

CITY OF MERCED
Planning Commission

Resolution #4127

WHEREAS, the Merced City Planning Commission at its regular meeting of December 20, 2023, held a public hearing and considered **Pending Annexation and Pre-zoning Application #23-03, General Plan Amendment #23-04, Adoption of the Virginia Smith Trust Specific Plan, and the Establishment of Planned Development (P-D) #80**, initiated by the Virginia Smith Trust, property owners. This application involves the annexation of approximately 654 acres of land to the City of Merced, the Prezoning of the property as Planned Development (P-D) #80, an amendment to the text of the General Plan, the adoption of the VST Specific Plan, and the establishment of Planned Development (P-D) #80. The property site is generally located at the northeast corner of Cardella and Lake Roads with an address of 4600 Lake Road, and is more particularly described as those portions of Section 2 and Section 3, Township 7 South, Range 14 East, Mount Diablo Base and Meridian in the County of Merced, State of California also known as Assessor's Parcel Numbers 060-010-004 and 060-020-048; and,

WHEREAS, the Merced City Planning Commission concurs with Findings/Considerations A through I of Staff Report #23-1114 (Exhibit B); and,

WHEREAS, after reviewing the City's Draft Environmental Determination, and fully discussing all the issues, the Merced City Planning Commission does resolve to hereby recommend to City Council adoption of the Focus Subsequent Environmental Impact Report SCH No. 2001021056 (certified 10/17/2023) and Mitigation Monitoring Program (Exhibit C), and approval of Pending Annexation and Pre-zoning Applications #23-03 and General Plan Amendment #23-04 and Establishment of Planned Development (P-D) #80 and Adoption of the Virginia Smith Trust Specific Plan, subject to the Conditions set forth in Exhibit A attached hereto.

PLANNING COMMISSION RESOLUTION # 4127

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December 20, 2023

Upon motion by Commissioner Gonzalez, seconded by Commissioner Delgadillo, and carried by the following vote:

AYES: Commissioner Gonzalez, Ochoa, Delgadillo, and Camper

NOES: None

ABSENT: Commissioner Thao, Smith, and Chairperson Harris


ABSTAIN: None

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December 20, 2023

Adopted this 20th day of December 2023


Chairperson, Planning Commission of
the City of Merced, California

ATTEST:


Secretary

Attachment:

Exhibit A – Conditions of Approval

Exhibit B – Findings

Exhibit C – Mitigation Monitoring and Reporting Program

Findings

Planning Commission Resolution #4127

Pending Annexation and Pre-zoning Application #23-03, General Plan Amendment #23-04, Establishment of Planned Development (P-D) #80, Adoption of VST Specific Plan and Environmental Review #23-44

1. All new construction within the annexation area shall comply with all standard Municipal Code and Subdivision Map Act requirements as applied by the City Engineering, Building, Planning and Fire Departments.
2. All other applicable codes, ordinances, policies, etc. adopted by the State of California or City of Merced shall apply.
3. Approval of Annexation and Pre-zoning Application #23-03, General Plan Amendment #23-04, the Establishment of Planned Development (P-D) #80, VST Specific Plan, and the adoption of Environmental Review #23-44 is subject to the applicant's entering into a written (legislative action) agreement that they agree to all the conditions and shall pay all City and school district fees, taxes, public facilities fees, in lieu fees and/or assessments, in effect on the date of any subsequent subdivision and/or permit approval, any increase in those fees, taxes, or assessments, and any new fees, taxes, or assessments, which are in effect at the time the building permits are issued, which may include public facilities impact fees, a regional traffic impact fee, law, etc. Payment shall be made for each phase at the time of building permit issuance for such phase unless an Ordinance or other requirement of the City requires payment of such fees, taxes, and or assessments at an earlier or subsequent time. Said agreement to be approved by the City Council prior to the adoption of the ordinance, resolution, or minute action.
4. The developer/applicant shall indemnify, protect, defend (with counsel selected by the City), and hold harmless the City, and any agency or instrumentality thereof, and any officers, officials, employees, or agents thereof, from any and all claims, actions, suits, proceedings, or judgments against the City, or any agency or instrumentality thereof, and any officers, officials, employees, or agents thereof to attack, set aside, void, or annul, an approval of the City, or any agency or instrumentality thereof, advisory agency, appeal board, or legislative body, including actions approved by the

EXHIBIT A

OF PLANNING COMMISSION RESOLUTION #4127

voters of the City, concerning the project and the approvals granted herein. Furthermore, developer/applicant shall indemnify, protect, defend (with counsel selected by the City), and hold harmless the City, or any agency or instrumentality thereof, against any and all claims, actions, suits, proceedings, or judgments against any governmental entity in which developer/applicant's project is subject to that other governmental entity's approval and a condition of such approval is that the City indemnify and defend such governmental entity. City shall promptly notify the developer/applicant of any claim, action, or proceeding. City shall further cooperate fully in the defense of the action. Should the City fail to either promptly notify or cooperate fully, the developer/applicant shall not thereafter be responsible to indemnify, defend, protect, or hold harmless the City, any agency or instrumentality thereof, or any of its officers, officials, employees, or agents.

5. The developer/applicant shall construct and operate all future projects within the annexation area in strict compliance with the approvals granted herein, City standards, laws, and ordinances, and in compliance with all State and Federal laws, regulations, and standards. In the event of a conflict between City laws and standards and a State or Federal law, regulation, or standard, the stricter or higher standard shall control.

The following conditions apply to new construction within the annexation area:

6. Community Facilities District (CFD) formation is required for annual operating costs for police and fire services as well as storm drainage, public landscaping, public landscaping within State rights-of-way, street trees, street lights, parks and open space. CFD procedures shall be initiated before final map or first building permit approval. Developer/Owner shall submit a request agreeing to such a procedure, waiving right to protest and post deposit as determined by the City Engineer or designee to be sufficient to cover procedure costs and maintenance costs expected prior to first assessments being received.

The following conditions apply to the future development at the property located at 4600 Lake Road:

7. All development shall be subject to the Mitigation Measures outlined in the *Mitigation Monitoring and Reporting Program for The*

University Community Plan update and VST Specific Plan Project under Environmental Review #23-44.

8. All development within the VST Specific Plan area shall comply with all requirements of the VST Specific plan.
9. Site Plan Review is required prior to construction of commercial, mixed use, office, or multi-family uses. At the time of project evaluation, if the Site Plan Review Committee deems that an increase in traffic or decrease in parking will create negative impacts, if necessary, the Committee may require additional documentation or studies to provide additional analysis to mitigate any issues.
10. Prior to the issuance of a building permit, the developer shall work with the Merced County Transit Authority (aka: The Bus) to determine if a bus stop is needed at this location. If a bus stop is required, the stop shall be in an area to allow the bus to move completely out of the travel lanes. The location of all bus stops shall be subject to approval by the City Engineer or designee.
11. The hours of construction activities that generate noise, when adjacent to housing and other “sensitive” uses shall be limited to the hours of 7:00 a.m. to 6:00 p.m.
12. At the time of construction, all required public improvements shall be installed along the property frontage. This includes, but is not limited to, sidewalk, curb, gutter, streetlights, and street trees.
13. The development shall contribute its fair share toward road improvements as described in the Mitigation Monitoring program.
14. All construction shall comply with construction standards in accordance with the requirement for the City’s Storm Water Quality permit and storm sewer system standards.
15. All new utilities serving the site shall be installed underground.
16. All City sewer, water, and storm drain lines serving the site shall be extended across the full frontage of the property unless it is determined by the Public Works Director that these lines are not likely to be extended to serve any other property (consistent with the Merced Municipal Code).
17. All storm water shall be contained onsite and metered out to the City’s storm water system in accordance with City Standards.

18. A minimum turning radius as required by the Fire Department for fire apparatus access must be provided throughout the project or as required.
19. The future commercial development shall provide pedestrian and bicycle access throughout per the VST Specific Plan. Safe connectivity throughout the site shall be provided by pedestrian pathways. Bicycle parking shall be provided as required by the City's Zoning Ordinance.
20. The developer shall use proper dust control procedures during site development in accordance with San Joaquin Valley Air Pollution Control District rules.
21. All landscaping shall comply with City Standards, the City's Zoning Ordinance Section – Landscaping, and the Merced Municipal Code, in addition to all state-mandated conservation and drought restrictions. This shall include the use of xeriscape landscaping as appropriate.
22. Irrigation for all onsite landscaping shall be provided by a low-volume system in accordance with the State's Emergency Regulation for Statewide Urban Water Conservation or any other state or city-mandated water regulations dealing with current drought conditions.
23. All landscaping in the public right-of-way shall comply with the most recently adopted water regulations by the State and City addressing water conservation measures.
24. All mechanical equipment shall be screened from public view.

Findings and Considerations
Planning Commission Resolution #4127
Pending Annexation and Pre-zoning Application #23-03, General Plan
Amendment #23-04, Establishment of Planned Development (P-D) #80,
and Adoption of the VST Specific Plan

FINDINGS/CONSIDERATIONS:

Changes to the text of the General Plan

- A) *Amend Policy UE-1.4b as follows (note underlined text is new text and ~~strikethrough~~ text is deleted text):*

The City accepts the University Community Plan adopted by Merced County on ~~December 21, 2004,~~ October 17, 2023, as a general conceptual framework for the planning of the University Community. The City also accepts the VST Specific Plan adopted by Merced County on October 17, 2023, as the design framework and program for the VST Property, including the development standards, land use diagram, circulation diagram, development plan, lot sizes and standards, and recreation, open space and park standards. These documents and plans were developed through a collaborative effort with UC Merced, the City, and the County, in conformance with the City’s policies for the area, including annexation to the City.

- ~~That existing plan can be used as foundation work for further planning for the area, with the City as lead agency in the planning process.~~
- ~~If a special planning process or framework is used for the development of the University Community, the costs of that planning process shall be borne by the applicants and developers, not by Merced residents.~~

The City should revise all of its various planning documents to accommodate the incorporation of the University Community into the City of Merced. These include not only the General Plan, but also plans for wastewater treatment, water, storm drainage, parks, fire protection, and other services.

Amend Figure 3.9 of Chapter 3 – Land Use to accurately reflect the modified boundaries of the University Community Plan

Figure 3.9 of the General Plan at Attachment D would be modified to match the boundary of the adopted University Community Plan as shown at Attachment E.

Add Policy L-3.8 as follows:

L-3.8 Implement the 2023 UCP and VST Specific Plan as adopted by the County of Merced.

Amend Section 3.73 University Community Plan by adding the following to the end of this section after “2009 Revisions” on page 3-71:

After the 2009 amendments the University Community Plan was further amended. The amendments included substantial revisions to the UCP policies text to reflect the current regulatory conditions, annexation the City of Merced as the preferred form of development, reduction of the planning area from 2,133 acres to 1,841 acres to include only those areas outside of the boundaries of the LRDP (and subject to local land use regulations), modification of the land use program to reduce the number for dwelling units from 11,616 to 9,680), a reduction of the amount of commercial development from 2,022,900 square feet to 1,246,150 square feet, and a modification of the circulation diagram. The modification of the circulation diagram included changes to the alignment of Campus Parkway. A revised land use diagram was also adopted and is included in Appendix 3.10.1. A Specific Plan was developed for the Virginia Smith Trust (VST) property concurrent with the update of the UCP.

Delete illustrations and figures for the UCP in Appendix 3.10.1 on pages 3-86 through 3-89 (Attachment F) and replace with Figures 3 and 4 of the VST Specific Plan (Attachment G).

General Plan Compliance and Policies Related to This Application

- B) The proposed annexation complies with the General Plan designation of University Community Plan (UCP) for the site. General Plan Policy UE-1.3 and Implementing Action 1.3.g requires that annexation requests be evaluated against certain criteria. Below is an evaluation of the proposed annexation against those criteria:

Criteria 1

Is the area contiguous to the Current City Limits and within the City’s Specific Urban Development Plan (SUDP)/Sphere of Influence (SOI)? Do the annexed lands form a logical and efficient City limit and include older areas where appropriate to minimize the formation of unincorporated peninsulas?

Evaluation

After the UC Merced annexation is completed, and at the time the

application for annexation is submitted to LAFCO, this site will be contiguous to the existing City Limits to the north (see map at Attachment A). After the annexation of the University of California, Merced, campus, the annexation of the proposed project site would logically begin the physical connection of what will become a University Village to the south of the UC Merced Campus.

Criteria 2

Is the proposed development consistent with the land use classification on the General Plan Land Use Diagram (Figure 3.1)?

Evaluation

The proposed project site land use designations are consistent with the land use classification of the University Community Plan and with the proposed changes to the General Plan text and diagrams as described in Finding A above. The VST Specific Plan is a subset of the larger University Community Plan that provides support for the University campus, students, employees, and faculty by creating a university village to house, recreate and entertain those associated with the UC. This project will implement that objective of the plan.

Criteria 3

Can the proposed development be served by the City water, sewer, storm drainage, fire and police protection, parks, and street systems to meet acceptable standards and service levels without requiring improvements and additional costs to the City beyond which the developer will consent to provide or mitigate?

Evaluation

The University is being served by the City of Merced through a service agreement. Once the UC annexes followed by the VST annexation, those services can be extended without burden to the City's financial health. All new development within the annexation area would be required to annex into the City's Community Facilities District (CFD) for services which would cover the costs of Police and Fire protection. Public Facilities Impact Fees would also be paid that would help fund future police and fire stations, parks, and street improvements. Requirements to annex to the CFD and pay the PFFP impact fees are listed as conditions of approval in the Planning Commission Resolution at Attachment A.

Criteria 4

Will this annexation result in the premature conversion of prime agricultural land as defined in the Important Farmland Map of the State Mapping and Monitoring Program? If so, are there alternative locations where this development could take place without converting prime soils?

Evaluation

Though parts of the annexation area are listed as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, the proposed development is planned to provide higher density, which will minimize the encroachment overall into local prime farmlands. Converting these lands to support the UC will help minimize vehicle trips and provide opportunities for healthy activity with plans for open space and parks. The conversion of farmland was evaluated as part of the FSEIR at Attachment I

Criteria 5

Will a non-agricultural use create conflict with adjacent or nearby agricultural uses? If so, how can these conflicts be mitigated?

Evaluation

The proposed development would not create barriers to the use of nearby agricultural lands.

Criteria 6

Does the annexation area help the City reach one of the following goals?

Does annexation of the area bring the City closer to annexation of the UC Merced campus and University Community?

Does the area contain significant amounts of job-generating land uses, such as industrial, commercial, office, and business/research and development parks?

Does the project provide key infrastructure facilities or other desirable amenities such as the extension of major roads, utility trunk lines, parks, and recreational facilities, etc.?

Evaluation

The proposed annexation area is within the University Community Plan. This annexation will not be possible until the UC Merced campus is annexed. Although this annexation does not bring the City closer to annexing the UC Campus it does start the process of annexation of the University Community Plan.

The land uses proposed in this project area will contain land uses that support the University such as residential, commercial, office, and mixed use. Due to that, there will be many opportunities for economic growth and job generation. The project provides key infrastructure facilities or other desirable amenities such as the extension of major roads, utility trunk lines, parks, and recreational facilities. The VST Specific Plan provides linkages between the University Campus and this property to create opportunities for residents and staff to traverse between the school and the uses to the south eventually built on the VST site. The design also provides continued connections for roadways and utilities.

Community Benefits

- C) The VST annexation is the first step in the development of this area. Once the area begins development, there will be significant community benefits as a result of this development. These benefits include affordable housing, providing incentives to workers on the UC Campus, providing features that reduce environmental impacts, and providing ongoing funding for services and programs that further the Merced County Office of Education's (MCOE) mission. The document provided at Attachment H provides more details on these benefits.

Zoning Code Compliance for the Planned Development Establishment

- D) Per Merced Municipal Code Section 20.20.20 (J) Planned Development (P-D) Zoning Districts, approval of an application for Planned Development Establishment or Revision with accompanying Preliminary Site Utilization Plan only if the following findings can be made:
1. *The proposed development is consistent with the goals, policies, and actions of the General Plan and any applicable specific plan and community plan.*

The proposed Planned Development Establishment would be consistent with the General Plan if General Plan Amendment #23-04 is approved.

- 2. The site for the proposed development is adequate in size and shape to accommodate proposed land uses.*

The subject site is located at the northeast corner of Cardella and Lake Roads (Attachment B). The project proposes 654 acres of mixed-use development, including 4,000 dwelling units, approximately 800,000 square feet of commercial/office space, 76 acres of parks and 25 acres of open space and trails. The site for the proposed development is adequate in size and shape to accommodate the proposed land uses.

- 3. The site for the proposed development has adequate access considering the limitations of existing and planned streets and highways.*

The proposal would have adequate access to existing and planned streets and highways.

- 4. Adequate public services exist or will be provided to serve the proposed development.*

City utilities such as water and sewer main lines as well as storm drain lines would be extended to the project site with approval of the proposed annexation. These lines would be adequate to serve the project.

- 5. The proposed development will not have a substantial adverse effect on surrounding property, will be compatible with the existing and planned land use character of the surrounding area, and will enhance the desirability of the area and have a beneficial effect.*

There may be some temporary impacts such as vibration, noise, and dust during construction, but the proposed development would not have a substantial adverse effect on surrounding property, will be compatible with the existing and planned land use character of the surrounding area, and will enhance the desirability of the area and have a beneficial effect.

- 6. The proposed development carries out the intent of the Planned Development zoning district by providing a more efficient use of the land and an excellence of site design greater than that which could be achieved through the application of established zoning standards.*

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OF PLANNING COMMISSION RESOLUTION #4127

The proposed development provides efficient use of land. By creating the VST Specific Plan, the project proponents provided the vision and standards for optimizing the property, creating a sense of place, creating the foundation for mixed use and pedestrian scaled development and ultimately providing the village support needed for the existing university students and staff.

7. *Each individual unit of the proposed development, in each phase as well as the total development, can exist as an independent unit capable of creating a good environment in the locality and being in any stage as desirable and stable as the total development.*

The proposed development consists of a mixture of uses that mirror a similarity of design to the UC campus. Anything that is developed on this property, to the plan standards, can exist by itself and still benefit the community, especially the UC campus. Once anything is developed it could remain independent capable of creating a good environment in the locality and being in any stage as desirable and stable as the total development.

8. *Any deviation from the standard ordinance requirements is warranted by the design and additional amenities incorporated in the development plan, which offer certain unusual redeeming features to compensate for any deviations that may be permitted.*

As shown in VST Specific Plan at Attachment C of Planning Commission Staff Report #23-1114, the proposal includes walking and bike trails connecting the future development with the UC campus. There are also development standards that will create architectural interest not required in standard zoning. A mixed-use development, planned as part of the land use vision, will provide the extension of visual interest and optimal pedestrian and bike friendly environment as currently experienced on the campus to the north.

9. *The principles incorporated in the proposed development plan indicate certain unique or unusual features, which could not otherwise be achieved under the other zoning district.*

The proposed use would allow development of the entire parcel, in a way that is directly linked and supportive to the University of California, Merced campus. The design provides physical pedestrian and bicycle linkages that will promote healthy transportation options and get people out of their car. The mixed-use design and variety of

housing types proposed throughout the development will provide direct support to the UC students, employees and faculty and create a village as is in the original plans for the site.

Specific Plan

- E) The proposal includes a specific plan as shown at Attachment C. The VST Specific Plan is an update of the University Community Plan previously adopted by the County of Merced. The original plan had a vision which supported the University of California campus with a village-like development of mixed-use, walking and bike trails and a variety of housing styles. The VST Specific Plan contains similar requirements. The goal is to support the University campus in the same way as originally planned.

The standards of the Specific Plan will be incorporated into the standards for Planned Development (P-D) #80. The “Regulatory and Design Framework” section of the VST Specific Plan defines the standards for development within the specific plan area. All projects within the area will be measured against these standards to ensure compliance with the Specific Plan. In order to ensure this compliance, Condition #8 was added which requires Site Plan Review for all commercial, mixed-use, multi-family, or office uses within the plan area. Single-family development would also be required to comply with all requirements for setbacks and design standards as outlined in the specific plan but would not be subject to Site Plan Review.

Traffic/Circulation

- F) An environmental study was conducted that assessed the projected traffic counts and traffic impacts to the area based on the proposed land uses. This traffic study can be found within Attachment D. The development shall contribute its fair share toward road improvements as described within the Mitigation Monitoring Program in Resolution #4127 Exhibit C.

Parking

- G) The annexation does not directly produce a need for parking. However, the subsequent development would require parking to serve the future uses on the site. Parking requirements would be evaluated at the Site

Plan Review and/or Building Permit phase of development. It could also be reviewed as each project within the plan area is specifically entitled.

Land Use

- H) The subject site is located at the northeast corner of Cardella and Lake Roads (Attachment B). The project proposes 654 acres of mixed-use development, including 4,000 dwelling units, approximately 800,000 square feet of commercial/office space, 76 acres of parks and 25 acres of open space and trails. The land use map for this development is shown as Attachment B or within the Specific Plan (Attachment C).

Site Plan

- I) As described in Finding E above, a condition has been added to require a Site Plan Review Permit for all commercial, mixed-use, office, and multi-family development within the plan area. Each development shall be evaluated to ensure compliance with the requirements of the VST Specific Plan. At the time of project evaluation, if the Site Plan Review Committee deems that an increase in traffic or decrease in parking will create negative impacts, the Committee may require additional documentation or studies to provide additional analysis to mitigate any issues.

Neighborhood Impact/Interface

- J) The proposed project does not include any uses that would be detrimental to the public health, safety, and welfare of the immediate area or the city as a whole. Implementation of the conditions of approval and adherence to all applicable Building Codes, Fire Codes, and City Standards would prevent the project from having any detrimental effect on the health, safety, and welfare of the neighboring properties as well as the City as a whole. There may be some temporary impacts such as vibration, noise, and dust during construction, but the proposed development would not have a substantial adverse effect on surrounding property long term, will be compatible with the existing and planned land use character of the surrounding area, and will enhance the desirability of the area and have a beneficial effect.

Pre-Annexation Development Agreement

- K) Section 20.86.150 of the Zoning Ordinance requires a property owner to enter into a Pre-Annexation Development Agreement prior to annexation. This agreement shall not become operative unless annexation proceedings are completed by the Local Agency Formation commission (LAFCO). There is no requirement for staff to bring it to the Planning Commission. However, a Draft Pre-Annexation Development Agreement will be provided to, reviewed by, and approved by the City Council prior to their decision. The Pre-annexation Development Agreement is only with the owner of the vacant land and binds the owner and their successors to certain conditions and requirements related to the development of the land.

Environmental Clearance

- L) Planning staff has conducted an environmental review of the project in accordance with the requirements of the California Environmental Quality Act (CEQA). A Focus Subsequent Environmental Impact Report SCH No. 2001021056 (certified 10/17/2023) was prepared, and a Statement of Overriding Consideration with a Mitigation Monitoring Program is being recommended. This environmental document is provided at Attachment I.

MITIGATION MONITORING AND REPORTING PROGRAM
FOR THE

University Community Plan Update and VST Specific Plan Project

State Clearinghouse No. 2001021056

County of Merced
Planning Department
2222 M Street, 2nd Floor
Merced, California 95340

Contact:
Tiffany Ho
Merced County Planning Department

July 28, 2023

**EXHIBIT C
OF PLANNING COMMISSION RESOLUTION #4127**

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List of Abbreviations

AAQA	Ambient Air Quality Analysis
BESD	Banta Elementary School District
BMP	best management practice
CALGreen	State Building Energy Efficiency Standards
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resources Board
CDFW	California Department of Fish and Wildlife
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CFR	Code of Federal Regulations
City	City of Merced
CNEL	community noise equivalent level
County	County of Merced
dBA	A-weighted decibel
ESA	federal Endangered Species Act
ghg	greenhouse gas
lb/day	pounds per day
L _{dn}	day-night average noise level
L _{eq}	energy-equivalent noise level
MMRP	mitigation monitoring and reporting program
MSDS	Material Safety Data Sheets
MTCO _{2e}	metric tons of carbon dioxide equivalent
NAHC	Native American Heritage Center
NMFS	National Marine Fisheries Service
NPDES	National Pollutant Discharge Eliminate System

PCC	Public Contract Code
PRC	Public Resources Code
RWQCB	regional water quality control board
SJVAPCD	San Joaquin Valley Air Pollution Control District
SWPPP	storm water pollution prevention plan
USACE	U.S. Army Corps of Engineers
USFWS	U.S. Fish and Wildlife Service
Valley CAN	Valley Clean Air Now
VELB	valley elderberry longhorn beetle
VERA	Voluntary Emission Reduction Agreement
ZNE	zero net energy

1. Mitigation Monitoring and Reporting Program

In accordance with the California Environmental Quality Act (CEQA) (Public Resources Code [PRC] Section 21000 et seq.), the County of Merced (County) prepared a Focused Subsequent Environmental Impact Report (SEIR) for the UCP Update and VST Specific Plan Project (the Project). The Project is located in unincorporated Merced County, northeast of the City of Merced, south of UC Merced, and within the City's sphere of influence (SOI). The proposed UCP Update area encompasses 1,841 acres and includes two properties; the Hunt and VST properties. The VST Property consists of 654 acres immediately south of the UC Merced Campus and is bounded generally by Lake Road on the west, UC Merced to the north, Cardella Road on the south and the Orchard Drive alignment on the east. The Hunt property is referred to as UCP South in the Adopted UCP, and includes approximately 1,187 acres of land south of UC Merced and is bounded by Lake Road on the west, Cardella Road to the north, Fairfield Canal to the east and Yosemite Road to the south. The Project includes modifications to the University Community Plan as part of the UCP Update and a Specific Plan for the 654-acre VST Property.

The SEIR evaluates the program-level impacts of the proposed changes to the Adopted UCP, and the project specific impacts associated with the VST Specific Plan. The SEIR (State Clearinghouse No. 2001021056) identified significant impacts and mitigation measures that would reduce the identified impacts to less-than-significant levels, where feasible, and concluded that some environmental impacts would be significant and unavoidable. CEQA (PRC Section 21081.6) and the State CEQA Guidelines (Sections 15091[d] and 15097) require public agencies to "adopt a reporting or monitoring program for the changes made to the project or conditions of project approval, adopted in order to mitigate or avoid significant effects on the environment." This mitigation monitoring and reporting program (MMRP) has been prepared for the Project because the SEIR identifies significant adverse impacts related to project implementation, and mitigation measures have been identified to reduce or eliminate most of those impacts. Adoption of this MMRP would occur in conjunction with approval of the Project.

1.1. Purpose of Mitigation Monitoring and Reporting Program

This MMRP has been prepared to ensure that all required mitigation measures are implemented and completed in a satisfactory manner before and during project construction and operation, as applicable.

The MMRP table provided below has been prepared to assist the responsible parties in implementing the mitigation measures applicable to the Project. The table identifies the impact; the individual mitigation measures; the specific actions required before, during, and after construction; the implementing party; and mitigation timing. The table also includes a column to confirm implementation of the mitigation measures after project approval. The numbering of mitigation measures follows the numbering sequence found in the project SEIR. Mitigation measures that are referenced more than once in the SEIR are not duplicated multiple times in the MMRP table.

1.2. 2001/2004 UCP EIR and relationship to the UCP Update and VST Specific Plan MMRP

In 2004, the County adopted the UCP, which covered a 2,133-acre area that included most of the VST property, just south of the UC Merced campus (Adopted UCP). A program EIR was certified with adoption of the UCP in 2001 and a supplemental EIR, which focused on hydrology and water quality, was certified on December 21, 2004 via Resolution No. 2004-238 (referred to collectively herein as the 2001/2004 UCP EIR; State Clearinghouse No. 2001021056). The 2001/2004 UCP EIR was identified as the appropriate document to base the subsequent CEQA analyses upon because it describes the potential environmental impacts of the planning documents that would be amended by the VST Specific Plan and was certified by the County.

The County adopted an MMRP as part of the 2001/2004 UCP EIR approvals and those mitigation measures are incorporated herein by this reference. This MMRP is focused specifically on the UCP Update and VST Specific Plan

Project. Where mitigation measures applicable to the Project remain the same as those adopted in the 2001/2004 UCP EIR, the title, "Adopted Mitigation Measure," is used as the mitigation measure was "adopted" as part of the 2001/2004 UCP EIR; where mitigation measures would be modified or eliminated from those identified in the 2001/2004 UCP EIR, the title, "Modified Mitigation Measure," is used; and where new mitigation measures were developed for the modified Phase 2 Project, the title, "New Mitigation Measure," is used.

This MMRP only applies to activities associated with implementation of the UCP Update and VST Specific Plan Project applicable to the portions of the Project detailed in each measure. In addition, if the UCP Update and VST Specific Plan Project does not proceed, and the Project as approved through the 2001/2004 UCP EIR is implemented across the UCP area, the 2001/2004 UCP EIR mitigation measures would be applied to those activities.

1.3. Roles and Responsibilities

The County is responsible for overall administration of the MMRP and for verifying that the applicant, builder, construction contractor, or other designated party has completed the necessary actions for each measure. The party responsible for implementing each item will identify the staff members responsible for coordinating with the County on the MMRP.

1.4. Mitigation Monitoring and Reporting Program Table

Table 1, which identifies the mitigation measures applicable to the UCP Update and VST Specific Plan Project, includes the table columns identified and described below:

- ▶ **Impact:** This column presents all the impacts disclosed in the SEIR for which mitigation was identified.
- ▶ **Mitigation Measure:** This column presents all the mitigation measures identified in the UCP Update and VST Specific Plan Project SEIR, each of which has been adopted and incorporated into the project.
- ▶ **Action(s):** For every mitigation measure, one or more actions are described. The actions delineate the means by which the mitigation measures will be implemented and, in some instances, the criteria for determining whether a measure has been successfully implemented. Where mitigation measures are particularly detailed, the action may refer back to the measure.
- ▶ **Implementing Party:** This column identifies the entity responsible for undertaking the required action.
- ▶ **Timing:** Implementation of the action must occur before or during some part of project approval, project design, or project construction or on an ongoing basis. This column identifies the timing for implementation of each mitigation measure.
- ▶ **Completion of Implementation:** The County is responsible for ensuring that mitigation measures are successfully implemented with respect to work implemented within the County's jurisdiction. The "Completion of Implementation" column is to be used by the County to indicate when implementation of a mitigation measure has been completed. The County, at its discretion, may delegate implementation responsibility or portions thereof to qualified consultants or contractors. Upon annexation, the County's responsibility to ensure that the mitigation measures are successfully implemented will be transferred to the City of Merced. The "Completion of Implementation" column is to be used by the City to indicate when implementation of a mitigation measure has been completed.

Table 1 UCP Update and VST Specific Plan Mitigation Monitoring and Reporting Program

Impact	Mitigation Measure	Action(s)	Implementing Party ¹	Timing	Completion of Implementation
Air Quality					
<p>Impact 3.1.1: Generation of Short-Term, Construction-Related Emissions of ROG, NO_x, PM₁₀, and PM_{2.5}</p>	<p>Adopted Mitigation Measure 4.3-1 Compliance with the following SJVAPCD mitigation measure listed in Table 6-3 of the GAAMAQD would further reduce dust created during construction activities:</p> <ul style="list-style-type: none"> ▶ Limit traffic speeds on unpaved roads to 15 mph. <p>Adopted Mitigation Measure 4.3-2 Construction contracts shall include the following specifications:</p> <ul style="list-style-type: none"> ▶ Minimize idling time to a maximum of ten minutes when construction equipment is not in use; ▶ Employ construction activity management techniques such as extending the construction period outside the ozone season of May through October, reducing the number of hours of construction and scheduling activities during off peak hours; ▶ Tuning engines to manufacturer’s specifications; ▶ When feasible, schedule equipment usage to avoid simultaneous use of equipment. <p>New Mitigation Measure 3.1-1a: Utilize the cleanest available off-road construction equipment, including the latest Tier diesel or electric equipment (e.g. scrapers, graders, trenchers, tractors, loaders, backhoes, etc.) (UCP South only)</p> <p>All construction specifications shall require use off-road construction equipment that meet EPA’s Tier 4 emission standards as defined in 40 CFR 1039 and comply with the appropriate test procedures and provisions as contained in 40 CFR Parts 1065 and 1068. Tier 3 models can be used if a Tier 4 version of the equipment type is not yet produced by manufacturers. This measure can also be achieved by using battery-electric off-road equipment as it becomes available. Implementation of this measure shall be required in the</p>	<p>Prepare an AAQA for all construction and operational emissions that exceed 100 lb/day.</p>	<p>Project applicant, construction contractor, SJVAPCD</p>	<p>During preparation of the EIR for UCP South</p>	
		<p>Confirm that construction equipment measures are implemented</p>	<p>County of Merced</p>	<p>Before grading</p>	

¹ The County’s obligation to implement or confirm that implementation has been satisfied will transfer to the City of Merced upon annexation.

Impact	Mitigation Measure	Action(s)	Implementing Party ¹	Timing	Completion of Implementation
	<p>contract the project applicant establishes with its construction contractors. The applicant shall demonstrate its plan to fulfill the requirements of this measure in a report or in project improvement plan details submitted to the discretionary land use authority (City of Merced or Merced County) prior to the use of any off-road, diesel-powered construction equipment.</p> <p>New Mitigation Measure 3.1-1b: Preparation of an Ambient Air Quality Analysis (UCP South only)</p> <p>SJVAPCD recommends that construction and operational emissions that exceed 100 lb/day prepare an AAQA to assess whether a project would violate an AAQS. Prior to the approval of a Final Map, the project applicant shall prepare a project-level analysis of emissions for development in the UCP area that is subject to SJVAPCD oversight to confirm whether the particular land use development would result in emissions that exceed this 100 lb/day screening criterion. In cases where a project's construction activity would generate emissions above this screening criterion (i.e., 100 lb/day) s, the project applicant shall prepare an AAQA. If, following the preparation of an AAQA, emissions are found to contribute to an exceedance of an AAQS, the project applicant shall either implement additional emission reduction measures as part of the project or, once all feasible on-site reduction measures have been exhausted, engage in regional programs that serve to reduce air pollution in the San Joaquin Valley. An example of a potential program includes the Valley Clean Air Now (Valley CAN) organization, which improves public health through investments in vehicle repair and replacement programs. Emissions reduction programs must demonstrate a quantifiable reduction and must be located within the SJVAB so air pollution reductions are realized in the basin. Alternatively, if regional air pollution reduction programs are unavailable, the project applicant may enter into a Voluntary Emission Reduction Agreement (VERA) with SJVAPCD to reduce emissions to below 100 lb/day for any pollutant that exceeds the screening criteria. If conditions warrant participation in a VERA, the VERA shall demonstrate a pound-for-pound reduction in emissions</p>				

Impact	Mitigation Measure	Action(s)	Implementing Party ¹	Timing	Completion of Implementation
	<p>that exceed 100 lb/day through a process that funds and implements emissions reduction projects within the SJVAB. The types of emission reduction projects that could be funded include electrification of stationary internal combustion engines (such as well pumps), replacing old heavy-duty trucks with cleaner, more efficient heavy-duty trucks, and replacement of old farm tractors. If a VERA is found to be required to meet thresholds, and the applicant elects to enter into one, the project applicant shall engage in a discussion with SJVAPCD prior to the adoption of the VERA to ensure that feasible mitigation has been identified to reduce emissions to a less-than-significant level.</p>				
<p>Impact 3.1-2: Long-Term, Operational (Regional) Emissions of Criteria Air Pollutants and Precursors</p>	<p>Adopted Mitigation Measure 4.3-4</p>	<p>Implement construction design features to minimize impacts.</p>	<p>Project applicant, construction contractor</p>	<p>Before building permit issuance</p>	
	<p>(a) Outdoor electrical outlets shall be installed in the front and backyards of all housing units. (b) Use solar or low emission water heaters. (c) Orient buildings to take advantage of solar heating and natural cooling and use passive solar design. (d) Increase wall and attic insulation.</p>	<p>Preparation of air quality assessment to determine whether any SJVAPCD annual mass emissions thresholds are exceeded.</p>	<p>Project applicant, SJVAPCD</p>	<p>Before building permit issuance</p>	
	<p>New Mitigation Measure 3.1-2a: Implement On-Site Project Design Features to Reduce Emissions of Criteria Air Pollutants (UCP South) Prior to the issuance of any development permits, the project applicant shall Implement the following measures to reduce the project's emissions:</p> <ul style="list-style-type: none"> ▶ Use low-VOC (50–100 grams per liter) paint for external residential applications on all construction drawings for review and approval by staff of the discretionary land use authority (City of Merced or Merced County). ▶ Incorporate traffic calming measures including marked crosswalks, count-down signal timers, curb extensions, speed tables, raised crosswalks, raised intersections, median islands, tight corner radii, roundabouts, and on-street parking 				

Impact	Mitigation Measure	Action(s)	Implementing Party ¹	Timing	Completion of Implementation
	<p>throughout the site plan. Specific calming measures and locations shall be identified by a qualified transportation specialist.</p> <ul style="list-style-type: none"> ▶ Electric water heaters in all residences (no gas storage tank heaters). ▶ Electric heating, ventilation, and air conditioning (HVAC) units in residences (no gas units). ▶ Meet Tier 2 electric vehicle charging standards of the most recent version of Part 11 of the Title 24 California Building Code (CalGreen Code) for all land use types. ▶ Restrict idling times for heavy heavy duty trucks accessing the project site to 3 minutes or less through the signage indicating that idling must be limited to this duration. ▶ Plant vegetation throughout the project site near areas of high pollution generation (e.g., heavily traveled roadways, sites of truck idling) to reduce the dispersion of air pollutants. ▶ Apply for grant funding through SJVAPCD’s Bikeway Incentive Program, which offers funding for Class I, Class II, and Class III bicycle paths for projects within the SJVAB. <p>Mitigation Measure 3.1-2b: Engage in Regional Programs to Offset Project Emissions of ROG, NO_x, CO, and PM₁₀ (UCP South and VST Specific Plan) UCP South Once the on-site reduction measures listed above under Mitigation Measure 3.1-2a have been incorporated, an air quality assessment shall be prepared to determine whether any SJVAPCD annual mass emissions thresholds are exceeded. If no thresholds are exceeded, no further action is necessary. If one or more thresholds are exceeded, prior to the issuance of grading permits for the first phase of development, the project applicant shall enter into a VERA through coordination with SJVAPCD to reduce emissions to meet SJVAPCD’s annual mass emissions thresholds for any pollutant that exceeds their respective threshold. The project applicant shall engage in a discussion with SJVAPCD prior to the adoption of the</p>				

Impact	Mitigation Measure	Action(s)	Implementing Party ¹	Timing	Completion of Implementation
	<p>VERA to ensure that feasible mitigation has been identified to reduce emissions to a less-than-significant level consistent with the direction given in SJVAPCD's GAMAQI. As allowed by SJVAPCD, the project applicant shall be provided the opportunity to perform an additional quantification of the project's operational emissions following the implementation of the proposed measures listed above under Mitigation Measure 3.1-2a to estimate the TPY needed to reduce emissions to meet SJVAPCD's annual thresholds of significance.</p> <p>VST Specific Plan</p> <p>A project-level evaluation of potential emissions has been performed for the VST Specific Plan. Based on SJVAPCD's guidance, various project design features have been incorporated into the design of the VST Specific Plan to reduce emissions, such as transportation management strategies and the elimination of onsite natural gas infrastructure for residential land uses. Based on this data (see Table 3.1-13), the applicant shall enter into a VERA with SJVAPCD to fully compensate for ROG, NO_x, and CO emissions that exceed SJVAPCD's CEQA annual mass emissions thresholds of significance.</p>				
Biological Resources					
Impact 3.2-1: Result in Disturbance to or Loss of Special-Status Plant Species	Adopted Mitigation Measure 4.4-2: The County shall ensure that at least 551 acres of upland annual grassland is preserved in conjunction with and to support at least 61.2 acres of vernal pool fairy shrimp habitat (for a total of 612 acres).	Preservation of upland annual grassland.	Project applicant, County of Merced	Before construction	This has been completed for VST.
	Adopted Mitigation Measure 4.4-6: Seed collection from the shining navarretia located within the UCP area shall be conducted prior to the loss of the populations in the UCP area. Seed collection shall be conducted by a qualified botanist or restoration biologist. Collected seeds shall be dispersed within suitable habitat (i.e., seasonally moist	Collection of shining navarretia seeds within UCP area.	Project applicant, construction contractor	Before construction	
		Pre-construction surveys of special-status species.	Project applicant, construction contractor	Before construction	

Impact	Mitigation Measure	Action(s)	Implementing Party ¹	Timing	Completion of Implementation
	<p>clay flats in grassland). Seeds shall be dispersed only within suitable habitats where shining navarretia does not currently occur to avoid impacts on the genetic composition of existing populations.</p> <p>Seed from shining navarretia shall be dispersed in suitable habitat within the annual grassland preserved in conjunction with loss of vernal pool habitat (Impact 4.4.1) and/or Swainson's hawk habitat (Impact 4.4.4) if feasible. However, if mitigation lands to serve both purposes cannot be found, the applicant will be responsible for negotiating a conservation easement with a land owner in the vicinity such that a minimum of seven populations of shining navarretia receive long-term protection.</p> <p>Mitigation Measure 3.2-1: Implement Avoidance Measure and Mitigation for Special-Status Plant Species Not Covered by the Existing CDFW Incidental Take Permit or USFWS Biological Opinion</p> <ul style="list-style-type: none"> ▶ During implementation of preconstruction surveys required under the CDFW ITP and USFWS Biological Opinion Conservation Measures, a qualified botanist will target additional special-status plant species not covered by these permits. Surveys will follow survey methods from CDFW's Protocols for Surveying and Evaluating Impacts on Special-Status Native Plant Populations and Natural Communities (CDFW 2018) and will be conducted during the blooming period for these species (Table MM 3.2-1). ▶ If special-status plant species are not found, the botanist will document the findings in a report to the discretionary land use authority (City of Merced or Merced County), and no further mitigation will be required. <p>If special-status plant species are found, the area occupied by special-status plants will be avoided completely, if feasible (i.e., project objectives can still be met). This may include establishing a no-disturbance buffer around the occupied habitat and demarcation of this buffer by a qualified biologist or botanist using flagging or high-visibility construction fencing. The size of the buffer</p>	<p>Establishment of buffer area if any special-status species are found.</p>	<p>Project applicant, construction contractor</p>	<p>Before construction</p>	

Impact	Mitigation Measure	Action(s)	Implementing Party ¹	Timing	Completion of Implementation
	<p>will be determined by the qualified biologist or botanist and will be large enough to avoid direct or indirect impacts on the plant.</p> <ul style="list-style-type: none"> ▶ If special-status plants are found during special-status plant surveys and cannot be avoided, the project applicant shall, in consultation with CDFW or USFWS as appropriate depending on species status, develop and implement a site-specific mitigation strategy to achieve no net loss of occupied habitat or individuals. It is likely that existing mitigation efforts for state and federally listed plant species required under the ITP and USFWS Biological Opinion would be sufficient to reduce impacts on non-listed special-status plant species to a less-than-significant level. <p>Mitigation measures shall include, at a minimum, preserving and enhancing existing populations, establishing populations through seed collection or transplantation from the site that is to be affected, and/or restoring or creating habitat in sufficient quantities to achieve no net loss of occupied habitat or individuals. Purchase of credits from an agency-mitigation bank that contains the affected species may also be used to offset loss of occupied habitat. Potential mitigation sites could include suitable locations within or outside of the UCP area or VST Specific Plan area. Habitat and individual plants lost shall be mitigated at a minimum 1:1 ratio, considering acreage as well as function and value. Success criteria for preserved and compensatory populations will include:</p> <ul style="list-style-type: none"> ▪ The extent of occupied area and plant density (number of plants per unit area) in compensatory populations will be equal to or greater than the affected occupied habitat. ▪ Compensatory and preserved populations will be self-producing. Populations will be considered self-producing when: <ul style="list-style-type: none"> • plants reestablish annually for a minimum of five years with no human intervention such as supplemental seeding; and 				

Impact	Mitigation Measure	Action(s)	Implementing Party ¹	Timing	Completion of Implementation
	<ul style="list-style-type: none"> reestablished and preserved habitats contain an occupied area and flower density comparable to existing occupied habitat areas in similar habitat types in the project vicinity. <p>If offsite mitigation includes dedication of conservation easements, purchase of mitigation credits, or other offsite conservation measures, the details of these measures will be included in the mitigation plan, including information on responsible parties for long-term management, conservation easement holders, long-term management requirements, success criteria such as those listed above and other details, as appropriate to target the preservation of long-term viable populations.</p>				
Impact 3.2-2: Result in Disturbance to or Loss of Special-Status Wildlife Species and Habitat	Adopted Mitigation Measure 4.4-2: The County shall ensure that at least 551 acres of upland annual grassland is preserved in conjunction with and to support at least 61.2 acres of vernal pool fairy shrimp habitat (for a total of 612 acres).	Preservation of upland annual grassland.	Project applicant, County of Merced	Before construction	This has been completed for VST.
	Adopted Mitigation Measure 4.4-4(a): The County shall ensure that Swainson's hawk foraging habitat is preserved offsite in sufficient quality and quantity, as determined through consultation with the CDFW, to mitigate for the loss resulting from the proposed UCP.	Preservation of offsite foraging habitat for Swainson's hawk	Project applicant, construction contractor, CDFW	Before construction	
	The preservation of annual grasslands (through Policy PA 2.3) that are suitable as foraging habitat for Swainson's hawk shall be located within 10 miles of a current or historic Swainson's hawk nest site (consistent with CDFG guidance).	Pre-construction surveys to identify active raptor nests. Consultation with CDFW and USFWS if any are located	Project applicant, construction contractor	Before construction	
	Adopted Mitigation Measure 4.4-4(b): The County shall require pre-construction surveys to identify active raptor nests prior to the onset of construction activities within 1,000 feet of any ground disturbing activities (i.e., construction site). The pre-construction surveys will be conducted in accordance with USFWS and/or CDFW guidelines. If	Pre-construction surveys to identify San Joaquin kit fox. If any are located, implementation of June 1999 Standardized Recommendations for Protection of the San Joaquin Kit Fox Prior to or During Ground Disturbance	Project applicant, construction contractor	Before construction	

<p>no active raptor nests are identified within 1,000 feet of the construction site, no further mitigation would be necessary.</p> <p>If active nests are found within 1,000 feet of the construction site, the CDFW shall be consulted to determine appropriate mitigation measures to minimize the effect. At a minimum, construction shall be delayed within an appropriate buffer zone, as determined by consultation with CDFW, until the young have fledged.</p> <p>Adopted Mitigation Measure 4.4-5: Project applicants shall conduct surveys for dens/burrows that could be occupied by vagrant San Joaquin kit fox prior to any ground-disturbing activities within the UCP area. The surveys shall be conducted within two weeks or less of any ground-disturbing activities. If dens/burrows meeting the criteria suitable for use by San Joaquin kit fox are found, the dens/burrows shall be cleared using the methodologies that are consistent with those described in the June 1999 Standardized Recommendations for Protection of the San Joaquin Kit Fox Prior to or During Ground Disturbance.</p> <p>New Mitigation Measure 3.2-2a: Conduct Preconstruction Surveys for Western Spadefoot, Implement Avoidance Measures, and Relocate Individuals</p> <ul style="list-style-type: none"> ▶ Within 7 days before commencement of project activities that would result in ground disturbance, vegetation removal, or use of vehicles, a qualified biologist familiar with the life history of western spadefoot and experienced in performing surveys for western spadefoot will conduct a focused preconstruction survey of habitat suitable for the species within the UCP area. The qualified biologist will inspect the project site in the UCP area for adult western spadefoot toads, eggs and tadpoles within aquatic breeding habitat, as well as suitable burrow habitat. ▶ If western spadefoot adults, tadpoles, or eggs are not detected during the focused survey, the qualified biologist will submit a report summarizing the results of the survey to the discretionary land use authority (City of Merced or Merced County), and further mitigation will not be required. ▶ If western spadefoot adults, tadpoles, or eggs are detected, a qualified biologist with an appropriate CDFW Scientific Collecting 	<p>Pre-construction surveys to identify presence of Western spadefoot. Implementation of mitigation with CDFW permit if any are located.</p>	<p>Project applicant, construction contractor, CDFW</p>	<p>Before construction</p>
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Impact	Mitigation Measure	Action(s)	Implementing Party ¹	Timing	Completion of Implementation
	<p>Permit that allows handling of amphibians will relocate individual adults, tadpoles, or eggs to nearby suitable habitat with prior approval of CDFW. The qualified biologist will also be present during initial ground disturbance activities and will inspect the project site in the UCP area before initiation of project activities. If additional western spadefoot are detected, the qualified biologist will relocate individuals into suitable habitat for western spadefoot (i.e., vernal pool grasslands) that will be preserved in perpetuity.</p> <p>New Mitigation Measure 3.2-2b: Conduct Preconstruction Surveys for Western Pond Turtle, Implement Avoidance Measures, and Relocate Individuals</p> <ul style="list-style-type: none"> ▶ Within 48 hours before commencement of project activities that would result in ground disturbance, vegetation removal, or use of vehicles, a qualified biologist familiar with the life history of western pond turtle and experienced in performing surveys for western pond turtle will conduct a focused survey of habitat suitable for the species within the UCP area. If aquatic habitat potentially suitable for the species is present within a project site in the UCP area (e.g., streams, ponds, drainages), upland habitat within approximately 1,600 feet of this aquatic habitat will also be surveyed. The qualified biologist will inspect the project site for western pond turtles as well as suitable burrow habitat. ▶ If western pond turtles are not detected during the focused survey, the qualified biologist will submit a report summarizing the results of the survey to the discretionary land use authority (City of Merced or Merced County), and further mitigation will not be required. ▶ If western pond turtles are detected, a no-disturbance buffer of at least 100 feet will be established around any identified nest sites or overwintering sites. A qualified biologist with an appropriate CDFW Scientific Collecting Permit that allows 	<p>Pre-construction surveys to identify presence of Western pond turtle. Implementation of avoidance measures and relocation.</p>	<p>Project applicant, construction contractor</p>	<p>Before construction</p>	

<p>handling of reptiles will be present during initial ground disturbance activities and will inspect the project site before initiation of project activities. If western pond turtles are detected, the qualified biologist will move the turtles downstream and out of harm's way.</p> <p>New Mitigation Measure 3.2-2c: Conduct Focused American Badger Survey and Establish Protective Buffers</p> <ul style="list-style-type: none"> ▶ Within 30 days before commencement of project activities that would result in ground disturbance, vegetation removal, or use of vehicles, a qualified wildlife biologist with familiarity with American badger and experience using survey methods for the species will conduct focused surveys of habitat suitable for the species within the UCP area to identify any American badger dens. ▶ If occupied dens are not found, the qualified biologist will submit a report summarizing the results of the survey to the discretionary land use authority (City of Merced or Merced County), and further mitigation will not be required. ▶ If occupied dens are found, impacts on active badger dens will be avoided by establishing exclusion zones around all active badger dens, the size of which will be determined by the qualified biologist. No project activities (e.g., vegetation removal, ground disturbance, staging) will occur within the exclusion zone until denning activities are complete or the den is abandoned, as confirmed by a qualified biologist. The qualified biologist will monitor each den once per week to track the status of the den and to determine when it is no longer occupied. When it is no longer occupied, project activities within the exclusion zone may occur. <p>New Mitigation Measure 3.2-2d: Conduct Focused Surveys for Crotch Bumble Bee and Implement Avoidance Measures If Listed under CESA</p> <p>Prior to implementation of project activities that could result in loss of crotch bumble bees (e.g., ground disturbance, vegetation removal), the following measures will be implemented.</p> <ul style="list-style-type: none"> ▶ The project applicant will retain a qualified biologist familiar with bumble bees in California, with experience using survey methods 	<p>Pre-construction surveys to identify presence of American Badger. Establishment of protective buffers.</p>	<p>Project applicant, construction contractor</p>	<p>Before construction</p>	
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Impact	Mitigation Measure	Action(s)	Implementing Party ¹	Timing	Completion of Implementation
	<p>for bumble bees, and with approval from CDFW to conduct focused surveys of suitable habitat within the project site in the UCP area. Because a survey protocol for this species has not been established, survey methods will be developed and approved in consultation with CDFW, and will generally include but not be limited to the following elements (included in survey protocols for other bumble bee species in the United States [USFWS 2018]):</p> <ul style="list-style-type: none"> ▪ Surveys will be conducted during the active flight season (typically March through September). ▪ Surveys will be conducted by walking transects through suitable habitat, or by surveying a minimum of one person-hour per 3 acres of suitable habitat without transects. ▪ Bumble bees within the project site will be identified through passive, non-lethal methods (e.g., visual surveys using binoculars, photographic documentation), as approved by CDFW. <ul style="list-style-type: none"> • If crotch bumble bees are detected during focused surveys, the survey results will be submitted to the discretionary land use authority (City of Merced or Merced County) and CDFW. The project applicant will consult with CDFW to determine whether there are additional avoidance measures available that would reduce the likelihood of injury or mortality of crotch bumble bee. The project applicant will consult with CDFW to determine whether authorization for take of crotch bumble bees would be required by obtaining an incidental take permit pursuant to California Fish and Game Code Section 2081. If required, the project applicant will implement measures required under the permit which may include compensatory mitigation to fully mitigate impacts on crotch bumble bee. 	<p>Pre-construction surveys to identify presence of Crotch Bumble Bee. Establishment of avoidance measures</p>	<p>Project applicant, construction contractor. CDFW</p>	<p>Before construction</p>	
		<p>Pre-construction surveys to identify presence of bats. Establishment of avoidance measures</p>	<p>Project applicant, construction contractor. County of Merced</p>	<p>Before construction</p>	

Impact	Mitigation Measure	Action(s)	Implementing Party ¹	Timing	Completion of Implementation
	<ul style="list-style-type: none"> If no crotch bumble bees are detected during focused surveys, the survey results will be submitted to the discretionary land use authority (City of Merced or Merced County). The project applicant will consult with CDFW to determine whether the negative survey results are sufficient to conclude that crotch bumble bees (including underground overwintering and nesting colonies) are absent from the project site, and that authorization for take of crotch bumble bees would not be required. If CDFW concurs, then further mitigation would not be required. <p>New Mitigation Measure 3.2-2e: Conduct Focused Bat Surveys and Implement Avoidance Measures</p> <p>Within 30 days before commencement of project activities, a qualified biologist familiar with bats and bat ecology and experienced in conducting bat surveys will conduct surveys for bat roosts in suitable habitat (e.g., trees, crevices, cavities, exfoliating bark, bridges, unoccupied buildings) within and adjacent to the UCP area.</p> <ul style="list-style-type: none"> ▶ Surveys will consist of a daytime pedestrian survey looking for evidence of bat use (e.g., guano) and/or an evening emergence survey to note the presence or absence of bats within potential roosts. ▶ If no evidence of bat roosts is found, the qualified biologist will submit a report summarizing the results of the survey to the discretionary land use authority (City of Merced or Merced County), and no further study will be required. ▶ If evidence of bat roosts is observed, the species and number of bats using the roost will be determined. Bat detectors shall be used if deemed necessary to supplement survey efforts by the qualified biologist. ▶ If an active western red bat maternity roost is detected, a qualified biologist shall determine an appropriate avoidance buffer to be maintained from April 1 until young are capable of 	Pre-construction surveys to identify presence of burrowing owl. Establishment of avoidance measures and compensation for affected areas	Project applicant, construction contractor. CDFW	Before construction	
		If pile driving must occur within 55 feet of existing structures, use vibratory pile driving or augered piles.	Project applicant, construction contractor	During construction	

Impact	Mitigation Measure	Action(s)	Implementing Party ¹	Timing	Completion of Implementation
	<p>flight (typically through August). Project activities will not occur within this buffer until after the roosts are unoccupied.</p> <ul style="list-style-type: none"> ▶ If roosts of western red bat are determined to be present and must be removed, the bats will be excluded from the roosting site before the tree, building, or other roost structure is removed. A program addressing compensation, exclusion methods, and roost removal procedures will be developed in consultation with CDFW before implementation. Exclusion methods may include use of one-way doors at roost entrances (bats may leave but not reenter) or sealing roost entrances when the site can be confirmed to contain no bats. Exclusion efforts may be restricted during periods of sensitive activity (e.g., during hibernation or while females in maternity colonies are nursing young). The loss of each roost (if any) will be replaced in consultation with CDFW and may require construction and installation of bat boxes suitable to the bat species and colony size excluded from the original roosting site. If determined necessary during consultation with CDFW, replacement roosts will be implemented before bats are excluded from the original roost sites. Once the replacement roosts are constructed and it is confirmed that bats are not present in the original roost site by a qualified biologist, the roost tree, building, or roost other structure may be removed. <p>New Mitigation Measure 3.2-2f: Conduct Protocol-Level Surveys for Burrowing Owl, Implement Avoidance Measures, and Compensate for Loss of Occupied Burrows</p> <p>This mitigation measure would remove the requirements of Adopted Mitigation Measure 4.4-4(b) and implement the following protocol-level survey requirements.</p> <p>A qualified biologist will conduct focused breeding and nonbreeding season surveys for burrowing owls in areas of habitat suitable for the species identified during the reconnaissance-level survey (e.g., grassland, agricultural land) on and within 1,640 feet (500 meters) of the UCP area. Surveys will be conducted before the start of project</p> 				

Impact	Mitigation Measure	Action(s)	Implementing Party ¹	Timing	Completion of Implementation
	<p>activities and in accordance with Appendix D of the <i>CDFW Staff Report on Burrowing Owl Mitigation</i> (CDFW 2012; CDFW Staff Report).</p> <ul style="list-style-type: none"> ▶ If no occupied burrows are found, the qualified biologist will submit a report documenting the survey methods and results to the discretionary land use authority (City of Merced or Merced County), and no further mitigation will be required. ▶ If an active burrow is found within 1,640 feet of pending construction activities that would occur during the nonbreeding season (September 1 through January 31), a minimum protection buffer of 164 feet (50 meters) shall be established and maintained around the occupied burrow throughout construction. The protection buffer may be adjusted if, in consultation with CDFW, a qualified biologist determines that an alternative buffer will not disturb burrowing owl use of the burrow because of particular site features or other buffering measures. If occupied burrows are present that cannot be avoided or adequately protected with a no-disturbance buffer, a burrowing owl exclusion plan will be developed, as described in Appendix E of the CDFW Staff Report. Burrowing owls will not be excluded from occupied burrows until the project burrowing owl exclusion plan is approved by CDFW. The exclusion plan will include a compensatory habitat mitigation plan (see below). ▶ If an active burrow is found during the breeding season (February 1 through August 31), occupied burrows will not be disturbed and will be provided with a protective buffer at a minimum of 164 feet unless a qualified biologist verifies through noninvasive means that either: (1) the birds have not begun egg laying, or (2) juveniles from the occupied burrows are foraging independently and are capable of independent survival. The size of the buffer may be adjusted depending on the time of year and level of disturbance as outlined in the CDFW Staff Report. The size of the buffer may be reduced if a broad-scale, long-term, monitoring program acceptable to CDFW is implemented so that burrowing owls are not adversely affected. Once the fledglings are capable of independent survival, 				

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	<p>the owls can be evicted, and the burrow can be destroyed per the terms of a CDFW-approved burrowing owl exclusion plan developed in accordance with Appendix E of CDFW Staff Report.</p> <ul style="list-style-type: none"> ▶ If burrowing owls are evicted from burrows and the burrows are destroyed by implementation of project activities, the project applicant will mitigate the loss of occupied habitat in accordance with guidance provided in the CDFW Staff Report, which states that permanent impacts on nesting, occupied and satellite burrows, and burrowing owl habitat (i.e., grassland habitat with suitable burrows) will be mitigated such that habitat acreage and number of burrows are replaced through permanent conservation of comparable or better habitat with similar vegetation communities and burrowing mammals (e.g., ground squirrels) present to provide for nesting, foraging, wintering, and dispersal. The project applicant will retain a qualified biologist to develop a burrowing owl mitigation and management plan that incorporates the following goals and standards: <ul style="list-style-type: none"> ▪ Mitigation lands will be selected based on comparison of the habitat lost to the compensatory habitat, including type and structure of habitat, disturbance levels, potential for conflicts with humans, pets, and other wildlife, density of burrowing owls, and relative importance of the habitat to the species throughout its range. ▪ If feasible, mitigation lands will be provided adjacent or proximate to the project site so that displaced owls can relocate with reduced risk of injury or mortality. Feasibility of providing mitigation adjacent or proximate to the project site depends on availability of sufficient habitat to support displaced owls that may be preserved in perpetuity. ▪ If habitat suitable for burrowing owl is not available for conservation adjacent or proximate to the project site, mitigation lands can be secured offsite and will aim to consolidate and enlarge conservation areas outside of planned development areas and within foraging distance of 				

Impact	Mitigation Measure	Action(s)	Implementing Party ¹	Timing	Completion of Implementation
	<p>other conservation lands. Mitigation may also be accomplished through purchase of mitigation credits at a CDFW-approved mitigation bank, if available. Alternative mitigation sites and acreages may also be determined in consultation with CDFW.</p> <p>If burrowing owl habitat mitigation is completed through permittee-responsible conservation lands, the mitigation plan will include mitigation objectives, site selection factors, site management roles and responsibilities, vegetation management goals, financial assurances and funding mechanisms, performance standards and success criteria, monitoring and reporting protocols, and adaptive management measures. Success will be based on the number of adult burrowing owls and pairs using the site and if the numbers are maintained over time. Measures of success, as suggested in the CDFW Staff Report, will include site tenacity, number of adult owls present and reproducing, colonization by burrowing owls from elsewhere, changes in distribution, and trends in stressors.</p>				
Greenhouse Gas Emissions and Climate Change					
Impact 3.4-1: Conflict with an Applicable Plan, Policy or Regulation Adopted for the Purpose of Reducing the Emissions of Greenhouse Gases	<p>New Mitigation Measure 3.4-1: Implement the Bay Area Air Quality Management District’s On-Site Project Design Features to Demonstrate the Project’s Fair Share in Meeting the State’s Long-Term GHG Reduction Targets (UCP South only)</p> <p>The following mitigation measure shall be applied to the UCP South portion of the project site. Prior to the issuance of building permits, the project applicant shall include the following elements in all construction drawings.</p> <ul style="list-style-type: none"> ▶ Eliminate all on-site natural gas infrastructure for all land uses. ▶ Adherence to the most recent Tier 2 requirements of Part 11 of the Title 24 California Buildings Code’s (CALGreen Code’s) electric vehicle (EV) charging standards. 	<p>Adherence to applicable state guidelines and standards with respect to GHG reduction strategies.</p>	<p>Project applicant</p>	<p>Before building permits are issued and/or before approval of improvement plans</p>	

Impact	Mitigation Measure	Action(s)	Implementing Party ¹	Timing	Completion of Implementation
	<ul style="list-style-type: none"> ▶ Demonstrate consistency with OPR’s SB 743 regional VMT standards (i.e., residential projects meeting a 15 percent below the existing VMT per capita, office projects meeting a 15 percent below the existing VMT per employee, and retail projects attaining a no net increase in existing VMT) ▶ If the aforementioned project design features cannot be incorporated into the project’s design, the applicant shall include other relevant project design characteristics such that any additional emissions generated from natural gas, insufficient EV charging, or excessive VMT can be fully offset. Examples of measures that could be applied to individual projects in UCP South include, but are not limited to, the following: <ul style="list-style-type: none"> ▪ Implementation of a solid waste diversion program. ▪ Exceedance of the most recent version of Part 6 of the Title 24 California Building Code (California Energy Code). ▪ Use of low-flow appliances. ▪ Use of energy star appliances. <p>Implementation of ZNE buildings.</p>				
Impact 3.4-3: Conflict with or Obstruct a State or Local Plan for Renewable Energy or Energy Efficiency	New Mitigation Measure 3.4-3: Implement On-Site Project Design Features that that Address Building Carbonization and Energy Efficiency (UCP South) Implement the project design features in Mitigation Measure 3.4-1 that address building carbonization and energy efficiency.	Implementation of design features during building construction	Project applicant	Before building permit is issued	
Hydrology and Water Quality					

Impact	Mitigation Measure	Action(s)	Implementing Party ¹	Timing	Completion of Implementation
Impact 3.5-3: Substantially Alter the Existing Drainage Pattern of Project Area	<p>Mitigation Measure 3.5-3: Implement Altered Channel Cross Section Subject to MID Approval (VST Specific Plan Only) Prior to initiation of infrastructure improvements for Phase 2 of the VST Specific Plan, the project applicant or subsequent developer shall submit evidence to the discretionary land use authority (City of Merced or Merced County) that:</p> <ul style="list-style-type: none"> ▶ the proposed modification of the Fairfield Canal is designed such that no change would occur in the hydraulic flow rates and velocities of the canal, and ▶ necessary permits have been obtained from MID. ▶ Specific features that can be incorporated into the design to effectively control flowrate and velocity include (but are not limited to) adjusting the channel cross section, use of construction material that has higher roughness coefficient (i.e., river rock, rip rap, gabions), incorporating roughness baffles, and energy dissipaters at the downstream end of the canal. 	Implementation of altered channel cross section of Fairfield Canal	Project applicant with oversight from MID, subject to approval from City of Merced or Merced County	Before infrastructure improvements	
Impact 3.5-5: Cumulative Impacts to Water Quality	<p>No new mitigation is required for this impact. In light of changes to the cumulative condition and current regulations, Adopted Mitigation Measure 4.8-12 is no longer applicable or required to address the cumulative impacts of the UCP Update. The mitigation requirement would be removed as follows: Adopted Mitigation Measure 4.8-12 The County shall develop Best Management Practices and prepare a Stormwater Pollution Prevention Plan and a stormwater monitoring program consistent with National Pollution Discharge System Phase 2 Permit Criteria.</p>	None	N/A	N/A	
Impact 3.5-6: Cumulative Impacts to	<p>No new mitigation is required for this impact. In light of changes to the cumulative condition and current regulations, Adopted Mitigation Measures 4.8-15 and 4.8-16 are no</p>	None	N/A	N/A	

Impact	Mitigation Measure	Action(s)	Implementing Party ¹	Timing	Completion of Implementation
Hydrology and Flooding	<p>longer applicable or required to address the cumulative impacts of the UCP Update. The mitigation requirement would be removed as follows:</p> <p>Adopted Mitigation Measure 4.8-15: The County shall work with the Merced County Flood Control District, MID, and the City of Merced to update the Merced County Critical Area Flooding and Drainage Plan to identify a strategy for managing storm drainage runoff associated with future development within the Merced area. The plan update shall include at a minimum: existing hydrologic and hydraulic conditions; identification of base flood elevations that meet FEMA 44 CFR part 60 requirements, if such data have not been developed, and a process to evaluate the one-foot cumulative increase criteria; estimates of future peak flows and volumes based on anticipated land uses; performance standards for new development that address both peak flows and volumes while downstream conditions are not worsened; strategies to coordinate the development of local storm drainage and flood protection improvements with Merced County Streams Group projects; and mechanisms to update or revise the plan as needed as new information becomes available.</p> <p>Adopted Mitigation Measure 4.8-16: MID and the County shall coordinate to ensure that additional stormwater drainage systems do not add flows into the Fairfield Canal that would exceed the canal's capacity restrictions, potentially creating levee failure or overtopping conditions downstream of the UCP area.</p>				
Noise and Vibration					
Impact 3.6-1: Short-Term Construction-	Adopted Mitigation Measure 4.10-4: Construction contractors shall comply with the following or an equivalent noise control program:	Construction equipment must comply with noise control program	Project applicant, construction contractor	Before ground disturbance	

Impact	Mitigation Measure	Action(s)	Implementing Party ¹	Timing	Completion of Implementation
Generated Noise Levels	<ul style="list-style-type: none"> ▶ All noise-producing project equipment and vehicles using internal combustion engines shall be equipped with exhaust mufflers and air-inlet silencers where appropriate, in good operating condition that meet or exceed original factory specification. ▶ Mobile or fixed "package" equipment (e.g., arc-welders, air compressors) shall be equipped with shrouds and noise control features that are readily available for that type of equipment. ▶ All mobile or fixed noise producing equipment used on the project, that is regulated for noise output by local, state or federal agency, shall comply with such regulation while engaged in project-related activities. ▶ Electrically powered equipment shall be used instead of pneumatic or internal combustion powered equipment, where practicable. ▶ Material stockpiles and mobile equipment staging, parking and maintenance areas shall be located as far as practicable from noise-sensitive receptors. ▶ The use of noise-producing signals, including horns, whistles, alarms, and bells shall be for safety warning purposes only. No project-related public address loudspeaker, two-way radio, or music system shall be audible at any adjacent noise-sensitive receptor except for emergency use. <p>The erection of temporary noise barriers will be considered where project activity is unavoidably close to noise-sensitive receptors.</p> <p>New Mitigation Measure 3.6-1: Revise Policy N 2.6 for Managing Noise from Construction Activities of the Adopted UCP</p> <p>Revise Policy N 2.6 of the Adopted UCP as follows:</p> <p>Policy N 2.6</p> <p>Manage noise from construction activities by:</p> <ul style="list-style-type: none"> ▶ Limiting the hours of construction activities that generate noise, when adjacent to housing and other "sensitive" uses. Typically, Construction is limited to the hours of 7:00 a.m. to <u>6:00 p.m.</u> 	Implementation of noise control features on certain equipment	Project applicant, construction contractor	Before ground disturbance	

Impact	Mitigation Measure	Action(s)	Implementing Party ¹	Timing	Completion of Implementation
	<p>10:00 p.m., weekdays and Saturday, and prohibited on Saturdays, Sundays, and legal holidays, except for emergency work.</p> <ul style="list-style-type: none"> ▶ Requiring that all construction vehicles or equipment, fixed or stationary, be equipped with properly operating and maintained mufflers. ▶ <u>All construction equipment shall be properly maintained and equipped with noise-reduction intake and exhaust mufflers and engine shrouds, in accordance with manufacturers' recommendations. Equipment engine shrouds shall be closed during equipment operation.</u> ▶ Requiring that construction vehicle staging areas be located as far as practical from existing residential uses ▶ Requiring that construction vehicle trips be routed as far as practical from existing residential uses ▶ <u>Construction equipment with back-up alarms shall be equipped with either audible self-adjusting backup alarms or alarms that only sound when an object is detected. Self-adjusting backup alarms shall automatically adjust to 5 dB over the surrounding background levels. All non-self-adjusting backup alarms shall be set to the lowest setting required to be audible above the surrounding noise levels.</u> ▶ <u>Locate any trailers and materials used during construction capable of breaking the line of sight between the noise-sensitive receptors and construction-noise generating equipment such that they would serve as noise barriers in order to protect noise-sensitive receptors from noise generated by off-site construction activity.</u> ▶ <u>For construction occurring within 600 feet of an existing noise sensitive receptor, install temporary noise curtains as close as possible to the noise-generating activity such that the curtains obstruct the direct line of sight between the noise-generating construction activity and the nearby sensitive receptors. Temporary noise curtains shall consist of durable, flexible composite material featuring a noise barrier layer bounded to</u> 				

Impact	Mitigation Measure	Action(s)	Implementing Party ¹	Timing	Completion of Implementation
	<p><u>sound-absorptive material on one side. The noise barrier layer shall consist of rugged, impervious, material with a surface weight of at least one pound per square foot.</u></p> <ul style="list-style-type: none"> ▶ <u>Noise-reducing enclosures and techniques shall be used around stationary noise-generating equipment (e.g., concrete mixers, generators, compressors).</u> ▶ <u>Operate heavy-duty construction equipment at the lowest operating power possible.</u> <p><u>Electrically powered equipment shall be used instead of pneumatic or internal combustion powered equipment, where practicable.</u></p>				
<p>Impact 3.6-2: Long-Term, Operational Noise (Stationary and Area Sources)</p>	<p>Mitigation Measure 3.6-2: Amend the UCP to Include Provisions for Operational Stationary Source Noise Generating Activities</p> <p>The County of Merced shall revise the following policies in the UCP Update as follows:</p> <ul style="list-style-type: none"> ▶ Policy N 1.1 Design and construct new noise-generating land uses in a manner that does not cause excessive <u>exterior or interior noise for noise-sensitive land uses on any location of nearby residential properties.</u> The <u>exterior noise standard for noise-sensitive land uses is of 65 60 dBA L_{dn}</u> and the <u>interior noise standard for residential structures and other noise-sensitive land uses is 45 dB L_{dn}</u>; provided, however, that residential uses within and immediate adjacent to the Town Center shall be considered commercial mixed uses for the purposes of determining noise compatibility. <u>Additionally, exterior stationary source noise standards for noise-sensitive land uses are 55 dB L_{eq} between the hours of 7:00 a.m. and 10:00p.m. and 45 dB L_{eq} and 50 L_{max} between the hours of 10:00 p.m. and 7:00 a.m. shall not be exceeded by stationary noise generating land uses at any existing or planned residential land use.</u> Noise reduction features shall be included in the design of any land use that has noise sources affecting residential land uses. <u>These noise reduction features shall include structure design and layout, site planning, and other measures; block walls and barriers</u> 	<p>Design of new land uses to prevent excessive noise near noise-sensitive receptors</p>	<p>Project applicant, County of Merced</p>	<p>Prior to Project approval</p>	

Impact	Mitigation Measure	Action(s)	Implementing Party ¹	Timing	Completion of Implementation
	<p><u>(including berms) shall only be used where such measures are deemed infeasible or ineffective.</u></p> <p>Policy N X.X Loading docks shall be located and designed such that noise generated by activity at the loading dock would not exceed the City's stationary noise source criteria (i.e., exterior noise levels of 55 dB L_{eq} between the hours of 7:00 a.m. and 10:00p.m. and 45 dB L_{eq} and 50 L_{max} between the hours of 10:00 p.m. and 7:00 a.m) at any existing noise sensitive receptor. As part of the design-build process for uses that include loading docks, a specialized noise study will be completed to evaluate the specific design and ensure compliance with City of Merced noise standards. Reduction of loading dock noise can be achieved by locating loading docks as far away as possible from noise sensitive land uses, constructing noise barriers between loading docks and noise-sensitive land uses, or using buildings and topographic features to provide acoustic shielding for noise-sensitive land uses. Final design, location, and orientation shall be dictated by findings in the noise study.</p>				
<p>Impact 3.6-3: Long-Term, Operational Noise (Traffic)</p>	<p>Adopted Mitigation Measure 4.10-3(a): The County shall construct barriers and/or retrofit affected homes with noise attenuation measures (e.g., sound-rated windows) necessary to achieve a 45 Ldn interior noise level.</p> <p>Adopted Mitigation Measure 4.10-3(b): For development within the UCP area, noise considerations should be taken into account during initial site planning, in order to maximize shielding by the planned structures or other on-site features.</p>	<p>During planning, applicant shall design development with noise considerations in mind.</p>	<p>Project applicant</p>	<p>Prior to Project approval</p>	
<p>Impact 3.6-4: Generate Excessive Groundborne Vibration or Groundborne Noise Levels</p>	<p>Adopted Mitigation Measure 4.10-5: Limit groundborne vibration due to construction activities to 0.2 in/sec velocity (limit of potential for damage to structures) in the vertical direction at sensitive receptors. For construction adjacent to highly sensitive uses, apply additional measures as feasible, including advance notice to occupants of sensitive facilities to ensure precautions are taken in those facilities to protect ongoing activities from the effects of vibration.</p>	<p>Implementation of vibration reduction measures,</p>	<p>Project applicant, construction contractor.</p>	<p>During construction.</p>	

Impact	Mitigation Measure	Action(s)	Implementing Party ¹	Timing	Completion of Implementation
	<p>New Mitigation Measure 3.6-4: Amend the UCP to Include Provisions for Potential Vibration-Inducing Activities The County of Merced shall include the following policy in the UCP Update:</p> <ul style="list-style-type: none"> ▶ Policy N.X: Construction Vibration. <u>All potential vibration-inducing activities shall comply with the following measures, setback distances, precautions, monitoring programs, and alternative methods to traditional construction activities:</u> <ul style="list-style-type: none"> ▪ <u>Ground vibration-producing activities, such as pile driving and blasting, shall be limited to the daytime hours between 7:00 a.m. to 6:00 p.m. on weekdays and shall not occur on weekends and holidays consistent with County of Merced Municipal Code Section 10.60.040.</u> ▪ <u>If pile driving is used and would occur within 630 feet of existing residential receptors, pile holes shall be predrilled to the maximum feasible depth to reduce the number of blows required to seat a pile.</u> ▪ <u>All construction equipment on construction sites shall be operated as far away from vibration-sensitive sites as reasonably possible.</u> ▪ <u>Earthmoving and ground-impacting operations shall be phased so as not to occur simultaneously in areas close to sensitive receptors, to the extent feasible. The total vibration level produced could be significantly less when each vibration source is operated at separate times.</u> ▪ <u>Minimum setback requirements for different types of ground vibration producing activities (e.g., pile driving and blasting) for the purpose of preventing negative human response shall be established based on the specific nature of the vibration producing activity (e.g., type and duration of pile driving), local soil conditions, and the type of sensitive receptor. Established setback requirements (i.e., 630 feet) can be breached only if a project-specific, site-specific, technically adequate ground vibration study indicates that the buildings</u> 				

Impact	Mitigation Measure	Action(s)	Implementing Party ¹	Timing	Completion of Implementation
	<p><u>would not be exposed to ground vibration levels in excess of 70 VdB, and ground vibration measurements performed during the construction activity confirm that the buildings are not being exposed to levels in excess of 70 VdB.</u></p> <ul style="list-style-type: none"> ▪ <u>All vibration-inducing activity within the distance parameters described above shall be monitored and documented for ground vibration noise and vibration noise levels at the nearest sensitive land use and associated recorded data submitted to the County of Merced so as not to exceed 70 Vdb.</u> <p><u>Alternatives to traditional pile driving (e.g., sonic pile driving, jetting, cast-in-place or auger cast piles, nondisplacement piles, pile cushioning, torque or hydraulic piles) shall be considered and implemented where feasible to reduce vibration levels.</u></p>				

Impact	Mitigation Measure	Action(s)	Implementing Party ¹	Timing	Completion of Implementation
<p>Impact 3.6-5: Cumulative Noise Impacts</p>	<p>Adopted Mitigation Measure 4.10-3(a): The County shall construct barriers and/or retrofit affected homes with noise attenuation measures (e.g., sound-rated windows) necessary to achieve a 45 L_{dn} interior noise level.</p> <p>Adopted Mitigation Measure 4.10-3(b): For development within the UCP area, noise considerations should be taken into account during initial site planning, in order to maximize shielding by the planned structures or other on-site features.</p> <p>Adopted Mitigation Measure 4.10-4: Construction contractors shall comply with the following or an equivalent noise control program:</p> <ul style="list-style-type: none"> ▶ All noise-producing project equipment and vehicles using internal combustion engines shall be equipped with exhaust mufflers and air-inlet silencers, where appropriate, in good operating condition that meet or exceed original factory specification. ▶ Mobile or fixed "package" equipment (e.g., arc-welders, air compressors) shall be equipped with shrouds and noise control features that are readily available for that type of equipment. ▶ All mobile or fixed noise-producing equipment used on the project, that is regulated for output by local, state or federal 	<p>County to retrofit affected homes.</p>	<p>County of Merced</p>	<p>Before construction.</p>	

Impact	Mitigation Measure	Action(s)	Implementing Party ¹	Timing	Completion of Implementation
	<p>agency, shall comply with such regulation while engaged with project-related activities.</p> <ul style="list-style-type: none"> ▶ Electrically powered equipment shall be used instead of pneumatic or internal combustion powered equipment, where practicable. ▶ Material stockpiles and mobile equipment staging, parking and maintenance areas shall be located as far as practicable from noise-sensitive receptors. ▶ The use of noise-producing signals, including horns, whistles, alarms, and bells, shall be for safety warning purposes only. No project-related public address loudspeaker, two-way radio, or music system shall be audible at any adjacent noise-sensitive receptor except for emergency use. ▶ The erection of temporary noise barriers will be considered where project activity is unavoidably close to noise-sensitive receptors. <p>Adopted Mitigation Measure 4.10-5: Limit groundborne vibration due to construction activities to 0.2 in/sec velocity (limit of potential for damage to structures) in the vertical direction at sensitive receptors. For construction adjacent to highly sensitive uses, apply additional measures as feasible, including advance notice to occupants of sensitive facilities to ensure precautions are taken in those facilities to protect ongoing activities from the effects of vibration.</p>	Implementation of noise attenuation measures.	Project applicant, construction contractor	During construction	
Transportation					

Impact	Mitigation Measure	Action(s)	Implementing Party ¹	Timing	Completion of Implementation
Impact 3.7-1: Conflict with a Program, Plan, Ordinance, or Policy Addressing the Circulation System, Including Transit, Roadway, Bicycle and Pedestrian Facilities	Adopted Mitigation Measure 4.14-4: Merced County will, and the City of Merced should, ensure adequate maintenance of the existing path along Lake Road and other regional bicycle and pedestrian facilities that provide access to the proposed UCP.	Maintain of existing path and other bike and pedestrian facilities providing access to UCP.	Merced County and City of Merced	During Project operation	
Impact 3.7-3: Substantially Increase Hazards Due to a Geometric Design Feature (e.g., Sharp Curves or Dangerous Intersections) or Incompatible Uses (e.g., Farm Equipment)	Adopted Mitigation Measure 4.14-4: Merced County will, and the City of Merced should, ensure adequate maintenance of the existing path along Lake Road and other regional bicycle and pedestrian facilities that provide access to the proposed UCP.	Maintain of existing path and other bike and pedestrian facilities providing access to UCP.	Merced County and City of Merced	During Project operation	

Impact	Mitigation Measure	Action(s)	Implementing Party ¹	Timing	Completion of Implementation
<p>Impact 3.7-5: Cumulative Transportation Impacts</p>	<p>Adopted Mitigation Measure 4.14-7(a): UCP development shall contribute its fair share toward the following Tier road improvements which are shown in Figure 4.14-3 [in the 2001/2004 UCP EIR]:</p> <ul style="list-style-type: none"> ▶ Highway 59, widen to 4 lanes, Yosemite Avenue to Bellevue Road ▶ Highway 59, new segment between Highway 99 and 140 ▶ Yosemite Avenue, extend from R Street to Highway 59 ▶ Yosemite Avenue, widen to 4 lanes, Campus Parkway to G Street ▶ Bellevue Road, widen to 6 lanes, Highway 59 to Campus Parkway ▶ R Street, extend from Yosemite Avenue to Bellevue Road ▶ Parsons Avenue/Gardner Avenue, extend and widen to 4 lanes, Childs Avenue to Bellevue Road ▶ Highway 59, new alignment along Mission Avenue ▶ Mission Avenue, widen to 4 lanes, Highway 99 to Highway 59 ▶ Childs Avenue, widen to 4 lanes, Campus Parkway to Highway 59 <p>Adopted Mitigation Measure 4.14-7(b): For development through year 2025, UCP development shall only contribute its fair share toward the following Tier road improvements, which are shown on Figure 4.14-4:</p> <ul style="list-style-type: none"> ▶ Yosemite Avenue, extend from R Street to Highway 59 ▶ Yosemite Avenue, widen to 4 lanes, Campus Parkway to G Street ▶ R Street, extend from Yosemite Avenue to Bellevue Avenue ▶ Parsons Avenue/Gardner Avenue, extend and widen to 4 lanes, Childs Avenue to Bellevue Road 	<p>Contribution of fair share road improvements</p>	<p>Project applicant</p>	<p>Before construction</p>	

Impact	Mitigation Measure	Action(s)	Implementing Party ¹	Timing	Completion of Implementation
	<p>► Bellevue Road, widen to 4 lanes, Highway 59 to Campus Parkway</p> <p>Adopted Mitigation Measure 4.14-7(c): For development through Year 2015, the County shall analyze the expected future operations of the Lake/Yosemite intersection at the following milestone points: (1) determination of conceptual alignment for Campus Parkway, (2) preparation of the Geometric Approval Drawings for Campus Parkway, and (3) each October, beginning in the opening year of the UC Merced Campus. If any of these analyses determine that the Lake/Yosemite intersection will operate at unacceptable LOS, the proposed UCP shall contribute its fair share toward the cost of any improvements deemed necessary at the intersection. Monitoring of the Lake/Yosemite intersection shall end upon completion of the Campus Park extension from Yosemite Avenue to Bellevue Road.</p> <p>Adopted Mitigation Measure 4.14-7(d): The County shall work with the City of Merced, Caltrans and MCAG to establish rights-of-way and access management requirements along the routes identified above.</p> <p>Adopted Mitigation Measure 4.14-8(a): Implement Mitigation Measure 4.14-7(a). In addition, UCP development shall contribute its fair share toward intersection improvement along G Street between Highway 99 and Childs Avenue.</p> <p>Adopted Mitigation Measure 4.14-8(b): Implement Mitigation Measure 4.14-7(d).</p>	<p>Establishing proper rights of way and access for identified routes.</p>	<p>County of Merced, City of Merced</p>	<p>Before construction</p>	