addendum takes into consideration the minor modifications to the description of the proposed Solar PV Project provided in Volume 3 of the 2009 UCM LRDP EIS/EIR. The project changes consist of an increased in size from 8 to 10 acres; modified project boundaries beyond the UCM 2020 Project boundary; type of visual screening used; and a technical correction regarding the amount of energy the project would generate (see Section 4.4 for a broader discussion of minor changes in the proposed project).

Describe how the minor project changes affect the earlier environmental analysis

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

The minor changes to the proposed Solar PV project (increased size from 8 to 10 acres; modified project boundaries beyond the UCM 2020 Project boundary; type of visual screening used; and a technical correction regarding the amount of energy the project would generate) would not result in new or substantially worse impacts to scenic vistas beyond what was analyzed in the 2009 UCM LRDP EIS/EIR.

The increased size of the Solar PV project site would not substantially change the potential effects to on- or off-campus views of the Sierra Nevada because, while a greater amount of surface area would be developed with solar PV arrays, the height and visual appearance of the project would be generally consistent with what was previously analyzed as part of the UCM 2020 Project (EIS/EIR Volume 3) and urbanization development of the entire campus (EIS/EIR Volume 1). The technical correction to the amount of energy that the proposed project would

generate does not have any potential to result in aesthetic impacts. In conclusion, the potential environmental effects of the proposed project were adequately addressed in the 2009 UCM LRDP EIS/EIR.

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

The campus site is not located near any state-designated scenic highways and there are no resources present on the site that would qualify as scenic resources. The potential impacts of the proposed project were adequately addressed in the 2009 UCM LRDP EIS/EIR.

c) Substantially degrade the existing visual character or quality of the site and its surroundings?

The minor changes to the proposed Solar PV project (increased size from 8 to 10 acres; modified project boundaries beyond the UCM 2020 Project boundary; type of visual screening used; and a technical correction regarding the amount of energy the project would generate) would not result in new or worse impacts to visual character beyond those identified in the 2009 UCM LRDP EIS/EIR. The increased size of the Solar PV project site would not substantially change the impacts to visual character because, while a greater amount of surface area would be developed with solar PV arrays, the height and visual appearance of the project would be generally consistent with what was previously analyzed as part of the UCM 2020 Project (EIS/EIR Volume 3) and urbanization development of the entire campus (EIS/EIR Volume 1).

The change in visual screening implemented by the project would not result in substantially worse effects because the project site will ultimately be located internal to the UC Merced campus, and located in an area substantially surrounded by land uses with height and massing features similar to or greater than that which is being proposed. The technical correction to the amount of energy that the proposed project would generate does not have any potential to result in aesthetic impacts. In conclusion, the potential environmental effects of the proposed project were adequately addressed in the 2009 UCM LRDP EIS/EIR.

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

The minor changes to the proposed Solar PV project (increased size from 8 to 10 acres; modified project boundaries beyond the UCM 2020 Project boundary; type of visual screening used; and a technical correction regarding the amount of energy the project would generate) would not result in new or substantially worse aesthetic impacts resulting from light or glare beyond what was analyzed in the 2009 UCM LRDP EIS/EIR.

The increased size of the Solar PV project site would not substantially increase the project's potential to result in glare because the proposed orientation of the panels and fence screening method would minimize glare, and nighttime security lighting resulting from the project to a level not substantially different than what was analyzed as part of the UCM 2020 Project (EIS/EIR Volume 3) and urbanization development of the entire campus (EIS/EIR Volume 1). The technical correction to the amount of energy that the proposed project would generate does

not have any potential to result in aesthetic impacts. In conclusion, the potential environmental effects of the proposed project were adequately addressed in the 2009 UCM LRDP EIS/EIR.

Issues	(A) Additional Project-level Impact Analysis Required	(B) Project Impact Adequately Addressed in Earlier Environmental Document
2. Agricultural 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. Would the project:		
a) Result in the conversion of Important Farmland, including Prime Farmland, Farmland of Statewide Importance and Unique Farmland?	☐	☒
b) Expose residents to agricultural nuisance, substantially conflict with existing general plan policies or zoning for agricultural use, or involve other changes that could result in the conversion of Important Farmland to nonagricultural uses?	☐	☒
c) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☒

Describe relevant elements of project

The proposed Project would occupy approximately 10 acres of land on the UC Merced campus and is located in an area currently identified by the Department of Conservation's 2008 Department of Conservation's 2008 Farmland Mapping and Monitoring Program (FMMP) as

Grazing and Urban and Built-Up Lands. Roadway and utility infrastructure supporting the 10-acre solar PV array would traverse Phase 3 and 4 UCM campus land and is also located in an area currently identified as Grazing and Urban and Built-Up Lands.

Describe how project was analyzed in earlier environmental document

a) Result in the conversion of Important Farmland, including Prime Farmland, Farmland of Statewide Importance and Unique Farmland?

The 2009 UCM LRDP EIS/EIR concluded that construction of the UC Merced campus, including the UCM 2020 Project, of which the proposed Solar PV project is a part, would convert Important Farmland to urban uses. This impact is considered potentially significant. However, because, as part of the University's environmental commitments, adequate acreage of important farmland has already been placed under conservation easements that allow farming to continue, this impact would be less than significant.

b) Expose residents to agricultural nuisance, substantially conflict with existing general plan policies or zoning for agricultural use, or involve other changes that could result in the conversion of Important Farmland to nonagricultural uses?

The 2009 UCM LRDP EIS/EIR concluded that construction of the UC Merced campus, including the UCM 2020 Project, of which the proposed Solar PV project is a part, will be developed in a manner whereby portions of the Campus (including the UCM 2020 Project site) that are adjacent to areas that would remain in agricultural use would be used primarily for open space and recreational purposes. Since the surrounding land uses would be compatible with these land uses on the proposed Campus, the campus population would not be exposed to agricultural nuisances that in turn could put pressure on agricultural practices on adjacent lands to be abandoned or for the land to convert to non-agricultural uses.

c) Conflict with existing zoning for agricultural use, or a Williamson Act contract?

The 2009 UCM LRDP EIS/EIR concluded that construction of the UC Merced campus, including the UCM 2020 Project, of which the proposed Solar PV project is a part, would not substantially conflict with existing zoning for agricultural use or involve the cancellation of a Williamson Act contact. Therefore, there would be no impact resulting in the conversion of Important Farmland as a result of the proposed Project as amended.

Describe any minor changes to the project since earlier environmental analysis

This Addendum takes into consideration the minor modifications to the description of the proposed Solar PV Project provided in Volume 3 of the 2009 UCM LRDP EIS/EIR. The project changes consist of an increased in size from approximately 8 to 10 acres; modified project boundaries beyond the UCM 2020 Project boundary; type of visual screening used; and a technical correction regarding the amount of energy the project would generate (see Section 4.4 for a broader discussion of minor changes in the proposed project).

Describe how the minor project changes affect the earlier environmental analysis

a) Result in the conversion of Important Farmland, including Prime Farmland, Farmland of Statewide Importance and Unique Farmland?

The minor changes to the proposed Solar PV project (increased size from 8 to 10 acres; modified project boundaries beyond the UCM 2020 Project boundary; type of visual screening used; and a technical correction regarding the amount of energy the project would generate) would not result in new or substantially worse agricultural resource impacts involving the conversion of Important Farmland beyond what was analyzed in the 2009 UCM LRDP EIS/EIR.

The increased size of the Solar PV project site would not substantially increase the potential effects to the conversion of Important Farmlands because, while a greater amount of surface area would be developed with solar PV arrays, the project as amended, would be developed entirely on campus lands classified as Grazing and Urban and Built-Up Lands which is not substantially different than what was analyzed as part of the UCM 2020 Project (EIS/EIR Volume 3) and urbanization development of the entire campus (EIS/EIR Volume 1).

The change in visual screening and the technical correction to the amount of energy that the proposed project would generate does not have any potential to result in conversion impacts on Important Farmlands.

In conclusion, the potential environmental effects of the proposed project were adequately addressed in the 2009 UCM LRDP EIS/EIR.

b) Expose residents to agricultural nuisance, substantially conflict with existing general plan policies or zoning for agricultural use, or involve other changes that could result in the conversion of Important Farmland to nonagricultural uses?

The minor changes to the proposed Solar PV project (increased size from 8 to 10 acres; modified project boundaries beyond the UCM 2020 Project boundary; type of visual screening used; and a technical correction regarding the amount of energy the project would generate) would not result in new or substantially worse agricultural resource impacts involving changes leading to the conversion of Important Farmland to nonagricultural uses beyond what was analyzed in the 2009 UCM LRDP EIS/EIR.

The increased size of the Solar PV project site would not substantially increase the impacts that could result in changes leading to the conversion of Important Farmland to nonagricultural uses because, while a greater amount of surface area would be developed with solar PV arrays, the Project, as proposed, is not located adjacent to the periphery of the campus and therefore will not be in an area where land uses are designed for their compatibility with agricultural uses. Additionally, while the project will utilize more land for development, the land uses of the project would be generally consistent with what was previously analyzed as part of the UCM

2020 Project (EIS/EIR Volume 3) and urbanization development of the entire campus (EIS/EIR Volume 1).

The change in visual screening and the technical correction to the amount of energy that the proposed project would generate does not have any potential to result in changes leading to the conversion of Important Farmland to nonagricultural uses.

In conclusion, the potential impacts of the proposed project were adequately addressed in the 2009 UCM LRDP EIS/EIR.

c) Conflict with existing zoning for agricultural use, or a Williamson Act contract?

The minor changes to the proposed Solar PV project (increased size from 8 to 10 acres; modified project boundaries beyond the UCM 2020 Project boundary; type of visual screening used; and a technical correction regarding the amount of energy the project would generate) would not result in new or substantially worse agricultural resource impacts involving conflicts with existing zoning for agricultural use, or a Williamson Act contract beyond what was analyzed in the 2009 UCM LRDP EIS/EIR.

The increased size of the Solar PV project site would not substantially increase the impacts that could result in conflicts with existing zoning for agricultural use, or a Williamson Act because, as a state owned property, the Campus is not subject to local zoning and no portion of the Campus site is under a Williamson Act contract. Additionally, while the project will utilize more land for development, the additional lands occupied by the proposed project, as amended, continue to be within the confines of the Campus boundary and would not be subject to local zoning. No portion of the additional lands are under a Williamson Act contract. As such, the project would be generally consistent with what was previously analyzed as part of the UCM 2020 Project (EIS/EIR Volume 3) and urbanization development of the entire campus (EIS/EIR Volume 1).

The change in visual screening and the technical correction to the amount of energy that the proposed project would generate does not have any potential to result in conflicting with existing zoning for agricultural use, or a Williamson Act contract.

In conclusion, the potential impacts of the proposed project were adequately addressed in the 2009 UCM LRDP EIS/EIR.

Issues	Additional Project-level Impact Analysis Required	Project Impact Adequately Addressed in Earlier Environmental Document
3. 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?	☐	☒
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☒
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)?	☐	☒
d) Expose sensitive receptors to substantial pollutant concentrations?	☐	☒
e) Create objectionable odors affecting a substantial number of people?	☐	☒
f) Result in greenhouse gas emissions that would hinder or delay the campus' ability to meet the UC climate change goals contained in the UC Policy on Sustainable Practices?	☐	☒

Describe relevant elements of project

The proposed Project will establish an electrical generation system utilizing photovoltaic technologies that will provide a means of delivering sustainable energy to the UC Merced Campus. This source of renewable energy will reduce UC Merced's energy usage derived from sources negatively impacting air quality, such as those derived from the combustion of fossil fuels.

The proposed Project, including offsite infrastructure improvements, will require grading, trenching and general construction activities. Construction-related emissions from the proposed Project can be distinguished as either on site or off site. On-site emissions generated during construction principally consist of exhaust emissions from the operation of heavy-duty construction equipment, fugitive dust from disturbed soil. Off-site emissions during the construction phase normally consist of exhaust emissions and entrained paved road dust from construction worker commute trips and material delivery trips to and from the construction site.

The operation-related emissions from the proposed Project include exhaust emissions and entrained paved road dust from maintenance workers commute trips as well as emissions from fugitive dust of entrained unpaved roadway accessing the site. No combustion related operational emissions will occur on any mechanical equipment located on the site.

Describe how project was analyzed in earlier environmental document

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

The 2009 UCM LRDP EIS/EIR concluded that construction of the UC Merced campus, including the UCM 2020 Project, of which the proposed Solar PV project is a part, would not conflict with or obstruct implementation of the applicable air quality plan. Merced County has recognized the Campus through its amendment of the Merced County General Plan in 1996 to designate a UC Merced Specific Urban Development Plan. Accordingly, the development of the Campus, including land uses under the UCM 2020 Project, is included in the Merced County General Plan, the growth projections of which would be reflected in the SJVAPCD's air quality plans adopted in 2007. The UCM 2020 Project, as a subset of the growth included in the Merced County General Plan, would not conflict with or obstruct implementation of the applicable air quality plan. Thus, the effect of the UCM 2020 Project with respect to the air quality management plan is itself less than significant.

b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?

The 2009 UCM LRDP EIS/EIR concluded that construction of the UCM 2020 Project, of which the proposed Solar PV project is a part, would require site preparation (i.e., clearing and grading); pavement and asphalt installation; and construction of academic buildings, campus support facilities, student housing, and streets. Utilizing an air quality model to determine on and off-road vehicle emissions, it was determined that the SJVAPCD significance thresholds would not be exceeded for ROG, NOX, and PM10 due to construction of the UCM 2020 Project. Therefore, construction emissions would result in a less than significant impact on air quality.

The 2009 UCM LRDP EIS/EIR also concluded that operation of the UCM 2020 Project, of which the proposed Solar PV project is a part, would generate annual emissions that exceed the SJVAPCD significance thresholds for ROG and NOX. Therefore, operational emissions of ROG and NOX generated by campus operations would be considered to have a significant air quality impact. While mitigation measures are proposed to reduce the UCM 2020 Project's operational air quality impact, the impacts remain significant and unavoidable for ROG and NOX.

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)?

The 2009 UCM LRDP EIS/EIR concluded that construction and the total increase in the campus' operational emissions of ROG and NOX at buildout of the UCM 2020 Project, of which the proposed Solar PV project is a part, would exceed the San Joaquin Valley Air Pollution Control District (SJVAPCD) significance thresholds. The impact is considered individually and cumulatively significant, particularly when viewed against the background of the serious nature of existing air quality problems in the San Joaquin Valley Air Board (SJVAB).

Although all feasible and reasonable mitigation will be imposed, there would still be remaining contributions of ROG and NOX. Thus, the construction and operation of the campus under the UCM 2020 Project would have a significant cumulative impact on air quality.

d) Expose sensitive receptors to substantial pollutant concentrations?

The 2009 UCM LRDP EIS/EIR concluded that construction of the UC Merced campus, including the UCM 2020 Project, of which the proposed Solar PV project is a part, would not expose sensitive receptors to substantial pollutant concentrations of carbon monoxide (CO) (Impact AQ-3). The UC Merced Project was evaluated for its potential to cause high levels of CO due to traffic associated with the Campus, including the UCM 2020 Project. As indicated in Volume 1 of the 2009 UCM LRDP EIS/EIR, under worst-case conditions, future CO concentrations at each of these intersections worst affected by the traffic associated with the Campus at buildout would not exceed the state 1-hour and 8-hour standards. Therefore, no significant CO hotspot impacts would occur to sensitive receptors in the vicinity of these intersections. Because no significant impacts would occur based on the traffic associated with the Campus, no significant CO impacts would occur based on the much smaller volume of traffic associated with the UCM 2020 Project. This impact is less than significant.

e) Create objectionable odors affecting a substantial number of people?

The 2009 UCM LRDP EIS/EIR concluded that construction of the UC Merced campus, including the UCM 2020 Project, of which the proposed Solar PV project is a part, would not create objectionable odors affecting a substantial number of people. Construction of the Campus would require the use of diesel-fueled equipment, architectural coatings, and asphalt, all of which produce associated odors. However, these odors are not pervasive enough to cause objectionable odors affecting a substantial number of people. Consequently, construction of the Campus would not cause or be affected by odors. The operation of the Campus facilities are not considered to be a significant source of odors and all research using odorous materials would take place inside buildings, so there would be no odorous emissions associated with research activities. In addition, the project would not be located near any significant odor sources. Consequently, the Campus, including the UCM 2020 Project, would not cause or be affected by odors. This impact is less than significant.

f) Result in greenhouse gas emissions that would hinder or delay the campus' ability to meet the UC climate change goals contained in the UC Policy on Sustainable Practices?

The 2009 UCM LRDP EIS/EIR concluded that the development of the UC Merced Campus would not impede or conflict with the emissions reduction targets and strategies prescribed in or developed to implement California State Assembly Bill 32 (AB 32). AB 32 represents the first enforceable statewide program to limit GHG emissions from all major industries with penalties for noncompliance. 2009 LRDP goals and policies and the programs that the Campus has developed in addition to the University's Policy for Sustainable Practices collectively would support the applicable measures in the AB 32's Proposed Scoping Plan. There are no applicable scoping plan measures that would not be addressed by the 2009 LRDP and other UC programs. The Campus' development program is thus consistent with applicable AB 32 Proposed Scoping Plan measures.

Therefore, the development of the Campus would not impede or conflict with the emissions reduction targets and strategies prescribed in or developed to implement AB 32 and would not result a contribution to global climate change that would be cumulatively considerable. The Campus has committed to implementing a comprehensive Climate Action Plan (CAP) and a sustainability program as part of the 2009 LRDP which will reduce its total emissions substantially below "business as usual" emissions by 2020 and beyond. Therefore, the impact from the development of the Campus on global climate would not be significant and no mitigation is required.

Describe any minor changes to the project since earlier environmental analysis

This Addendum takes into consideration the minor modifications to the description of the proposed Solar PV Project provided in Volume 3 of the 2009 UCM LRDP EIS/EIR. The project changes consist of an increased in size from 8 to 10 acres; modified project boundaries beyond the UCM 2020 Project boundary; type of visual screening used; and a technical correction regarding the amount of energy the project would generate (see Section 4.4 for a broader discussion of minor changes in the proposed project).

Describe how the minor project changes affect the earlier environmental analysis

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

The minor changes to the proposed Solar PV project (increased size from 8 to 10 acres; modified project boundaries beyond the UCM 2020 Project boundary; type of visual screening used; and a technical correction regarding the amount of energy the project would generate) would not result in new or substantially worse air quality impacts resulting from conflicting with or obstructing implementation of the applicable air quality plan beyond what was analyzed in the 2009 UCM LRDP EIS/EIR.

The increased size of the Solar PV project site would not substantially increase the project's potential to result in conflicting with or obstructing implementation of the applicable air quality plan because the proposal continues to be developed within the campus boundaries which is

included in the Merced County General Plan, the growth projections of which would be reflected in the SJVAPCD's air quality plans adopted in 2007. The increased size of the Solar PV project site and it's potential to result in conflicting with or obstructing implementation of the applicable air quality plan does not substantially differ from that which was analyzed as part of the UCM 2020 Project (EIS/EIR Volume 3) and urbanization development of the entire campus (EIS/EIR Volume 1).

The change in visual screening and the technical correction to the amount of energy that the proposed project would generate does not have any potential to result in air quality plan impacts.

In conclusion, the potential environmental effects of the proposed project were adequately addressed in the 2009 UCM LRDP EIS/EIR.

b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?

The minor changes to the proposed Solar PV project (increased size from 8 to 10 acres; modified project boundaries beyond the UCM 2020 Project boundary; type of visual screening used; and a technical correction regarding the amount of energy the project would generate) would not result in new or substantially worse air quality impacts resulting from violating any air quality standard or contributing substantially to an existing or projected air quality violation beyond what was analyzed in the 2009 UCM LRDP EIS/EIR.

The increased size of the Solar PV project site would not substantially increase the project's potential to result in violating any air quality standard or contributing substantially to an existing or projected air quality violation because the construction and operational aspects of the proposal do not substantially differ from that which was analyzed as part of the UCM 2020 Project (EIS/EIR Volume 3) and urbanization development of the entire campus (EIS/EIR Volume 1).

The change in visual screening and the technical correction to the amount of energy that the proposed project would generate does not have any potential to result in air quality standard impacts.

In conclusion, the potential environmental effects of the proposed project were adequately addressed in the 2009 UCM LRDP EIS/EIR.

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)?

The minor changes to the proposed Solar PV project (increased size from 8 to 10 acres; modified project boundaries beyond the UCM 2020 Project boundary; type of visual screening used; and a technical correction regarding the amount of energy the project would generate) would not result in new or substantially worse air quality impacts resulting from 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 beyond what was analyzed in the 2009

UCM LRDP EIS/EIR.

The increased size of the Solar PV project site would not substantially increase the project's potential to 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 because the construction and the total increase in the proposal's operational emissions of ROG and NOX at buildout do not substantially differ from that which was analyzed as part of the UCM 2020 Project (EIS/EIR Volume 3) and urbanization development of the entire campus (EIS/EIR Volume 1).

The change in visual screening and the technical correction to the amount of energy that the proposed project would generate does not have any potential to result in criteria pollutant impacts.

In conclusion, the potential environmental effects of the proposed project were adequately addressed in the 2009 UCM LRDP EIS/EIR.

d) Expose sensitive receptors to substantial pollutant concentrations?

The minor changes to the proposed Solar PV project (increased size from 8 to 10 acres; modified project boundaries beyond the UCM 2020 Project boundary; type of visual screening used; and a technical correction regarding the amount of energy the project would generate) would not result in new or substantially worse air quality impacts resulting from exposing sensitive receptors to substantial pollutant concentrations beyond what was analyzed in the 2009 UCM LRDP EIS/EIR.

The increased size of the Solar PV project site would not substantially increase the project's potential to result in exposing sensitive receptors to substantial pollutant concentrations because the future CO concentrations at each of these intersections worst affected by the traffic associated with the project does not substantially differ from that which was analyzed as part of the UCM 2020 Project (EIS/EIR Volume 3) and urbanization development of the entire campus (EIS/EIR Volume 1).

The change in visual screening and the technical correction to the amount of energy that the proposed project would generate does not have any potential to result in air quality pollution concentration impacts.

In conclusion, the potential environmental effects of the proposed project were adequately addressed in the 2009 UCM LRDP EIS/EIR.

e) Create objectionable odors affecting a substantial number of people?

The minor changes to the proposed Solar PV project (increased size from 8 to 10 acres; modified project boundaries beyond the UCM 2020 Project boundary; type of visual screening used; and a technical correction regarding the amount of energy the project would generate) would not result in new or substantially worse air quality impacts resulting from creating objectionable odors affecting a substantial number of people beyond what was analyzed in the 2009 UCM LRDP

EIS/EIR.

The increased size of the Solar PV project site would not substantially increase the project's potential to result in creating objectionable odors affecting a substantial number of people because the construction and operational project related odors and the project site's proximity to any significant odor sources is not substantially differ from that which was analyzed as part of the UCM 2020 Project (EIS/EIR Volume 3) and urbanization development of the entire campus (EIS/EIR Volume 1).

The change in visual screening and the technical correction to the amount of energy that the proposed project would generate does not have any potential to result in air quality objectionable odor impacts.

In conclusion, the potential environmental effects of the proposed project were adequately addressed in the 2009 UCM LRDP EIS/EIR.

f) Result in greenhouse gas emissions that would hinder or delay the campus' ability to meet the UC climate change goals contained in the UC Policy on Sustainable Practices?

The minor changes to the proposed Solar PV project (increased size from 8 to 10 acres; modified project boundaries beyond the UCM 2020 Project boundary; type of visual screening used; and a technical correction regarding the amount of energy the project would generate) would not result in new or substantially worse air quality impacts resulting from greenhouse gas emissions that would hinder or delay the campus' ability to meet the UC climate change goals contained in the UC Policy on Sustainable Practices beyond what was analyzed in the 2009 UCM LRDP EIS/EIR.

As a 10-acre on-campus renewable energy project, the Solar PV project as amended would not substantially increase the project's potential to result in greenhouse gas emissions that would hinder or delay the campus' ability to meet the UC climate change goals contained in the UC Policy on Sustainable Practices.

The change in visual screening and the technical correction to the amount of energy that the proposed project would generate does not have any potential to result in air quality greenhouse gas emissions impacts.

In conclusion, the potential environmental effects of the proposed project were adequately addressed in the 2009 UCM LRDP EIS/EIR.

Issues	Additional Project-level Impact Analysis Required	Project Impact Adequately Addressed in Earlier Environmental Document
3. BIOLOGICAL RESOURCES -- Would the project:		
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☒
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?	☐	☒
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☒
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☒
e) Conflict with any applicable policies protecting biological resources?	☐	☒
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other applicable habitat conservation plan?	☐	☒

Describe relevant elements of project

The proposed Project will include the installation of approximately 4,870 ground-mounted solar photovoltaic panels. The installation of the panels will consist of utilizing surface mounted non-ground penetrating precast foundations to hold in place the solar panels. This feature will require onsite grading. Fencing will encircle the perimeter of the Project site and will include boring operations to set fence posts necessary to support the fencing material. A proposed high voltage transmission line would be installed to convey electricity from the project site to the campus. The above ground utility lines will require boring operations necessary to securely stabilize the power poles. Trenching will also be required near the Campus central plant to connect the above ground transmission to underground utility lines.

Describe how project was analyzed in earlier environmental document

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?

The 2009 UCM LRDP EIS/EIR concluded that construction of the UC Merced campus, including the UCM 2020 Project, of which the proposed Solar PV project is a part, would result in both direct and indirect impacts on special-status species. However, the environmental commitments included in the development of the campus, which would also apply to the UCM 2020 Project, would mitigate impacts on special-status species and reduce these impacts to a less than significant level. Therefore, the UCM 2020 Project's impacts on special-status species would be less than significant.

b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?

The 2009 UCM LRDP EIS/EIR concluded that construction of the UC Merced campus, including the UCM 2020 Project, of which the proposed Solar PV project is a part, would have a less than significant impact on vernal pool species critical habitat, special-status amphibian habitat, Swainson's hawk foraging habitat, special-status avian species foraging habitat, and San Joaquin kit fox residence and dispersal habitat, as the implementation of the environmental commitments in the Conservation Strategy and Management Plan for Conservation Lands would avoid, minimize, and compensate for indirect impacts on critical habitat and ensure that critical habitat would not be diminished, thereby reducing this potential impact to a less-than significant level.

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?

The 2009 UCM LRDP EIS/EIR concluded that construction of the UC Merced campus, including the UCM 2020 Project, of which the proposed Solar PV project is a part, would not result in a net loss of wetland area or functions through direct removal, filling, hydrological interruption, or other means because of the environmental commitments included in the development of the campus. While not all wetlands on the campus can be avoided, the Campus would compensate for the loss of wetland area and the loss of wetland functions, resulting in a less than significant impact. Therefore, this impact would be considered less than significant for the UCM 2020 Project as well.

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?

The 2009 UCM LRDP EIS/EIR concluded that construction of the UC Merced campus, including the UCM 2020 Project, of which the proposed Solar PV project is a part, would result in the direct loss of suitable ground and tree/shrub nesting habitat for special-status and non-special-status migratory birds, including raptors, through the removal of annual grassland, irrigated pasture, and seasonal freshwater marsh communities, and the removal of individual trees and shrubs that occur mainly along the canals and the boundary of the project site. However, the impacts of the development of the Campus would be potentially significant but would be reduced to a less-than-significant level through the implementation of Mitigation Measures noted in Volume 1 of the 2009 UCM LRDP EIS/EIR.

The 2009 UCM LRDP EIS/EIR also concluded that construction of the UC Merced campus, including the UCM 2020 Project, of which the proposed Solar PV project is a part, would not result in an impact related to movement of native resident or migratory fish.

e) Conflict with any applicable policies protecting biological resources?

The 2009 UCM LRDP EIS/EIR concluded that construction of the UC Merced campus, including the UCM 2020 Project, of which the proposed Solar PV project is a part, would not result in an impact related to a conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. The development of the Campus would adhere to the 2009 UC Merced LRDP policies related to conservation and/or protection of biological resources. These policies will be implemented as appropriate during the development of the proposed Project.

f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other applicable habitat conservation plan?

The 2009 UCM LRDP EIS/EIR concluded that construction of the UC Merced campus, including the UCM 2020 Project, of which the proposed Solar PV project is a part, would not result in an impact related to conflicts with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan because no habitat conservation plans or natural community conservation plans have been adopted that encompass the project area.

Describe any minor changes to the project since earlier environmental analysis

This Addendum takes into consideration the minor modifications to the description of the proposed Solar PV Project provided in Volume 3 of the 2009 UCM LRDP EIS/EIR. The project changes consist of an increased in size from 8 to 10 acres; modified project boundaries beyond the UCM 2020 Project boundary; type of visual screening used; and a technical correction regarding the amount of energy the project would generate (see Section 4.4 for a broader discussion of minor changes in the proposed project).

Describe how the minor project changes affect the earlier environmental analysis

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?

The minor changes to the proposed Solar PV project (increased size from 8 to 10 acres; modified project boundaries beyond the UCM 2020 Project boundary; type of visual screening used; and a technical correction regarding the amount of energy the project would generate) would not result in new or substantially worse biological resources impacts resulting in a substantial adverse effect 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 beyond what was analyzed in the 2009 UCM LRDP EIS/EIR.

The increased size of the Solar PV project site would not substantially increase the project's potential to result in a substantial adverse effect on any species identified as a candidate, sensitive, or special status species because the proposal continues to be developed within the campus boundaries and the environmental commitments included in the development of the campus would continue to apply to the proposed Project. The effect of the Solar PV project site on any species identified as a candidate, sensitive, or special status species does not substantially differ from that which was analyzed as part of the UCM 2020 Project (EIS/EIR Volume 3) and urbanization development of the entire campus (EIS/EIR Volume 1).

The change in visual screening and the technical correction to the amount of energy that the proposed project would generate does not have any potential to result in impacts relating to any species identified as a candidate, sensitive, or special status species.

In conclusion, the potential environmental effects of the proposed project were adequately addressed in the 2009 UCM LRDP EIS/EIR.

b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?

The minor changes to the proposed Solar PV project (increased size from 8 to 10 acres; modified

project boundaries beyond the UCM 2020 Project boundary; type of visual screening used; and a technical correction regarding the amount of energy the project would generate) would not result in new or substantially worse biological resources impacts resulting in a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service beyond what was analyzed in the 2009 UCM LRDP EIS/EIR.

The increased size of the Solar PV project site would not substantially increase the project's potential to result in a substantial adverse effect on any riparian habitat or other sensitive natural community because the proposal continues to be developed within the campus boundaries and the environmental commitments included in the development of the campus would continue to apply to the proposed Project. The effect of the Solar PV project site on any riparian habitat or other sensitive natural community does not substantially differ from that which was analyzed as part of the UCM 2020 Project (EIS/EIR Volume 3) and urbanization development of the entire campus (EIS/EIR Volume 1).

The change in visual screening and the technical correction to the amount of energy that the proposed project would generate does not have any potential to result in impacts relating to any riparian habitat or other sensitive natural community.

In conclusion, the potential environmental effects of the proposed project were adequately addressed in the 2009 UCM LRDP EIS/EIR.

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?

The minor changes to the proposed Solar PV project (increased size from 8 to 10 acres; modified project boundaries beyond the UCM 2020 Project boundary; type of visual screening used; and a technical correction regarding the amount of energy the project would generate) would not result in new or substantially worse biological resources impacts resulting in a substantial adverse effect on federally protected wetlands through direct removal, filling, hydrological interruption, or other means beyond what was analyzed in the 2009 UCM LRDP EIS/EIR.

The increased size of the Solar PV project site would not substantially increase the project's potential to result in a substantial adverse effect on federally protected wetlands because the proposal continues to be developed within the campus boundaries and the environmental commitments included in the development of the campus would continue to apply to the proposed Project. The effect of the Solar PV project site on any federally protected wetlands does not substantially differ from that which was analyzed as part of the UCM 2020 Project (EIS/EIR Volume 3) and urbanization development of the entire campus (EIS/EIR Volume 1).

The change in visual screening and the technical correction to the amount of energy that the proposed project would generate does not have any potential to result in impacts relating to federally protected wetlands.

In conclusion, the potential environmental effects of the proposed project were adequately addressed in the 2009 UCM LRDP EIS/EIR.

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?

The minor changes to the proposed Solar PV project (increased size from 8 to 10 acres; modified project boundaries beyond the UCM 2020 Project boundary; type of visual screening used; and a technical correction regarding the amount of energy the project would generate) would not result in new or substantially worse biological resources impacts resulting in interfering 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 beyond what was analyzed in the 2009 UCM LRDP EIS/EIR.

The increased size of the Solar PV project site would not substantially increase the project's potential to result in a substantial adverse effect on 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 because the proposal will implement the appropriate mitigation measures as noted in Volume 1 of the 2009 UCM LRDP EIS/EIR to reduce this impact to less than significant level. The mitigation measures affect on lessening the impacts on the movement of any native resident or migratory fish or wildlife species does not substantially differ from that which was analyzed as part of the UCM 2020 Project (EIS/EIR Volume 3) and urbanization development of the entire campus (EIS/EIR Volume 1).

The change in visual screening and the technical correction to the amount of energy that the proposed project would generate does not have any potential to result in impacts relating to the movement of any native resident or migratory fish or wildlife species.

In conclusion, the potential environmental effects of the proposed project were adequately addressed in the 2009 UCM LRDP EIS/EIR.

e) Conflict with any applicable policies protecting biological resources?

The minor changes to the proposed Solar PV project (increased size from 8 to 10 acres; modified project boundaries beyond the UCM 2020 Project boundary; type of visual screening used; and a technical correction regarding the amount of energy the project would generate) would not result in conflicting with any applicable policies protecting biological resources beyond what was analyzed in the 2009 UCM LRDP EIS/EIR.

The increased size of the Solar PV project site would not substantially increase the project's potential to result in a substantial adverse effect in conflicting with any applicable policies protecting biological resources because the proposal as part of the development the UC Merced Campus would continue to adhere to the 2009 UC Merced LRDP policies related to conservation and/or protection of biological resources. These policies will be implemented as appropriate during the development of the proposed Project. The potential of the Solar PV project, due to its

increase in size, to adhere to the 2009 UC Merced LRDP policies does not substantially differ from that which was analyzed as part of the 2020 Project (EIS/EIR Volume 3) and urbanization development of the entire campus (EIS/EIR Volume 1).

The change in visual screening and the technical correction to the amount of energy that the proposed project would generate does not have any potential to result in impacts relating to a conflict with any applicable policies protecting biological resources.

In conclusion, the potential environmental effects of the proposed project were adequately addressed in the 2009 UCM LRDP EIS/EIR.

f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other applicable habitat conservation plan?

The minor changes to the proposed Solar PV project (increased size from 8 to 10 acres; modified project boundaries beyond the UCM 2020 Project boundary; type of visual screening used; and a technical correction regarding the amount of energy the project would generate) would not result in new or substantially worse biological resources impacts resulting in a substantial adverse effect in conflicting with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other applicable habitat conservation plan beyond what was analyzed in the 2009 UCM LRDP EIS/EIR.

The increased size of the Solar PV project site would not substantially increase the project's potential to result in a substantial adverse effect on conflicting with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other applicable habitat conservation plan because the proposal continues to be developed within the campus boundaries and no habitat conservation plans or natural community conservation plans have been adopted that encompass the UC Merced Project area. The effect of the Solar PV project site on conflicting with the provisions of an adopted habitat conservation plan does not substantially differ from that which was analyzed as part of the 2020 Project (EIS/EIR Volume 3) and urbanization development of the entire campus (EIS/EIR Volume 1).

The change in visual screening and the technical correction to the amount of energy that the proposed project would generate does not have any potential to result in impacts relating to any adopted habitat conservation plan.

Issues	Additional Project-level Impact Analysis Required	Project Impact Adequately Addressed in Earlier Environmental Document
4. CULTURAL RESOURCES -- Would the project:		
a) Cause a substantial adverse change in the	☐	☒

significance of a historical resource as defined in Section 15064.5?		
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	☐	☒
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☒
d) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☒

Describe relevant elements of project

The proposed solar array would be substantially developed above ground. In addition, installation of the approximately 4,870 ground-mounted solar photovoltaic panels will consist of utilizing surface mounted non-ground penetrating precast foundations to hold in place the solar panels. This feature will require grading of the project site. Fencing will encircle the perimeter of the Project site and will include boring operations of no more than 5 feet in depth to set fence posts necessary to support the fencing material. A proposed high voltage transmission line will also be installed to convey electricity from the project site to the campus. The above ground utility lines will require boring operations of no more than 8 feet in depth necessary to securely stabilize the power poles. Light, non-asphaltic, roadway grading will also be required to establish vehicular access to the site. Trenching will also be required near the Campus central plant to connect the above ground transmission to underground utility lines.

Describe how project was analyzed in earlier environmental document

a) Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?

The 2009 UCM LRDP EIS/EIR concluded that construction of the UC Merced campus, including the UCM 2020 Project, of which the proposed Solar PV project is a part, would not damage or destroy significant historic resources located within the project footprint as none are present within the project impact area. However, mitigation measures identified in Section 4.5, Volume 1 of the 2009 UCM LRDP EIS/EIR, would be implemented as part of the proposed project which would be required if buried cultural resources are inadvertently discovered during ground-disturbing activities. Implementation of this measure would reduce potential impacts to a less-than-significant level.

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

The 2009 UCM LRDP EIS/EIR concluded that construction of the UC Merced campus, including the UCM 2020 Project, of which the proposed Solar PV project is a part, would be developed in an area where no potential historical archaeological remains or features associated with the Spanish or Mexican periods are known to exist. No impact would occur to archaeological resources as a result of the proposed project.

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

The 2009 UCM LRDP EIS/EIR concluded that construction of the UC Merced campus, including the UCM 2020 Project, of which the proposed Solar PV project is a part, would have the potential to disturb or destroy paleontological resources that might be present in these formations. However, mitigation measures identified in Section 4.5, Volume 1 of the 2009 UCM LRDP EIS/EIR, would be implemented as part of the proposed project which would require construction personnel be informed of the potential for encountering significant paleontological resources and of the need to stop work in the vicinity of a potential discovery until a qualified paleontologist has been provided the opportunity to assess the significance of the find and implement appropriate measures to protect or scientifically remove the find.

An additional mitigation measure would require a qualified paleontologist will be intermittently present to inspect exposures of Merhten Formation, North Merced Gravels, and Riverbank Formation during construction operations to ensure that paleontological resources are not destroyed by project construction. The potential impact associated with potentially finding paleontological resources within the UCM 2020 Project site would be reduced to a less than significant level with implementation of these measures.

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

The 2009 UCM LRDP EIS/EIR concluded that construction of the UC Merced campus, including the UCM 2020 Project, of which the proposed Solar PV project is a part, could potentially inadvertently unearth and damage buried human remains that were not identified during pedestrian field surveys of the campus. However, mitigation measures identified in Section 4.5, Volume 1 of the 2009 UCM LRDP EIS/EIR, would be implemented as part of the proposed project which would require the Campus comply with state laws relating to the disposition of Native American burials, which falls within the jurisdiction of the California Native American Heritage Commission (Public Resources Code Section 5097). Implementation of this measure would reduce potential impacts of the proposed Project to a less than significant level.

Describe any minor changes to the project since earlier environmental analysis

This Addendum takes into consideration the minor modifications to the description of the proposed Solar PV Project provided in Volume 3 of the 2009 UCM LRDP EIS/EIR. The project changes consist of an increased in size from 8 to 10 acres; modified project boundaries beyond the UCM 2020 Project boundary; type of visual screening used; and a technical correction regarding the amount of energy the project would generate (see Section 4.4 for a broader

discussion of minor changes in the proposed project).

Describe how the minor project changes affect the earlier environmental analysis

a) Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?

The minor changes to the proposed Solar PV project (increased size from 8 to 10 acres; modified project boundaries beyond the UCM 2020 Project boundary; type of visual screening used; and a technical correction regarding the amount of energy the project would generate) would not result in new or substantially worse cultural resource impacts causing a substantial adverse change in the significance of a historical resource as defined in Section 15064.5 beyond what was analyzed in the 2009 UCM LRDP EIS/EIR.

The increased size of the Solar PV project site would not substantially increase the potential effects to the change in the significance of a historical resource because, while a greater amount of surface area would be developed with solar PV arrays, the project as amended, would be developed using mitigation measures designed not to damage or destroy significant historic resources located within the project footprint. The increased size of the Solar PV project site and its potential to cause a substantial adverse change in the significance of a historical resource does not substantially different than what was analyzed as part of the UCM 2020 Project (EIS/EIR Volume 3) and urbanization development of the entire campus (EIS/EIR Volume 1).

The change in visual screening and the technical correction to the amount of energy that the proposed project would generate does not have any potential to result in causing a substantial adverse change in the significance of a historical resource.

In conclusion, the potential environmental effects of the proposed project were adequately addressed in the 2009 UCM LRDP EIS/EIR.

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

The minor changes to the proposed Solar PV project (increased size from 8 to 10 acres; modified project boundaries beyond the UCM 2020 Project boundary; type of visual screening used; and a technical correction regarding the amount of energy the project would generate) would not result in new or substantially worse cultural resource impacts causing a substantial adverse change in the significance of a archaeological resource as defined in Section 15064.5 beyond what was analyzed in the 2009 UCM LRDP EIS/EIR.

The increased size of the Solar PV project site would not substantially increase the potential effects to the change in the significance of a archaeological resource because, while a greater amount of surface area would be developed with solar PV arrays, the project as amended, would be developed in an area where no potential historical archaeological remains or features associated with the Spanish or Mexican periods are known to exist. The increased size of the Solar PV project site and its potential to cause a substantial adverse change in the significance of an archaeological resource does not substantially different than what was analyzed as part of the

UCM 2020 Project (EIS/EIR Volume 3) and urbanization development of the entire campus (EIS/EIR Volume 1).

The change in visual screening and the technical correction to the amount of energy that the proposed project would generate does not have any potential to result in causing a substantial adverse change in the significance of an archaeological resource.

In conclusion, the potential environmental effects of the proposed project were adequately addressed in the 2009 UCM LRDP EIS/EIR.

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

The minor changes to the proposed Solar PV project (increased size from 8 to 10 acres; modified project boundaries beyond the UCM 2020 Project boundary; type of visual screening used; and a technical correction regarding the amount of energy the project would generate) would not result in new or substantially worse cultural resource impacts that either directly or indirectly destroy a unique paleontological resource or site or unique geologic feature beyond what was analyzed in the 2009 UCM LRDP EIS/EIR.

The increased size of the Solar PV project site would not substantially increase the potential effects to the change in the significance of a unique paleontological resource or site or unique geologic feature because, while a greater amount of surface area would be developed with solar PV arrays, the project as amended, would be developed using mitigation measures designed not to damage or destroy a unique paleontological resource or site or unique geologic feature located within the project footprint. The increased size of the Solar PV project site and its potential to cause a substantial adverse change in the significance of a unique paleontological resource or site or unique geologic feature does not substantially different than what was analyzed as part of the UCM 2020 Project (EIS/EIR Volume 3) and urbanization development of the entire campus (EIS/EIR Volume 1).

The change in visual screening and the technical correction to the amount of energy that the proposed project would generate does not have any potential to result in directly or indirectly destroying a unique paleontological resource or site or unique geologic feature.

In conclusion, the potential environmental effects of the proposed project were adequately addressed in the 2009 UCM LRDP EIS/EIR.

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

The minor changes to the proposed Solar PV project (increased size from 8 to 10 acres; modified project boundaries beyond the UCM 2020 Project boundary; type of visual screening used; and a technical correction regarding the amount of energy the project would generate) would not result in new or substantially worse cultural resource impacts that would disturb any human remains, including those interred outside of formal cemeteries beyond what was analyzed in the 2009 UCM LRDP EIS/EIR.

The increased size of the Solar PV project site would not substantially increase the potential effects to disturb any human remains, including those interred outside of formal cemeteries because, while a greater amount of surface area would be developed with solar PV arrays, the project as amended, would be developed using mitigation measures designed not to disturb any human remains, including those interred outside of formal cemeteries located within the project footprint. The increased size of the Solar PV project site and its potential to disturb any human remains, including those interred outside of formal cemeteries does not substantially different than what was analyzed as part of the UCM 2020 Project (EIS/EIR Volume 3) and urbanization development of the entire campus (EIS/EIR Volume 1).

The change in visual screening and the technical correction to the amount of energy that the proposed project would generate does not have any potential to disturb any human remains, including those interred outside of formal cemeteries.

In conclusion, the potential environmental effects of the proposed project were adequately addressed in the 2009 UCM LRDP EIS/EIR.

Issues	Additional Project-level Impact Analysis Required	Project Impact Adequately Addressed in Earlier Environmental Document
5. 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.	☐	☒
ii) Strong seismic ground shaking?	☐	☒
iii) Seismic-related ground failure, including liquefaction?	☐	☒
iv) Landslides?	☐	☒
	☐	☒

b) Result in substantial soil erosion or the loss of topsoil?		
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☒
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	☐	☒
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	☐	☒

Describe relevant elements of project

The topography of the Project site consists of gently rolling flatland with less than 10 percent slopes. The geologic formation present on the site includes the Riverbank formation.
Soils within the Project site and surrounding area are generally alluvial, forming a thin layer over bedrock units beneath. The soils generally consist of poorly sorted gravel, sand, silt, and clay. These soil types are generally gravelly and acidic, and have low fertility. The soils have a moderate shrink-swell potential, with a granular, clayey, and relatively consolidated and cemented nature.

The Project site is located in an area that has historically been characterized by low seismic activity. No active faults have been identified in the immediate vicinity of the Project site and the nearest active fault in Merced County is the Ortigalita fault, located in the western quarter of Merced County. The closest seismic source is the northwest-trending Foothills fault system, which terminates approximately 15 miles northeast of the Project site. The faults associated with the Foothills fault system are inactive.

Describe how project was analyzed in earlier environmental document

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.

The 2009 UCM LRDP EIS/EIR concluded that construction of the UC Merced campus, including the UCM 2020 Project, of which the proposed Solar PV project is a part, would not expose people or structures to risk of injury or structural damage from fault rupture. The Campus site is not subject to significant seismic hazards associated with active faults and all new facilities and structures, including those constructed as part of the UCM 2020 Project, would be constructed in compliance with the current California Building Standards Commission (CBSC) standards and UC Seismic Policy, which establish requirements for the seismic and structural safety of all structures. Therefore, this impact is considered less than significant.

ii) Strong seismic ground shaking?

The 2009 UCM LRDP EIS/EIR concluded that construction of the UC Merced campus, including the UCM 2020 Project, of which the proposed Solar PV project is a part, would have the potential for liquefaction, slope stability issues, or other structural issues that could be aggravated during seismic events. Construction on such sites could expose structures or people to risk of damage or injury. This impact is considered potentially significant. However, 2009 UCM LRDP EIS/EIR Program Level Mitigation Measures would be implemented and would reduce this impact to a less than significant level.

iii) Seismic-related ground failure, including liquefaction?

The 2009 UCM LRDP EIS/EIR concluded that construction of the UC Merced campus, including the UCM 2020 Project, of which the proposed Solar PV project is a part, would have the potential for liquefaction, slope stability issues, or other structural issues that could be aggravated during seismic events. Construction on such sites could expose structures or people to risk of damage or injury. This impact is considered potentially significant. However, 2009 UCM LRDP EIS/EIR Program Level Mitigation Measures would be implemented and would reduce this impact to a less than significant level.

iv) Landslides?

The 2009 UCM LRDP EIS/EIR concluded that construction of the UC Merced campus, including the UCM 2020 Project, of which the proposed Solar PV project is a part, would result in a less than significant impact relating to potential impacts associated with landslides or other slope failure. New facilities and structures within the proposed campus would be constructed according to applicable current (CBSC) standards. Geotechnical investigations would ensure that subsurface soil characteristics are properly identified to safely design foundations and structures to reduce the potential impacts associated with slope failure. Therefore, this impact is considered less than significant.

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

The 2009 UCM LRDP EIS/EIR concluded that construction of the UC Merced campus, including the UCM 2020 Project, of which the proposed Solar PV project is a part, would result in a less than significant impact relating to the potential for significant soil erosion or

sedimentation due to construction on the campus. All future construction projects on the campus that would disturb 1 acre or more would be required to comply with the National Pollutant Discharge Elimination System (NPDES) requirements to control discharges from construction sites and would implement Stormwater Pollution Prevention Plans (SWPPPs). Compliance with NPDES regulations for control of pollutant discharge during construction would reduce the potential for significant soil erosion or sedimentation due to construction on the Campus. Therefore, this impact is considered less than significant

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?

The 2009 UCM LRDP EIS/EIR concluded that construction of the UC Merced campus, including the UCM 2020 Project, of which the proposed Solar PV project is a part, is generally not expected to expose people or structures to risk of injury or structural damage from ground shaking and related hazards such as liquefaction. However, sites could be present within the Campus that have some potential for liquefaction, slope stability issues, or other structural issues that could be aggravated during seismic events. Construction on such sites could expose structures or people to risk of damage or injury. This impact is considered potentially significant. However, 2009 UCM LRDP EIS/EIR Program Level Mitigation Measures would be implemented and would reduce this impact to a less than significant level.

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?

The 2009 UCM LRDP EIS/EIR concluded that construction of the UC Merced campus, including the UCM 2020 Project, of which the proposed Solar PV project is a part, would have a moderate to high shrink-swell potential (i.e., soil expansiveness). However, new facilities and structures within the campus, including the UCM 2020 Project facilities, would be constructed using the current CBSC standards. The applicable codes and regulations establish requirements for the structural safety of all structures. Therefore, potential impacts associated with expansive soils would be less than significant.

e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?

The 2009 UCM LRDP EIS/EIR concluded that construction of the UC Merced campus, including the UCM 2020 Project, of which the proposed Solar PV project is a part, would not include the use of septic tanks or alternative wastewater disposal systems that would require percolation of treated effluent. There would, therefore, be no impact related to septic tanks or alternative wastewater disposal systems

Describe any minor changes to the project since earlier environmental analysis

This Addendum takes into consideration the minor modifications to the description of the proposed Solar PV Project provided in Volume 3 of the 2009 UCM LRDP EIS/EIR. The project

changes consist of an increased in size from 8 to 10 acres; modified project boundaries beyond the UCM 2020 Project boundary; type of visual screening used; and a technical correction regarding the amount of energy the project would generate (see Section 4.4 for a broader discussion of minor changes in the proposed project).

Describe how the minor project changes affect the earlier environmental analysis

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.

The minor changes to the proposed Solar PV project (increased size from 8 to 10 acres; modified project boundaries beyond the UCM 2020 Project boundary; type of visual screening used; and a technical correction regarding the amount of energy the project would generate) would not result in new or substantially worse geology and soils impacts involving exposing people or structures to potential substantial adverse effects, including the risk of loss, injury, or death due to rupture of a known earthquake fault beyond what was analyzed in the 2009 UCM LRDP EIS/EIR.

The increased size of the Solar PV project site would not substantially increase the impacts that could result in exposing people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault because, while a greater amount of surface area would be developed with solar PV arrays, the Project, as proposed, is in an area not subject to significant seismic hazards associated with active faults. Additionally, all new facilities and structures, including those constructed as part of the UCM 2020 Project, would be constructed in compliance with the current CBSC standards and UC Seismic Policy, which establish requirements for the seismic and structural safety of all structures. The project site area and proposed structures would be generally consistent with what was previously analyzed as part of the UCM 2020 Project (EIS/EIR Volume 3) and urbanization development of the entire campus (EIS/EIR Volume 1).

The change in visual screening and the technical correction to the amount of energy that the proposed project would generate does not have any potential to result in exposing people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault.

In conclusion, the potential impacts of the proposed project were adequately addressed in the 2009 UCM LRDP EIS/EIR.

ii) Strong seismic ground shaking?

The minor changes to the proposed Solar PV project (increased size from 8 to 10 acres; modified project boundaries beyond the UCM 2020 Project boundary; type of visual screening used; and a technical correction regarding the amount of energy the project would generate) would not result in new or substantially worse geology and soils impacts involving exposing people or structures to potential substantial adverse effects, including the risk of loss, injury, or death due to strong seismic ground shaking beyond what was analyzed in the 2009 UCM LRDP EIS/EIR.

The increased size of the Solar PV project site would not substantially increase the impacts that could result in exposing people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking because, while a greater amount of surface area would be developed with solar PV arrays, the Project, as proposed, would utilize the same Program Level Mitigation Measures as originally proposed 2009 UCM LRDP EIS/EIR to reduce this impact to a less than significant level. The project site area and proposed structures would be generally consistent with what was previously analyzed as part of the UCM 2020 Project (EIS/EIR Volume 3) and urbanization development of the entire campus (EIS/EIR Volume 1).

The change in visual screening and the technical correction to the amount of energy that the proposed project would generate does not have any potential to result in exposing people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking.

In conclusion, the potential impacts of the proposed project were adequately addressed in the 2009 UCM LRDP EIS/EIR.

iii) Seismic-related ground failure, including liquefaction?

The minor changes to the proposed Solar PV project (increased size from 8 to 10 acres; modified project boundaries beyond the UCM 2020 Project boundary; type of visual screening used; and a technical correction regarding the amount of energy the project would generate) would not result in new or substantially worse geology and soils impacts involving exposing people or structures to potential substantial adverse effects, including the risk of loss, injury, or death due to seismic-related ground failure, including liquefaction beyond what was analyzed in the 2009 UCM LRDP EIS/EIR.

The increased size of the Solar PV project site would not substantially increase the impacts that could result in exposing people or structures to potential substantial adverse effects, including the risk of loss, injury, or death due to seismic-related ground failure, including liquefaction because, while a greater amount of surface area would be developed with solar PV arrays, the Project, as proposed, would utilize the same Program Level Mitigation Measures as originally proposed 2009 UCM LRDP EIS/EIR to reduce this impact to a less than significant level. The project site area and proposed structures would be generally consistent with what was previously analyzed as part of the UCM 2020 Project (EIS/EIR Volume 3) and urbanization development of the entire campus (EIS/EIR Volume 1).

The change in visual screening and the technical correction to the amount of energy that the proposed project would generate does not have any potential to result in exposing people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction.

In conclusion, the potential impacts of the proposed project were adequately addressed in the 2009 UCM LRDP EIS/EIR.

iv) Landslides?

The minor changes to the proposed Solar PV project (increased size from 8 to 10 acres; modified project boundaries beyond the UCM 2020 Project boundary; type of visual screening used; and a technical correction regarding the amount of energy the project would generate) would not result in new or substantially worse geology and soils impacts involving exposing people or structures to potential substantial adverse effects, including the risk of loss, injury, or death due to landslides beyond what was analyzed in the 2009 UCM LRDP EIS/EIR.

The increased size of the Solar PV project site would not substantially increase the impacts that could result in exposing people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving landslides because, while a greater amount of surface area would be developed with solar PV arrays, the Project, as proposed, would constructed according to current California Building Standards Commission CBSC standards. Geotechnical investigations would also be required to ensure that subsurface soil characteristics are properly identified to safely design foundations and structures to reduce the potential impacts associated with slope failure. These measures would be the same as originally proposed 2009 UCM LRDP EIS/EIR to reduce this impact to a less than significant level. The project site area and proposed structures would also be generally consistent with what was previously analyzed as part of the UCM 2020 Project (EIS/EIR Volume 3) and urbanization development of the entire campus (EIS/EIR Volume 1).

The change in visual screening and the technical correction to the amount of energy that the proposed project would generate does not have any potential to result in exposing people or structures to potential substantial adverse effects, including the risk of loss, injury, or death due to landslides.

In conclusion, the potential impacts of the proposed project were adequately addressed in the 2009 UCM LRDP EIS/EIR.

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

The minor changes to the proposed Solar PV project (increased size from 8 to 10 acres; modified project boundaries beyond the UCM 2020 Project boundary; type of visual screening used; and a technical correction regarding the amount of energy the project would generate) would not result in new or substantially worse geology and soils impacts involving substantial soil erosion or the loss of topsoil beyond what was analyzed in the 2009 UCM LRDP EIS/EIR.

The increased size of the Solar PV project site would not substantially increase the impacts that could result substantial soil erosion or the loss of topsoil because, while a greater amount of surface area would be developed with solar PV arrays, the Project, as proposed, would continue to be required to comply with the National Pollutant Discharge Elimination System (NPDES) requirements to control discharges from construction sites and would implement Stormwater Pollution Prevention Plans (SWPPPs). Compliance with NPDES regulations for control of pollutant discharge during construction would reduce the potential for significant soil erosion or sedimentation due to construction on the Campus. The project site area, proposed structures and erosion control measures would be generally consistent with what was previously analyzed as part of the UCM 2020 Project (EIS/EIR Volume 3) and urbanization development of the entire campus (EIS/EIR Volume 1).

The change in visual screening and the technical correction to the amount of energy that the proposed project would generate does not have any potential to result in substantial soil erosion or the loss of topsoil.

In conclusion, the potential impacts of the proposed project were adequately addressed in the 2009 UCM LRDP EIS/EIR.

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?

The minor changes to the proposed Solar PV project (increased size from 8 to 10 acres; modified project boundaries beyond the UCM 2020 Project boundary; type of visual screening used; and a technical correction regarding the amount of energy the project would generate) would not result in new or substantially worse geology and soils impacts involving on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse beyond what was analyzed in the 2009 UCM LRDP EIS/EIR.

The increased size of the Solar PV project site would not substantially increase the impacts that could result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse because, the proposal would continue to utilize the appropriate mitigation measures for projects that were previously analyzed as part of the UCM 2020 Project (EIS/EIR Volume 3) and urbanization development of the entire campus (EIS/EIR Volume 1) which would reduce this impact to a less than significant level.

The change in visual screening and the technical correction to the amount of energy that the proposed project would generate does not have any potential to result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse.

In conclusion, the potential impacts of the proposed project were adequately addressed in the 2009 UCM LRDP EIS/EIR.

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?

The minor changes to the proposed Solar PV project (increased size from 8 to 10 acres; modified project boundaries beyond the UCM 2020 Project boundary; type of visual screening used; and a technical correction regarding the amount of energy the project would generate) would not result in new or substantially worse geology and soils impacts involving being located on expansive soils that would create substantial risks to life or property beyond what was analyzed in the 2009 UCM LRDP EIS/EIR.

The increased size of the Solar PV project site would not substantially increase the impacts of being located on expansive soils that would create substantial risks to life or property because, while a greater amount of surface area would be developed with solar PV arrays, the Project, as proposed, would be constructed according to current California Building Standards Commission CBSC standards and be generally consistent with what was previously analyzed as part of the UCM 2020 Project (EIS/EIR Volume 3) and urbanization development of the entire campus (EIS/EIR Volume 1).

The change in visual screening and the technical correction to the amount of energy that the proposed project would generate does not have any potential to result in increasing the impacts of being located on expansive soils that would create substantial risks to life or property.

In conclusion, the potential impacts of the proposed project were adequately addressed in the 2009 UCM LRDP EIS/EIR.

e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?

The minor changes to the proposed Solar PV project (increased size from 8 to 10 acres; modified project boundaries beyond the UCM 2020 Project boundary; type of visual screening used; and a technical correction regarding the amount of energy the project would generate) would not result in new or substantially worse geology and soils impacts involving soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems beyond what was analyzed in the 2009 UCM LRDP EIS/EIR.

The increased size of the Solar PV project site would not substantially increase the impacts of soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems because, while a greater amount of surface area would be developed with solar PV arrays, the Project, as proposed, would not include the use of septic tanks or alternative wastewater disposal systems which would be generally consistent with what was previously analyzed as part of the UCM 2020 Project (EIS/EIR Volume 3) and urbanization development of the entire campus (EIS/EIR Volume 1).

The change in visual screening and the technical correction to the amount of energy that the proposed project would generate does not have any potential to result impacts relating to soils

incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems.

In conclusion, the potential impacts of the proposed project were adequately addressed in the 2009 UCM LRDP EIS/EIR.

Issues	Additional Project-level Impact Analysis Required	Project Impact Adequately Addressed in Earlier Environmental Document
6. HAZARDS AND HAZARDOUS MATERIALS – Would the project:		
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☒
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☒
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☒
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☒
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	☐	☒
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?	☐	☒
	☐	☒

g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?		
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	☒

Describe relevant elements of project

The proposed Project, as amended, will not include research and instructional laboratories, and will not produce biohazard and chemical waste. The proposed project is not located within two miles of a public airport which would result in a potential safety hazard to people working within the Project site. The Project site is, however, located within 2 miles of a private airstrip. The remote location of the Project site would not interfere with an adopted emergency response plan or emergency evacuation plan. The project site is being developed with a perimeter fire break used to prevent damage due to wildland fires. The project site has been used historically for agricultural purposes, agricultural use has been limited to non-irrigated pasture; therefore, use of herbicides and pesticides is unlikely to have occurred within this area.

Describe how project was analyzed in earlier environmental document

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

The 2009 UCM LRDP EIS/EIR concluded that construction of the UC Merced campus, including the UCM 2020 Project, of which the proposed Solar PV project is a part, would fully comply with federal, state, and local standards and regulations that would reduce the potential impacts on the public and environment through the transport, use, or disposal of hazardous materials to a less-than-significant level for the UCM 2020 Project.

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?

The 2009 UCM LRDP EIS/EIR concluded that due to the relatively small amount of hazardous materials involved and with compliance with applicable transport regulations, construction of the UC Merced campus, including the UCM 2020 Project, of which the proposed Solar PV project is a part, would not create a significant hazard to the public or environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials.

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

The 2009 UCM LRDP EIS/EIR concluded that construction of the UC Merced campus, including the UCM 2020 Project, of which the proposed Solar PV project is a part, would not involve hazardous emissions or the handling of hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school. The Campus would not be located within 0.25 mile of any existing or proposed school. Therefore, this impact is considered less than significant

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?

The 2009 UCM LRDP EIS/EIR concluded that construction of the UC Merced campus, including the UCM 2020 Project, of which the proposed Solar PV project is a part, would not be located on a site that is included on a list of hazardous material sites compiled pursuant to Government Code Section 65962.5 and therefore would not create a significant hazard to the public or the environment.

However, it is possible that environmental conditions, such as non-permitted disposal sites, trash burn pits, wells, or other underground storage devices, may exist in the proposed UCM 2020 Project development area that have not been reported or identified. In addition, because a portion of the UCM 2020 Project site has been historically used for agricultural purposes, there is the potential that soil and groundwater has been contaminated by the application of pesticides, herbicides, and other agricultural chemicals, or by illegal debris disposal in the past. Therefore, this impact would be considered potentially significant. Implementation of a Program Level Mitigation Measure would ensure that potential impacts attributable to development on previously contaminated land would be reduced to a less-than-significant level.

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?

The 2009 UCM LRDP EIS/EIR concluded that construction of the UC Merced campus, including the UCM 2020 Project, of which the proposed Solar PV project is a part, would not be located within an airport land use plan or within 2 miles of a public airport or public use airport. Therefore, no impact would occur with respect to this criterion.

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?

The 2009 UCM LRDP EIS/EIR concluded that construction of the UC Merced campus, including the UCM 2020 Project, of which the proposed Solar PV project is a part, would not result in a safety hazard for people residing or working in the project area due to the project's proximity to a private airstrip. Although the Campus would be located within 2 miles of the LWH Farms, LLC, private airstrip, all proposed development would be required to comply with applicable Federal Aviation Administration (FAA) and Caltrans Division of Aeronautics regulations and permits. Compliance with these requirements would reduce the safety hazards

associated with airstrip operations to an acceptable level. The potential impact with respect to this criterion is, therefore, considered less than significant

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

The 2009 UCM LRDP EIS/EIR concluded that construction of the UC Merced campus, including the UCM 2020 Project, of which the proposed Solar PV project is a part, would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. Emergency response plans and emergency evacuation plans would be established for all proposed buildings on the campus. Emergency and evacuation plans would be coordinated between campus buildings to ensure proper procedures in the case of a massive emergency or evacuation. Therefore, the potential impact with respect to this criterion is considered less than significant.

h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?

The 2009 UCM LRDP EIS/EIR concluded that construction of the UC Merced campus, including the UCM 2020 Project, of which the proposed Solar PV project is a part, would not expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands. Development of the project would be complemented by sufficient fire control measures. In addition, proper emergency response emergency evacuation plans would be established to provide efficient and comprehensive support in the case of an emergency. Therefore, implementation of the UC Merced campus, including the UCM 2020 Project, of which the proposed Solar PV project is a part, would not expose people or structures to a significant risk of loss, injury, or death involving wildland fires.

Describe any minor changes to the project since earlier environmental analysis

This Addendum takes into consideration the minor modifications to the description of the proposed Solar PV Project provided in Volume 3 of the 2009 UCM LRDP EIS/EIR. The project changes consist of an increased in size from approximately 8 to 10 acres; modified project boundaries beyond the UCM 2020 Project boundary; type of visual screening used; and a technical correction regarding the amount of energy the project would generate (see Section 4.4 for a broader discussion of minor changes in the proposed project).

Describe how the minor project changes affect the earlier environmental analysis

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

The minor changes to the proposed Solar PV project (increased size from 8 to 10 acres; modified project boundaries beyond the UCM 2020 Project boundary; type of visual screening used; and a

technical correction regarding the amount of energy the project would generate) would not result in new or substantially worse hazards and hazardous materials impacts involving creating a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials beyond what was analyzed in the 2009 UCM LRDP EIS/EIR.

The increased size of the Solar PV project site would not substantially increase the impacts that could result in new or substantially worse hazards and hazardous materials impacts involving creating a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials because, the proposal would continue to fully comply with federal, state, and local standards and regulations that would reduce the potential impacts on the public and environment through the transport, use, or disposal of hazardous materials.

The project's compliance with federal, state, and local standards and regulations governing the transport, use, or disposal of hazardous materials would be generally consistent with what was previously analyzed as part of the UCM 2020 Project (EIS/EIR Volume 3) and urbanization development of the entire campus (EIS/EIR Volume 1).

The change in visual screening and the technical correction to the amount of energy that the proposed project would generate does not have any potential to result in creating a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.

In conclusion, the potential impacts of the proposed project were adequately addressed in the 2009 UCM LRDP EIS/EIR.

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?

The minor changes to the proposed Solar PV project (increased size from 8 to 10 acres; modified project boundaries beyond the UCM 2020 Project boundary; type of visual screening used; and a technical correction regarding the amount of energy the project would generate) would not result in new or substantially worse hazards and hazardous materials impacts involving creating 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 beyond what was analyzed in the 2009 UCM LRDP EIS/EIR.

The increased size of the Solar PV project site would not substantially increase the impacts that could result in new or substantially worse hazards and hazardous materials impacts involving creating 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 because, the relatively small amount of hazardous materials involved and with compliance with applicable transport regulations would be generally consistent with what was previously analyzed as part of the UCM 2020 Project (EIS/EIR Volume 3) and urbanization development of the entire campus (EIS/EIR Volume 1).

The change in visual screening and the technical correction to the amount of energy that the proposed project would generate does not have any potential to result in creating 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.

In conclusion, the potential impacts of the proposed project were adequately addressed in the 2009 UCM LRDP EIS/EIR.

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

The minor changes to the proposed Solar PV project (increased size from 8 to 10 acres; modified project boundaries beyond the UCM 2020 Project boundary; type of visual screening used; and a technical correction regarding the amount of energy the project would generate) would not result in new or substantially worse hazards and hazardous materials impacts involving emitting hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school beyond what was analyzed in the 2009 UCM LRDP EIS/EIR.

The increased size of the Solar PV project site would not substantially increase the impacts that could result in new or substantially worse hazards and hazardous materials impacts involving emitting hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school because the proposed location of the project site, which is not located within 0.25 mile of any existing or proposed school, would be generally consistent with what was previously analyzed as part of the UCM 2020 Project (EIS/EIR Volume 3) and urbanization development of the entire campus (EIS/EIR Volume 1).

The change in visual screening and the technical correction to the amount of energy that the proposed project would generate does not have any potential to result in emitting hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.

In conclusion, the potential impacts of the proposed project were adequately addressed in the 2009 UCM LRDP EIS/EIR.

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?

The minor changes to the proposed Solar PV project (increased size from 8 to 10 acres; modified project boundaries beyond the UCM 2020 Project boundary; type of visual screening used; and a technical correction regarding the amount of energy the project would generate) would not result in new or substantially worse hazards and hazardous materials impacts involving being located on a site which is included on a list of hazardous materials sites and, as a result, would create a significant hazard to the public or the environment beyond what was analyzed in the 2009 UCM LRDP EIS/EIR.

The increased size of the Solar PV project site would not substantially increase the impacts that could result in new or substantially worse hazards and hazardous materials impacts involving being located on a site which is included on a list of hazardous materials sites and, as a result, would create a significant hazard to the public or the environment, because the project site would continue to be sited on a location that is not included on a list of hazardous material sites.

Additionally, the proposal would continue to utilize, if necessary, the appropriate mitigation measures for potential impacts attributable to development on previously contaminated land which is consistent with the project requirements as previously analyzed as part of the UCM 2020 Project (EIS/EIR Volume 3) and urbanization development of the entire campus (EIS/EIR Volume 1).

The change in visual screening and the technical correction to the amount of energy that the proposed project would generate does not have any potential to result in being located on a site which is included on a list of hazardous materials sites and, as a result, would create a significant hazard to the public or the environment.

In conclusion, the potential impacts of the proposed project were adequately addressed in the 2009 UCM LRDP EIS/EIR.

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?

The minor changes to the proposed Solar PV project (increased size from 8 to 10 acres; modified project boundaries beyond the UCM 2020 Project boundary; type of visual screening used; and a technical correction regarding the amount of energy the project would generate) would not result in new or substantially worse hazards and hazardous materials impacts resulting in a safety hazard for people residing or working in the project area within two miles of a public airport or public use airport beyond what was analyzed in the 2009 UCM LRDP EIS/EIR.

The increased size of the Solar PV project site would not substantially increase the impacts that could result in new or substantially worse hazards and hazardous materials impacts resulting in a safety hazard for people residing or working in the project area within two miles of a public airport or public use airport because the proposal continues not to be located within an airport land use plan or within 2 miles of a public airport or public use airport which is generally consistent with what was previously analyzed as part of the UCM 2020 Project (EIS/EIR Volume 3) and urbanization development of the entire campus (EIS/EIR Volume 1).

The change in visual screening and the technical correction to the amount of energy that the proposed project would generate does not have any potential to result in a safety hazard for people residing or working in the project area within two miles of a public airport or public use airport.

In conclusion, the potential impacts of the proposed project were adequately addressed in the 2009 UCM LRDP EIS/EIR.

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?

The minor changes to the proposed Solar PV project (increased size from 8 to 10 acres; modified project boundaries beyond the UCM 2020 Project boundary; type of visual screening used; and a technical correction regarding the amount of energy the project would generate) would not result in new or substantially worse hazards and hazardous materials impacts resulting in a safety hazard for people residing or working in the project area within the vicinity of a private airstrip beyond what was analyzed in the 2009 UCM LRDP EIS/EIR.

The increased size of the Solar PV project site would not substantially increase the impacts that could result in new or substantially worse hazards and hazardous materials impacts resulting in a safety hazard for people residing or working in the project area within the vicinity of a private airstrip because the proposal will continue to be required to comply with applicable Federal Aviation Administration (FAA) and Caltrans Division of Aeronautics regulations and permits. The proposal's compliance with these requirements would be generally consistent with what was previously analyzed as part of the UCM 2020 Project (EIS/EIR Volume 3) and urbanization development of the entire campus (EIS/EIR Volume 1).

The change in visual screening and the technical correction to the amount of energy that the proposed project would generate does not have any potential to result in a safety hazard for people residing or working in the project area and within the vicinity of a private airstrip.

In conclusion, the potential impacts of the proposed project were adequately addressed in the 2009 UCM LRDP EIS/EIR.

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

The minor changes to the proposed Solar PV project (increased size from 8 to 10 acres; modified project boundaries beyond the UCM 2020 Project boundary; type of visual screening used; and a technical correction regarding the amount of energy the project would generate) would not result in new or substantially worse hazards and hazardous materials impacts Emergency response plans and emergency evacuation plans would be established for all proposed buildings on the campus. Emergency and evacuation plans would be coordinated between campus buildings to ensure proper procedures in the case of a massive emergency or evacuation beyond what was analyzed in the 2009 UCM LRDP EIS/EIR.

The increased size of the Solar PV project site would not substantially increase the impacts that could result in new or substantially worse hazards and hazardous materials impacts impairing implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan because the proposal, as part of the development of the Campus, would continue to be designed in accordance with existing and proposed emergency response

plans and emergency evacuation plans and be coordinated with other campus buildings and structures to ensure proper procedures in the case of a massive emergency or evacuation. The project's incorporation into such emergency plans would be generally consistent with what was previously analyzed as part of the UCM 2020 Project (EIS/EIR Volume 3) and urbanization development of the entire campus (EIS/EIR Volume 1).

The change in visual screening and the technical correction to the amount of energy that the proposed project would generate does not have any potential to impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.

In conclusion, the potential impacts of the proposed project were adequately addressed in the 2009 UCM LRDP EIS/EIR.

h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?

The minor changes to the proposed Solar PV project (increased size from 8 to 10 acres; modified project boundaries beyond the UCM 2020 Project boundary; type of visual screening used; and a technical correction regarding the amount of energy the project would generate) would not result in new or substantially worse hazards and hazardous materials impacts involving exposing people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands beyond what was analyzed in the 2009 UCM LRDP EIS/EIR.

The increased size of the Solar PV project site would not substantially increase the impacts that could result in new or substantially worse hazards and hazardous materials impacts involving exposing people or structures to a significant risk of loss, injury or death involving wildland fires because the proposal would continue to be complemented by sufficient fire control measures including proper emergency response emergency evacuation plans to provide efficient and comprehensive support in the case of an emergency. The project's inclusion in emergency response emergency evacuation plans would be generally consistent with what was previously analyzed as part of the UCM 2020 Project (EIS/EIR Volume 3) and urbanization development of the entire campus (EIS/EIR Volume 1).

The change in visual screening and the technical correction to the amount of energy that the proposed project would generate does not have any potential to result in exposing people or structures to a significant risk of loss, injury or death involving wildland fires.

In conclusion, the potential impacts of the proposed project were adequately addressed in the 2009 UCM LRDP EIS/EIR.

Issues	Additional Project-level Impact Analysis Required	Project Impact Adequately Addressed in Earlier Environmental Document
7. HYDROLOGY AND WATER QUALITY -- Would the project:		
a) Violate any water quality standards or waste discharge requirements?	☐	☒
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)?	☐	☒
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?	☐	☒
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?	☐	☒
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?	☐	☒
f) Otherwise substantially degrade water quality?	☐	☒
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?	☐	☒
h) Place within a 100-year flood hazard area structures which would impede or redirect flood	☐	☒

flows?

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?	☐	☒
j) Inundation by seiche, tsunami, or mudflow?	☐	☒

Describe relevant elements of project

The proposed project is currently located in unincorporated Merced County. It is not anticipated that the project will require wastewater or potable utilities from a local jurisdiction or from any other sources. Construction of the Project would require light grading and excavation activities that could cause minimal erosion and sedimentation. Spills or leaks from heavy equipment and machinery (petroleum products and other heavy metals), staging areas, and building sites could adversely affect receiving water quality. Excavation activities associated with the construction of the proposed Project have a potential to encounter shallow groundwater in the vicinity of the Fairfield Canal.

The Project site is located in an area that is known to have soil types with low to moderate recharge potential. There are substantial amounts of clay in the Project site soils, which restrict the ability of surface water to migrate down to the shallow groundwater aquifer. New construction associated with the development of the Project site would include new impervious surfaces that would generate more stormwater runoff than the volume that is generated under existing conditions, although because of the low permeability of Project site soils, the increase in runoff would not be large.

The Project site is to the south and outside the inundation area of Lake Yosemite Dam. However, the site is adjacent to the Fairfield Canal which will be used for conveying stormwater runoff from the UC Merced Campus with concurrence from the Merced Irrigation District. This canal, as well as others in the planning area, has structural integrity inadequacies due to the erosion, tree roots, burrowing animals, and other factors.

Describe how project was analyzed in earlier environmental document

a) Violate any water quality standards or waste discharge requirements?

The 2009 UCM LRDP EIS/EIR concluded that construction of the UC Merced campus, including the UCM 2020 Project, of which the proposed Solar PV project is a part, would not result in the discharge of sediments or pollutants into receiving waters, potentially affecting water quality. As with all projects that are expected to discharge dewatered effluent or water extracted from well pump tests, the construction contractor would be required to obtain a National Pollutant Discharge Elimination System Permit (NPDES) and Waste Discharge Requirements (WDRs) from the Central Valley Regional Water Quality Control Board CVRWQCB. Permit issuance and compliance with measures required by the permits would reduce project impacts associated with the release of contaminants to surface water or

groundwater and the potentially significant impacts on surface water quality. Therefore, this impact is considered less than significant

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)?

The 2009 UCM LRDP EIS/EIR concluded that construction of the UC Merced campus, including the UCM 2020 Project, of which the proposed Solar PV project is a part, would not substantially deplete groundwater supplies such that the production of existing nearby wells would drop to levels that would not support the planned uses. Site specific studies conducted in 2004 showed that groundwater interference could affect the ability of some of the local wells to supply water at the existing rates. However, the potential long term drawdown of the shallow and deep aquifers in the vicinity of the Campus would not have any environmental effect other than lowering the groundwater table by 25 to 35 feet in the area of the rural residences west of Lake Road. This could affect nearby residential wells that are screened at these depths and such wells would need to be deepened. This impact is considered less than significant.

Additionally, the 2009 UCM LRDP EIS/EIR concluded that construction of the UC Merced campus, including the UCM 2020 Project, of which the proposed Solar PV project is a part, would not substantially interfere with groundwater recharge such that there would be a net deficit in aquifer volume. The campus is located in an area that is known to have soil types with recharge potential ranging from low to moderate. There are substantial amounts of clay in the campus site soils, which restrict the ability of surface water to migrate down to the shallow groundwater aquifer, and a clay hard pan present near the ground surface further inhibits the potential of surface water to infiltrate down to the groundwater aquifer.

Based on these known soil characteristics of the campus site, development within this area would not have a substantial impact on the infiltration of surface water to subsurface groundwater aquifers. Furthermore, the Campus'2009 LRDP contains policies to develop the campus in a sustainable manner which would maximize percolation and infiltration of precipitation into underlying groundwater by using LID methods, developing bioswales, single project or multi project detention or retention basins, and preservation and use of natural drainage areas, to the extent feasible. These policies would apply to all development under the UCM 2020 Project. Therefore, this impact is considered less than significant

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?

The 2009 UCM LRDP EIS/EIR concluded that construction of the UC Merced campus, including the UCM 2020 Project, of which the proposed Solar PV project is a part, would require grading and excavation activities that could cause erosion and sedimentation that could degrade the receiving water quality. UC Merced will implement multiple erosion and sediment control Best Management Practices (BMPs) in areas with potential to drain to surface water. These

BMPs will be selected to achieve maximum sediment removal and represent the Best Available Technology (BAT) that is economically achievable. Compliance with these provisions would result in a less than significant impact on receiving waters from construction activities on the UCM 2020 Project site.

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?

The 2009 UCM LRDP EIS/EIR concluded that construction of the UC Merced campus, including the UCM 2020 Project, of which the proposed Solar PV project is a part, would include new impervious surfaces that would generate more stormwater runoff than the volume that is generated under existing conditions. There would be increase in the rate and amount of runoff and if discharged uncontrolled to surface waters could result in or exacerbate flooding in downstream areas. In addition, existing drainage patterns would be altered by the construction of facilities.

With the development of the UCM 2020 Project, this drainage pattern would be altered and additional runoff that is generated would be collected by the storm drainage system, detained, and then discharged into Fairfield Canal at a discharge rate established by MID. To ensure that stormwater beyond the capacity of the canal is not discharged into the canal, MID would install water elevation detectors in the canal which would determine when releases to the canal would be allowed.

MID has indicated that in the event that the entire capacity of Fairfield Canal is needed to convey floodwaters from Lake Yosemite, the Campus must be designed to hold runoff from large storm events until such time that capacity in the canal becomes available to receive campus or community runoff. Therefore, the UCM 2020 Project has been designed to detain stormwater flows. The stormwater detention facilities included in the UCM 2020 Project would control stormwater runoff before discharge into Fairfield Canal and Cottonwood Creek, and therefore there would be no project related flooding impacts in downstream areas. The impact would be less than significant.

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?

The 2009 UCM LRDP EIS/EIR concluded that construction of the UC Merced campus, including the UCM 2020 Project, of which the proposed Solar PV project is a part, would not substantially increase the amount of sediment and urban pollutants in the site runoff and therefore would not result in water quality degradation. National Pollutant Discharge Elimination System (NPDES) regulations require the project to develop and implement a Storm Water Management Program (SWMP) that includes Best Management Practices (BMPs) aimed at addressing urban runoff pollutants.

Storm water generated in the new areas of the campus as they are developed would be detained in detention basins before discharge into Fairfield Canal. The detention of stormwater and its slow release into the canal would ensure that sediments in the stormwater would settle out and

the quality of water would be appropriate for discharge into Bear Creek, which is the final discharge point for Fairfield Canal. Continuation of current practices and compliance with Phase II NPDES requirements would reduce the potential for campus runoff to result in impacts on surface water quality. Therefore, this impact is considered less than significant.

f) Otherwise substantially degrade water quality?

The 2009 UCM LRDP EIS/EIR concluded that construction of the UC Merced campus, including the UCM 2020 Project, of which the proposed Solar PV project is a part, would not substantially increase the amount of sediment and urban pollutants in the site runoff and therefore would not result in water quality degradation.

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?

The 2009 UCM LRDP EIS/EIR concluded that construction of the UC Merced campus, including the UCM 2020 Project, of which the proposed Solar PV project is a part, is not located in a 100 year floodplain and would not be subject to on site flooding.

h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?

The 2009 UCM LRDP EIS/EIR concluded that construction of the UC Merced campus, including the UCM 2020 Project, of which the proposed Solar PV project is a part, is not located in a 100 year floodplain and would not be subject to on site flooding.

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?

The 2009 UCM LRDP EIS/EIR concluded that construction of the UC Merced campus, including the UCM 2020 Project, of which the proposed Solar PV project is a part, would not 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. The project site is outside the inundation area of Lake Yosemite Dam, and therefore there is no risk to people or structures on the project site from inundation due to dam failure.

The Fairfield and Le Grand Canals are used for primarily for irrigation water to serve the agriculture uses in the area. In winter months when agriculture is not using irrigation water, the canals are used as flood control channels. Only the Fairfield Canal would be used for conveying stormwater runoff from the project site with concurrence from MID. As part of the UCM 2020 Project, detention basins will be designed and incorporated into the drainage infrastructure to hold back the runoff from the storm events until water levels recede in the canal. Sensors will be placed into the canal to determine when the canal is at capacity, and discharges will only occur when the canal has room to handle the additional runoff. This will prevent the canal from overtopping or taking on more storm water runoff than it can handle. Based on these factors, this impact is considered less than significant.

j) Inundation by seiche, tsunami, or mudflow?

The 2009 UCM LRDP EIS/EIR concluded that construction of the UC Merced campus, including the UCM 2020 Project, of which the proposed Solar PV project is a part, is not located in an inundation area and would not be subject to a seiche, tsunami, or mudflow.

Describe any minor changes to the project since earlier environmental analysis

This Addendum takes into consideration the minor modifications to the description of the proposed Solar PV Project provided in Volume 3 of the 2009 UCM LRDP EIS/EIR. The project changes consist of an increased in size from approximately 8 to 10 acres; modified project boundaries beyond the UCM 2020 Project boundary; type of visual screening used; and a technical correction regarding the amount of energy the project would generate (see Section 4.4 for a broader discussion of minor changes in the proposed project).

Describe how the minor project changes affect the earlier environmental analysis

a) Violate any water quality standards or waste discharge requirements?

The minor changes to the proposed Solar PV project (increased size from 8 to 10 acres; modified project boundaries beyond the UCM 2020 Project boundary; type of visual screening used; and a technical correction regarding the amount of energy the project would generate) would not result in new or substantially worse hydrology and water quality impacts involving violating any water quality standards or waste discharge requirements beyond what was analyzed in the 2009 UCM LRDP EIS/EIR.

The increased size of the Solar PV project site would not substantially increase the potential effects in violating any water quality standards or waste discharge requirements because, while a greater amount of surface area would be developed with solar PV arrays, the project as amended, would continue to maintain compliance with measures required by the National Pollutant Discharge Elimination System Permit (NPDES) and Waste Discharge Requirements (WDRs) from the Central Valley Regional Water Quality Control Board CVRWQCB. Such permits and requirements would not differ from what was analyzed as part of the UCM 2020 Project (EIS/EIR Volume 3) and urbanization development of the entire campus (EIS/EIR Volume 1).

The change in visual screening and the technical correction to the amount of energy that the proposed project would generate does not have any potential to result in violating any water quality standards or waste discharge requirements.

In conclusion, the potential environmental effects of the proposed project were adequately addressed in the 2009 UCM LRDP EIS/EIR.

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)?

The minor changes to the proposed Solar PV project (increased size from 8 to 10 acres; modified project boundaries beyond the UCM 2020 Project boundary; type of visual screening used; and a technical correction regarding the amount of energy the project would generate) would not result in new or substantially worse hydrology and water quality impacts involving substantially depleting 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 beyond what was analyzed in the 2009 UCM LRDP EIS/EIR.

The increased size of the Solar PV project site would not substantially increase the potential effects in substantially depleting 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 because, while a greater amount of surface area would be developed with solar PV arrays, the project's water usage (no water usage proposed) would be generally consistent with what was previously analyzed as part of the UCM 2020 Project (EIS/EIR Volume 3) and urbanization development of the entire campus (EIS/EIR Volume 1).

The change in visual screening and the technical correction to the amount of energy that the proposed project would generate does not have any potential to result in substantially depleting 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.

In conclusion, the potential environmental effects of the proposed project were adequately addressed in the 2009 UCM LRDP EIS/EIR.

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?

The minor changes to the proposed Solar PV project (increased size from 8 to 10 acres; modified project boundaries beyond the UCM 2020 Project boundary; type of visual screening used; and a technical correction regarding the amount of energy the project would generate) would not result in new or substantially worse hydrology and water quality impacts involving substantially altering 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 beyond what was analyzed in the 2009 UCM LRDP EIS/EIR.

The increased size of the Solar PV project site would not substantially increase the potential effects in substantially altering 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 because, while a greater amount of surface area would be developed with solar PV arrays, the project as amended, would continue to will implement multiple erosion and sediment control Best Management Practices (BMPs) in areas of the project site with potential to drain to surface water. These areas do not substantially differ from what was analyzed as part of the UCM 2020 Project (EIS/EIR Volume 3) and urbanization development of the entire campus (EIS/EIR Volume 1).

The change in visual screening and the technical correction to the amount of energy that the proposed project would generate does not have any potential to result in substantially altering 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.

In conclusion, the potential environmental effects of the proposed project were adequately addressed in the 2009 UCM LRDP EIS/EIR.

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?

The minor changes to the proposed Solar PV project (increased size from 8 to 10 acres; modified project boundaries beyond the UCM 2020 Project boundary; type of visual screening used; and a technical correction regarding the amount of energy the project would generate) would not result in new or substantially worse hydrology and water quality impacts involving substantially altering 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 beyond what was analyzed in the 2009 UCM LRDP EIS/EIR.

The increased size of the Solar PV project site would not substantially increase the potential effects in substantially altering 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 because, while a greater amount of surface area would be developed with solar PV arrays, the project as amended, would continue to be designed consistent with the UCM 2020 Project's storm water management plan which includes stromwater detention facilities that would control stormwater runoff before discharge into Fairfield Canal and Cottonwood Creek. The project's potential to result in flooding on- or off-site does not substantially differ from what was analyzed as part of the UCM 2020 Project (EIS/EIR Volume 3) and urbanization development of the entire campus (EIS/EIR Volume 1).

The change in visual screening and the technical correction to the amount of energy that the proposed project would generate does not have any potential to result in substantially altering 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.

In conclusion, the potential environmental effects of the proposed project were adequately addressed in the 2009 UCM LRDP EIS/EIR.

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?

The minor changes to the proposed Solar PV project (increased size from 8 to 10 acres; modified project boundaries beyond the UCM 2020 Project boundary; type of visual screening used; and a

technical correction regarding the amount of energy the project would generate) would not result in new or substantially worse hydrology and water quality impacts involving creating or contributing runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff beyond what was analyzed in the 2009 UCM LRDP EIS/EIR.

The increased size of the Solar PV project site would not substantially increase the potential effects in creating or contributing runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff because, while a greater amount of surface area would be developed with solar PV arrays, the project as amended, would continue to comply with the National Pollutant Discharge Elimination System (NPDES) regulations which require the project to develop and implement a Storm Water Management Program (SWMP) that includes Best Management Practices (BMPs) aimed at addressing urban runoff pollutants.

The proposal would also continue to be developed as part of the UCM 2020 Project where storm water generated in the new areas of the campus would be detained in detention basins before discharge into Fairfield Canal. The detention of stormwater and its slow release into the canal would ensure that sediments in the stormwater would settle out and the quality of water would be appropriate for discharge into Bear Creek, which is the final discharge point for Fairfield Canal.

As such, the project's potential to 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 does not substantially differ from what was analyzed as part of the UCM 2020 Project (EIS/EIR Volume 3) and urbanization development of the entire campus (EIS/EIR Volume 1).

The change in visual screening and the technical correction to the amount of energy that the proposed project would generate does not have any potential to result in creating or contributing runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff.

In conclusion, the potential environmental effects of the proposed project were adequately addressed in the 2009 UCM LRDP EIS/EIR.

f) Otherwise substantially degrade water quality?

The minor changes to the proposed Solar PV project (increased size from 8 to 10 acres; modified project boundaries beyond the UCM 2020 Project boundary; type of visual screening used; and a technical correction regarding the amount of energy the project would generate) would not result in new or substantially worse hydrology and water quality impacts that would otherwise substantially degrade water quality beyond what was analyzed in the 2009 UCM LRDP EIS/EIR.

The increased size of the Solar PV project site would not substantially increase the potential effects that would otherwise substantially degrade water quality because, while a greater amount of surface area would be developed with solar PV arrays, the project as amended, would not substantially increase the amount of sediment and urban pollutants in the site runoff and

therefore would not result in water quality degradation that does not substantially differ from what was analyzed as part of the UCM 2020 Project (EIS/EIR Volume 3) and urbanization development of the entire campus (EIS/EIR Volume 1).

The change in visual screening and the technical correction to the amount of energy that the proposed project would generate does not have any potential to otherwise substantially degrade water quality.

In conclusion, the potential environmental effects of the proposed project were adequately addressed in the 2009 UCM LRDP EIS/EIR.

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?

The minor changes to the proposed Solar PV project (increased size from 8 to 10 acres; modified project boundaries beyond the UCM 2020 Project boundary; type of visual screening used; and a technical correction regarding the amount of energy the project would generate) would not result in new or substantially worse hydrology and water quality impacts resulting in placing 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 beyond what was analyzed in the 2009 UCM LRDP EIS/EIR.

The increased size of the Solar PV project site would not substantially increase the potential effects that would otherwise substantially degrade water quality because, while a greater amount of surface area would be developed with solar PV arrays, the project as amended, does not include the development of housing as part of the proposed Project which is consistent with what was analyzed as part of the UCM 2020 Project (EIS/EIR Volume 3) and urbanization development of the entire campus (EIS/EIR Volume 1).

The change in visual screening and the technical correction to the amount of energy that the proposed project would generate does not have any potential to 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.

In conclusion, the potential environmental effects of the proposed project were adequately addressed in the 2009 UCM LRDP EIS/EIR.

h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?

The minor changes to the proposed Solar PV project (increased size from 8 to 10 acres; modified project boundaries beyond the UCM 2020 Project boundary; type of visual screening used; and a technical correction regarding the amount of energy the project would generate) would not result in new or substantially worse hydrology and water quality impacts resulting in placing within a 100-year flood hazard area structures which would impede or redirect flood flows beyond what was analyzed in the 2009 UCM LRDP EIS/EIR.

The increased size of the Solar PV project site would not substantially increase the potential effects that would otherwise substantially degrade water quality because, while a greater amount of surface area would be developed with solar PV arrays, the project as amended, is not located within a 100-year flood hazard area which is consistent with what was analyzed as part of the UCM 2020 Project (EIS/EIR Volume 3) and urbanization development of the entire campus (EIS/EIR Volume 1).

The change in visual screening and the technical correction to the amount of energy that the proposed project would generate does not have any potential to place within a 100-year flood hazard area structures which would impede or redirect flood flows.

In conclusion, the potential environmental effects of the proposed project were adequately addressed in the 2009 UCM LRDP EIS/EIR.

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?

The minor changes to the proposed Solar PV project (increased size from 8 to 10 acres; modified project boundaries beyond the UCM 2020 Project boundary; type of visual screening used; and a technical correction regarding the amount of energy the project would generate) would not result in new or substantially worse hydrology and water quality impacts involving exposing 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 beyond what was analyzed in the 2009 UCM LRDP EIS/EIR.

The increased size of the Solar PV project site would not substantially increase the potential effects in exposing 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 because, while a greater amount of surface area would be developed with solar PV arrays, the project as amended, would continue to be developed outside the inundation area of Lake Yosemite Dam and within an area where detention basins will be designed and incorporated into the drainage infrastructure to hold back the runoff from the storm events until water levels recede in the Fairfield and Le Grand Canals preventing these canals from overtopping or taking on more storm water runoff than it can handle. The site's location in relation to an inundation area and its inclusion within an area where detention basins will be designed does not substantially differ from what was analyzed as part of the UCM 2020 Project (EIS/EIR Volume 3) and urbanization development of the entire campus (EIS/EIR Volume 1).

The change in visual screening and the technical correction to the amount of energy that the proposed project would generate does not have any potential to result in exposing 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.

In conclusion, the potential environmental effects of the proposed project were adequately addressed in the 2009 UCM LRDP EIS/EIR.

j) Inundation by seiche, tsunami, or mudflow?

The minor changes to the proposed Solar PV project (increased size from 8 to 10 acres; modified project boundaries beyond the UCM 2020 Project boundary; type of visual screening used; and a technical correction regarding the amount of energy the project would generate) would not result in new or substantially worse hydrology and water quality impacts involving inundation by seiche, tsunami, or mudflow beyond what was analyzed in the 2009 UCM LRDP EIS/EIR.

The increased size of the Solar PV project site would not substantially increase the potential effects inundation by seiche, tsunami, or mudflow because, while a greater amount of surface area would be developed with solar PV arrays, the project as amended, would continue to be developed outside of an inundation area due to a seiche, tsunami, or mudflow which does not substantially differ from what was analyzed as part of the UCM 2020 Project (EIS/EIR Volume 3) and urbanization development of the entire campus (EIS/EIR Volume 1).

The change in visual screening and the technical correction to the amount of energy that the proposed project would generate does not have any potential to result in inundation by seiche, tsunami, or mudflow.

In conclusion, the potential environmental effects of the proposed project were adequately addressed in the 2009 UCM LRDP EIS/EIR.

Issues	Additional Project-level Impact Analysis Required	Project Impact Adequately Addressed in Earlier Environmental Document
8. LAND USE AND PLANNING -- Would the project:		
a) Physically divide an established community?	☐	☒
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the LRDP, general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☒
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☒
	☐	☒

d) Create other land use impacts?

Describe relevant elements of project

The Project site is located in unincorporated Merced County to the northeast of the City of Merced. In 1996 Merced County amended its general plan to designate a UC Merced Specific Urban Development Plan (SUDP) area within which the UC Merced Campus and the proposed Project is located. An SUDP is an area designation under the Merced County General Plan where future urban development is planned to be accommodated. The SUDP designation is applied to both incorporated cities and to unincorporated communities with some degree of urbanization.

The northern portion of the campus site, above the Bellevue Road alignment, is within the City of Merced's current Sphere of Influence (SOI). In California "sphere of influence" has a legal meaning as a plan for the probable physical boundaries and service area of a local agency. The proposed Project will be developed in this area.

As part of the development of the Campus, the Project site is located adjacent to large open spaces comprised primarily of grazing lands with scattered rural residences, a planned residential community, agricultural lands to the south, and a rural residential center to the southwest. Lake Yosemite Regional Park is located to the northwest of the Project site. To the west of Lake Yosemite is a large established rural residential area with a nearby golf course. The area south and west of the intersection of Bellevue Road and Lake Drive is designated Rural Residential Center (RRC) in the Merced County General Plan.

RRC zones consist of large lots (one acre or greater) and permit accessory agricultural uses such as live stock pasturing, horse stables, and hobby farming. RRC's, traditionally, lack full urban services and often rely on septic systems and well water. Even though parcels within an RRC have rural attributes, they are considered by the County to be urban land uses. Lands to the east and north of the campus are designated as Agricultural Lands in the Merced County General Plan.

Describe how project was analyzed in earlier environmental document

a) Physically divide an established community?

The 2009 UCM LRDP EIS/EIR concluded that construction of the UC Merced campus, including the UCM 2020 Project, of which the proposed Solar PV project is a part, would be located on the periphery of existing development and is surrounded by grazing lands, and would not physically divide an established community. For this reason, no related impact on an existing community would occur.

b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the LRDP, general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?

The 2009 UCM LRDP EIS/EIR concluded that construction of the UC Merced campus, including the UCM 2020 Project, of which the proposed Solar PV project is a part, would not conflict with the 2000 Merced County General Plan, because the University is a state entity, there is no municipal jurisdiction over the campus. Furthermore, the County's general plan identifies the majority of campus site, including the UCM 2020 Project site, as part of the UC Merced SUDP.

Additionally, the 2009 UCM LRDP EIS/EIR concluded that construction of the UC Merced campus, including the UCM 2020 Project, of which the proposed Solar PV project is a part, would not conflict with the City of Merced General Plan as the City of Merced's Vision 2015 General Plan states that the future of Merced includes the 10th University of California campus. Therefore, the development of the proposed Project would not be in conflict with the provisions of the City and County's general plan. The impact would be less than significant.

c) Conflict with any applicable habitat conservation plan or natural community conservation plan?

The 2009 UCM LRDP EIS/EIR concluded that construction of the UC Merced campus, including the UCM 2020 Project, of which the proposed Solar PV project is a part, would not conflict with any applicable habitat conservation plan or natural community conservation plan, as there are no habitat conservation plans or natural community conservation plans that are applicable to the UC Merced, including the UCM 2020 Project site.

d) Create other land use impacts?

The 2009 UCM LRDP EIS/EIR concluded that construction of the UC Merced campus, including the UCM 2020 Project, of which the proposed Solar PV project is a part, would contain land use plans that have been developed in a coordinated manner and if the land uses are developed as proposed, incompatible land uses would not be placed adjacent to each other. With respect to rural residential land uses along the west side of Lake Road, a green belt is planned between Campus Parkway and Lake Road within the Campus and University Community in this area which would help avoid impacts on the existing homes, especially from traffic noise along Campus Parkway. Therefore, the Campus development, and the proposed Project would not result in placement of incompatible land uses near the homes along Lake Road. The impact would be less than significant.

Describe any minor changes to the project since earlier environmental analysis

This Addendum takes into consideration the minor modifications to the description of the proposed Solar PV Project provided in Volume 3 of the 2009 UCM LRDP EIS/EIR. The project changes consist of an increased in size from approximately 8 to 10 acres; modified project boundaries beyond the UCM 2020 Project boundary; type of visual screening used; and a technical correction regarding the amount of energy the project would generate (see Section 4.4 for a broader discussion of minor changes in the proposed project).

Describe how the minor project changes affect the earlier environmental analysis

a) Physically divide an established community?

The minor changes to the proposed Solar PV project (increased size from 8 to 10 acres; modified project boundaries beyond the UCM boundary; type of visual screening used; and a technical correction regarding the amount of energy the project would generate) would not result in new or substantially worse land use and planning impacts involving physically dividing an established community beyond what was analyzed in the 2009 UCM LRDP EIS/EIR.

The increased size of the Solar PV project site would not substantially increase the potential effects to physically dividing an established community because, while a greater amount of surface area would be developed with solar PV arrays, the project as amended, would continue to be developed entirely on campus lands which are located on the periphery of existing development and is surrounded by grazing lands, which is not substantially different than what was analyzed as part of the UCM 2020 Project (EIS/EIR Volume 3) and urbanization development of the entire campus (EIS/EIR Volume 1).

The change in visual screening and the technical correction to the amount of energy that the proposed project would generate does not have any potential to result in physically dividing an established community.

In conclusion, the potential environmental effects of the proposed project were adequately addressed in the 2009 UCM LRDP EIS/EIR.

b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the LRDP, general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?

The minor changes to the proposed Solar PV project (increased size from 8 to 10 acres; modified project boundaries beyond the UCM 2020 Project boundary; type of visual screening used; and a technical correction regarding the amount of energy the project would generate) would not result in new or substantially worse land use and planning impacts involving a conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project beyond what was analyzed in the 2009 UCM LRDP EIS/EIR.

The increased size of the Solar PV project site would not substantially increase the potential effects in conflicting with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project because, while a greater amount of surface area would be developed with solar PV arrays, the project as amended would continue to be developed entirely on campus lands which no municipal jurisdiction has authority over. In addition, both the City and County of Merced General Plans acknowledge the Campus as part of their future land use development. The project as amended is not substantially different than what was analyzed as part of the UCM 2020 Project (EIS/EIR Volume 3) and urbanization development of the entire campus (EIS/EIR Volume 1).

The change in visual screening and the technical correction to the amount of energy that the proposed project would generate does not have any potential to result in a conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project.

In conclusion, the potential environmental effects of the proposed project were adequately addressed in the 2009 UCM LRDP EIS/EIR.

c) Conflict with any applicable habitat conservation plan or natural community conservation plan?

The minor changes to the proposed Solar PV project (increased size from 8 to 10 acres; modified project boundaries beyond the UCM 2020 Project boundary; type of visual screening used; and a technical correction regarding the amount of energy the project would generate) would not result in new or substantially worse land use and planning impacts involving a conflict with any applicable habitat conservation plan or natural community conservation plan beyond what was analyzed in the 2009 UCM LRDP EIS/EIR.

The increased size of the Solar PV project site would not substantially increase the potential effects in conflicting with any applicable habitat conservation plan or natural community conservation plan because, while a greater amount of surface area would be developed with solar PV arrays, the project as amended, would continue to be developed entirely on campus lands in which no habitat conservation plans or natural community conservation plans currently exist, which is not substantially different than what was analyzed as part of the UCM 2020 Project (EIS/EIR Volume 3) and urbanization development of the entire campus (EIS/EIR Volume 1).

The change in visual screening and the technical correction to the amount of energy that the proposed project would generate does not have any potential to result in a conflict with any applicable habitat conservation plan or natural community conservation plan.

In conclusion, the potential environmental effects of the proposed project were adequately addressed in the 2009 UCM LRDP EIS/EIR.

d) Create other land use impacts?

The minor changes to the proposed Solar PV project (increased size from 8 to 10 acres; modified project boundaries beyond the UCM 2020 Project boundary; type of visual screening used; and a technical correction regarding the amount of energy the project would generate) would not result in new or substantially worse land use and planning impacts involving creating other land use impacts beyond what was analyzed in the 2009 UCM LRDP EIS/EIR.

The increased size of the Solar PV project site would not substantially increase the potential effects in creating other land use impacts because, while a greater amount of surface area would be developed with solar PV arrays, the project as amended would continue to be developed entirely on campus lands which contain land use plans that have been developed in a coordinated manner and where incompatible land uses would not be placed adjacent to each other. Each of

the land uses occupied by the proposed Project includes provisions for on-site utility services. The land use plans and the location of the Project site would be generally consistent with what was analyzed as part of the UCM 2020 Project (EIS/EIR Volume 3) and urbanization development of the entire campus (EIS/EIR Volume 1).

The change in visual screening and the technical correction to the amount of energy that the proposed project would generate does not have any potential to result in creating other land use impacts.

In conclusion, the potential environmental effects of the proposed project were adequately addressed in the 2009 UCM LRDP EIS/EIR.

Issues	Additional Project-level Impact Analysis Required	Project Impact Adequately Addressed in Earlier Environmental Document
9. NOISE -- Would the project result in:		
a) Exposure of persons to or generation of noise levels in excess of standards established in any applicable plan or noise ordinance, or applicable standards of other agencies?	☐	☒
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	☐	☒
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☒
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project (including construction)?	☐	☒
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?	☐	☒
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?

Describe relevant elements of project

Sound is mechanical energy transmitted by pressure waves in a compressible medium such as air. Noise can be defined as unwanted. The decibel (dB) scale is used to quantify sound intensity. The proposed Project is located in eastern Merced County, east of Lake Yosemite and Lake Road, approximately 2 miles northeast of the corporate limits of the City of Merced, California.

The proposed Project would establish a solar array capable of transmitting 1.12 mw of electricity to the UC Merced Campus. The Project site is largely undeveloped and no major fixed noise sources exist on the site. Noise sources in the area include traffic on local roadways and noise from agricultural equipment. Noise-sensitive receptors in the vicinity of the site include a few residences located along Lake Road to the east and Yosemite Avenue to the south of the project site. In addition, Lake Yosemite Regional Park is located to the north.

No heavily traveled roads or freeways are within the area of the proposed Project. Nearby roadways tend to be lightly traveled, at moderate vehicle speeds, and do not handle large volumes of heavy-duty trucks or buses. As such, while motor vehicle traffic causes noise within the project area, and tends to be the primary noise source in locations adjacent to traveled roadways, the resulting noise levels are not excessive.

The nearest railroad is sufficiently distant from the Project area, noise from railroad traffic does not affect ambient noise levels at the site of the proposed Project. The Merced Municipal Airport is approximately 5 miles to the southwest of the project area, and Castle Airport (the former Castle Air Force Base) is approximately 6 miles to the west. While noise from aircraft overflights is occasionally perceptible within the project area, it does not substantially affect the noise environment. No industrial or manufacturing facilities are located in the project area; however, some agricultural-related operations and land maintenance activities cause occasional, daytime noise south of the Project site. To the northwest of the Project site, the Lake Yosemite facilities provide recreational boating opportunities, which generate noise primarily during the daytime hours of the warmer months.

Describe how project was analyzed in earlier environmental document

a) Exposure of persons to or generation of noise levels in excess of standards established in any applicable plan or noise ordinance, or applicable standards of other agencies?

The 2009 UCM LRDP EIS/EIR concluded that construction of the UC Merced campus, including the UCM 2020 Project, of which the proposed Solar PV project is a part, could expose existing offsite and future on site noise sensitive receptors to elevated noise levels. Noise generated by daily campus activities is not expected to exceed the noise standard of 60 dBA Ldn exterior and 45 dBA Ldn interior at offsite residential locations or 70 dBA Ldn at parks because the noise levels generated by these activities are generally low at the source and would be further

attenuated by the distance between the campus facilities and the nearest offsite receptors, including the regional park.

The land use plans for the Campus have been designed to avoid the location of sensitive land uses near potential loud noise sources. Furthermore, noise levels associated with typical commercial grade HVAC systems can be reduced to below the noise standard for residences and parks at a distance of less than 50 feet from the source with the use of standard attenuation barriers. For these reasons, the UC Merced Project, including the UCM 2020 Project, would not expose receptors to noise levels from daily operations in excess of the standards for noise sensitive uses, and therefore would not create a significant impact.

b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?

The 2009 UCM LRDP EIS/EIR concluded that construction of the UC Merced campus, including the UCM 2020 Project, of which the proposed Solar PV project is a part, could expose existing offsite and future onsite noise sensitive receptors to elevated noise levels. Construction activities for the UCM 2020 Project would include ground clearing, earthmoving, foundations, erection of structures and finishing. However, standard noise reduction techniques are recommended in 2009 UCM LRDP EIS/EIR Mitigation Measures to reduce noise exposure of nearby noise sensitive receptors to day and night time construction noise. These measures will reduce this impact to a less than significant level.

The 2009 UCM LRDP EIS/EIR also concluded that construction of the UC Merced campus, including the UCM 2020 Project, of which the proposed Solar PV project is a part, would not generate substantial levels of vibration. Pile driving is not anticipated for the UCM 2020 Project due to the geology that is typical for Merced County. However, in the event that pile driving is required during construction, it could produce groundborne vibration levels that might be perceptible to nearby sensitive receptors. In addition, at a few future campus facilities, such as laboratories, additional precautions may be needed to prevent adverse effects from vibration. Implementation of 2009 UCM LRDP EIS/EIR program-level Mitigation Measures would limit groundborne vibration to construction activities, and would require additional measures for construction activities adjacent to highly sensitive use. Therefore, vibration impacts associated with pile driving activities on the Campus, including the proposed UCM 2020 Project, would be less than significant.

c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?

The 2009 UCM LRDP EIS/EIR concluded that construction of the UC Merced campus, including the UCM 2020 Project, of which the proposed Solar PV project is a part, would increase traffic volumes on the local roadway network, which would result in increased traffic noise levels at noise sensitive receptors located along these roadways. In general, the UCM 2020 Project would contribute approximately 20,800 trips to regional and local roadways. While the UCM 2020 Project would contribute trips to the study area street segments, the trips added by the UCM 2020 Project would not result in substantial noise impacts.

d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project (including construction)?

The 2009 UCM LRDP EIS/EIR concluded that construction of the UC Merced campus, including the UCM 2020 Project, of which the proposed Solar PV project is a part, could expose existing off site and future on site noise sensitive receptors to elevated noise levels. Temporary construction activities for the UCM 2020 Project would include ground clearing, earthmoving, foundations, erection of structures and finishing. However, standard noise reduction techniques are recommended in 2009 UCM LRDP EIS/EIR Mitigation Measures to reduce noise exposure of nearby noise sensitive receptors to day and night time construction noise. These measures will reduce this impact to a less than significant level.

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?

The 2009 UCM LRDP EIS/EIR concluded that construction of the UC Merced campus, including the UCM 2020 Project, of which the proposed Solar PV project is a part, would not be located within 2 miles of a public airport. The Merced Municipal Airport is approximately 5 miles to the southwest of the project area, and Castle Airport (the former Castle Air Force Base) is approximately 6 miles to the west. While noise from aircraft overflights is occasionally perceptible within the project area, it does not substantially affect the noise environment. A review of the County's Noise Element indicates that the 65 dBA Ldn noise contours from the airports in the region would not encompass or include any portion of the project site. This impact is less than significant.

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?

The 2009 UCM LRDP EIS/EIR concluded that construction of the UC Merced campus, including the UCM 2020 Project, of which the proposed Solar PV project is a part, could be developed adjacent to existing noise-generating uses, including the private airstrip located adjacent to Community South. Although it is used infrequently (for agricultural uses), depending on frequency of airstrip operations, overflights from the adjacent airstrip could only result in excessive noise levels in Community South area. As such, this is a less than significant impact.

Describe any minor changes to the project since earlier environmental analysis

This Addendum takes into consideration the minor modifications to the description of the proposed Solar PV Project provided in Volume 3 of the 2009 UCM LRDP EIS/EIR. The project changes consist of an increased in size from approximately 8 to 10 acres; modified project boundaries beyond the UCM 2020 Project boundary; type of visual screening used; and a technical correction regarding the amount of energy the project would generate (see Section 4.4 for a broader discussion of minor changes in the proposed project).

Describe how the minor project changes affect the earlier environmental analysis

a) Exposure of persons to or generation of noise levels in excess of standards established in any applicable plan or noise ordinance, or applicable standards of other agencies?

The minor changes to the proposed Solar PV project (increased size from 8 to 10 acres; modified project boundaries beyond the UCM 2020 Project boundary; type of visual screening used; and a technical correction regarding the amount of energy the project would generate) would not result in new or substantially worse noise impact involving the exposure of persons to or generation of noise levels in excess of standards established in any applicable plan or noise ordinance, or applicable standards of other agencies beyond what was analyzed in the 2009 UCM LRDP EIS/EIR.

The increased size of the Solar PV project site would not substantially increase the potential effects of exposing of persons to or generation of noise levels in excess of standards established in any applicable plan or noise ordinance, or applicable standards of other agencies because, while a greater amount of surface area would be developed with solar PV arrays, the project as amended, would continue to be developed entirely on campus lands which have been designed to avoid the location of sensitive land uses near potential loud noise sources. The location of the Project site and the land use designations therein are not substantially different than what was analyzed as part of the UCM 2020 Project (EIS/EIR Volume 3) and urbanization development of the entire campus (EIS/EIR Volume 1).

The change in visual screening and the technical correction to the amount of energy that the proposed project would generate does not have any potential to result in the exposure of persons to or generation of noise levels in excess of standards established in any applicable plan or noise ordinance, or applicable standards of other agencies.

In conclusion, the potential environmental effects of the proposed project were adequately addressed in the 2009 UCM LRDP EIS/EIR.

b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?

The minor changes to the proposed Solar PV project (increased size from 8 to 10 acres; modified project boundaries beyond the UCM 2020 Project boundary; type of visual screening used; and a technical correction regarding the amount of energy the project would generate) would not result in new or substantially worse noise impact involving the exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels beyond what was analyzed in the 2009 UCM LRDP EIS/EIR.

The increased size of the Solar PV project site would not substantially increase the potential effects of exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels because, while a greater amount of surface area would be developed with solar PV arrays, the project as amended, would continue to implement standard noise reduction techniques recommended in 2009 UCM LRDP EIS/EIR Mitigation Measures to reduce

noise exposure of nearby noise sensitive receptors to day and night time construction noise. The generation of excessive groundborne vibration or groundborne noise levels from the project site is not substantially different than what was analyzed as part of the UCM 2020 Project (EIS/EIR Volume 3) and urbanization development of the entire campus (EIS/EIR Volume 1).

The change in visual screening and the technical correction to the amount of energy that the proposed project would generate does not have any potential to result in the exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels.

In conclusion, the potential environmental effects of the proposed project were adequately addressed in the 2009 UCM LRDP EIS/EIR.

c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?

The minor changes to the proposed Solar PV project (increased size from 8 to 10 acres; modified project boundaries beyond the UCM 2020 Project boundary; type of visual screening used; and a technical correction regarding the amount of energy the project would generate) would not result in new or substantially worse noise impact involving a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project beyond what was analyzed in the 2009 UCM LRDP EIS/EIR.

The increased size of the Solar PV project site would not substantially increase the potential effects of a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project because, while a greater amount of surface area would be developed with solar PV arrays, the project as amended, would not result in a substantial contribution to an increase in traffic trips beyond what was analyzed as part of the UCM 2020 Project (EIS/EIR Volume 3) and urbanization development of the entire campus (EIS/EIR Volume 1).

The change in visual screening and the technical correction to the amount of energy that the proposed project would generate does not have any potential to result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project.

In conclusion, the potential environmental effects of the proposed project were adequately addressed in the 2009 UCM LRDP EIS/EIR.

d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project (including construction)?

The minor changes to the proposed Solar PV project (increased size from 8 to 10 acres; modified project boundaries beyond the UCM 2020 Project boundary; type of visual screening used; and a technical correction regarding the amount of energy the project would generate) would not result in new or substantially worse noise impact involving a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project beyond what was analyzed in the 2009 UCM LRDP EIS/EIR.

The increased size of the Solar PV project site would not substantially increase the potential effects of a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project because, while a greater amount of surface area would be developed with solar PV arrays, the project as amended, would continue to implement standard noise reduction techniques recommended in 2009 UCM LRDP EIS/EIR Mitigation Measures to reduce noise exposure of nearby noise sensitive receptors to day and night time construction noise. The temporary or periodic increase in ambient noise levels generated from the project site is not substantially different than what was analyzed as part of the UCM 2020 Project (EIS/EIR Volume 3) and urbanization development of the entire campus (EIS/EIR Volume 1).

The change in visual screening and the technical correction to the amount of energy that the proposed project would generate does not have any potential to result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project.

In conclusion, the potential environmental effects of the proposed project were adequately addressed in the 2009 UCM LRDP EIS/EIR.

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?

The minor changes to the proposed Solar PV project (increased size from 8 to 10 acres; modified project boundaries beyond the UCM 2020 Project boundary; type of visual screening used; and a technical correction regarding the amount of energy the project would generate) would not result in new or substantially worse noise impact that involve exposing people residing or working in the project area to excessive noise levels of a public airport or public use airport beyond what was analyzed in the 2009 UCM LRDP EIS/EIR.

The increased size of the Solar PV project site would not substantially increase the potential effects of exposing people residing or working in the project area to excessive noise levels of a public airport or public use airport because, while a greater amount of surface area would be developed with solar PV arrays, the project as amended, would continue to be developed outside of a 2 mile radius of a public airport. The project site's location does not substantially differ from what was analyzed as part of the UCM 2020 Project (EIS/EIR Volume 3) and urbanization development of the entire campus (EIS/EIR Volume 1).

The change in visual screening and the technical correction to the amount of energy that the proposed project would generate does not have any potential to result in exposing people residing or working in the project area to excessive noise levels of a public airport or public use airport.

In conclusion, the potential environmental effects of the proposed project were adequately addressed in the 2009 UCM LRDP EIS/EIR.

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?

The minor changes to the proposed Solar PV project (increased size from 8 to 10 acres; modified project boundaries beyond the UCM 2020 Project boundary; type of visual screening used; and a technical correction regarding the amount of energy the project would generate) would not result in new or substantially worse noise impact that involve exposing people residing or working in the project area to excessive noise levels of a private airstrip beyond what was analyzed in the 2009 UCM LRDP EIS/EIR.

The increased size of the Solar PV project site would not substantially increase the potential effects of exposing people residing or working in the project area to excessive noise levels of a public airport or public use airport because, while a greater amount of surface area would be developed with solar PV arrays, the project as amended, would continue to be developed outside the vicinity of a private airstrip. The project site's location does not substantially differ from what was analyzed as part of the UCM 2020 Project (EIS/EIR Volume 3) and urbanization development of the entire campus (EIS/EIR Volume 1).

The change in visual screening and the technical correction to the amount of energy that the proposed project would generate does not have any potential to result in exposing people residing or working in the project area to excessive noise levels of a private airstrip.

In conclusion, the potential environmental effects of the proposed project were adequately addressed in the 2009 UCM LRDP EIS/EIR.

Issues	Additional Project-level Impact Analysis Required	Project Impact Adequately Addressed in Earlier Environmental Document
10. 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)?	☐	☒
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☒
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☒

Describe relevant elements of project

The proposed Project does not include residential development. The site will require intermittent service/maintenance operations and will include no full-time employees at the site. No residential dwelling units currently exist on the site or in the Project area. No people currently reside on the Project site or in the project vicinity.

Describe how project was analyzed in earlier environmental document

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)?

The 2009 UCM LRDP EIS/EIR concluded that construction of the UC Merced campus, including the UCM 2020 Project, of which the proposed Solar PV project is a part, would generated, through the development of the UCM 2020 Project, a total of 11,526 students, faculty, and staff and the dependents of each group to the City of Merced and Merced County from other locations. This represents a 14 percent increase in the current population of the City of Merced and a 5 percent increase in the current population of Merced County. While the population increase due to full development of the UCM 2020 Project and overall Campus is already accounted for in the Merced County Association of Governments (MCAG) projections for the City and the County, and would not exceed the growth projections, the population increase due to the UCM 2020 Project would be substantial. Since the increase would be considered substantial when compared to MCAG population projections, the direct population growth generated by the UCM 2020 Project would be significant and unavoidable.

Although the population growth due to UCM 2020 Project buildout is considered substantial, a significant proportion of Campus growth would be accommodated within the campus. The UCM 2020 Project would add approximately 4,170 beds to the existing student housing, reducing the number of students needing off campus housing to 2,400. It is assumed that all student dependents would live in the community, not on campus. The number of new residents (students, employees, and dependents) who would need housing off campus in the City of Merced and Merced County would therefore be approximately 7,356 persons. However, the rise in student and employee population would be gradual over the buildout period of the UCM 2020 Project, and housing supply in the local area currently exceeds demand. Based on these factors, it is expected that the local community would be able to accommodate the short term demand for housing caused by the increased population. No significant impact is anticipated with regard to housing demand. However, population growth impacts from the UCM 2020 Project would remain significant and unavoidable.

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

The 2009 UCM LRDP EIS/EIR concluded that construction of the UC Merced campus, including the UCM 2020 Project, of which the proposed Solar PV project is a part, would not displace substantial numbers of existing housing, necessitating the construction of replacement

housing elsewhere. With the exception of student housing on the Phase 1.1 Campus, no dwelling units are currently situated on the campus site. Since no existing housing would be displaced, there would be no impacts related to construction of replacement housing on the campus.

c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?

The 2009 UCM LRDP EIS/EIR concluded that construction of the UC Merced campus, including the UCM 2020 Project, of which the proposed Solar PV project is a part, would not displace substantial numbers of people, necessitating the construction of replacement housing elsewhere. With the exception of student housing on the Phase 1.1 Campus, no existing population is currently situated on the campus site. UCM 2020 Project development would not displace existing Phase 1.1 students.

Describe any minor changes to the project since earlier environmental analysis

This Addendum takes into consideration the minor modifications to the description of the proposed Solar PV Project provided in Volume 3 of the 2009 UCM LRDP EIS/EIR. The project changes consist of an increased in size from approximately 8 to 10 acres; modified project boundaries beyond the UCM 2020 Project boundary; type of visual screening used; and a technical correction regarding the amount of energy the project would generate (see Section 4.4 for a broader discussion of minor changes in the proposed project).

Describe how the minor project changes affect the earlier environmental analysis

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)?

The minor changes to the proposed Solar PV project (increased size from 8 to 10 acres; modified project boundaries beyond the UCM 2020 Project boundary; type of visual screening used; and a technical correction regarding the amount of energy the project would generate) would not result in new or substantially worse population and housing impacts involving the inducement of substantial population growth in an area, either directly or indirectly beyond what was analyzed in the 2009 UCM LRDP EIS/EIR.

The increased size of the Solar PV project site would not substantially increase the potential effects involving the inducement of substantial population growth in an area, either directly or indirectly because, while a greater amount of surface area would be developed with solar PV arrays, the project as amended, would not include the development of housing or the establishment of a business that requires onsite employment, which does not differ from what was analyzed as part of the UCM 2020 Project (EIS/EIR Volume 3) and urbanization development of the entire campus (EIS/EIR Volume 1).

The change in visual screening and the technical correction to the amount of energy that the proposed project would generate does not have any potential to result in the inducement of substantial population growth in an area, either directly or indirectly.

In conclusion, the potential environmental effects of the proposed project were adequately addressed in the 2009 UCM LRDP EIS/EIR.

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

The minor changes to the proposed Solar PV project (increased size from 8 to 10 acres; modified project boundaries beyond the UCM 2020 Project boundary; type of visual screening used; and a technical correction regarding the amount of energy the project would generate) would not result in new or substantially worse population and housing impacts involving the displacement of substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere beyond what was analyzed in the 2009 UCM LRDP EIS/EIR.

The increased size of the Solar PV project site would not substantially increase the potential effects involving the displacement of substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere because, while a greater amount of surface area would be developed with solar PV arrays, the project as amended, would continue to be developed on undeveloped grazing land containing no housing, which does not differ from what was analyzed as part of the UCM 2020 Project (EIS/EIR Volume 3) and urbanization development of the entire campus (EIS/EIR Volume 1).

The change in visual screening and the technical correction to the amount of energy that the proposed project would generate does not have any potential to result in the displacement of substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere.

In conclusion, the potential environmental effects of the proposed project were adequately addressed in the 2009 UCM LRDP EIS/EIR.

c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?

The minor changes to the proposed Solar PV project (increased size from 8 to 10 acres; modified project boundaries beyond the UCM 2020 Project boundary; type of visual screening used; and a technical correction regarding the amount of energy the project would generate) would not result in new or substantially worse population and housing impacts involving the displacement of substantial numbers of people, necessitating the construction of replacement housing elsewhere beyond what was analyzed in the 2009 UCM LRDP EIS/EIR.

The increased size of the Solar PV project site would not substantially increase the potential effects involving the displacement of substantial numbers of people, necessitating the construction of replacement housing elsewhere because, while a greater amount of surface area would be developed with solar PV arrays, the project as amended, would continue to be

developed on undeveloped grazing land containing no housing or people, which does not differ from what was analyzed as part of the UCM 2020 Project (EIS/EIR Volume 3) and urbanization development of the entire campus (EIS/EIR Volume 1).

The change in visual screening and the technical correction to the amount of energy that the proposed project would generate does not have any potential to result in the displacement of substantial numbers of people, necessitating the construction of replacement housing elsewhere.

In conclusion, the potential environmental effects of the proposed project were adequately addressed in the 2009 UCM LRDP EIS/EIR.

Issues	Additional Project-level Impact Analysis Required	Project Impact Adequately Addressed in Earlier Environmental Document
11. PUBLIC SERVICES		
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:		
a) Fire protection?	☐	☒
b) Police protection?	☐	☒
c) Schools?	☐	☒
d) Parks?	☐	☒
e) Other public facilities?	☐	☒
f) Create other public service impacts?	☐	☒

Describe relevant elements of project

The proposed Project is located within unincorporated Merced County at this time. Therefore, under existing conditions, with the exception of law enforcement services, which are provided by

the Campus Police Department, all services to the Project site are provided by the County. However, the Campus, of which the proposed Project is a part, may be annexed to the City or remain in unincorporated Merced County. If the Campus is annexed to the City of Merced, the City would provide fire protection as well as sewer and water services. If annexation does not take place or annexation is delayed, the University plans to enter into an agreement with the City for the provision fire service to the Campus.

The Project site is located within the boundaries of the Merced City School District (MCSD), the Weaver Union School District (WUSD), and the Merced Union High School District (MUHSD). County-owned recreational facilities are managed by the Merced County Parks and Recreation Office. County recreational facilities near the project site include Lake Yosemite Regional Park which is approximately .5 miles to the northeast. The City of Merced Parks and Community Services Department also maintains park and recreational facilities within the area of the Project site. Nearby community and neighborhood parks include Fahrens Park, Santa Fe Park, Rahilly Park, and Burbank Park.

Describe how project was analyzed in earlier environmental document

a) Fire protection?

The 2009 UCM LRDP EIS/EIR concluded that construction of the UC Merced campus, including the UCM 2020 Project, of which the proposed Solar PV project is a part, would be served by the City of Merced Fire Department following the execution of a pre annexation agreement with the City or upon the completion of the annexation process. Therefore, the impact related to fire protection services would be less than significant. However, the City has indicated that either a new fire station would be constructed in Community North to serve the Campus and University Community, or a new facility would be constructed somewhere in the Bellevue and G Street area to serve the site as well as northern Merced growth. Because a site for this fire station has not been selected, and the fire station would be built in response to the general northern Merced growth and not solely to serve the UCM 2020 Project, the environmental impacts of this future project will be evaluated and mitigated by the City of Merced in conjunction with the approval of the new fire station's development.

b) Police protection?

The 2009 UCM LRDP EIS/EIR concluded that construction of the UC Merced campus, including the UCM 2020 Project, of which the proposed Solar PV project is a part, would require an expansion of UC Merced Police Department services and facilities. The Campus land use plan includes adequate land for the expansion of the Campus police facility as needed. The environmental consequences of developing campus facilities, including additional police facilities, are evaluated and mitigated to the extent feasible in the 2009 UCM LRDP EIS/EIR. This impact would be would be less than significant.

c) Schools?

The 2009 UCM LRDP EIS/EIR concluded that construction of the UC Merced campus, including the UCM 2020 Project, of which the proposed Solar PV project is a part, would not increase enrollment in local public schools that would require construction of new facilities, the construction of which could have environmental effects. This is because the University Community has been designed to absorb the growth associated with the campus and includes an adequate amount of land acreage for schools to serve the population that would reside in the community.

In the short term however, until such time that the schools are developed within the University Community, development of the campus under the UCM 2020 Project would result in an increased demand for primary and secondary educational facilities in the campus vicinity. This demand would be related primarily to employee households and the small number of student families that may move into the Merced area as a result of the UCM 2020 Project.

In the event that the increased demand generated from the growth associated with the campus would require the construction of new schools or expanded facilities at existing schools in the City, it is anticipated that when new schools are proposed, the school districts will evaluate the environmental impacts resulting from new construction. Furthermore, full mitigation of school impacts will be provided via the collection of school impact fees from new housing developed in the region. Therefore, the impact related to schools would be less than significant.

d) Parks?

The 2009 UCM LRDP EIS/EIR concluded that construction of the UC Merced campus, including the UCM 2020 Project, of which the proposed Solar PV project is a part, would result in a less than significant impact associated with the construction of new recreational facilities off site. Given that the Campus would allocate 244 acres to athletics, recreation and open space uses land uses, the campus population at full development would be adequately served. The UC Merced Campus, including the UCM 2020 Project, would not result in demand for offsite recreational facilities. The UC Merced Campus also would not trigger the construction of new parks or expansion of existing parks in areas outside the Campus and University Community lands because the University Community has been designed to absorb the growth associated with the campus and includes an adequate amount of park acreage to serve the population that would reside in the community. Therefore, the Campus, including the UCM 2020 Project, would result in less than significant impacts related to park demand and the construction of new parks or expansion of existing parks off site.

However, the 2009 UCM LRDP EIS/EIR concluded that construction of the UC Merced campus, including the UCM 2020 Project, of which the proposed Solar PV project is a part, could accelerate the physical deterioration of the park facilities and contribute to the need for new park facilities. While the impact would be potentially

significant, 2009 UCM LRDP EIS/EIR Mitigation Measures are proposed to reduce this impact to a less than significant level.

e) Other public facilities?

The 2009 UCM LRDP EIS/EIR concluded that construction of the UC Merced campus, including the UCM 2020 Project, of which the proposed Solar PV project is a part, would not substantially increase demand for library services in Merced County. The proposed campus would meet the need for library services for the campus population. Therefore, impacts on the Merced County library system associated with development of the Campus, including the UCM 2020 Project, would be less than significant.

f) Create other public service impacts?

The 2009 UCM LRDP EIS/EIR concluded that construction of the UC Merced campus, including the UCM 2020 Project, of which the proposed Solar PV project is a part, would create no other public service impacts.

Describe any minor changes to the project since earlier environmental analysis

This Addendum takes into consideration the minor modifications to the description of the proposed Solar PV Project provided in Volume 3 of the 2009 UCM LRDP EIS/EIR. The project changes consist of an increased in size from approximately 8 to 10 acres; modified project boundaries beyond the UCM 2020 Project boundary; type of visual screening used; and a technical correction regarding the amount of energy the project would generate (see Section 4.4 for a broader discussion of minor changes in the proposed project).

Describe how the minor project changes affect the earlier environmental analysis

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:

a) Fire protection?

The minor changes to the proposed Solar PV project (increased size from 8 to 10 acres; modified project boundaries beyond the UCM 2020 Project boundary; type of visual screening used; and a technical correction regarding the amount of energy the project would generate) would not result in new or substantially worse public services impacts involving substantial adverse physical impacts associated with the provision or need of new or physically altered fire protection facilities, the construction of which could cause significant environmental impacts beyond what was analyzed in the 2009 UCM LRDP EIS/EIR.

The increased size of the Solar PV project site would not substantially increase the potential effects of the adverse physical impacts associated with the provision or need of new or physically altered fire protection facilities, the construction of which could cause significant environmental impacts because, while a greater amount of surface area would be developed with solar PV arrays, the project as amended, would continue to be developed on campus lands which are contemplated to be served by the City of Merced Fire Department through the construction of a new station of which the environmental impacts of this future project will be evaluated and mitigated by the City of Merced in conjunction with the approval of the new fire station's development. The expansion of the Project site will not increase the need for additional fire protection beyond what was analyzed as part of the UCM 2020 Project (EIS/EIR Volume 3) and urbanization development of the entire campus (EIS/EIR Volume 1).

The change in visual screening and the technical correction to the amount of energy that the proposed project would generate does not have any potential to substantially increase the adverse physical impacts associated with the provision or need of new or physically altered fire protection facilities, the construction of which could cause significant environmental impacts.

In conclusion, the potential environmental effects of the proposed project were adequately addressed in the 2009 UCM LRDP EIS/EIR.

b) Police protection?

The minor changes to the proposed Solar PV project (increased size from 8 to 10 acres; modified project boundaries beyond the UCM 2020 Project boundary; type of visual screening used; and a technical correction regarding the amount of energy the project would generate) would not result in new or substantially worse public services impacts involving substantial adverse physical impacts associated with the provision or need of new or physically altered police protection facilities, the construction of which could cause significant environmental impacts beyond what was analyzed in the 2009 UCM LRDP EIS/EIR.

The increased size of the Solar PV project site would not substantially increase the potential effects of the adverse physical impacts associated with the provision or need of new or physically altered police protection facilities, the construction of which could cause significant environmental impacts because, while a greater amount of surface area would be developed with solar PV arrays, the project as amended, would continue to be developed on campus lands of which includes adequate land for the expansion of the Campus police facility and where the environmental consequences of developing such facilities are evaluated and mitigated to the extent feasible in the UC Merced Project Draft EIS/EIR. The expansion of the Project site will not increase the need for police protection beyond what was analyzed as part of the UCM 2020 Project (EIS/EIR Volume 3) and urbanization development of the entire campus (EIS/EIR Volume 1).

The change in visual screening and the technical correction to the amount of energy that the proposed project would generate does not have any potential to substantially increase the adverse physical impacts associated with the provision or need of new or physically altered police protection facilities, the construction of which could cause significant environmental impacts.

In conclusion, the potential environmental effects of the proposed project were adequately addressed in the 2009 UCM LRDP EIS/EIR.

c) Schools?

The minor changes to the proposed Solar PV project (increased size from 8 to 10 acres; modified project boundaries beyond the UCM 2020 Project boundary; type of visual screening used; and a technical correction regarding the amount of energy the project would generate) would not result in new or substantially worse public services impacts involving substantial adverse physical impacts associated with the provision or need of new or physically altered school facilities, the construction of which could cause significant environmental impacts beyond what was analyzed in the 2009 UCM LRDP EIS/EIR.

The increased size of the Solar PV project site would not substantially increase the potential effects of the adverse physical impacts associated with the provision or need of new or physically altered school facilities, the construction of which could cause significant environmental impacts because, while a greater amount of surface area would be developed with solar PV arrays, the project as amended, would not house, employ or be directly associated to a population requiring school facilities. As such, the expansion of the Project site will not increase the need for additional school facilities beyond what was analyzed as part of the UCM 2020 Project (EIS/EIR Volume 3) and urbanization development of the entire campus (EIS/EIR Volume 1).

The change in visual screening and the technical correction to the amount of energy that the proposed project would generate does not have any potential to substantially increase the adverse physical impacts associated with the provision of new or physically altered school facilities, the construction of which could cause significant environmental impacts.

In conclusion, the potential environmental effects of the proposed project were adequately addressed in the 2009 UCM LRDP EIS/EIR.

d) Parks?

The minor changes to the proposed Solar PV project (increased size from 8 to 10 acres; modified project boundaries beyond the UCM 2020 Project boundary; type of visual screening used; and a technical correction regarding the amount of energy the project would generate) would not result in new or substantially worse public services

impacts involving substantial adverse physical impacts associated with the provision or need of new or physically altered park facilities, the construction of which could cause significant environmental impacts beyond what was analyzed in the 2009 UCM LRDP EIS/EIR.

The increased size of the Solar PV project site would not substantially increase the potential effects of the adverse physical impacts associated with the provision or need of new or physically altered park facilities, the construction of which could cause significant environmental impacts because, while a greater amount of surface area would be developed with solar PV arrays, the project as amended, would not house, employ or be directly associated to a population requiring park facilities. As such, the expansion of the Project site will not increase the need for additional park facilities beyond what was analyzed as part of the UCM 2020 Project (EIS/EIR Volume 3) and urbanization development of the entire campus (EIS/EIR Volume 1).

The change in visual screening and the technical correction to the amount of energy that the proposed project would generate does not have any potential to substantially increase the adverse physical impacts associated with the provision of new or physically altered park facilities, the construction of which could cause significant environmental impacts.

In conclusion, the potential environmental effects of the proposed project were adequately addressed in the 2009 UCM LRDP EIS/EIR.

e) Other public facilities?

The minor changes to the proposed Solar PV project (increased size from 8 to 10 acres; modified project boundaries beyond the UCM 2020 Project boundary; type of visual screening used; and a technical correction regarding the amount of energy the project would generate) would not result in new or substantially worse public services impacts involving substantial adverse physical impacts associated with the provision or need of library facilities, the construction of which could cause significant environmental impacts beyond what was analyzed in the 2009 UCM LRDP EIS/EIR.

The increased size of the Solar PV project site would not substantially increase the potential effects of the adverse physical impacts associated with the provision or need of new or physically altered other public facilities, the construction of which could cause significant environmental impacts because, while a greater amount of surface area would be developed with solar PV arrays, the project as amended, would not house, employ or be directly associated to a population requiring library facilities. As such, the expansion of the Project site will not increase the need for additional library facilities beyond what was analyzed as part of the UCM 2020 Project (EIS/EIR Volume 3) and urbanization development of the entire campus (EIS/EIR Volume 1).

The change in visual screening and the technical correction to the amount of energy that the proposed project would generate does not have any potential to substantially

increase the adverse physical impacts associated with the provision of new or physically altered library facilities, the construction of which could cause significant environmental impacts.

In conclusion, the potential environmental effects of the proposed project were adequately addressed in the 2009 UCM LRDP EIS/EIR.

f) Create other public service impacts?

The minor changes to the proposed Solar PV project (increased size from 8 to 10 acres; modified project boundaries beyond the UCM 2020 Project boundary; type of visual screening used; and a technical correction regarding the amount of energy the project would generate) would not result in new or substantially worse public services impacts involving other public service impacts beyond what was analyzed in the 2009 UCM LRDP EIS/EIR.

The increased size of the Solar PV project site would not substantially increase the potential effects of the adverse physical impacts associated with other public services because, the 2009 UCM LRDP EIS/EIR concluded that construction of the UC Merced campus, including the UCM 2020 Project, of which the proposed Solar PV project is a part, would create no other public service impacts. The expansion of the Project site will not increase the potential to create other service impacts beyond what was analyzed as part of the UCM 2020 Project (EIS/EIR Volume 3) and urbanization development of the entire campus (EIS/EIR Volume 1).

The change in visual screening and the technical correction to the amount of energy that the proposed project would generate does not have any potential to substantially increase the adverse physical impacts associated with the creation of other service impacts.

In conclusion, the potential environmental effects of the proposed project were adequately addressed in the 2009 UCM LRDP EIS/EIR.

Issues	Additional Project-level Impact Analysis Required	Project Impact Adequately Addressed in Earlier Environmental Document
12. RECREATION --		
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☒
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?	☐	☒

Describe relevant elements of project

County-owned recreational facilities are managed by the Merced County Parks and Recreation Office. County recreational facilities near the project site include Lake Yosemite Regional Park which is approximately 0.5 mile to the northeast. The City of Merced Parks and Community Services Department also maintains park and recreational facilities within the area of the Project site. Nearby community and neighborhood parks include Fahrens Park, Santa Fe Park, Rahilly Park, and Burbank Park.

Describe how project was analyzed in earlier environmental document

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?

The 2009 UCM LRDP EIS/EIR concluded that construction of the UC Merced campus, including the UCM 2020 Project, of which the proposed Solar PV project is a part, would result in a less than significant impact associated with the construction of new recreational facilities off site. Given that the Campus would allocate 244 acres to athletics, recreation and open space uses land uses, the campus population at full development would be adequately served. The UC Merced Campus, including the UCM 2020 Project, would not result in demand for offsite recreational facilities. The UC Merced Campus also would not trigger the construction of new parks or expansion of existing parks in areas outside the Campus and University Community lands because the University Community has been designed to absorb the growth associated with the campus and includes an adequate amount of park acreage to serve the population that would reside in the community. Therefore, the Campus, including the UCM 2020 Project, would result

in less than significant impacts related to park demand and the construction of new parks or expansion of existing parks off site.

However, the 2009 UCM LRDP EIS/EIR concluded that construction of the UC Merced campus, including the UCM 2020 Project, of which the proposed Solar PV project is a part, could accelerate the physical deterioration of the Lake Yosemite Park facility. While the impact would be potentially significant, 2009 UCM LRDP EIS/EIR Mitigation Measures are proposed to reduce this impact to a less than significant level.

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?

The 2009 UCM LRDP EIS/EIR concluded that construction of the UC Merced campus, including the UCM 2020 Project, of which the proposed Solar PV project is a part, would assign 140 acres for athletic and recreational facilities. In addition, approximately 104 acres of passive open space uses are planned for the campus. Recreational facilities and open space that would be developed on the campus would adequately serve the needs of the residential population, as well as the daytime population of the campus. The environmental impacts from the development of all Campus lands, including those lands that would be developed with recreational facilities and open space, are addressed in the other 2009 UCM LRDP EIS/EIR and mitigated to the extent feasible by the mitigation measures included in the 2009 UCM LRDP EIS/EIR document. The impact would be less than significant.

Describe any minor changes to the project since earlier environmental analysis

This Addendum takes into consideration the minor modifications to the description of the proposed Solar PV Project provided in Volume 3 of the 2009 UCM LRDP EIS/EIR. The project changes consist of an increased in size from approximately 8 to 10 acres; modified project boundaries beyond the UCM 2020 Project boundary; type of visual screening used; and a technical correction regarding the amount of energy the project would generate (see Section 4.4 for a broader discussion of minor changes in the proposed project).

Describe how the minor project changes affect the earlier environmental analysis

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?

The minor changes to the proposed Solar PV project (increased size from 8 to 10 acres; modified project boundaries beyond the UCM 2020 Project boundary; type of visual screening used; and a technical correction regarding the amount of energy the project would generate) would not result in new or substantially worse recreation impacts involving increasing 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 beyond what was analyzed in the 2009 UCM LRDP EIS/EIR.

The increased size of the Solar PV project site would not substantially increase the potential effects of increasing 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 because, while a greater amount of surface area would be developed with solar PV arrays, the project as amended, would not house, employ or be directly associated to a population requiring park facilities. As such, the expansion of the Project site will not increase the need for additional park facilities beyond what was analyzed as part of the UCM 2020 Project (EIS/EIR Volume 3) and urbanization development of the entire campus (EIS/EIR Volume 1).

The change in visual screening and the technical correction to the amount of energy that the proposed project would generate does not have any potential to result in increasing 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.

In conclusion, the potential environmental effects of the proposed project were adequately addressed in the 2009 UCM LRDP EIS/EIR.

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?

The minor changes to the proposed Solar PV project (increased size from 8 to 10 acres; modified project boundaries beyond the UCM 2020 Project boundary; type of visual screening used; and a technical correction regarding the amount of energy the project would generate) would not result in new or substantially worse recreation impacts involving the inclusion of recreational facilities or requiring the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment beyond what was analyzed in the 2009 UCM LRDP EIS/EIR.

The increased size of the Solar PV project site would not substantially increase the potential effects of including recreational facilities or requiring the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment because, while a greater amount of surface area would be developed with solar PV arrays, the project as amended, would not house, employ or be directly associated to a population requiring recreational facilities. As such, the expansion of the Project site will not increase the need for additional recreational facilities beyond what was analyzed as part of the UCM 2020 Project (EIS/EIR Volume 3) and urbanization development of the entire campus (EIS/EIR Volume 1).

The change in visual screening and the technical correction to the amount of energy that the proposed project would generate does not have any potential to result in the inclusion of recreational facilities or requiring the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment.

In conclusion, the potential environmental effects of the proposed project were adequately addressed in the 2009 UCM LRDP EIS/EIR.

Issues	Additional Project-level Impact Analysis Required	Project Impact Adequately Addressed in Earlier Environmental Document
13. 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)?	☐	☒
b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?	☐	☒
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?	☐	☒
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☒
e) Result in inadequate emergency access?	☐	☒
f) Result in inadequate parking capacity?	☐	☒
g) Conflict with applicable policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	☐	☒

Describe relevant elements of project

The Project site can be accessed by Lake Road. Lake Road is a two lane north south road extending from Yosemite Avenue to its northern terminus at Lake Yosemite. Additionally, several major roadways are located within the Project vicinity. Bellevue Road is a two lane east west road extending from Fox Road to its eastern terminus at Lake Road adjacent to the project

site. Yosemite Avenue is a two lane east west road extending from R Street to its eastern terminus at Arboleda Drive. Campus Parkway is a planned north south, divided four lane roadway that is approved for construction between Highway 99 and Yosemite Avenue. The nearest intersection to the Project site is at Lake Road and Bellevue Avenue, approximately .75 miles northwest of the Project site.

During construction of the Project site, equipment trucks, tractor trailers and personal vehicles will be accessing the site. Construction is planned to take place during a 3 month time period, commencing in June of 2009. During the operation of the Project facility, intermittent service/repair vehicles will access the sight to perform service related work. This may include tractor trailers accessing the site with replacement components or service vehicles such as full size utility trucks. These activities will take place on an as needed basis. The facility will not require regularly scheduled visits and will take place no more than two times per month.

Describe how project was analyzed in earlier environmental document

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)?

The 2009 UCM LRDP EIS/EIR concluded that construction of the UC Merced campus, including the UCM 2020 Project, of which the proposed Solar PV project is a part, would cause several local intersections to operate at unacceptable levels and would contribute 1 percent or more to the traffic growth projected for local roadway segments planned to be widened in the future.

While the Campus, including each of the subareas that make up the University Community, would provide either a proportional share of the cost of the improvement based on the project's actual contribution to the impact or would pay traffic impact fees, and while 2009 UCM LRDP EIS/EIR Mitigation Measures TRANS 1A and 1B are proposed to address the Campus/Community's significant impacts on roadway segments and intersections, the full funding and construction of the roadway segment and intersection improvements identified in the mitigation measures above cannot be assured, as it depends on actions by other jurisdictions.

b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?

The 2009 UCM LRDP EIS/EIR concluded that construction of the UC Merced campus, including the UCM 2020 Project, of which the proposed Solar PV project is a part, would result in no LOS impacts on roadway segments within the study area. As discussed in the 2009 UCM LRDP EIS/EIR, the Merced County Association of Governments (MCAG) travel demand model consistent with the 2007 Merced County Regional Transportation Plan (RTP) was used to generate 2030 traffic forecasts for the Campus and associated community. That model assumes that a number of transportation improvements would be in place by 2030. With those transportation improvements included in the model and the assumption that the improved road network would be in place in 2030, a roadway segment level of service (LOS) analysis was

conducted for the Proposed Action which revealed that the traffic resulting from the Proposed Action would result in no LOS impacts on roadway segments within the study area.

Although analytically this evaluation and its results are correct, it does not reveal the full impact of the Proposed Action on the roadway segments because the analysis assumed that all necessary improvements would be built by the time that the full traffic from the Proposed Action is added to the study roadway segments (see "a)" in this section for the results of the revised analysis and Project affects to the 2009 UCM LRDP EIS/EIR environmental analysis).

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?

The 2009 UCM LRDP EIS/EIR concluded that construction of the UC Merced campus, including the UCM 2020 Project, of which the proposed Solar PV project is a part, would not affect air traffic patterns because the project site is not within the land use planning area of a public airport.

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

The 2009 UCM LRDP EIS/EIR concluded that construction of the UC Merced campus, including the UCM 2020 Project, of which the proposed Solar PV project is a part, would be adequately designed to accommodate the traffic demand and would be appropriately sized to support access by emergency response vehicles. This level of design will ensure roadway features are constructed in a manner that minimizes hazards such as sharp curves or dangerous intersections. This impact would be considered less than significant.

Regarding incompatible land uses, see Land Use and Planning Section "d)" for discussion on project related affects to 2009 UCM LRDP EIS/EIR environmental analysis.

e) Result in inadequate emergency access?

The 2009 UCM LRDP EIS/EIR concluded that construction of the UC Merced campus, including the UCM 2020 Project, of which the proposed Solar PV project is a part, would be designed to minimize reliance on vehicles while maintaining high levels of accessibility and personal mobility. Streets within the Campus would be designed to accommodate a mix of travel modes. Implementation of the 2009 LRDP policies would ensure the street system would provide adequate connectivity and capacity, and would be implemented in a timely manner relative to the pace of development. The Campus street system would be adequately designed to accommodate the traffic demand and would be appropriately sized to support access by emergency response vehicles. This impact would be considered less than significant.

f) Result in inadequate parking capacity?

The 2009 UCM LRDP EIS/EIR concluded that construction of the UC Merced campus, including the UCM 2020 Project, of which the proposed Solar PV project is a part, could

generate off site "spill over" parking demand if parking supply is not provided at a pace commensurate with student, faculty, and staff growth. The 2009 Long Range Development Plan (LRDP) envisions providing a parking supply to meet campus demand for a targeted 90 percent peak occupancy level. LRDP policies provide for development of a parking supply/demand Master Plan for the campus, and for effective management of parking supply to meet changing demand. With implementation of the 2009 LRDP policies, impacts of campus development, including the UCM 2020 Project, related to parking would be less than significant.

g) Conflict with applicable policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?

The 2009 UCM LRDP EIS/EIR concluded that construction of the UC Merced campus, including the UCM 2020 Project, of which the proposed Solar PV project is a part, would provide for a campus street system designed to meet the travel time and maneuvering requirements for transit vehicles, including appropriately sized travel lanes, bus stops and pull outs, and connectivity to key destinations. LRDP policies provide for high transit levels of service and operating efficiency, integration of regional campus transit services, and broad based user fee program for the campus that has demonstrated effective in other university environments.

The Campus already provides bus services connecting the campus to downtown Merced, Merced College, and the Castle research facilities. Additionally, transit service to the Campus is envisioned in the most recent Short Range Transit Plan by Merced County Transit. Implementation of 2009 UCM LRDP EIS/EIR program level Mitigation Measure TRANS 1A would provide for continued support for transit services as the campus grows.

LRDP policies also provide for ongoing coordination with neighboring jurisdictions and regional agencies to manage traffic growth and coordinate timely implementation of bicycle and pedestrian systems and services. The policies contained in the Merced County Regional Commuter Bicycle Plan and in the Merced and Atwater Bicycle Plan also support the improvements of bikeway connections to the Campus. This impact would be less than significant.

Describe any minor changes to the project since earlier environmental analysis

This Addendum takes into consideration the minor modifications to the description of the proposed Solar PV Project provided in Volume 3 of the 2009 UCM LRDP EIS/EIR. The project changes consist of an increased in size from approximately 8 to 10 acres; modified project boundaries beyond the UCM 2020 Project boundary; type of visual screening used; and a technical correction regarding the amount of energy the project would generate (see Section 4.4 for a broader discussion of minor changes in the proposed project).

Describe how the minor project changes affect the earlier environmental analysis

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)?

The minor changes to the proposed Solar PV project (increased size from 8 to 10 acres; modified project boundaries beyond the UCM 2020 Project boundary; type of visual screening used; and a technical correction regarding the amount of energy the project would generate) would not result in new or substantially worse transportation/traffic impacts causing an increase in traffic, which is substantial in relation to the existing traffic load and capacity of the street system beyond what was analyzed in the 2009 UCM LRDP EIS/EIR.

The increased size of the Solar PV project site would not substantially increase the potential effects to cause an increase in traffic, which is substantial in relation to the existing traffic load and capacity of the street system because, while a greater amount of surface area would be developed with solar PV arrays, the project as amended, does not include ongoing vehicular access to the Project site in the daily operation of the Solar PV facility which is not substantially different than what was analyzed as part of the UCM 2020 Project (EIS/EIR Volume 3) and urbanization development of the entire campus (EIS/EIR Volume 1).

The change in visual screening and the technical correction to the amount of energy that the proposed project would generate does not have any potential to result in causing an increase in traffic, which is substantial in relation to the existing traffic load and capacity of the street system.

In conclusion, the potential environmental effects of the proposed project were adequately addressed in the 2009 UCM LRDP EIS/EIR.

b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?

The minor changes to the proposed Solar PV project (increased size from 8 to 10 acres; modified project boundaries beyond the UCM 2020 Project boundary; type of visual screening used; and a technical correction regarding the amount of energy the project would generate) would not result in new or substantially worse transportation/traffic impacts that exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways beyond what was analyzed in the 2009 UCM LRDP EIS/EIR.

The increased size of the Solar PV project site would not substantially increase the potential effects to exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways because, while a greater amount of surface area would be developed with solar PV arrays, the project as amended, does not include ongoing vehicular access to the Project site in the daily operation of the Solar PV facility which is not substantially different than what was analyzed as part of the UCM 2020

Project (EIS/EIR Volume 3) and urbanization development of the entire campus (EIS/EIR Volume 1).

The change in visual screening and the technical correction to the amount of energy that the proposed project would generate does not have any potential to exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways.

In conclusion, the potential environmental effects of the proposed project were adequately addressed in the 2009 UCM LRDP EIS/EIR.

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?

The minor changes to the proposed Solar PV project (increased size from 8 to 10 acres; modified project boundaries beyond the UCM 2020 Project boundary; type of visual screening used; and a technical correction regarding the amount of energy the project would generate) would not result in new or substantially worse transportation/traffic impacts resulting 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 beyond what was analyzed in the 2009 UCM LRDP EIS/EIR.

The increased size of the Solar PV project site would not substantially increase the potential effects resulting 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 because, while a greater amount of surface area would be developed with solar PV arrays, the project as amended, continues not to be located within the land use planning area of a public airport, which is not substantially different than what was analyzed as part of the UCM 2020 Project (EIS/EIR Volume 3) and urbanization development of the entire campus (EIS/EIR Volume 1).

The change in visual screening and the technical correction to the amount of energy that the proposed project would generate does not have any potential to 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.

In conclusion, the potential environmental effects of the proposed project were adequately addressed in the 2009 UCM LRDP EIS/EIR.

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

The minor changes to the proposed Solar PV project (increased size from 8 to 10 acres; modified project boundaries beyond the UCM 2020 Project boundary; type of visual screening used; and a technical correction regarding the amount of energy the project would generate) would not result in new or substantially worse transportation/traffic impacts that would substantially increase hazards due to a design feature or incompatible uses beyond what was analyzed in the 2009 UCM LRDP EIS/EIR.

The increased size of the Solar PV project site would not substantially increase the potential effects that would substantially increase hazards due to a design feature or incompatible uses because, while a greater amount of surface area would be developed with solar PV arrays, the project as amended, does not include permanent on or off-site roadway infrastructure improvements nor does it include a change in uses different than what was analyzed as part of the UCM 2020 Project (EIS/EIR Volume 3) and urbanization development of the entire campus (EIS/EIR Volume 1).

The change in visual screening and the technical correction to the amount of energy that the proposed project would generate does not have any potential to result substantially increase hazards due to a design feature or incompatible uses.

In conclusion, the potential environmental effects of the proposed project were adequately addressed in the 2009 UCM LRDP EIS/EIR.

e) Result in inadequate emergency access?

The minor changes to the proposed Solar PV project (increased size from 8 to 10 acres; modified project boundaries beyond the UCM 2020 Project boundary; type of visual screening used; and a technical correction regarding the amount of energy the project would generate) would not result in new or substantially worse transportation/traffic impacts resulting in inadequate emergency access beyond what was analyzed in the 2009 UCM LRDP EIS/EIR.

The increased size of the Solar PV project site would not substantially increase the potential effects resulting in inadequate emergency access because, while a greater amount of surface area would be developed with solar PV arrays, the project as amended, will be developed with consideration to the design of the proposed Campus street system which is not substantially different than what was analyzed as part of the UCM 2020 Project (EIS/EIR Volume 3) and urbanization development of the entire campus (EIS/EIR Volume 1).

The change in visual screening and the technical correction to the amount of energy that the proposed project would generate does not have any potential to result in inadequate emergency access.

In conclusion, the potential environmental effects of the proposed project were adequately addressed in the 2009 UCM LRDP EIS/EIR.

f) Result in inadequate parking capacity?

The minor changes to the proposed Solar PV project (increased size from 8 to 10 acres; modified project boundaries beyond the UCM 2020 Project boundary; type of visual screening used; and a technical correction regarding the amount of energy the project would generate) would not result in new or substantially worse transportation/traffic impacts resulting in inadequate parking capacity beyond what was analyzed in the 2009 UCM LRDP EIS/EIR.

The increased size of the Solar PV project site would not substantially increase the potential effects resulting in inadequate parking capacity because, while a greater amount of surface area

would be developed with solar PV arrays, the project as amended, does not include substantial ongoing vehicular access to the Project site in the daily operation of the Solar PV facility which is not substantially different than what was analyzed as part of the UCM 2020 Project (EIS/EIR Volume 3) and urbanization development of the entire campus (EIS/EIR Volume 1).

The change in visual screening and the technical correction to the amount of energy that the proposed project would generate does not have any potential to result in inadequate parking capacity.

In conclusion, the potential environmental effects of the proposed project were adequately addressed in the 2009 UCM LRDP EIS/EIR.

g) Conflict with applicable policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?

The minor changes to the proposed Solar PV project (increased size from 8 to 10 acres; modified project boundaries beyond the UCM 2020 Project boundary; type of visual screening used; and a technical correction regarding the amount of energy the project would generate) would not result in new or substantially worse transportation/traffic impacts conflicting with applicable policies, plans, or programs supporting alternative transportation beyond what was analyzed in the 2009 UCM LRDP EIS/EIR.

The increased size of the Solar PV project site would not substantially increase the potential effects resulting in a conflict with applicable policies, plans, or programs supporting alternative transportation because, while a greater amount of surface area would be developed with solar PV arrays, the project as amended, will be developed within the planned Campus street system that supports alternative transportation modes which is not substantially different than what was analyzed as part of the UCM 2020 Project (EIS/EIR Volume 3) and urbanization development of the entire campus (EIS/EIR Volume 1).

The change in visual screening and the technical correction to the amount of energy that the proposed project would generate does not have any potential to conflict with applicable policies, plans, or programs supporting alternative transportation.

In conclusion, the potential environmental effects of the proposed project were adequately addressed in the 2009 UCM LRDP EIS/EIR.

Issues	Additional Project-level Impact Analysis Required	Project Impact Adequately Addressed in Earlier Environmental Document
14. UTILITIES AND SERVICE SYSTEMS -- Would the project:		
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☒
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?	☐	☒
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☒
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☒
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?	☐	☒
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☒
g) Comply with applicable federal, state, and local statutes and regulations related to solid waste?	☐	☒
h) Create other utility and service system impacts?	☐	☒

Describe relevant elements of project

The proposed project is a utility provision facility capable of generating approximately 1.12 mw of electricity utilizing solar technologies. No other type of facilities will be located on the Project site. The Project does not include the provision of potable or wastewater facilities. No solid waste will be generated as a result of the operation of the facility. New construction associated with the development of the Project site would introduce new impervious surfaces that may generate slightly more stormwater runoff than the volume that is generated under existing conditions. Implementation of the proposed Project would also require off-site development of electric transmission lines.

Describe how project was analyzed in earlier environmental document

a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?

The 2009 UCM LRDP EIS/EIR concluded that construction of the UC Merced campus, including the UCM 2020 Project, of which the proposed Solar PV project is a part, would discharge wastewater to and be treated by the City of Merced's waste water treatment plant (WWTP). The City of Merced WWTP discharges treated effluent under a waste discharge requirement order (WDR) from the RWQCB. The WDR establishes limits on the volume and concentrations of constituents in the treated effluent that is discharged by the WWTP.

Additionally, the Campus Department of Environmental Health and Safety (EH&S) has developed and implemented comprehensive programs to handle these wastes on the campus. Because there would be adequate treatment capacity, and because of the Campus' EH&S program that controls drain discharge of hazardous materials, the discharge of wastewater from the Campus and University Community would not result in a violation of the City's WWTP waste discharge requirements.

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?

The 2009 UCM LRDP EIS/EIR concluded that construction of the UC Merced campus, including the UCM 2020 Project, of which the proposed Solar PV project is a part, would generate a demand for 1,151 afy of potable water for indoor uses at full development. The fire flow needs of the UCM 2020 Project would be met by the existing 16 inch water supply line located within the roadway alignment of Bellevue Road and by the on campus well. It is anticipated that this supply line and on campus well would sufficiently serve the UCM 2020 Project. Therefore, no improvements to this water line or an additional water line would be needed and the impacts of the proposed UCM 2020 Project related to water infrastructure and conveyance would be less than significant.

Wastewater generated on the UCM 2020 Project site would require collection and conveyance to an on or offsite wastewater treatment plant for treatment and disposal. The City has committed

to provide wastewater treatment service to the campus, including the UCM 2020 Project site. Wastewater flows associated with development of the UCM 2020 Project could be accommodated within both the existing and approved capacity of the City of Merced Waste Water Treatment Plant (WWTP). No further improvements would be required. Therefore, there would be no impacts associated with the provision of expanded treatment plant capacity.

c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

The 2009 UCM LRDP EIS/EIR concluded that construction of the UC Merced campus, including the UCM 2020 Project, of which the proposed Solar PV project is a part, would be been designed to detain stormwater flows. The stormwater detention facilities included in the development of the campus would control stormwater runoff before discharge into Fairfield Canal and Cottonwood Creek, and therefore there would be no project related flooding impacts in downstream areas. The impacts of constructing these facilities have been analyzed in the 2009 UCM LRDP EIS/EIR.

d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?

The 2009 UCM LRDP EIS/EIR concluded that construction of the UC Merced campus, including the UCM 2020 Project, of which the proposed Solar PV project is a part, would demand at full buildout approximately 2,228 acre-feet of water per year. The total demand of acre feet per year associated with the Campus is well below the 8,073 acre-feet per year by 2025 amount anticipated in the 2005 Urban Water Management Plan (UWMP). Therefore, water demands associated with the combined development of the Campus and University Community would be accounted for in the approved 2005 UWMP and the impact to water resources would be less than significant.

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?

The 2009 UCM LRDP EIS/EIR concluded that construction of the UC Merced campus, including the UCM 2020 Project, of which the proposed Solar PV project is a part, would require collection and conveyance to an on or off site wastewater treatment plant for treatment and disposal. The City has committed to provide wastewater treatment service to the campus, including the UCM 2020 Project site. Wastewater flows associated with development of the UCM 2020 Project could be accommodated within both the existing and approved capacity of the City of Merced Waste Water Treatment Plant (WWTP). No further improvements would be required. Therefore, there would be no impacts associated with the provision of expanded treatment plant capacity.

f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?

The 2009 UCM LRDP EIS/EIR concluded that construction of the UC Merced campus, including the UCM 2020 Project, of which the proposed Solar PV project is a part, would generate solid waste that would not require expansion of the regional landfill. The University of California adopted a Policy on Sustainable Practices, which sets waste diversion goals of 75 percent by June 2012 and zero waste by 2020 for UC campuses. Therefore, the Campus, including the UCM 2020 Project, would not generate solid waste that would substantially affect the capacity of the Highway 59 Landfill.

g) Comply with applicable federal, state, and local statutes and regulations related to solid waste?

The 2009 UCM LRDP EIS/EIR concluded that construction of the UC Merced campus, including the UCM 2020 Project, of which the proposed Solar PV project is a part, would handle solid waste compliance with the UC Policy on Sustainable Practices which encourages recycling of construction waste. The Campus has also set as a goal to achieve zero landfill waste by 2020. This involves minimizing the generation of solid waste on campus through green packaging purchase requirements and other initiatives to reduce and recycle waste, while undertaking an aggressive recycling program for construction and other campus waste streams.

h) Create other utility and service system impacts?

The 2009 UCM LRDP EIS/EIR concluded that construction of the UC Merced campus, including the UCM 2020 Project, of which the proposed Solar PV project is a part, would have less than significant environmental impacts from the construction of offsite utilities, including gas and electrical lines.

Describe any minor changes to the project since earlier environmental analysis

This Addendum takes into consideration the minor modifications to the description of the proposed Solar PV Project provided in Volume 3 of the 2009 UCM LRDP EIS/EIR. The project changes consist of an increased in size from approximately 8 to 10 acres; modified project boundaries beyond the UCM 2020 Project boundary; type of visual screening used; and a technical correction regarding the amount of energy the project would generate (see Section 4.4 for a broader discussion of minor changes in the proposed project).

Describe how the minor project changes affect the earlier environmental analysis

a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?

The minor changes to the proposed Solar PV project (increased size from 8 to 10 acres; modified project boundaries beyond the UCM 2020 Project boundary; type of visual screening used; and a technical correction regarding the amount of energy the project would generate) would not result in new or substantially worse utilities and service systems impacts involving the exceedance of

wastewater treatment requirements of the applicable Regional Water Quality Control Board beyond what was analyzed in the 2009 UCM LRDP EIS/EIR.

The increased size of the Solar PV project site would not substantially increase the potential effects in the exceedance of wastewater treatment requirements of the applicable Regional Water Quality Control Board because, while a greater amount of surface area would be developed with solar PV arrays, the project as amended, would continue to be developed without the need of wastewater infrastructure which is not substantially different than what was analyzed as part of the UCM 2020 Project (EIS/EIR Volume 3) and urbanization development of the entire campus (EIS/EIR Volume 1).

The change in visual screening and the technical correction to the amount of energy that the proposed project would generate does not have any potential to result in exceeding wastewater treatment requirements of the applicable Regional Water Quality Control Board.

In conclusion, the potential environmental effects of the proposed project were adequately addressed in the 2009 UCM LRDP EIS/EIR.

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?

The minor changes to the proposed Solar PV project (increased size from 8 to 10 acres; modified project boundaries beyond the UCM 2020 Project boundary; type of visual screening used; and a technical correction regarding the amount of energy the project would generate) would not result in new or substantially worse utilities and service systems impacts that would 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 beyond what was analyzed in the 2009 UCM LRDP EIS/EIR.

The increased size of the Solar PV project site would not substantially increase the potential effects that would 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 because, while a greater amount of surface area would be developed with solar PV arrays, the project as amended, would continue to be developed without the need of water or wastewater infrastructure which is not substantially different than what was analyzed as part of the UCM 2020 Project (EIS/EIR Volume 3) and urbanization development of the entire campus (EIS/EIR Volume 1).

The change in visual screening and the technical correction to the amount of energy that the proposed project would generate does not have any potential to 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.

In conclusion, the potential environmental effects of the proposed project were adequately addressed in the 2009 UCM LRDP EIS/EIR.

c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

The minor changes to the proposed Solar PV project (increased size from 8 to 10 acres; modified project boundaries beyond the UCM 2020 Project boundary; type of visual screening used; and a technical correction regarding the amount of energy the project would generate) would not result in new or substantially worse utilities and service systems impacts that would require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects beyond what was analyzed in the 2009 UCM LRDP EIS/EIR.

The increased size of the Solar PV project site would not substantially increase the potential effects that would require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects because, while a greater amount of surface area would be developed with solar PV arrays, the project as amended, would continue to be developed in consideration with the planned construction of new campus storm water drainage facilities which is not substantially different than what was analyzed as part of the UCM 2020 Project (EIS/EIR Volume 3) and urbanization development of the entire campus (EIS/EIR Volume 1).

The change in visual screening and the technical correction to the amount of energy that the proposed project would generate does not have any potential to require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.

In conclusion, the potential environmental effects of the proposed project were adequately addressed in the 2009 UCM LRDP EIS/EIR.

d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?

The minor changes to the proposed Solar PV project (increased size from 8 to 10 acres; modified project boundaries beyond the UCM 2020 Project boundary; type of visual screening used; and a technical correction regarding the amount of energy the project would generate) would not result in new or substantially worse utilities and service systems impacts involving sufficient water supplies available to serve the project from existing entitlements and resources beyond what was analyzed in the 2009 UCM LRDP EIS/EIR.

The increased size of the Solar PV project site would not substantially increase the potential effects involving sufficient water supplies available to serve the project from existing entitlements and resources because, while a greater amount of surface area would be developed with solar PV arrays, the project as amended, would continue to be developed without the use of water which is not substantially different than what was analyzed as part of the UCM 2020 Project (EIS/EIR Volume 3) and urbanization development of the entire campus (EIS/EIR Volume 1).

The change in visual screening and the technical correction to the amount of energy that the proposed project would generate does not have any potential to require water supplies from existing entitlements and resources.

In conclusion, the potential environmental effects of the proposed project were adequately addressed in the 2009 UCM LRDP EIS/EIR.

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?

The minor changes to the proposed Solar PV project (increased size from 8 to 10 acres; modified project boundaries beyond the UCM 2020 Project boundary; type of visual screening used; and a technical correction regarding the amount of energy the project would generate) would not result in new or substantially worse utilities and service systems impacts that would result in a determination by the wastewater treatment provider, which serves or may serve the project that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments beyond what was analyzed in the 2009 UCM LRDP EIS/EIR.

The increased size of the Solar PV project site would not substantially increase the potential effects that would result in a determination by the wastewater treatment provider, which serves or may serve the project that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments because, while a greater amount of surface area would be developed with solar PV arrays, the project as amended, would continue to be developed without the need of wastewater infrastructure which is not substantially different than what was analyzed as part of the UCM 2020 Project (EIS/EIR Volume 3) and urbanization development of the entire campus (EIS/EIR Volume 1).

The change in visual screening and the technical correction to the amount of energy that the proposed project would generate does not have any potential that would result in a determination by the wastewater treatment provider, which serves or may serve the project that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments.

In conclusion, the potential environmental effects of the proposed project were adequately addressed in the 2009 UCM LRDP EIS/EIR.

f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?

The minor changes to the proposed Solar PV project (increased size from 8 to 10 acres; modified project boundaries beyond the UCM 2020 Project boundary; type of visual screening used; and a technical correction regarding the amount of energy the project would generate) would not result in new or substantially worse utilities and service systems impacts that would result in being

served by a landfill with insufficient permitted capacity to accommodate the project's solid waste disposal needs beyond what was analyzed in the 2009 UCM LRDP EIS/EIR.

The increased size of the Solar PV project site would not substantially increase the potential effects of being served by a landfill with insufficient permitted capacity to accommodate the project's solid waste disposal needs because, while a greater amount of surface area would be developed with solar PV arrays, the project as amended, would continue to be operated without producing solid waste, which is not substantially different than what was analyzed as part of the UCM 2020 Project (EIS/EIR Volume 3) and urbanization development of the entire campus (EIS/EIR Volume 1).

The change in visual screening and the technical correction to the amount of energy that the proposed project would generate does not have any potential that would result in the need of being served by a landfill with insufficient permitted capacity to accommodate the project's solid waste disposal needs.

In conclusion, the potential environmental effects of the proposed project were adequately addressed in the 2009 UCM LRDP EIS/EIR.

g) Comply with applicable federal, state, and local statutes and regulations related to solid waste?

The minor changes to the proposed Solar PV project (increased size from 8 to 10 acres; modified project boundaries beyond the UCM 2020 Project boundary; type of visual screening used; and a technical correction regarding the amount of energy the project would generate) would not result in new or substantially worse utilities and service systems impacts that would result in noncompliance with applicable federal, state, and local statutes and regulations related to solid waste beyond what was analyzed in the 2009 UCM LRDP EIS/EIR.

The increased size of the Solar PV project site would not substantially increase the potential effects of noncompliance with applicable federal, state, and local statutes and regulations related to solid waste because, while a greater amount of surface area would be developed with solar PV arrays, the project as amended, would continue to be operated without producing solid waste, which is not substantially different than what was analyzed as part of the UCM 2020 Project (EIS/EIR Volume 3) and urbanization development of the entire campus (EIS/EIR Volume 1).

The change in visual screening and the technical correction to the amount of energy that the proposed project would generate does not have any potential that would result in the inability to comply with applicable federal, state, and local statutes and regulations related to solid waste.

In conclusion, the potential environmental effects of the proposed project were adequately addressed in the 2009 UCM LRDP EIS/EIR.

h) Create other utility and service system impacts?

The minor changes to the proposed Solar PV project (increased size from 8 to 10 acres; modified project boundaries beyond the UCM 2020 Project boundary; type of visual screening used; and a

technical correction regarding the amount of energy the project would generate) would not result in new or substantially worse utilities and service systems impacts involving off-site gas and electric utility lines beyond what was analyzed in the 2009 UCM LRDP EIS/EIR.

The increased size of the Solar PV project site would not substantially increase the potential effects impacts involving offsite gas and electric utility lines because, while a greater amount of surface area would be developed with solar PV arrays, the project as amended, would serve the electrical energy needs of the campus through electrical conduits internal to the Campus and not require gas lines in the operation of the Solar PV facility, which is not substantially different than what was analyzed as part of the UCM 2020 Project (EIS/EIR Volume 3) and urbanization development of the entire campus (EIS/EIR Volume 1).

The change in visual screening and the technical correction to the amount of energy that the proposed project would generate does not have any potential that would result in impacts involving offsite gas and electric utility lines.

In conclusion, the potential environmental effects of the proposed project were adequately addressed in the 2009 UCM LRDP EIS/EIR.

Issues	Additional Project-level Impact Analysis Required	Project Impact Adequately Addressed in Earlier Environmental Document
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☒
b) Does the project have the potential to achieve short-term environmental goals to the disadvantage of long-term environmental goals?	☐	☒
c) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of past, present and	☐	☒

probable future projects)?

d) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly? ☐ ☒

Describe relevant elements of project

See previous Sections relating to Biological and Cultural Resources for a description of the relevant elements of the project.

Describe how project was analyzed in earlier environmental document

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

The 2009 UCM LRDP EIS/EIR concluded that construction of the UC Merced campus, including the UCM 2020 Project, of which the proposed Solar PV project is a part, would include the implementation of the environmental commitments in the Conservation Strategy and Management Plan for Conservation Lands that would avoid, minimize, and compensate for indirect impacts on critical habitat and ensure that critical habitat would not be diminished, thereby reducing this potential impact to a less than significant level.

The 2009 UCM LRDP EIS/EIR also concluded the development of the Campus would not damage or destroy significant historic resources located within the project footprint as none are present within the project impact area and if found, appropriate 2009 UCM LRDP EIS/EIR Mitigation Measures would reduce potential impacts to a less than significant level.

b) Does the project have the potential to achieve short-term environmental goals to the disadvantage of long-term environmental goals?

While this item is not specifically addressed in the 2009 UCM LRDP EIS/EIR, construction of the UC Merced campus, including the UCM 2020 Project, of which the proposed Solar PV project is a part, would achieve long term environmental goals through its commitments in the Conservation Strategy and Management Plan for Conservation Lands. The management plan addresses policies regarding various land uses and management commitments to protect and maintain conservation values consistent with regulatory commitments and requirements for the UCM project and will serve for an extended period, assumed at approximately 20 years. The Conservation Strategy would be designed to provide a comprehensive strategy for the long term conservation of certain species and their habitats in the project region. The development of the Solar PV does not include short-term environmental goals that would disadvantage the long-term environmental goals set forth in the Conservation Strategy and Management Plan for Conservation Lands.

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

The 2009 UCM LRDP EIS/EIR concluded that construction of the UC Merced campus, including the UCM 2020 Project, of which the proposed Solar PV project is a part, would result in significant and unavoidable cumulative impacts of the proposed project on aesthetics, agricultural resources, air quality, hydrology and water quality, traffic noise, population and housing, traffic, and utilities and service systems. However, cumulative impacts for all resources areas were less than significant or less than significant after mitigation.

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

The 2009 UCM LRDP EIS/EIR concluded that construction of the UC Merced campus, including the UCM 2020 Project, of which the proposed Solar PV project is a part, would not have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly as the 2009 UCM LRDP EIS/EIR evaluated potential effects on the human environment which includes an analysis of the natural and physical environment and the relationship of people with that environment.

Describe any minor changes to the project since earlier environmental analysis

This Addendum takes into consideration the minor modifications to the description of the proposed Solar PV Project provided in Volume 3 of the 2009 UCM LRDP EIS/EIR. The project changes consist of an increased in size from 8 to 10 acres; modified project boundaries beyond the UCM 2020 Project boundary; type of visual screening used; and a technical correction regarding the amount of energy the project would generate (see Section 4.4 for a broader discussion of minor changes in the proposed project).

Describe how the minor project changes affect the earlier environmental analysis

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

The minor changes to the proposed Solar PV project (increased size from 8 to 10 acres; modified project boundaries beyond the UCM 2020 Project boundary; type of visual screening used; and a technical correction regarding the amount of energy the project would generate) would not result in new or substantially worse impacts resulting in the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory

beyond what was analyzed in the 2009 UCM LRDP EIS/EIR.

The increased size of the Solar PV project site would not substantially increase the project's potential to degrade the quality of the environment because the proposal continues to be developed within the campus boundaries and the environmental commitments included in the development of the campus would continue to apply to the proposed Project. Additionally, if historic resources are located within the project footprint, appropriate 2009 UCM LRDP EIS/EIR Mitigation Measures would be implemented to reduce potential impacts. The effect of the Solar PV project site on any species identified as a candidate, sensitive, or special status species, or on historic resources does not substantially differ from that which was analyzed as part of the UCM 2020 Project (EIS/EIR Volume 3) and urbanization development of the entire campus (EIS/EIR Volume 1).

The change in visual screening and the technical correction to the amount of energy that the proposed project would generate does not have any potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory.

In conclusion, the potential environmental effects of the proposed project were adequately addressed in the 2009 UCM LRDP EIS/EIR.

b) Does the project have the potential to achieve short-term environmental goals to the disadvantage of long-term environmental goals?

The minor changes to the proposed Solar PV project (increased size from 8 to 10 acres; modified project boundaries beyond the UCM 2020 Project boundary; type of visual screening used; and a technical correction regarding the amount of energy the project would generate) would not result in new or substantially worse impacts resulting in the potential to achieve short-term environmental goals to the disadvantage of long-term environmental goal beyond what was analyzed in the 2009 UCM LRDP EIS/EIR.

The increased size of the Solar PV project site would not substantially increase the project's potential to achieve short-term environmental goals to the disadvantage of long-term environmental goal because the proposal continues to be developed within the campus boundaries of which the University of California at Merced would achieve long term environmental goals through its commitments in the Conservation Strategy and Management Plan for Conservation Lands. The effect of the Solar PV project site on the potential to achieve short-term environmental goals to the disadvantage of long-term environmental goals does not substantially differ from that which was analyzed as part of the UCM 2020 Project (EIS/EIR Volume 3) and urbanization development of the entire campus (EIS/EIR Volume 1).

The change in visual screening and the technical correction to the amount of energy that the proposed project would generate does not have any potential to achieve short-term environmental goals to the disadvantage of long-term environmental goals.

In conclusion, the potential environmental effects of the proposed project were adequately addressed in the 2009 UCM LRDP EIS/EIR.

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

The minor changes to the proposed Solar PV project (increased size from 8 to 10 acres; modified project boundaries beyond the UCM 2020 Project boundary; type of visual screening used; and a technical correction regarding the amount of energy the project would generate) would not result in new or substantially worse impacts that are individually limited, but cumulatively considerable beyond what was analyzed in the 2009 UCM LRDP EIS/EIR.

The increased size of the Solar PV project site would not substantially increase the project's potential to have impact that are individually limited, but cumulatively considerable because the proposal continues to be developed within the campus boundaries of which the University of California at Merced would implement mitigation measures for all resources where impacts were determined to be cumulatively considerable which does not substantially differ from that which was analyzed as part of the UCM 2020 Project (EIS/EIR Volume 3) and urbanization development of the entire campus (EIS/EIR Volume 1).

The change in visual screening and the technical correction to the amount of energy that the proposed project would generate does not have any potential affect the impacts that are individually limited, but cumulatively considerable.

In conclusion, the potential environmental effects of the proposed project were adequately addressed in the 2009 UCM LRDP EIS/EIR.

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

The minor changes to the proposed Solar PV project (increased size from 8 to 10 acres; modified project boundaries beyond the UCM 2020 Project boundary; type of visual screening used; and a technical correction regarding the amount of energy the project would generate) would not result in new or substantially worse environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly beyond what was analyzed in the 2009 UCM LRDP EIS/EIR.

The increased size of the Solar PV project site would not substantially increase the project's potential to have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly because the proposal continues to be developed with the consideration of these potential effects on the human environment and has been designed to limit such effects, which does not substantially differ from that which was analyzed as part of the UCM 2020 Project (EIS/EIR Volume 3) and urbanization development of the entire campus (EIS/EIR Volume 1).

The change in visual screening and the technical correction to the amount of energy that the proposed project would generate does not have any potential to impact the environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly.

In conclusion, the potential environmental effects of the proposed project were adequately addressed in the 2009 UCM LRDP EIS/EIR.

VI. SUPPORTING INFORMATION SOURCES

UC Merced. 2009. *Long Range Development Plan*, Environmental Impact Statement/Environmental Impact Report. Prepared by Impact Sciences, Inc., ICF Jones & Stokes, Fehr & Peers.

UC Merced. 2009. *Long Range Development Plan*. Prepared by the University of California, Merced.

VII. ADDENDUM PREPARER

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VIII. APPENDIX (See Following Pages)

Figure 1
Location of the Proposed Action