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STATE ROUTE 113/HUTCHISON DRIVE INTERCHANGE IMPROVEMENTS PROJECT

Addendum to the UC Davis 2018 Long Range Development Plan EIR

State Clearinghouse No. 2017012008

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LIST OF ABBREVIATIONS

2018 LRDP University of California Davis 2018 Long Range Development Plan

AB Assembly Bill

BMP Best Management Practices

CAA Clean Air Act

CAAQS California Ambient Air Quality Standards

CBC California Building Code

CEQA California Environmental Quality Act
CNDDB California Natural Diversity Database
CNEL community noise equivalent level

CO carbon monoxide

dB decibel

dBA A-weighted decibel

EIR Environmental Impact Report
HCP Habitat Conservation Plan
LID Low Impact Development
I-80 Interstate Highway 80

LOS level of service

MGD million gallons per day

MSL mean sea level

MS4 Municipal Separate Storm Sewer System
NAAQS National Ambient Air Quality Standards
NAHC Native American Heritage Center
NCCP Natural Community Conservation Plan

NO_X oxides of nitrogen

NPDES National Pollutant Discharge Elimination System

Phase II Small MS4 Permit General Permit for Storm Water Discharges from Small Municipal

Separate Storm Sewer Systems

PM₁₀ particulate matter with an aerodynamic diameter of 10 microns or

smaller

PM_{2.5} particulate matter with an aerodynamic diameter of 2.5 microns or

smaller

Project SR 113/Hutchison Drive Interchange Improvements Project

ROG reactive organic gases

SACOG Sacramento Area Council of Governments

 $\begin{array}{ccc} \text{SB} & & \text{Senate Bill} \\ \text{SO}_2 & & \text{sulfur dioxide} \\ \text{SR} & & \text{State Route} \end{array}$

SWPPP stormwater pollution prevention plan

TAC toxic air contaminant

TDM Transit Demand Management

the Program EIR 2018 LRDP EIR

UC University of California
UPF ultrafine particles
VMT vehicle miles traveled

YSAQMD Yolo-Solano Air Quality Management District

1 PROJECT INFORMATION

Project title: State Route 113/Hutchison Drive Interchange

Improvements Project

Project location: University of California, Davis, Yolo County

Lead agency's name and address: The Regents of the University of California

1111 Franklin Street Oakland, CA 94607

Contact person: Matt Dulcich, Director of Environmental Planning

UC Davis Campus Planning and Environmental Stewardship

530.752.9597

Project sponsor's name and address: University of California, Davis

One Shields Avenue 436 Mrak Hall

Davis, CA 95616-8678

Location of administrative record: See Project Sponsor

Previously Certified 2018 LRDP Programmatic EIR:

This addendum documents that none of the conditions described in Section 15162 of the State CEQA Guidelines have occurred and the Project will not have any significant effects that were not already discussed in the Programmatic Environmental Impact Report (EIR) for the University of California (UC) Davis 2018 Long Range Development Plan (2018 LRDP) (State Clearinghouse No. 2017012008). The 2018 LRDP is a comprehensive land use plan that guides physical development on campus to accommodate projected enrollment increases and expanded and new program initiatives. The 2018 LRDP and its EIR are available for review at the following locations:

- UC Davis Campus Planning and Environmental Stewardship in 436 Mrak Hall on the UC Davis campus,
- reserves at Shields Library on the UC Davis campus,
- ■ Yolo County Public Library at 315 East 14th Street in Davis, and
- online at: http://environmentalplanning.ucdavis.edu.

Please note that due to Covid-19 and California's State of Emergency (Executive Order N-54-20) the UC Davis and Yolo County libraries and UC Davis offices are closed. Providing hard copies at these locations may not be feasible at this time. Please contact UC Davis Environmental Planning office if you need assistance accessing the appropriate documents.

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2 INTRODUCTION

2.1 PURPOSE OF THIS ADDENDUM

The Board of Regents of the University of California (The Regents) certified the environmental impact report (EIR) and adopted the Long Range Development Plan (LRDP) for the UC Davis campus in 2018. The programmatic environmental analysis of the overall LRDP was provided in Volume 1 of the Draft EIR; the State Route (SR) 113/Hutchison Drive Interchange Improvements component was included in Volume 2, West Village Expansion, as Mitigation Measure 3.16-4a: Modify the SR 113/Hutchison Drive Interchange. Volume 2 included a project-level analysis of the West Village Expansion component of the LRDP, incorporating information from Volume 1 as relevant. The SR 113/Hutchison Drive Interchange Improvements Project (the "Project") has since been modified following preliminary engineering and design work. This addendum describes the Project, which would involve the construction of roadway and ramp improvements at the intersection of SR 113 and Hutchison Drive. This addendum evaluates how modifications to the previously identified interchange improvements component is covered by the 2018 LRDP EIR. No subsequent CEQA document is necessary for this Project.

2.1.1 2018 Long Range Development Plan Environmental Impact Report

The 2018 LRDP is a comprehensive land use plan that guides physical development on campus to accommodate projected enrollment increases and expanded and new program initiatives. The UC Davis 2018 LRDP EIR (State Clearinghouse No. 2017012008) (UC Davis 2018a) was prepared in accordance with Section 15168 of the CEQA Guidelines and Public Resources Code Section 21094 and analyzed the environmental impacts of the 2018 LRDP. The 2018 LRDP EIR (Volume 1) analyzes full implementation of uses and physical development proposed under the 2018 LRDP (UC Davis 2018b) and identifies measures to mitigate the significant adverse program-level and cumulative impacts associated with that growth.

This addendum utilizes a modified checklist format to document that the interchange improvements are covered by the 2018 LRDP EIR pursuant to Section 15168(c) of the State CEQA Guidelines, which states, "subsequent activities in the program must be examined in the light of the program EIR to determine whether an additional environmental document must be prepared." Pursuant to Section 15168(c)(4), an agency should use "...a written checklist or similar device to document the evaluation of the site and the activity to determine whether the environmental effects of the operation were covered in the program EIR." The checklist is set up to document that none of the conditions described in CEQA Guidelines Section 15162 calling for the preparation of a subsequent EIR have occurred and an addendum to the 2018 LRDP EIR may be prepared (per CEQA Guidelines Section 15164).

The organization of the project-specific environmental analysis in this addendum follows the same overall format of the 2018 LRDP EIR (Volume 1); however, it avoids repetition of general background and setting information, the regulatory context, overall growth-related information, as well as issues that were evaluated fully in the 2018 LRDP EIR that require no further analysis, including cumulative impacts and alternatives to the 2018 LRDP. Instead, this addendum evaluates the more detailed project-level information specific to the Project to document that project activities are within the activities evaluated in the program EIR and that no subsequent EIR is required.

SR 113/HUTCHISON DRIVE INTERCHANGE IMPROVEMENTS COMPONENT OF THE 2018 LRDP EIR

The West Village Expansion component of the 2018 LRDP EIR (Volume 2) evaluated at a project level the potential physical impacts associates with development of the West Village expansion component of the UC Davis LRDP. The West Village Expansion component would provide additional student housing and related facilities including a centrally-located community building for students with a gym and designated study areas. The West Village Expansion component would provide housing for up to 3,800 students, of which 1,200 would be transfer students. Student housing buildings would be up to six stories in height and complement existing development to the east. The 48-acre West Village Expansion site is located within west campus in Yolo County and is bounded by Hutchison Drive to the south, existing residences in West Village to the east, and undeveloped agricultural land to the west and north.

As described in Volume 2 of the LRDP EIR, primary vehicular access to and from the West Village Expansion site is available via Hutchison Drive, the lone vehicular crossing of SR 113 immediately accessible from the West Village Expansion site. East of the West Village Expansion site, vehicles utilize Hutchison Drive to connect with SR 113 and the UC Davis central campus, as well as off-campus destinations within Davis. A Class I path is also present on the south side of Russell Boulevard between West Davis and the UC Davis central campus. Three bicycle roundabouts control bike flows in or near West Village, including a bicycle roundabout located at the western approach to the SR 113 bicycle/pedestrian overcrossing, which controls bicycle flows generated by West Village as well as West Davis (via the Russell Boulevard shared-use path). Three SR 113 crossings serve West Village bicyclists and pedestrians, including the Russell Boulevard overcrossing, the SR 113 bicycle/pedestrian overcrossing (immediately south of Russell Boulevard), and the Hutchison Drive overcrossing.

The LRDP EIR Volume 2 evaluated the impacts from buildout of the West Village Expansion and identified significant impacts related to vehicle level of service, bicycle facilities, and pedestrian facilities. Regarding bicycle facilities, the EIR noted that student and employee housing growth associated with the West Village Expansion would generate up to approximately 3,300 new bicyclists commuting to the central campus on a daily basis. Additional on-campus bicycle activity generated by on-campus housing growth (such as the West Village Expansion), together with increased automobile, transit, and pedestrian trips, could result in crowding on existing bicycle facilities and in shared right-of-way environments, particularly during peak travel periods such as the morning commute into the core campus area or passing periods between classes. Crowding would result in the competition for physical space between the modes, which in turn would increase the potential for collisions, including those involving bicyclists. The EIR stated that new West Village Expansion residents traveling to the core campus area by bike would cross SR 113 at one of three locations the shared-use path on the south side of the Russell Boulevard overcrossing, the bike/pedestrian overcrossing immediately south of Russell Boulevard, or the Class II bike lanes on the Hutchison Drive overcrossing. The majority of new West Village Expansion bicycle trips traveling to the core campus area would likely utilize the SR 113 bike/pedestrian overcrossing because of the directness of the route as well as its exclusive operating environment for bicyclists. As such, substantial additional bike volumes would be expected on the overcrossing and adjoining facilities, including the bicycle roundabout on the west end of the overcrossing. Although the SR 113 bike/pedestrian overcrossing is expected to accommodate most of the new West Village Expansion bicyclists, bicycle volume increases would also be expected on the existing Russell Boulevard shared-use path and Hutchison Drive bike lanes over SR 113. The EIR stated that increased project-related bicycle volume over the Hutchison Drive interchange would increase the potential for bicycle-vehicle conflicts because of the partial cloverleaf design of the interchange. This design features free right-turn lanes at the northbound and southbound ramps for vehicles, which create multiple mixing zones for bicycles and vehicles while also limiting sight lines for approaching vehicles at bike lane crossings.

To mitigate this impact, the LRDP EIR included West Village Expansion (WVE) Mitigation Measure 3.16-4a and 3.16-5, which stated:

The SR 113/Hutchison Drive interchange shall be modified to minimize the potential for conflicts between pedestrians, bicyclists, and vehicles and to provide dedicated space for each mode to the extent feasible. At a minimum, the interchange modifications should remove the existing channelized vehicular movements and square-up all on- and off-ramps with Hutchison Drive at a 90-degree angle. Specific ramps that should be reconstructed include the following:

- northbound diagonal on-ramp,
- northbound loop on-ramp,
- southbound diagonal on-ramp, and
- southbound loop on-ramp.

New traffic signals or roundabouts should be installed at the northbound and southbound ramp terminal intersections to control pedestrian, bicycle, and vehicular movements. Sidewalks and bike lanes should be provided on both sides of Hutchison Drive between Sage Street and Health Science Drive. Marked crosswalks should be provided across all on- and off-ramps at the northbound and southbound ramp terminal intersections. Since the interchange is owned and operated by Caltrans, any improvements will be subject to Caltrans review, project development procedures, and approval. UC Davis shall pursue the SR 113/Hutchison Drive interchange improvements prior to the occupancy of new West Village Expansion dwelling units.

2.1.2 State CEQA Guidelines Regarding an Addendum

If, after certification of an EIR, minor technical changes or additions are necessary or none of the conditions described in CEQA Guidelines Section 15162 calling for the preparation of a subsequent EIR have occurred, an addendum to the EIR may be prepared.

Public Resources Code (PRC) Section 21166 and Sections 15162 through 15163 of the State CEQA Guidelines describe the conditions under which subsequent document would be prepared. In summary, when an EIR has been certified or a mitigated negative declaration (MND) adopted for a Project, no subsequent document shall be prepared for that Project unless the lead agency determines, on the basis of substantial evidence in light of the whole record, one or more of the following:

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

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

Section 15164 of the CEQA Guidelines provides that a lead agency may prepare an addendum to a previously adopted EIR if some changes or additions are necessary, but none of the conditions described above for Section 15162 calling for preparation of a subsequent document have occurred. CEQA allows lead agencies to restrict review of modifications to a previously approved project to the incremental effects associated with the proposed modifications, compared against the anticipated effects of the previously approved project at build-out.

Changes to the approved LRDP in connection with the Project and any altered conditions since certification of the EIR in July 2018 would:

- not substantially increase the severity of previously identified significant effects.

In addition, no new information of substantial importance has arisen that shows that:

- ▲ the Project would have new significant effects,
- ▲ the Project would have substantially more severe effects,
- mitigation measures or alternatives previously found to be infeasible would in fact be feasible, or
- mitigation measures or alternatives that are considerably different from those analyzed in the EIR would substantially reduce one or more significant effects on the environment.

As described in Chapter 3 of this document, "Project Description," and Chapter 4, "Environmental Checklist for Supplemental Environmental Review," none of the conditions described above from Section 15162 calling for preparation of a subsequent document have occurred. Therefore, the differences between the approved LRDP, as described in the certified EIR, and the Project modifications now being considered constitute changes, consistent with CEQA Guidelines Section 15164, that may be addressed in an addendum to the EIR.

2.2 ORGANIZATION OF THE ADDENDUM

This addendum is organized into the following chapters:

Chapter 1 – Project Information: provides a summary of information about the Project, including Project location, lead agency, and contact information.

Chapter 2 – Introduction: summarizes the purpose of the addendum, the 2018 LRDP EIR, and this document's organization.

Chapter 3 – Project Description: includes a description of all elements of the Project triggering the addendum.

Chapter 4 – Coverage under the 2018 LRDP and 2018 LRDP EIR: describes the consistency of the Project with the 2018 LRDP and 2018 LRDP EIR, and includes an environmental checklist for each resource topic. This section of the addendum analyzes the potential effects on the existing physical environment from implementation of the proposed modifications, as compared to the approved 2018 LRDP. This analysis has been prepared to determine whether any of the conditions described above that would require preparation of a subsequent or supplemental EIR would occur as a result of the project modification.

Chapter 5 – Applicable 2018 LRDP EIR Mitigation Measures: lists measures from the 2018 LRDP EIR that are applicable to the Project.

Chapter 6 - References: lists references used in the preparation of this document.

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3 PROJECT DESCRIPTION

3.1 INTRODUCTION

This addendum describes the project-specific details of the proposed interchange improvements and compares the environmental impacts that would occur under the current proposal to those that were previously identified in Volume 2 of the 2018 LRDP EIR.

3.2 PROJECT LOCATION

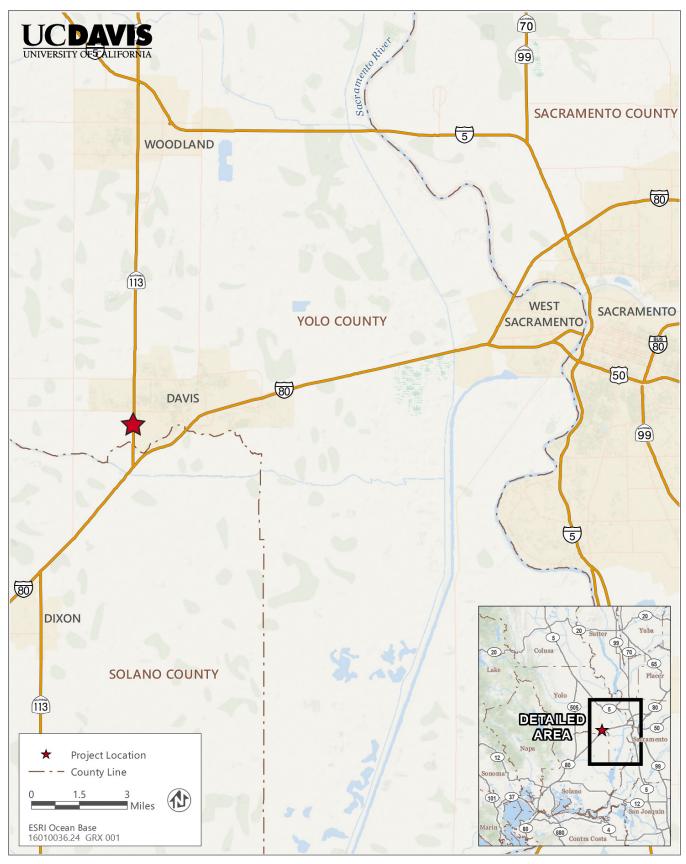
The approximately 5,300-acre UC Davis campus is located in Yolo and Solano Counties, approximately 72 miles northeast of San Francisco, 15 miles west of the City of Sacramento, and adjacent to the City of Davis (see Figure 3-1). The campus is composed of four geographical areas: the central campus, the south campus, the west campus, and Russell Ranch. Most classroom-based academic, office, laboratory, and extracurricular activities occur within the central campus. The central campus consists of approximately 900 acres and is bounded approximately by Russell Boulevard to the north, SR 113 to the west, I-80 and the Union Pacific Railroad tracks to the south, and A Street to the east. The 48-acre West Village Expansion area is located within west campus in Yolo County and is bounded by Hutchison Drive to the south, existing residences in West Village to the east, and undeveloped agricultural land to the west and north. The interchange improvements would be constructed along Hutchison Drive at the existing on-ramp and off-ramp facilities to SR 113.

3.3 SR 113/HUTCHISON DRIVE INTERCHANGE IMPROVEMENTS MODIFICATIONS

Since certification of the 2018 LRDP EIR, UC Davis has conducted additional engineering work to design the interchange improvements to meet the project objectives. The purpose of the SR 113/Hutchison Drive Multi-Modal Interchange Project is to:

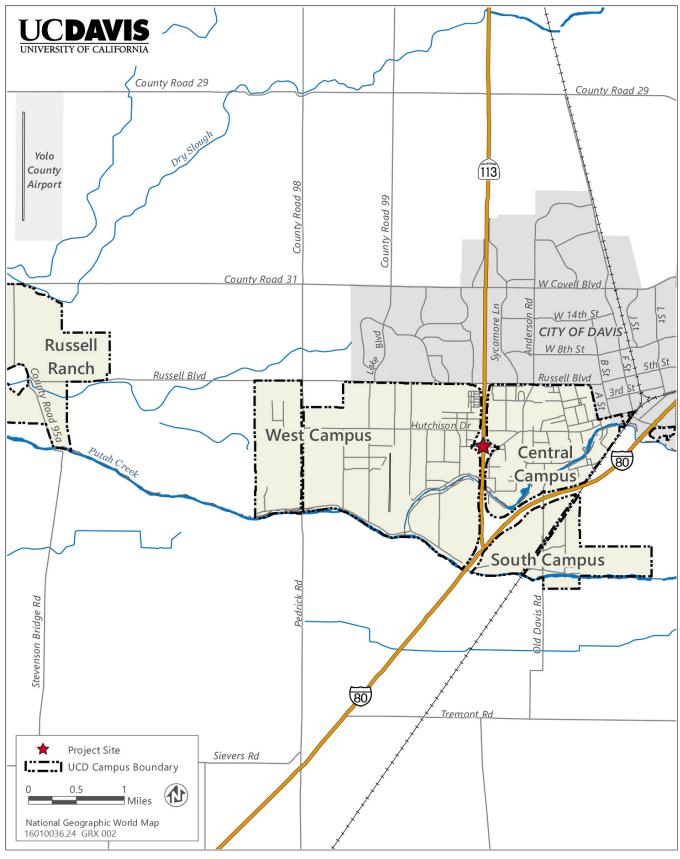
- improve regional mobility for all travel modes (cars, trucks, pedestrians and bicyclists);
- construct a network of bike paths/lanes to promote bicycle use between West Village and Campus;

- reduce greenhouse gas emissions;
- control motorist turning movements that conflict with bicycle and pedestrian movements; and



Source: Adapted by Ascent Environmental in 2020

Figure 3-1 Regional Location



Source: Adapted by Ascent Environmental in 2020

Figure 3-2 Project Location

3.3.1 Summary of Proposed Project Elements

The Project includes various improvements to improve connectivity for multi-modal use, including bicyclists and pedestrians (see Figure 3-3). These improvements include the following:

- "Square up" all ramps to improve pedestrian and bicyclist safety.
- Widen the existing northbound (NB) NB and southbound (SB) loop on-ramps from one lane to two lanes.
- Remove the existing NB and SB diagonal on-ramps.
- Signalize the two ramp intersections.
- Provide additional storage for left turn movements from Hutchison to the SR 113 on-ramps.
- ✓ Provide a 14-foot cycle track facility on the north side of the Hutchison Drive overcrossing, which will connect the West Village to the UC Davis main campus via Hutchison.
- ✓ Provide a 6-foot bike lane on the south side of the Hutchison Drive overcrossing for eastbound (EB) bicyclists and green thermoplastic bike lane striping on the EB approach
- Provide 5-foot sidewalks on both sides of the Hutchison Drive overcrossing.
- Provide marked crosswalks across all on/off ramps at the northbound and southbound ramp terminal intersections.
- ▲ Reconstruct the Hutchison Drive median and restripe lanes.

3.3.2 Construction Phasing and Staging

Construction of the Project would occur over 12 months from April 2021 through March 2022. Construction would consist of the following three phases:

Phase 1: Hutchison Dr median reconstruction and lane shift

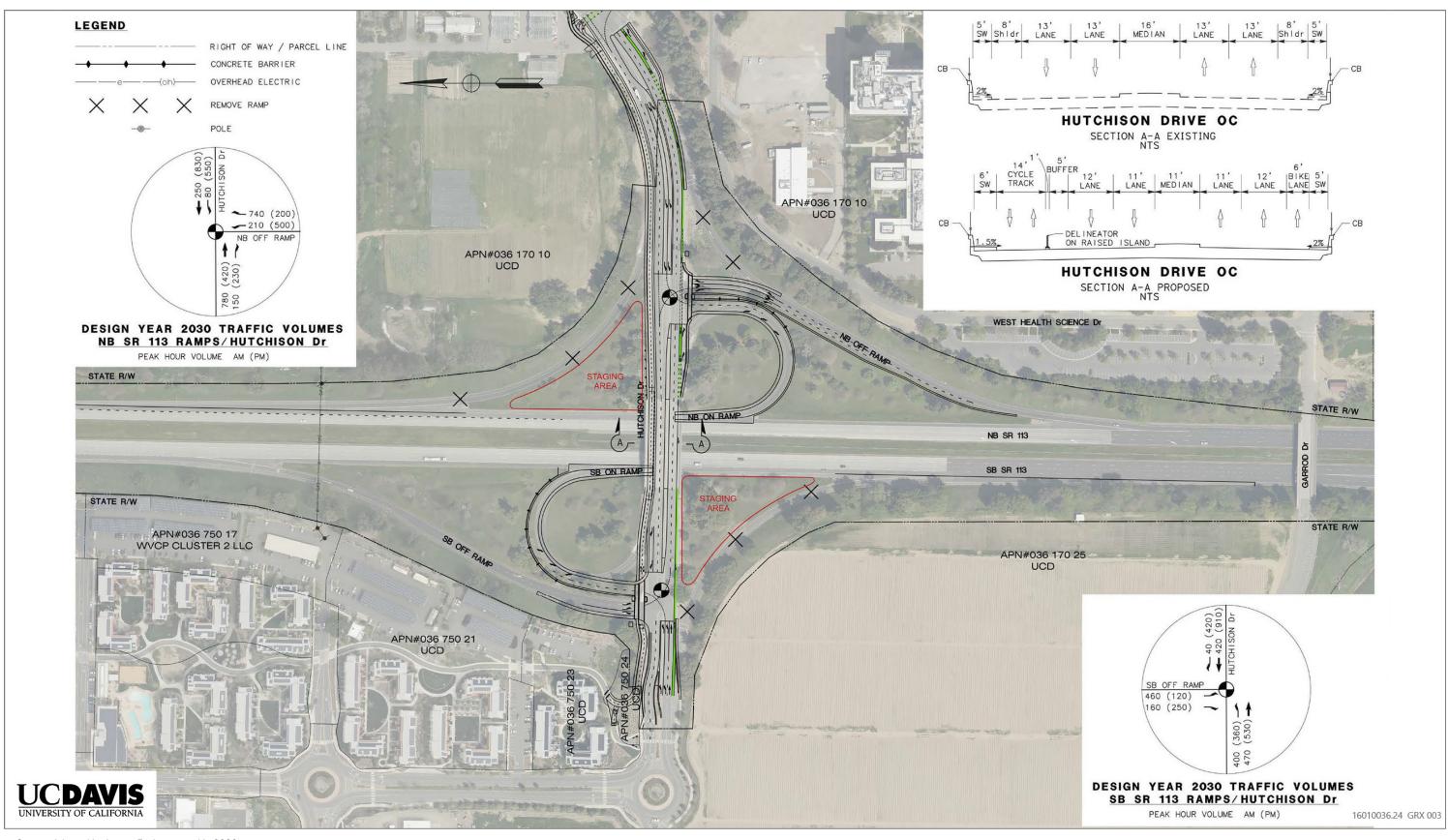
Phase 2:

- a. Southbound off-ramp and southbound on-ramp
- b. Improvements of north side of Hutchison Drive (sidewalk + cycle track + buffer)
- c. Bicycle path, pedestrian connection at west end
- d. Cycle track transition, raised islands, EVA entrance to green houses, fence relocation at east end @ HSD
- e. remove existing NB diagonal on-ramp

Phase 3:

- a. NB off-ramp and NB on-ramp
- b. Remove existing SB diagonal on-ramp

Two potential staging areas for project construction are located within the unpaved shoulder area west of the northbound on-ramp, and within the unpaved shoulder area east of the southbound on-ramp (see Figure 3-3).



Source: Adapted by Ascent Environmental in 2020

Figure 3-3 Proposed Project

4 COVERAGE UNDER THE 2018 LRDP AND 2018 LRDP EIR

To determine the Project's coverage with the 2018 LRDP and 2018 LRDP EIR, the following questions must be answered:

- ▲ Are the objectives of the Project consistent with the objectives adopted for the 2018 LRDP?
- ▲ Are the changes to campus population associated with the Project included within the scope of the 2018 LRDP's population projections?
- ▲ Is the proposed location of the Project in an area designated for this type of use in the 2018 LRDP?
- ▲ Is the Project included in the amount of the development projected in the 2018 LRDP?
- Have the conditions described in CEQA Guidelines Section 15162 calling for preparation of a subsequent EIR occurred?

Sections 4.1 through 4.4 document the Project's coverage by and consistency with the objectives, population projections, land use designations, and development projections contained in the 2018 LRDP. Section 4.5 contains a detailed examination of environmental topics documenting that the SR 113/Hutchison Drive Interchange Improvements Project is within the scope of the environmental impact analysis in the 2018 LRDP EIR and none of the conditions described in CEQA Guidelines Section 15162 calling for the preparation of a subsequent EIR have occurred.

4.1 2018 LRDP OBJECTIVES

The overall objective of the 2018 LRDP is to support the teaching, research, and public service missions of the UC. The 2018 LRDP planning goals are structured as three interrelated types of actions: support the academic enterprise, enrich community life, and create a sustainable future. The Project would support these 2018 LRDP objectives as follows.

<u>Support the Academic Enterprise</u>: While the Project would not directly create an environment for academic learning and discovery, it would support the academic enterprise by providing more efficient and safer transportation infrastructure for vehicles, bicycles, and pedestrians traveling between the west campus and central campus.

<u>Enrich Community Life</u>: The Project would indirectly support enrichment of community life by providing more efficient and safer transportation infrastructure for vehicles, bicycles, and pedestrians traveling between the west campus and central campus, which would benefit UC Davis students and staff.

<u>Create a Sustainable Future</u>: The Project would support the creation of a more sustainable campus by maximizing bike and pedestrian access to the campus. Project construction would be completed in a manner The Project would comply with the UC Sustainable Practices Policy. The project would accommodate and promote bicycle and pedestrian circulation while improving vehicle movements. The Project is consistent with UC Davis sustainability and conservation efforts.

4.2 2018 LRDP CAMPUS POPULATION

The Project would not introduce new students or staff and would not contribute to an increase in the campus population. The Project is therefore within the scope of the 2018 LRDP population projections.

4.3 2018 LRDP LAND USE DESIGNATION

The majority of the project site is owned by Caltrans and maintained by UC Davis under a freeway maintenance agreement with Caltrans. Therefore, it does not have a land use designation under the 2018 LRDP. A small portion of the project is located on campus property that is designated streetscapes and roadways.

4.4 2018 LRDP ACADEMIC BUILDING SPACE

The Project would reconfigure existing transportation infrastructure, which serves numerous west campus and central campus academic and residential buildings. The Project would not demolish nor develop any academic building space on campus. The Project would not contribute to the increase in academic building space anticipated by the 2018 LRDP and 2018 LRDP EIR.

4.5 ENVIRONMENTAL REVIEW OF PROJECT ACTIVITIES

UC Davis has determined that, in accordance with PRC Section 21166 and Section 15164 of the State CEQA Guidelines, minor technical changes or additions to the EIR are necessary to address the modifications to the approved LRDP. An addendum to a certified EIR is prepared when changes to a Project are required, and the changes:

- will not result in any new significant environmental effects, and/or
- ■ will not substantially increase the severity of previously identified effects.

The analysis of environmental effects provided below addresses the same impacts addressed in the 2018 LRDP EIR. The environmental analysis evaluates whether, for each environmental resource topic (e.g., land use, traffic, air quality), there are any changes in the Project or the circumstances under which it would be undertaken that would result in new or substantially more severe environmental impacts than considered in the 2018 LRDP EIR. The University has defined the column headings in the environmental checklist as follows:

Impact Examined in the 2018 LRDP EIR?: "Yes" is stated where the potential impacts of the Project were examined in the 2018 LRDP EIR. This document summarizes and cross references the relevant analysis in the 2018 LRDP EIR.

<u>Do Proposed Changes Involve New or Substantially More Severe Significant Impacts?</u>: This question is answered with a "yes" or "no," as substantiated by the discussion provided below the table. If the response is "yes," additional CEQA analysis is required.

<u>Do Any New Circumstances Involve New or Substantially More Severe Significant Impacts?</u>: This question is answered with a "yes" or "no," as substantiated by the discussion provided below the table. If the response is "yes," additional CEQA analysis is required.

<u>Do Mitigation Measures in the 2018 LRDP EIR Address/ Resolve Impacts. Including Impacts That Would Otherwise be New or Substantially More Severe?</u>: This question is answered with a "yes," "no," or "N/A," as substantiated by the discussion provided below the table. The answer N/A indicates there was no potential impact under the 2018 LRDP EIR and the Project does not change the impact conclusion. The 2018 LRDP EIR mitigation measures are summarized and cross referenced, and the mitigation measures applicable to the Project are summarized in Section 6 of this addendum.

4.5.1 Aesthetics

Section 3.1 of Volume 1 of the 2018 LRDP EIR evaluates the impacts of campus growth under the 2018 LRDP on aesthetics by providing regulatory setting information, environmental setting information, analysis methodology, significance criteria, and a detailed environmental impact evaluation. Section 3.1 of Volume 2 of the 2018 LRDP EIR evaluates the potential impacts of the West Village Expansion component.

ENVIRONMENTAL CHECKLIST AND DISCUSSION

Aesthetics Would the Project		Impact Examined in 2018 LRDP EIR?	Do Proposed	Do Any New	Do Mitigation Measures in the 2018	
			Changes Involve New or Substantially More Severe Significant Impacts?*	Circumstances Involve New or Substantially More Severe Significant Impacts?	LRDP EIR Address/ Resolve Impacts, Including Impacts That Would Otherwise be New or Substantially More Severe?	
a)	Have a substantial adverse effect on a scenic vista?	Yes	No	No	N/A	
b)	Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	Yes	No	No	N/A	
c)	Substantially degrade the existing visual character or quality of the site and its surroundings?	Yes	No	No	N/A	
d)	Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	Yes	No	No	Yes	

^{*}Determination is related to pre-mitigation conditions, including implementation of previously adopted mitigation.

- a) Volume 1 of the 2018 LRDP EIR (page 3.1-14) concluded that no scenic vistas are present in the vicinity of the site that could be affected by implementation of the SR 113 / Hutchison Drive Interchange Improvements Project. The Project includes demolition and improvements to the existing SR 113/ Hutchison Drive interchange. SR 113 bisects the campus north to south, and Hutchison Drive spans SR 113. The west end of the project site is located in the west campus and the east end of the project site is located in the central campus. The project site is located in a developed area with existing tree coverage. SR 113 is below grade with on-ramps and offramps leading down to and up from the highway, respectively. Long-distance views across the Hutchison Drive/SR 113 southbound (SB) and northbound (NB) ramps construction area are precluded due to the grade separation. Long-distance views across the project site to the west are precluded due to tree coverage and below grade construction. In the project vicinity, the existing bike path provides limited long-distance views across agricultural lands to the Coast Range. Development of the Project would not include new or expanded infrastructure that would impede views provided from SR 113 or Hutchison Drive. Furthermore, the Project would not result in any new or substantial adverse changes to scenic vistas in the surrounding area. Therefore, no new or substantially more severe impacts would occur and no mitigation would be required.
- b) As explained in Section 3.1.3 of Volume 1 of the 2018 LRDP EIR, SR 113 and Interstate 80 (I-80), the other highway in the vicinity of the campus, are not designated as state scenic highways. Neither the campus nor the project site is located near a state scenic highway. Therefore, no new or substantially more severe impacts would occur and no mitigation would be required.

- c) As discussed in Volume 1 of the 2018 LRDP EIR Impact 3.1-2, land use changes would occur primarily within and around the central campus and would have less-than-significant impacts. Development of the SR 113/ Hutchison Drive Interchange Improvements Project would redevelop and slightly expand existing infrastructure. Modifications to the interchange would be consistent and similar in design to the existing infrastructure. Furthermore, all new development is required to comply with the UC Davis Physical Design Framework and Campus Design Guide Manual, which establishes requirements intended to maintain important aesthetic features and compatibility with existing visual conditions, including the installation of landscaping (both in terms of bulk and color) and exterior features consistent with adjacent development (e.g., exterior lighting and finishes). Therefore, no new or substantially more severe impacts would occur and no mitigation would be required.
- d) The central campus is a developed/urban setting. A large number of light fixtures and sources (both interior and exterior) from this urban area of the UC Davis campus and adjacent Yolo County land uses already exist. In addition, the existing buildings nearby the project site on the UC Davis campus and residential development in the surrounding areas contain building and security lighting that are existing sources light. The 2018 LRDP EIR found that implementation of the 2018 LRDP would introduce new sources of light and glare associated with new buildings and facilities. Such lighting could contribute to indirect lighting/glare on adjacent land uses that could adversely affect daytime or nighttime views and result in additional skyglow (Volume 1 of the 2018 LRDP Impact 3.1-3). The SR 113 / Hutchison Drive Interchange Improvements Project area contains existing lighting for pedestrian and bicycle pathways as well as lighting to illuminate SR 113 and the freeway interchanges. Project lighting would be similar in nature to existing light sources. Consistent with Volume 1 of the 2018 LRDP EIR Mitigation 3.1-3(b) new or replacement outdoor lighting would use directional lighting methods with shielded and cutoff type light fixtures to minimize glare and upward directed lighting. The Campus Design Review Committee would also review the Project's use of non-directional lighting design to ensure that no adverse effects on nighttime views occur. Consistent with Volume 1 of the 2018 LRDP Impact 3.1-3, with implementation of 2018 LRDP Mitigation Measure 3.1-3(b), which is included in the Project, it would have a less-than-significant light and glare impact. Therefore, no new or substantially more severe impacts would occur, and no additional mitigation would be required.

4.5.2 Agricultural and Forestry Resources

Section 3.2 of the Volume 1 of the 2018 LRDP EIR evaluates the effects of campus growth under the 2018 LRDP on agricultural and forestry resources by providing regulatory setting information, environmental setting information, analysis methodology, significance criteria, and a detailed environmental impact evaluation. Section 3.2 of Volume 2 of the 2018 LRDP EIR evaluates the potential impacts of the West Village Expansion component.

ENVIRONMENTAL CHECKLIST AND DISCUSSION

Agricultural & Forestry Resources Would the Project		Impact Examined in 2018 LRDP EIR?	Do Proposed Changes Involve New or Substantially More Severe Significant Impacts?*	Do Any New Circumstances Involve New or Substantially More Severe Significant Impacts?	Do Mitigation Measures in the 2018 LRDP EIR Address/ Resolve Impacts, Including Impacts That Would Otherwise be New or Substantially More Severe?
a)	Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	Yes	No	No	N/A
b)	Conflict with existing zoning for agricultural use, or a Williamson Act contract?	Yes	No	No	N/A
c)	Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	Yes	No	No	N/A
d)	Result in the loss of forest or agricultural land or conversion of forest land to non-forest or non-agricultural use?	Yes	No	No	N/A
e)	Involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?	Yes	No	No	N/A

a) As described in Volume 1 of the 2018 LRDP EIR Impact 3.2-1 (significant and unavoidable), implementation of the 2018 LRDP could result in the conversion of 166 acres of Important Farmland to non-agricultural uses. However, according to the Farmland Mapping and Monitoring Program (FMMP), the SR 113/ Hutchison Drive Interchange Improvements site is previously developed and located on Caltrans and UC Davis land that is designated as Urban and Built-Up Land. Important Farmland, as designated by the FMMP, is located southwest of the project site and adjacent to the project site to the northeast. Project implementation would slightly expand the development footprint to widen the existing NB and SB loop on-ramps from one lane to two lanes; provide additional storage for left turn movements from Hutchison Drive to the SR 113 on-ramps; provide a 14-foot cycle track on the north side of Hutchinson Drive overcrossing; a 6-

foot bike line on the south side of Hutchinson Drive; and 5-foot sidewalks on both sides of the Hutchinson Drive overcrossing. As shown in Exhibit 3.2-1 of the 2018 LRDP EIR, the Project would not result in loss of Important Farmland. Project construction and operation would occur on the project site and would not indirectly or directly impact the Important Farmland located adjacent to the project site. The Project would not convert farmland to non-agricultural use, and it would not require mitigation. Therefore, no new or substantially more severe impacts would occur and no mitigation would be required.

- b) Campus lands and Caltrans lands are state lands that are not eligible for Williamson Act agreements, nor are they subject to local zoning controls. Therefore, this issue is not relevant to the 2018 LRDP or to the Project.
- c) None of the campus lands nor the project site is zoned or otherwise designated as forest land or timber-production lands. Therefore, this issue is not relevant to the 2018 LRDP or to the Project.
- d) As described in criterion (c) above, there are no forest lands within the UC Davis campus or within the project site. As described in criterion (a) above, no agricultural land uses exist within the project site and Important Farmland located adjacent to the project site is not expected to be impacted. Therefore, no new or substantially more severe impacts would occur and no mitigation would be required.
- e) Land uses surrounding the SR 113/ Hutchison Drive Interchange Improvements Project site consist of existing development to the west, agricultural lands and recreational uses to the east, and scattered residential development to the north and west. The project site is currently developed. Construction of the Project would redevelop and slightly expand current infrastructure. No conversion or loss of agricultural land or uses would occur. The Project would not involve any changes that would result in conversion of farmland to non-agricultural use or conversion of forest land to non-forest use. Therefore, no new or substantially more severe impacts would occur and no mitigation would be required.

4.5.3 Air Quality

Section 3.3 of the 2018 LRDP EIR addresses the air quality effects of campus growth under the 2018 LRDP by providing regulatory setting information, environmental setting information, analysis methodology, significance criteria, and a detailed environmental impact evaluation. Section 3.3 of Volume 2 of the 2018 LRDP EIR evaluates the potential impacts of the West Village Expansion component.

ENVIRONMENTAL CHECKLIST AND DISCUSSION

Air Quality Would the Project		Impact Examined in 2018 LRDP EIR?	Do Proposed Changes Involve New or Substantially More Severe Significant Impacts?*	Do Any New Circumstances Involve New or Substantially More Severe Significant Impacts?	Do Mitigation Measures in the 2018 LRDP EIR Address/ Resolve Impacts, Including Impacts That Would Otherwise be New or Substantially More Severe?
a)	Conflict with or obstruct implementation of the applicable air quality plan?	Yes	No	No	Yes
b)	Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	Yes	No	No	Yes
c)	Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	Yes	No	No	Yes
d)	Expose sensitive receptors to substantial pollutant concentrations?	Yes	No	No	Yes
e)	Create objectionable odors affecting a substantial number of people?	Yes	No	No	N/A

a,b,c) Emissions of criteria air pollutants and precursors associated with Project construction and operations are discussed separately below.

Construction-Generated Emissions of Criteria Air Pollutants and Precursors

2018 LRDP EIR Volume 2 Impact 3.3-1 disclosed that construction of the West Village Expansion under the 2018 LRDP would result in emissions of reactive organic gases (ROG), nitrous oxides (NOx), and particulate matter with an aerodynamic diameter of 10 microns or smaller (PM $_{10}$), and fine particulate matter with an aerodynamic diameter of 2.5 microns or smaller (PM $_{2.5}$). Construction-related emissions would occur from the operation of heavy-duty off-road equipment, material delivery, construction worker commute exhaust emissions, and asphalt paving. Emissions of PM $_{10}$ were anticipated to exceed Yolo-Solano Air Quality Management District's (YSAQMD) thresholds starting in 2018. The majority of PM $_{10}$ emissions were anticipated to be from the release of fugitive dust from haul truck and worker commute trips that occur on unpaved roads. The LRDP EIR Volume 2 stated that construction-generated NOx emissions would also exceed YSAQMD's thresholds of significance in 2019 which would occur from the operation of off-road heavy-duty equipment and vendor trips during building construction.

Fugitive dust emissions, including PM_{10} and $PM_{2.5}$, would be generated during site preparation and vary as a function of soil silt content, soil moisture, wind speed, and area of disturbance. Exhaust emissions of PM_{10} and $PM_{2.5}$ would result from combustion of fuels. Ozone precursor emissions (ROG and NO_X) would primarily be associated with exhaust from construction equipment, vendor trips, and worker commute trips. Because the Project would not entail the construction of buildings, emissions of ROG would be minimal as the application of architectural coatings would not occur.

Volume 2 of the 2018 LRDP EIR documented the overall expected construction emissions at the project site and identified, on an annual basis, that construction of the West Village Expansion from 2018 through 2020 could result in significant impacts related to the emissions of NOx and PM $_{10}$. The air quality analysis in Volume 2 of the 2018 LRDP EIR accounted for the construction of up to 1,300 dwelling units along with one acre of park space, approximately 1,000 vehicle parking spaces, 3,800 bicycle parking spaces, and a cumulative total of one acre of paved roadway. The Project would reconfigure the existing interchange and would not construct a new roadway. The Project is a required mitigation measure in Volume 2, and its construction emissions would be included under this category of new roadways. The Project would not entail the construction of any structures and therefore would not require the use of heavy-duty equipment required to erect and paint buildings. Construction of the Project would generate temporary construction emissions that contribute to the overall West Village Expansion component emissions as evaluated in Volume 2 of the 2018 LRDP EIR, but no new or substantially more severe impacts would result from the design changes because the scale and type of improvements are consistent with those identified in Volume 2.

As required by 2018 LRDP EIR Mitigation Measure 3.3-1, UC Davis would reduce emissions of ROG, NOx, and PM $_{10}$ by requiring the construction contractor to implement emissions reduction measures. At the program level, the 2018 LRDP EIR Impact 3.3-1 determined that construction under the 2018 LRDP, with implementation of Mitigation Measure 3.3-1, would not generate construction-related emissions of ROG or PM $_{10}$ that exceed YSAQMD significance criteria, but NOx emissions would be significant and unavoidable. This impact was addressed in the Findings and Statement of Overriding Considerations adopted by The Regents in connection with its approval of the 2018 LRDP. No additional mitigation is necessary to reduce the Project's contribution to these impacts.

Long-Term Operational Emissions of Criteria Air Pollutants and Precursors

Volume 2 of the 2018 LRDP EIR Impact 3.3-2 determined that long-term operational emissions related to the 2018 LRDP would not exceed YSAQMD significance thresholds for ROG, NOx, PM₁₀, and PM_{2.5}; therefore, mitigation was not required. As a transportation improvement project, the Project, once constructed, would support vehicle movement and improve bicycle and pedestrian circulation; it would not introduce new sources of operational emissions. Notably, once implemented, the Project would result in improved traffic and circulation, which could reduce emissions associated with vehicle movement (e.g., excessive braking and acceleration) below baseline levels. Other sources of operational criteria pollutants and ozone precursors such as natural gas combustion, electricity consumption, use of consumer products and landscaping equipment, periodic application of architectural coatings, or woodburning stoves and fireplaces would not be introduced as part of the Project. Therefore, the Project would not introduce new or substantially more several impacts and no mitigation is required.

d) Construction-Generated Emissions of Toxic Air Contaminants

Impact 3.3-3 of Volume 2 of the 2018 LRDP EIR determined that construction activities would result in temporary, short-term Project-generated emissions of toxic air contaminants (TACs),

particularly diesel PM, but would not expose sensitive receptors to an incremental increase in cancer risk that exceeds 10 in one million or a hazard index greater than 1.0 (less than significant with mitigation). As summarized on page 3.3-8 of Volume 2 of the 2018 LRDP EIR, the estimated health risks are less than one fourth of the YSAQMD health risk thresholds; thus, the EIR concluded that construction activity under the West Village Expansion component would not exceed health risk thresholds. However, WVE Mitigation Measure 3.3-3 (Implement 2018 LRDP Mitigation Measure 3.3-4) is recommended regardless and would apply to the Project. The Project, as a component of the overall West Village Expansion component of the 2018 LRDP, would require substantially less construction equipment than what was analyzed in Volume 2 of the 2018 LRDP EIR. Nonetheless, WVE Mitigation Measure 3.3-3 would be applied to the Project; therefore, UC Davis shall require the construction contractor to locate diesel-powered equipment as far away from sensitive receptors as possible, reduce equipment idling times, use equipment with EPA-rated Tier 3 engine ratings or better, and use alternatively-fueled equipment if available to further reduce TAC emissions. Therefore, no new or substantially more severe impacts would occur and no new mitigation measures would be required.

Land Use Compatibility with Offsite Sources of Toxic Air Contaminants and Ultrafine Particulates

As discussed on page 3.3-3 of Volume 2 of the 2018 LRDP EIR, impacts related to substantial pollutant concentrations (carbon monoxide [CO] and TACs) during operation of land uses identified under the 2018 LRDP, including the West Village Expansion component were determined to be less than significant. The Project would entail the construction of on- and off-ramps and bicycle lanes and would not introduce new stationary sources, such as boilers and laboratories, that would generate substantial TACs. Therefore, the Project would not result in new or substantially more severe impacts, and no mitigation would be required.

e) As discussed in 2018 LRDP EIR Impact 3.3-7 (less than significant with mitigation), implementation of the 2018 LRDP would result in temporary construction odors over approximately 13 years in different areas of the 5,300-acre campus; as well as new odors sources such as diesel-fueled delivery trucks, a biomass boiler, composting facility, and expansion of the wastewater treatment plant. The Project would result in minimal and temporary odors during the construction period, and in the long-term, the Project would not result in new sources of odors on campus, nor would the Project result in the relocation of existing odor sources or the development of residences near an existing odor source. Therefore, no new or substantially more severe impacts would occur and no mitigation would be required.

Archaeological, Historical, and Tribal Cultural Resources 4.5.4

Section 3.4 of Volume 1 of the 2018 LRDP EIR evaluates the effects of campus growth under the 2018 LRDP on archaeological, historical, and tribal cultural resources by providing regulatory setting information, environmental setting information, analysis methodology, significance criteria, and a detailed environmental impact evaluation. Section 3.4 of Volume 2 of the 2018 LRDP EIR evaluates the potential impacts of the West Village Expansion component.

ENVIRONMENTAL CHECKLIST AND DISCUSSION

	haeological, Historical, & Tribal Cultural Resources ould the Project	Impact Examined in 2018 LRDP EIR?	Do Proposed Changes Involve New or Substantially More Severe Significant Impacts?*	Do Any New Circumstances Involve New or Substantially More Severe Significant Impacts?	Do Mitigation Measures in the 2018 LRDP EIR Address/ Resolve Impacts, Including Impacts That Would Otherwise be New or Substantially More Severe?
a)	Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?	Yes	No	No	N/A
b)	Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	Yes	No	No	Yes
c)	Disturb any human remains, including those interred outside of formal cemeteries?	Yes	No	No	N/A
d)	Cause a substantial adverse change in the significance of a Tribal Cultural Resource as defined in Public Resources Code § 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is: 1) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or 2) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	Yes	No	No	N/A

a) Volume 1 of the 2018 LRDP EIR Impact 3.4-4 determined that development under the 2018 LRDP could result in adverse changes to historical resources as defined in Section 15064.5 (significant and unavoidable). The project site consists of an existing interchange, and no historic

*Determination is related to pre-mitigation conditions, including implementation of previously adopted mitigation.

resources were identified on the project site. Therefore, construction and operation of the

- SR 113/Hutchison Drive Interchange Improvements Project would have no impact on historical resources. Therefore, no new or substantially more severe impacts would occur and no mitigation would be required for the Project.
- b) As shown in Volume 1 of the 2018 LRDP EIR Exhibit 3.4-1, the majority of the project site is not within an area of archaeological sensitivity, with the exception of a small portion of the western area of the project site. As discussed in Volume 1 of the 2018 LRDP EIR Impact 3.4-1 (less than significant with mitigation), the potential for intact buried archaeological resources is considered "moderate" because, although the project site does not contain known archaeological resources, Project construction could involve excavation below 18 inches deep. Ground-disturbing activities could result in discovery or damage of undiscovered archaeological resources as defined in CEQA Guidelines Section 15064.5 (Impact 3.4-1 of Volume 1 of the 2018 LRDP EIR; less than significant with mitigation). In compliance with Mitigation Measure 3.4-1 of Volume 1 of the 2018 LRDP EIR, the Project would identify and protect unknown archaeological resources by requiring contractor crews to attend a training session regarding how to recognize archaeological sites and artifacts and what steps shall be taken to avoid impacts to those sites and artifacts. In addition, the Project would be required to protect, identify, and assess any archaeological material uncovered during construction. With implementation of these previously-adopted mitigation measures of Volume 1 of the 2018 LRDP EIR, currently undiscovered archaeological resources would be avoided, recorded, or otherwise treated appropriately, in accordance with pertinent laws and regulations. Therefore, no new or substantially more severe impacts would occur and no additional mitigation would be required.
- c) As discussed in Volume 1 of the 2018 LRDP EIR Impact 3.4-3 (less than significant), although unlikely, the Project has the potential to disturb human remains, including those interred outside of formal cemeteries. Compliance with California Health and Safety Code Sections 7050.5 and 7052 and California Public Resources Code Section 5097 would provide an opportunity to avoid or minimize the disturbance of human remains and to appropriately treat any remains that are discovered. Therefore, no new or substantially more severe impacts would occur and no mitigation would be required.
- d) As discussed in Volume 1 of the 2018 LRDP EIR Impact 3.4-2 (less than significant), UC Davis notifies the Yocha Dehe Wintun Nation of all projects and provides an update two or three times per year to avoid damaging effects to any tribal cultural resource. If UC Davis determines that a subsequent project may cause a substantial adverse change to a tribal cultural resource, and measures are not otherwise identified in the consultation process, new provisions in the PRC describe measures that, if determined by the lead agency to be feasible, could be implemented to reduce potential effects of campus-related development on tribal cultural resources, although none were identified through AB 52 compliance for the 2018 LRDP. Compliance with PRC Section 21080.3.2 and Section 21084.3 (a) and UC Davis's continuing notification of the Yocha Dehe Wintun Nation of all projects, would provide an opportunity to avoid or minimize the disturbance of tribal cultural resources, and to appropriately treat any remains that are discovered. Therefore, no new or substantially more severe impacts would occur and no mitigation would be required.

4.5.5 Biological Resources

Section 3.5 of the 2018 LRDP EIR addresses the effects of campus growth and development under the 2018 LRDP on biological resources by providing regulatory setting information, environmental setting information, analysis methodology, significance criteria, and a detailed environmental impact evaluation. Section 3.5 of Volume 2 of the 2018 LRDP EIR evaluates the potential impacts of the West Village Expansion component.

ENVIRONMENTAL CHECKLIST AND DISCUSSION

Biological Resources Would the Project			Do Proposed	Do Any New	Do Mitigation Measures in the 2018
		Impact Examined in 2018 LRDP EIR?	Changes Involve New or Substantially More Severe Significant Impacts?*	Circumstances Involve New or Substantially More Severe Significant Impacts?	LRDP EIR Address/ Resolve Impacts, Including Impacts That Would Otherwise be New or Substantially More Severe?
a)	Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	Yes	No	No	Yes
b)	Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or US Fish and Wildlife Service?	Yes	No	No	N/A
c)	Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	Yes	No	No	N/A
d)	Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	Yes	No	No	N/A
e)	Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	Yes	No	No	Yes
f)	Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	Yes	No	No	N/A
*De	etermination is related to pre-mitigation conditions, includin	ig impleme	ntation of prev	iously adopted	mitigation.

a) The project site includes the SR 113/Hutchison Drive interchange from the Garrod Drive overcrossing to the Russell Boulevard overcrossing, as well as two potential staging areas; one within the unpaved shoulder area west of the northbound on-ramp, and one within the unpaved

shoulder area east of the southbound on-ramp. Volume 1 of the 2018 LRDP EIR defines the project site and staging areas as urban landscaping /developed habitat (2018 LRDP EIR Exhibit 3.5-1). Apart from the developed hardscape associated with SR 113, Hutchison Road, on-ramps, and off-ramps, the project site also contains unpaved shoulder areas with ruderal grassland, trees, and shrubs. Tree and shrub species include gray pine (*Pinus sabiniana*), interior live oak (*Quercus wislizeni*), western redbud (*Cercis occidentalis*), and ceanothus (*Ceanothus* sp.) as determined during a reconnaissance-level survey for biological resources conducted on May 21, 2020.

The 2018 LRDP EIR found that development under the 2018 LRDP could potentially result in the loss of special-status plant and wildlife species (2018 LRDP EIR Impact 3.5-2 through 3.5-8). Based on a review of the sensitive plant and wildlife species within the vicinity of the project site (CNDDB 2020, CNPS 2020), and a reconnaissance-level survey for biological resources conducted on May 21, 2020, there is potential for Swainson's hawk (*Buteo swainsoni*), white-tailed kite (*Elanus leucurus*), and other nesting birds (non-special-status) to occur within or adjacent to the project site. While the project site, including staging areas, contain some areas of ruderal grassland, this habitat is not suitable for any of the special-status plants with potential to occur within the LRDP plan area. Thus, the Project would have no impact on sensitive plant species.

There are several known nesting occurrences of Swainson's hawk within approximately 0.5 mile of the project site and staging areas: several approximately 0.1 mile south of the project site in the UC Davis Arboretum; and one approximately 0.2 mile west of the project site (CNDDB 2020). There is one known nesting occurrence of white-tailed kite within approximately 1.5 miles southwest of the project site and staging areas associated with the Putah Creek riparian corridor (CNDDB 2020). Potentially suitable nesting habitat for both species is present within and adjacent to the project site and staging areas in large trees. Additionally, the trees and some large shrubs within and adjacent to the project site and staging areas could provide suitable nesting habitat for other nesting birds including raptors (e.g., red-tailed hawk [Buteo jamaicensis], Cooper's hawk [Accipiter cooperi]), and songbirds.

Project activities, including tree removal, tree pruning, use of heavy equipment and vehicles, ground disturbing activities, staging, and construction crew activity within close proximity of nesting trees could result in a potentially significant impact on Swainson's hawk and white-tailed kite, if present. Mitigation Measure 3.5-4a (1 through 4) from the 2018 LRDP EIR shall be implemented as part of the project to prevent disturbance to active Swainson's hawk, white-tailed kite, and other raptor nests. Therefore, no new or substantially more severe impacts would occur.

The Project activities described above could also result in a potentially significant impact on other native nesting birds, if present. Mitigation Measure 3.5-6 (1 and 2) from the 2018 LRDP EIR would be implemented as part of the Project to prevent disturbance to non-special-status bird nests. Therefore, no new or substantially more severe impacts would occur.

b,c) As described in to 2018 LRDP Impact 3.5-9 (less than significant with mitigation), development under the 2018 LRDP could affect aquatic features by introducing sediments into Putah Creek or removing or damaging riparian vegetation. The project site is approximately 0.9 mile north of the riparian corridor along Putah Creek. The Project footprint is mostly developed and is surrounded by roads and other facilities within west campus. The project site does not contain riparian habitat or wetlands. Therefore, no new or substantially more severe impacts would occur and no mitigation would be required.

- d) As described in 2018 LRDP EIR Impact 3.5-10 (less than significant), the Putah Creek corridor, which is the southern boundary of the UC Davis west campus, is the principal corridor for the movement of native resident and migratory fish and wildlife through the area. It is the regional connection between the hills in western Yolo County and the Sacramento River. The project site is approximately 0.9 mile north of the Putah Creek corridor and its associated riparian habitat. Therefore, the Project would not interfere with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors or impede the use of native wildlife nursery sites. Therefore, no new or substantially more severe impacts would occur and no mitigation would be required.
- e) 2018 LRDP EIR Impact 3.5-11 (less than significant with mitigation) determined that implementation of the 2018 LRDP could result in the removal of trees recognized to meet UC Davis standards for important trees. UC Davis standards identify "heritage" trees as healthy valley oak (*Quercus lobata*) trees with trunk diameters of 33 inches or greater at a height of 54 inches from the ground, and "specimen" trees as healthy trees or stands of trees that are of high value to the campus because of their size, species, extraordinary educational and research value, and other exceptional local importance. This impact was addressed in the Findings and Statement of Overriding Considerations adopted by The Regents in connection with its approval of the 2018 LRDP.

Approximately seven trees (e.g., gray pine, interior live oak, western redbud) are within the proposed footprint of project activities and would likely be removed during project construction. Additionally, several trees are located in close proximity to the project footprint, and ground disturbance, and use of heavy machinery could result in disturbance or damage to these trees or their root systems.

There are no mature valley oak trees within the project footprint; thus, no trees planned for removal qualify as heritage trees. While it is unlikely that trees planned for removal would be considered specimen trees, it is possible that some would be considered locally important. Mitigation Measure 3.5-11 (1 and 2) from the 2018 LRDP would be implemented as part of the Project to identify specimen trees on the project site and to relocate or replace these trees if removal is necessary. Therefore, no new or substantially more severe impacts would occur and no additional mitigation is required.

f) The Yolo Habitat Conservation Plan (HCP) and Natural Community Conservation Plan (NCCP) was approved on October 30, 2018. UC Davis is currently not a participant in the HCP/NCCP but is a trustee agency. As discussed in 2018 LRDP EIR Impact 3.5-12 (less than significant), CEQA does not require analysis of consistency with proposed plans, which was the status of the HCP/NCCP at the time. However, the 2018 LRDP EIR provided information on the Yolo County HCP/NCCP and the Solano County Multi-Species Habitat Conservation Plan because portions of the UC Davis campus are located within these plan areas. Impacts to species identified in these plans would be mitigated to less-than-significant levels through the adopted 2018 LRDP EIR mitigation measures. Therefore, the 2018 LRDP would not conflict with these proposed plans. The 2018 LRDP EIR mitigation measures would also be implemented for the Project, as discussed in criteria (a) above, to minimize impacts to special status species. Therefore, no new or substantially more severe impacts would occur.

4.5.6 Energy

Section 3.6 of the 2018 LRDP EIR addresses the energy impacts of campus growth under the 2018 LRDP by providing regulatory setting information, environmental setting information, analysis methodology, significance criteria, and a detailed environmental impact evaluation. Section 3.6 of Volume 2 of the 2018 LRDP EIR evaluates the potential impacts of the West Village Expansion.

ENVIRONMENTAL CHECKLIST AND DISCUSSION

Energy Would the Project		Impact Examined in 2018 LRDP EIR?	Do Proposed Changes Involve New or Substantially More Severe Significant Impacts?*	Do Any New Circumstances Involve New or Substantially More Severe Significant Impacts?	Do Mitigation Measures in the 2018 LRDP EIR Address/ Resolve Impacts, Including Impacts That Would Otherwise be New or Substantially More Severe?
a)	Result in unnecessary, inefficient, and wasteful use of energy?	Yes	No	No	N/A
b)	Conflict, or create an inconsistency, with any applicable plan, policy, or regulation adopted for the purpose of avoiding or mitigating environmental effects related to energy use?	Yes	No	No	N/A
*De	etermination is related to pre-mitigation conditions, includi	ing implemei	ntation of prev	iously adopted	mitigation.

a,b) Consistent with 2018 LRDP EIR Volume 2 Impact 3.6-1 (less than significant), the one-time energy expenditure required to construct the Project would be nonrecoverable. Most energy consumption would result from operation of heavy-duty construction equipment and on-road vehicle trips associated with commutes by construction workers and haul trucks trips. Idling of onsite heavy-duty diesel-powered equipment during construction would be limited to no more than five minutes in accordance with YSAQMD requirements. Further, onsite construction equipment may include alternatively-fueled vehicles (such as natural gas or electric) where feasible, and the selected construction contractors would use the best available engineering techniques, construction and design practices, and equipment operating procedures. The Project is an infrastructure project to reconfigure the existing interchange and would not introduce new structures that would be supplied by electricity or entail the combustion of natural gas. The Project-related energy use would not be considered inefficient, wasteful, or unnecessary. No new or substantially more severe impacts would occur and no mitigation would be required.

4.5.7 Geology, Soils, and Seismicity

Section 3.7 of Volume 1 of the 2018 LRDP EIR addresses the geology, soils, and seismicity effects of campus growth under the 2018 LRDP by providing regulatory setting information, environmental setting information, analysis methodology, significance criteria, and a detailed environmental impact evaluation. Section 3.7 of Volume 2 of the 2018 LRDP EIR evaluates the potential impacts of the West Village Expansion component.

ENVIRONMENTAL CHECKLIST AND DISCUSSION

Ge	Geology, Soils, & Seismicity		Do Proposed	Do Any New	Do Mitigation Measures in the 2018 LRDP EIR Address/ Resolve Impacts, Including Impacts That Would Otherwise be New or Substantially More Severe?
Would the Project		Impact Examined in 2018 LRDP EIR?	Changes Involve New or Substantially More Severe Significant Impacts?*	Circumstances Involve New or Substantially More Severe Significant Impacts?	
a)	Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
	i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	Yes	No	No	N/A
	ii) Strong seismic ground shaking?	Yes	No	No	N/A
	iii) Seismic-related ground failure, including liquefaction?	Yes	No	No	N/A
	iv) Landslides?	Yes	No	No	N/A
b)	Result in substantial soil erosion or the loss of topsoil?	Yes	No	No	Yes
c)	Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the Project, and potentially result in on- or offsite landslide, lateral spreading, subsidence, liquefaction or collapse?	Yes	No	No	N/A
d)	Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	Yes	No	No	N/A
e)	Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	Yes	No	No	N/A
f)	Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	Yes	No	No	N/A

Geology, Soils, & Seismicity Would the Project		Impact Examined in 2018 LRDP EIR?	Do Proposed Changes Involve New or Substantially More Severe Significant Impacts?*	Do Any New Circumstances Involve New or Substantially More Severe Significant Impacts?	Do Mitigation Measures in the 2018 LRDP EIR Address/ Resolve Impacts, Including Impacts That Would Otherwise be New or Substantially More Severe?
g)	Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	Yes	No	No	N/A
h)	Result in the loss of availability of a locally- important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	Yes	No	No	N/A

^{*}Determination is related to pre-mitigation conditions, including implementation of previously adopted mitigation.

- a,i) As stated on pages 3.7-8 and 3.7-15 of Volume 1 of the 2018 LRDP EIR, the campus, including the project site, is not located within an Alquist-Priolo Earthquake Fault Zone, and therefore is not subject to surface fault rupture. The nearest faults identified pursuant to the Alquist-Priolo Act are the Green Valley and Cordelia Faults, which are part of the San Andreas Fault System, approximately 35 miles southwest of the plan area (2018 LRDP EIR Table 3.7-2). Additionally, the nearest identified active fault zone is the Dunnigan Hills Fault zone located approximately 17 miles north of the plan area (Volume 1 of the 2018 LRDP EIR Table 3.7-2). This issue is not relevant to the Project.
- a,ii,iii) Volume 1 of the 2018 LRDP EIR concluded that compliance with the California Building Code (CBC) would reduce potential impacts associated with seismic activity, including the risk of liquefaction, to a less-than-significant level. A geotechnical report for the project site was completed for the Project by Geocon in December 2019 (Geocon 2019). The geotechnical report contains recommendations for seismic design parameters; cuts and excavations including stability, rippability, and grading factors; embankment fill preparation and fill placement in compliance with the CBC. Furthermore, based on the results of the geotechnical exploration, the predominately cohesive soil underlying the project site results in a low potential for liquefaction. Since the potential for liquefaction is low, the potential for lateral spreading and other secondary effects, such as seismic-induced settlement, is also low. Therefore, no new or substantially more severe impacts would occur and no mitigation would be required.
- a,iv) As stated on page 3.7-15 of Volume 1 of the 2018 LRDP EIR, the potential for landslides within the UC Davis campus and surrounding area is low because of the lack of significant slopes and acting gravitational forces. The project site is located on a topographically flat site with predominately cohesive soil on the west campus and central campus, and would not be subject to landslides. Embankments and fill slopes would be constructed at inclinations of 2H:1V or flatter and in accordance with Caltrans requirements, which possess adequate factor of safety against slope instability. Temporary excavations entered by workers would conform to Cal/OSHA requirements to minimize the likelihood of landslides and protect construction workers (Geocon 2019). Therefore, this issue is not relevant to the Project.
- b) As discussed in Volume 1 of the 2018 LRDP EIR Impact 3.7-4 (less than significant with Implementation of Mitigation Measure 3.7-4), construction of the project site could change the pattern of surface runoff or stormwater management such that areas that are susceptible to erosion are exposed to more runoff and experience increased rates of erosion. Soil underlying the project site is classified as having a medium expansion potential (Geocon 2019). To prevent

soil expansion, site storm drain runoff from the Project would be directed via surface drainage and/or underground pipes to existing water treatment facilities. The Project would also implement an erosion control plan which includes best management practices (BMPs) to reduce erosion and potential water pollution. Import fill material would be primarily granular with a "very low" to "low" expansion potential (i.e. an Expansion Index less than 50). Volume 1 of the 2018 LRDP EIR Impact 3.7-3 determined that construction-related erosion was less than significant because of compliance with the CBC provisions regarding soil compaction and sediment control during construction, as well as compliance with National Pollutant Discharge Elimination System (NPDES) permits requiring preparation of a Stormwater Pollution Prevention Plan (SWPPP). Therefore, no new or substantially more severe impacts would occur and no additional mitigation would be required.

- c,d)As discussed on page 3.7-20 of Volume 1 of the 2018 LRDP EIR, potential impacts related to unstable and expansive soils were less than significant because of building codes, regulations, and BMPs already in place. Campus policy requires compliance with the CBC and the University of California Seismic Safety Policy. The CBC requires that a geotechnical investigation that addresses the potential for liquefaction, lateral spreading, and other types of ground failure be performed to provide data for the architect and/or engineer to responsibly design the Project. As noted above under Checklist Item 4.1.7(a), a geotechnical design/materials report has been prepared for the Project. Results from the geotechnical report note the project site is underlain by predominately cohesive soil and the potential for liquefaction is low. Since the potential for liquefaction is low, the potential for lateral spreading and other secondary effects, such as seismic-induced settlement, is also low. Additionally, subsidence on campus is related to groundwater withdrawals from the shallow/intermediate aquifers. Groundwater was not encountered during exploratory borings performed to a maximum depth of 21.5 feet. Based on the California Department of Water Resources (DWR) Groundwater Information Center Interactive Map Application, Fall 2017 groundwater contours show that groundwater depth in the site vicinity ranges from approximately 50 to 60 feet. Groundwater extractions from the shallow/intermediate aguifer are not expected to increase with construction of the Project. The Project would be designed in compliance with the CBC, the University of California Seismic Safety Policy, and recommendations of site-specific geotechnical reports. Therefore, no new or substantially or more severe impacts would occur and no mitigation would be required.
- e) Although Volume 1 of the 2018 LRDP EIR Impact 3.7-7 (less than significant) addresses replacement or construction of new septic systems, that impact is related to a few areas of west campus, south campus, and Russell Ranch. The Project consists improvements to existing infrastructure and would not include septic tanks or alternative wastewater disposal systems. Therefore, no new or substantially more severe impacts would occur and no mitigation would be required.
- f) As discussed on page 3.7-8 of Volume 1 of the 2018 LRDP EIR and in the geotechnical report, the UC Davis campus, including the project site, is underlain by quaternary alluvium from the Holocene period that is generally less than 10,000 years old (Geocon 2019). The soils of the area are deep, unconsolidated, alluvial units with a low likelihood of producing fossils. As a result, impacts related to paleontological resources would not occur. Therefore, this issue is not relevant to the Project.
- g,h) As discussed on page 3.7-15 of Volume 1 of the 2018 LRDP EIR, the UC Davis campus, including the project site, is not located in an area of significant mineral deposits (specifically aggregate rock). Additionally, the project site is previously developed with existing infrastructure and is not indicated as a locally important mineral resource site. Therefore, this issue is not relevant to the Project.

4.5.8 Greenhouse Gas Emissions and Climate Change

Section 3.8 of the 2018 LRDP EIR explains the physical scientific basis of greenhouse gas (GHG) emissions and climate change, presents regulatory setting and significance criteria, describes the analysis methodology, presents the GHG sources and emissions associated with construction activities and campus operations, and evaluates the various types of adverse climate change-related effects on the environment. Section 3.8 of Volume 2 of the 2018 LRDP EIR evaluates the potential impacts of the West Village Expansion component.

ENVIRONMENTAL CHECKLIST AND DISCUSSION

	enhouse Gas Emissions uld the Project	Impact Examined in 2018 LRDP EIR?	Do Proposed Changes Involve New or Substantially More Severe Significant Impacts?*	Do Any New Circumstances Involve New or Substantially More Severe Significant Impacts?	Do Mitigation Measures in the 2018 LRDP EIR Address/ Resolve Impacts, Including Impacts That Would Otherwise be New or Substantially More Severe?
a)	Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	Yes	No	No	N/A
b)	Conflict with an applicable plan, policy, or regulation adopted for the purpose or reducing the emissions of greenhouse gases?	Yes	No	No	N/A
*De	termination is related to pre-mitigation conditions, includin	ng implemei	ntation of prev	iously adopted	mitigation.

a) 2018 LRDP EIR Impact 3.8-1 (less than significant) discloses that the 2018 LRDP would result in increased GHG emissions caused by increased construction activity, on-road VMT, building energy consumption, water consumption, wastewater and solid waste generation, and new stationary sources. However, implementation of the 2018 LRDP would reduce campus emissions 4 percent below 1990 levels by 2020 and 59 percent below 1990 levels by 2030. The 2018 LRDP EIR determined that both the 2020 and 2030 campus-wide GHG emission reductions would exceed the State's GHG targets pursuant to Senate Bill 32 of 2016 (i.e., 1990 levels by 2020 and 40 percent below 1990 levels by 2030) and would be consistent with the statewide GHG reduction goals, and would not considerably contribute to climate change.

Construction of the Project would result in GHG emissions from construction vehicle trips and equipment. The Project would comply with the 2018 UC Policy on Sustainable Practices and the 2019 Campus Design Guide. Although the Project would result in GHG emissions, through the initiatives to reduce campus-wide GHG emissions, including best construction practices, project emissions related to energy use would be reduced or offset over time. Therefore, no new or substantially more severe impacts would occur and no mitigation would be required.

b) As discussed in 2018 LRDP EIR Impact 3.8-2, implementation of the 2018 LRDP would achieve targets established in the UC Sustainable Practices Policy through anticipated planning and policy actions. The UC Davis Office of Sustainability prepares sustainability plans such as the Climate Action Plan (CAP), the Zero Waste Plan, and the Water Action Plan, which set the vision for campus action and outline strategies and efforts to enable the campus to achieve the UC Sustainable Practices Policy goals. Achievement of the UC Sustainable Practices Policy would meet or exceed statewide targets for 2030 and would not impede the ability to achieve

statewide 2050 targets, including continued implementation of Sacramento Area Council of Governments (SACOG) Metropolitan Transportation Plan/Sustainable Communities Strategy (MTP/SCS). The SACOG MTP/SCS for the Sacramento region proactively links land use, air quality, and transportation needs. The MTP/SCS implements smart growth principles and provides increased transportation options while reducing congestion, shortening commute times, and improving air quality (SACOG 2016). The modeling conducted for the LRDP includes SACOG's planned transportation projects under the 2035 MTP/SCS as part of the future condition analysis and would not conflict with or limit SACOG's ability to implement projects under the 2035 MTP/SCS (UC Davis 2018a).

As discussed in response a) above, the Project would not result in any significant short-term or long-term GHG contributions. Implementation of the UC Davis Climate Action Plan (CAP) describes and addresses policy and regulatory requirements of 1) the UC Sustainable Practices Policy, (2) Assembly Bill 32, including CARB's GHG Mandatory Reporting Program (3) the American College and University Presidents Climate Commitment, (4) CEQA, and (5) EPA reporting requirements. The Project also includes site and landscape designs that promote bicycle and pedestrian circulation while improving vehicle movements, thus reducing operational mobile source GHG emissions. Given this, the Project would not conflict with UC Sustainable Practices Policy, the UC Davis CAP, SACOG's 2035 MTP/SCS, or any other plan, policy, or regulation adopted for the purposes of reducing the emissions of GHGs. Therefore, no new or substantially more severe impacts would occur and no mitigation would be required.

4.5.9 Hazards and Hazardous Materials

Section 3.9 of Volume 1 of the 2018 LRDP EIR addresses the hazards and hazardous materials effects of campus growth under the 2018 LRDP by providing regulatory setting information, environmental setting information, analysis methodology, significance criteria, and a detailed environmental impact evaluation. Section 3.9 of Volume 2 of the 2018 LRDP EIR evaluates the potential impacts of the West Village Expansion component.

Haz	ards & Hazardous Materials		Do Proposed	Do Any New	Do Mitigation Measures in the 2018
Wo	uld the Project	Impact Examined in 2018 LRDP EIR?	Changes Involve New or Substantially More Severe Significant Impacts?*	Circumstances Involve New or Substantially More Severe Significant Impacts?	LRDP EIR Address/ Resolve Impacts, Including Impacts That Would Otherwise be New or Substantially More Severe?
a)	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	Yes	No	No	N/A
b)	Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	Yes	No	No	Yes
c)	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	Yes	No	No	N/A
d)	Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	Yes	No	No	N/A
e)	For a Project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the Project result in a safety hazard for people residing or working in the Project area?	Yes	No	No	N/A
f)	For a Project within the vicinity of a private airstrip, would the Project result in a safety hazard for people residing or working in the Project area?	Yes	No	No	N/A
g)	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	Yes	No	No	Yes
h)	Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands? termination is related to pre-mitigation conditions, including	Yes	No	No	N/A

- a) Volume 1 of the 2018 LRDP EIR Impact 3.9-1 (less than significant) concluded that adherence to existing regulations and compliance with the safety procedures mandated by applicable federal, state, university, and local laws and regulations would minimize the risks from the routine transportation, use, storage, or disposal of hazardous materials or hazardous wastes associated with construction and implementation of the LRDP to a less-than-significant level. The Project would comply with these regulations and safety procedures, and no new or substantially more severe impacts would occur and no mitigation would be required.
- b,d)The project site is not located on a contaminated site pursuant to Government Code Section 65962.5 (2018 LRDP EIR Volume 1 Impact 3.9-2). Two sites of potential concern were identified within the 2018 LRDP planning area: the UC Davis-United States Department of Agriculture Weed Control Lab and the Lab for Energy Related Health Research. Both of these sites are under the jurisdiction of state agencies and are currently under remediation and subject to development of Waste Discharge Requirements (WDRs), respectively. Activities involving the assessment, cleanup, and monitoring of these sites would continue regardless of approval of the SR 113/Hutchison Drive Interchange Improvements component of the 2018 LRDP.

Impact 3.9-2 in Volume 1 of the 2018 LRDP EIR (less than significant with mitigation) discusses how properties located adjacent to roadways may contain elevated concentrations of lead in exposed surface soils, and that soil can contain naturally occurring asbestos when ultramafic rocks containing asbestos are broken or crushed and asbestos fibers are released. The geotechnical investigation for the Project included soil samples from three borings for naturally occurring asbestos analysis and reported that the three samples contained chrysotile asbestos at concentrations ranging from less than 0.1 percent to 0.5 percent. Additionally, grading and excavation activities may also expose construction workers and the public to hazardous substances present in the soil or groundwater that are not anticipated based on information about existing site conditions.

With implementation of Mitigation Measures 3.9-2a and 3.9-2b of Volume 1 of the 2018 LRDP EIR, soil conditions on-site would be confirmed before development and any identified contamination would be appropriately remediated and a contingency plan would be established to describe the necessary actions that would be taken if evidence of contaminated soil or groundwater is encountered during construction, including cessation of work until the potential contamination is characterized and properly contained or remediated. Therefore, no new or substantially more severe impacts would occur and no additional mitigation is required.

- c) Consistent with Volume 1 of the 2018 LRDP EIR Impact 3.9-4 (less than significant), hazardous materials and waste could be handled within 0.25 mile of an existing or proposed school as a result of the Project. However, there are no schools within 0.25 mile of the SR 113/Hutchison Drive Interchange Improvements site. Additionally, the Project would not involve the operation of uses that would utilize hazardous or acutely hazardous materials beyond those normally associated with highways; therefore, this issue is not relevant to the Project.
- e) As shown in Volume 1 of the 2018 LRDP EIR Exhibits 3.9-2 and 3.9-3, the project site is not within any of the airport safety compatibility zones for the University Airport or the Yolo County Airport (2018 LRDP EIR Impact 3.9-5). New land uses associated with the 2018 LRDP, including the SR 113/Hutchison Drive Interchange Improvements component, would be consistent with airport land use plans and FAA guidance Therefore, no new or substantially more severe impacts would occur and no additional mitigation is required.

- f) As stated on page 3.9-29 of Volume 1 the 2018 LRDP EIR, the University Airport is a public use airport, not a private airstrip. No other private airport facilities are within the immediate vicinity of the campus. This issue is not relevant to this Project.
- Consistent with Volume 1 of the 2018 LRDP EIR Impact 3.9-6 (less than significant with mitigation), Project-related construction could result in short-term, temporary impacts to street traffic because of roadway improvements and potential extension of construction activities into the right-of-way. This could result in a reduction in the number of lanes or temporary closure of certain street segments. Any potential conflicts with emergency access or evacuation routes would interfere with implementation of the campus' Emergency Operations Plan. Preparation of a Construction Traffic Management Plan, as required by Mitigation Measure 3.9-6, would adequately address any potential conflicts with emergency access or evacuation routes during Project construction by communicating proposed lane and road closures with first responders and allowing first responders to plan accordingly to ensure that emergency response times and maintain adequate emergency access. The SR 113/Hutchison Drive interchange is owned by Caltrans and maintained by UC Davis under a maintenance agreement with Caltrans; and thus, the improvements will be subject to Caltrans review, Project development procedures, and approval that would include the implementation of work zone traffic controls consistent with Caltrans guidance and requirements. This would include the completion and implementation of a Transportation Management Plan to minimize traffic delays and improve mobility and safety that may result from lane restrictions or closures in a work zone. The Transportation Management Plan would be required to meet all the requirements detailed in the Caltrans Transportation Management Plan Guidelines. Additionally, emergency access would be subject to review by the responsible emergency service agencies, Caltrans, and the UC Davis Design Review Committee; thus, ensuring the Project would be designed to meet all applicable emergency access and design standards. Therefore, no new or substantially more severe impacts would occur and no mitigation would be required.
- h) As stated on page 3.9-29 of Volume 1 of the 2018 LRDP EIR, the project site is not located in or near a fire hazard severity zone established by the California Department of Forestry and Fire Protection. The potential for wildland fire is low. The Project would not change this; no new or substantially more severe impacts would occur and no mitigation would be required.

4.5.10 Hydrology and Water Quality

Section 3.10 Volume 1 of the 2018 LRDP EIR addresses the hydrology and water quality effects of campus growth under the 2018 LRDP by providing regulatory setting information, environmental setting information, analysis methodology, significance criteria, and a detailed environmental impact evaluation.

Hydrology & Water Quality Would the Project			Do Proposed Changes Involve New or Substantially More Severe Significant Impacts?*	Do Any New Circumstances Involve New or Substantially More Severe Significant Impacts?	Do Mitigation Measures in the 2018 LRDP EIR Address/ Resolve Impacts, Including Impacts That Would Otherwise be New or Substantially More Severe?
		Impact Examined in 2018 LRDP EIR?			
a)	Violate any water quality standards or waste discharge requirements?	Yes	No	No	Yes
b)	Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	Yes	No	No	N/A
c)	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or offsite?	Yes	No	No	Yes
d)	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite?	Yes	No	No	Yes
e)	Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	Yes	No	No	Yes
f)	Otherwise substantially degrade water quality?	Yes	No	No	Yes
g)	Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	Yes	No	No	N/A
h)	Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	Yes	No	No	N/A
i)	Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	Yes	No	No	N/A
j)	Inundation by seiche, tsunami, or mudflow? termination is related to pre-mitigation conditions, includin	Yes	No	No	N/A

a,f) Construction. Volume 1 of the 2018 LRDP EIR Impact 3.10-1 (less than significant) found that construction on campus would not contribute substantial loads of sediment or other pollutants to stormwater runoff. Construction on campus is covered under the NPDES statewide General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activity (General Permit). As part of the General Permit, campus construction projects managed by outside contractors and disturbing over one acre (including the Project) must implement Stormwater Pollution Prevention Plans (SWPPPs), which specify BMPs to reduce the contribution of sediments, spilled and leaked liquids from construction equipment, and other construction-related pollutants to stormwater runoff. The UC Davis campus is required to comply with the NPDES state-wide General Permit requirements. This regulatory framework provides adequate protection from stormwater contamination and provides water quality protection from construction activities on campus. The Project would result in grading and excavation, as well as use of construction lubricants, which could enter stormwater runoff. However, with adherence to BMPs and development of a SWPPP, these contributions would not be substantial. Therefore, no new or substantially more severe impacts would occur and no mitigation would be required.

Operation. As described in Volume 1 of the 2018 LRDP EIR Impact 3.10-2 (less than significant), new impervious surfaces created by development of the 2018 LRDP would result in new sources of stormwater runoff and contamination, as well as an increased risk of erosion and sedimentation. However, campus development, including the Project, is covered under the Phase II Small MS4 Permit, which requires management of long-term stormwater discharges and implementation of pollution protection measures. These management practices are enforced under the campus stormwater management program and ensure long-term protection related to stormwater pollution. The Project has been designed consistent with a drainage evaluation completed for the stormwater management system (2018 LRDP EIR Mitigation Measure 3.7-4). In addition, the project-specific geotechnical report recommends that the site drainage system include pollution prevention BMPs and/or treatment BMPs in accordance with Caltrans' Stormwater Quality Handbooks (Geocon 2019). Therefore, no new or substantially more severe impacts would occur and no additional mitigation would be required.

As described in Volume 1 of the 2018 LRDP EIR Impact 3.10-3 (less than significant), expansion of campus facilities under the 2018 LRDP would result in an increase in the amount of wastewater generated; however the types of chemical constituents in wastewater would remain approximately the same. The reconfiguration of existing interchange facilities would not contribute to this increase because it would not result in any change to the campus population. By continuing to adhere to the provisions of NPDES permit CA0077895, the wastewater treatment plant would continue to comply with WDRs which would reduce the impact to less than significant. Therefore, no new or substantially more severe impacts would occur and no mitigation would be required.

b) <u>Deep Aquifer.</u> As described in Volume 1 of the 2018 LRDP Impact 3.10-4 (less than significant), UC Davis will continue to draw domestic water from the six campus wells in the deep aquifer, during Term 91 conditions and to supplement water from the Woodland-Davis Clean Water Agency, to meet increased demand attributable to campus growth. The reconfiguration of existing interchange facilities would not contribute to this increase because it would not result in any change to the campus population. The Project is consistent with the land use designation and density identified in Volume 1 of the 2018 LRDP, and it was determined that campus use of groundwater supplies would not substantially affect the available supplies within or ability for recharge of the deep aquifer. Therefore, no new or substantially more severe impacts would occur and no mitigation would be required.

Shallow/Intermediate Aquifer. As described in Volume 1 of the 2018 LRDP EIR Impact 3.10-5 (less than significant), implementation of the 2018 LRDP is not expected to increase groundwater withdrawals from the shallow/intermediate aquifer; however, recharge infiltration patterns could be affected by the increase in development. The Project would result in approximately the same amount or a small reduction of impervious pavement because of the removal of the northbound and southbound diagonal on-ramps. LID strategies are included to prevent impacts to recharge infiltration patterns. Therefore, no new or substantially more severe impacts would occur and no mitigation would be required.

c,e)Volume 1 of the 2018 LRDP EIR Impact 3.10-6 (less than significant with mitigation) found that new development on campus would result in an overall increase in impervious surfaces and produce changes to site-specific stormwater infrastructure. The Project could contribute to this impact by reconfiguring the SR 113/Hutchison Drive Interchange Improvements with similar impervious structures and surfaces. Consistent with Mitigation Measure 3.10-6 of Volume 1 of the 2018 LRDP EIR (2018 LRDP EIR Mitigation Measure 3.7-4), which requires implementation of Project-level storm controls, the Project would implement a temporary water control plan during construction and an erosion control plan during construction and operation to capture and treat stormwater runoff from the impervious paving throughout the project site. Therefore, no new or substantially more severe impacts would occur and no additional mitigation would be required.

Water quality impacts related to stormwater runoff are evaluated in checklist item a, f), above.

- g,h)As described in Volume 1 of the 2018 LRDP EIR Impact 3.10-7 (less than significant with mitigation), the 2018 LRDP may involve the construction of additional academic and administrative facilities within the far western portion of west campus. Should that occur and in the event of a 100-year flood, there would be increased exposure to the risk of loss and flood damage. The project site is not located within a 100-year flood hazard area (see Volume 1 of the 2018 LRDP EIR, Exhibit 3.10-2, Designated 100-Year Flood Zones). The Project would not place any housing or structures within a 100-year flood hazard area. Therefore, no new or substantially more severe impacts would occur and no mitigation would be required.
- i) UC Davis is located within the inundation area of the Monticello Dam, such that up to two meters of water would be present in certain areas of campus for a period of approximately 24 hours. However, the dam structure is carefully managed by state and federal agencies and is capable of withstanding strong seismic shaking. As identified in Volume 1 of the 2018 LRDP EIR Impact 3.10-8, the risk of inundation of any portion of the campus, including the project site, from a failure of the Monticello Dam is low. The Project would not change the risk of flooding nor build new housing within an area subject to flooding. Therefore, no new or substantially more severe impacts would occur and no mitigation would be required.
- j) The campus is not subject to inundation by seiche, tsunami, or mudflow. The campus is generally flat and is not located near any large water bodies. Therefore, this issue is not relevant to the SR 113 / Hutchison Drive Interchange Improvements Project.

4.5.11 Land Use and Planning

Section 3.11 of Volume 1 of the 2018 LRDP EIR addresses the land use and planning effects of campus growth under the 2018 LRDP by providing regulatory setting information, environmental setting information, analysis methodology, significance criteria, and a detailed environmental impact evaluation. Section 3.11 of Volume 2 of the 2018 LRDP EIR evaluates the potential impacts of the West Village Expansion component.

	nd Use & Planning ould the Project	Impact Examined in 2018 LRDP EIR?	Do Proposed Changes Involve New or Substantially More Severe Significant Impacts?*	Do Any New Circumstances Involve New or Substantially More Severe Significant Impacts?	Do Mitigation Measures in the 2018 LRDP EIR Address/ Resolve Impacts, Including Impacts That Would Otherwise be New or Substantially More Severe?
a)	Physically divide an established community?	Yes	No	No	N/A
b)	Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the Project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	Yes	No	No	N/A
c)	Result in development of land uses that are substantially incompatible with existing adjacent land uses or with planned uses?	Yes	No	No	N/A

- a) There is no housing on the project site and the Project would have no potential to physically divide an established community. Rather, the Project includes the reconfiguration of an existing interchange to support bicycle and pedestrian movement between the west campus and central campus. Therefore, this issue is not relevant to the Project.
- b,c) The University of California holds jurisdiction over campus-related projects, and projects carried out by UC Davis would be consistent with the 2018 LRDP (Volume 1 of the 2018 LRDP EIR Impact 3.11-1). The project site is owned by Caltrans and maintained by UC Davis under a freeway maintenance agreement with Caltrans. A portion of the project site, including Hutchinson Drive, is located on the UC Davis campus and has a land use designation of streetscapes and roadways. As discussed on pages 3.16-9 and 3.16-13 of Volume 2 of the 2018 LRDP EIR, the SR 113/Hutchison Drive Interchange Improvements Project was included as WVE Mitigation Measure 3.16-4a and WVE Mitigation Measure 3.16-5. Implementation of the Project would improve operating conditions as related to traffic impacts at the site. The Project would involve transportation infrastructure uses similar to existing infrastructure; therefore, no new, substantial environmental impacts related to land use plans, policies, or zoning would occur. No new or substantially more severe impacts would occur and no mitigation would be required.

4.5.12 Noise

Section 3.12 of the 2018 LRDP EIR addresses the noise effects of campus growth under the 2018 LRDP by providing regulatory setting information, environmental setting information, analysis methodology, significance criteria, and a detailed environmental impact evaluation. Section 3.12 of Volume 2 of the 2018 LRDP EIR evaluates the potential impacts of the West Village Expansion component.

Noise Would the Project		Impact Examined in 2018 LRDP EIR	Do Proposed Changes Involve New or Substantially More Severe Significant Impacts?*	Do Any New Circumstances Involve New or Substantially More Severe Significant Impacts?	Do Mitigation Measures in the 2018 LRDP EIR Address/ Resolve Impacts, Including Impacts That Would Otherwise be New or Substantially More Severe?
a)	Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	Yes	No	No	Yes
b)	Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	Yes	No	No	N/A
c)	A substantial permanent increase in ambient noise levels in the Project vicinity above levels existing without the Project?	Yes	No	No	N/A
d)	A substantial temporary or periodic increase in ambient noise levels in the Project vicinity above levels existing without the Project?	Yes	No	No	N/A
e)	For a Project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the Project expose people residing or working in the Project area to excessive noise levels?	Yes	No	No	N/A
f)	For a Project within the vicinity of a private airstrip, would the Project expose people residing or working in the Project area to excessive noise levels?		No	No	N/A
f)	levels existing without the Project? For a Project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the Project expose people residing or working in the Project area to excessive noise levels? For a Project within the vicinity of a private airstrip, would the Project expose people residing or working	Yes	No No	No No	N/A

a,c,d) <u>Construction Noise</u>. 2018 LRDP EIR Volume 2 Impact 3.12-1 (less than significant with mitigation) determined that implementation of the West Village Expansion component would not result in construction-related noise impacts associated with the use of heavy-duty construction equipment. Daytime construction activity would not exceed applicable standards of 62.5 dBA Lmax at the nearest sensitive receptors located offsite within the City of Davis (1,350 feet from the project) which would not exceed the 86 dBA Lmax threshold established by the City. However, specific construction schedule and timing is unknown. If construction were to occur during the nighttime hours such that nearby on-campus receptors could experience sleep disturbance, construction could result in elevated noise levels at adjacent on-campus housing.

The Project includes the construction of new on and off ramps on SR 113 and new bicycle lanes. Implementation of WVE Mitigation Measure 3.12-1 (Reduce Construction Noise) would reduce temporary noise levels at existing on-campus receptors and ensure that construction activities are limited to the less-sensitive, daytime hours when people are typically not sleeping. Therefore, no new or substantially more severe impacts would occur and no additional mitigation would be required.

<u>Operational Noise – Stationary Noise Sources</u>. The reconfiguration of the existing interchange would not introduce new stationary sources of noise. The Project would not contribute to 2018 LRDP EIR Volume 2 Impact 3.12-2 (less than significant with mitigation), and no mitigation would be required.

<u>Operational Noise - Traffic Noise</u>. The Project would result in improved roadway operations and improved bicycle and pedestrian circulation. Decreased traffic and improved circulation would reduce traffic-generated noise. Therefore, the Project would not contribute to the 2018 LRDP EIR Volume 2 Impact 3.12-4 (less than significant), and no new or substantially more severe impacts would occur, and no mitigation would be required.

- b) As discussed on page 3.12-2 Volume 2 of the 2018 LRDP EIR, pile driving, blasting, or other substantial vibration-inducing construction equipment or techniques are not anticipated to be necessary during construction. The Project would not result in new or unique vibration levels that could be considered excessive during operation. The Project would not include the construction of residential land uses, nor would it require pile driving, blasting, or other substantial vibration-inducing construction equipment or techniques. The Project would require grading and paving; however, this is a typical construction activity and would not generate substantial levels of vibration or groundborne noise. Therefore, no new or substantially more severe impacts would occur and no mitigation would be required.
- e) As discussed on pages 3.12-4 and 3.12-5 of Volume 2 of the 2018 LRDP EIR, the University Airport is located approximately 0.4 miles southwest of the West Village Expansion site. The site is not located within the 55 A-weighted decibels (dBA) CNEL contour of the airport. Additionally, the West Village Expansion site is located approximately 7,500 feet away from an active Union Pacific Railroad (UPRR) line, which is above the 750-foot screening distance for railroad noise. The Project would not expose people to excessive noise levels associated with this public use airport because project site is located approximately 1 mile northeast of the University Airport and outside of the airport's existing noise contours. Moreover, the project is located approximately 5,200 feet from the UPRR line. Therefore, no new or substantially more severe impacts would occur and no mitigation would be required.
- f) The University Airport is a public use airport, not a private airstrip. No other private airport facilities are within the immediate vicinity of the campus. This issue is not relevant to this Project.

4.5.13 Population and Housing

Section 3.13 of Volume 1 of the 2018 LRDP EIR addresses the population and housing effects of campus growth under the 2018 LRDP by providing regulatory setting information, environmental setting information, analysis methodology, significance criteria, and a detailed environmental impact evaluation. Section 3.13 of Volume 2 of the 2018 LRDP EIR evaluates the potential impacts of the West Village Expansion component.

ENVIRONMENTAL CHECKLIST AND DISCUSSION

•	oulation & Housing uld the Project	Impact Examined in 2018 LRDP EIR	Do Proposed Changes Involve New or Substantially More Severe Significant Impacts?*	Do Any New Circumstances Involve New or Substantially More Severe Significant Impacts?	Do Mitigation Measures in the 2018 LRDP EIR Address/ Resolve Impacts, Including Impacts That Would Otherwise be New or Substantially More Severe?
a)	Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	Yes	No	No	N/A
b)	Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	Yes	No	No	N/A
c)	Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	Yes	No	No	N/A
d) *De	Create a demand for housing that cannot be accommodated by local jurisdictions? termination is related to pre-mitigation conditions, including	Yes	No	No	N/A

a,d) The direct and indirect inducement of population growth and housing demand caused by implementation of the 2018 LRDP is analyzed in Volume 1 of the 2018 LRDP EIR Impact 3.13-1 (significant and unavoidable). Implementation of the SR 113/Hutchison Drive Interchange Improvements Project would reconfigure the existing interchange and would not increase the demand for student housing and would not, induce additional students or employees on campus. Therefore, no new or substantially more severe impacts would occur and no mitigation

would be required.

b,c)No housing units exist on the project site. The Project would not displace any existing housing units or people. Therefore, this issue is not relevant to the Project.

4.5.14 Public Services

Section 3.14 of Volume 1 of the 2018 LRDP EIR addresses the public services effects of campus growth under the 2018 LRDP by providing regulatory setting information, environmental setting information, analysis methodology, significance criteria, and a detailed environmental impact evaluation. Section 3.14 of Volume 2 of the 2018 LRDP EIR evaluates the potential impacts of the West Village Expansion component.

ENVIRONMENTAL CHECKLIST AND DISCUSSION

	olic Services uld the Project	Impact Examined in 2018 LRDP EIR	Do Proposed Changes Involve New or Substantially More Severe Significant Impacts?*	Do Any New Circumstances Involve New or Substantially More Severe Significant Impacts?	Do Mitigation Measures in the 2018 LRDP EIR Address/ Resolve Impacts, Including Impacts That Would Otherwise be New or Substantially More Severe?
a)	Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services				
	i) Fire protection?	Yes	No	No	N/A
	ii) Police protection?	Yes	No	No	N/A
	iii) Schools?	Yes	No	No	N/A
	Iv) Other public facilities?	Yes	No	No	N/A
*De	termination is related to pre-mitigation conditions, includin	g impleme	ntation of prev	iously adopted	mitigation.

a) As discussed in Volume 1 of the 2018 LRDP EIR impacts 3.14-1 and 3.14-2 (less than significant), implementation of the 2018 LRDP could increase the demand for fire and police services. The Project would reconfigure an existing interchange and pedestrian paths and would not require additional staff or increase the number of employees or students anticipated in the 2018 LRDP. Therefore, the Project would not result in the need for additional fire or police protection facilities. No new or substantially more severe impacts would occur and no mitigation would be required.

As discussed in Volume 1 of the 2018 LRDP EIR Impact 3.14-3 (less than significant), the increase in campus population that is expected to occur under the 2018 LRDP would result in an increased demand for schools. However, the Project would not result in population growth that would contribute to this demand. Therefore, the Project would not result in the need for new or expanded school facilities. No new or substantially more severe impacts would occur and no mitigation would be required.

As discussed in Volume 1 of the 2018 LRDP EIR Impact 3.14-4 (less than significant), the increase in campus population that is expected to occur under the 2018 LRDP could result in an increased demand for public facilities such as libraries and parks; the Project would not result in population growth that would contribute to this demand. Therefore, the Project would not result in the need for new or expanded public facilities. No new or substantially more severe impacts would occur and no mitigation would be required.

4.5.15 Recreation

Section 3.15 of Volume 1 of the 2018 LRDP EIR addresses the environmental effects associated with modifying recreational resources to meet campus growth under the 2018 LRDP by providing regulatory setting information, environmental setting information, analysis methodology, significance criteria, and a detailed environmental impact evaluation. Section 3.15 of Volume 2 of the 2018 LRDP EIR evaluates the potential impacts of the West Village Expansion component.

	creation uld the Project	Impact Examined in 2018 LRDP EIR	Do Proposed Changes Involve New or Substantially More Severe Significant Impacts?*	Do Any New Circumstances Involve New or Substantially More Severe Significant Impacts?	Do Mitigation Measures in the 2018 LRDP EIR Address/ Resolve Impacts, Including Impacts That Would Otherwise be New or Substantially More Severe?
a)	Would the Project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	Yes	No	No	N/A
b)	Does the Project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	Yes	No	No	N/A
*De	termination is related to pre-mitigation conditions, including	g implemer	ntation of prev	iously adopted	mitigation.

- a) Volume 1 of the 2018 LRDP Impacts 3.15-1 and 3.15-2 (less than significant) found that the 2018 LRDP would have a less-than-significant increase in demand for recreation facilities. The Project would reconfigure the existing interchange and pedestrian paths and would not increase the student or employee population that was anticipated in the 2018 LRDP. The Project would not increase demand for on-campus recreation facilities. Therefore, no new or substantially more severe impacts would occur and no mitigation would be required.
- b) The project site plan includes pedestrian and bike facilities on the existing interchange that align with existing central campus pathways. Installation of these facilities would require grounddisturbance, which would result in typical construction-related impacts. These types of impacts are addressed throughout this environmental checklist (e.g., within Section 3.3, "Air Quality," Section 3.5, "Biological Resources," and Section 3.10, "Hydrology and Water Quality"); all of which are considered in the 2018 LRDP EIR. No new or substantially more severe impacts would occur and no new mitigation would be required.

4.5.16 Transportation, Circulation, and Parking

Section 3.16 of the 2018 LRDP EIR addresses the transportation, circulation, and parking effects of campus growth and development under the 2018 LRDP by providing regulatory setting information, environmental setting information, analysis methodology, significance criteria, and a detailed environmental impact evaluation. Section 3.16 of Volume 2 of the 2018 LRDP EIR evaluates the potential impacts of the West Village Expansion component. Mitigation Measures 3.16-4a and 3.16-5: Modify the SR 113/Hutchison Drive Interchange in Section 3.16 of Volume 2 of the 2018 LRDP EIR describe the required SR 113/Hutchison Drive interchange improvements.

TR/	TRANSPORTATION & TRAFFIC		Do Proposed	Do Any New	Do Mitigation Measures in the 2018
Wo	uld the Project	Impact Examined in 2018 LRDP EIR	Changes Involve New or Substantially More Severe Significant Impacts?*	Circumstances Involve New or Substantially More Severe Significant Impacts?	LRDP EIR Address/ Resolve Impacts, Including Impacts That Would Otherwise be New or Substantially More Severe?
a)	Conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	Yes	No	No	N/A
b)	Conflict with an applicable congestion management program, including, but not limited to level of service standards established by the county congestion management agency for designated roads and highways?	Yes	No	No	N/A
c)	Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	Yes	N/A	N/A	N/A
d)	Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	Yes	No	No	N/A
e)	Result in inadequate emergency access?	Yes	No	No	N/A
f)	Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	Yes	No	No	N/A
*De	termination is related to pre-mitigation conditions, including	(impleme	ntation of prev	iously adopted	mitigation.

a,b)The SR 113/Hutchison Drive Interchange Improvements component of the LRDP was described in Volume 2, West Village Expansion, as WVE Mitigation Measures 3.16-4a and 3.16-5: Modify the SR 113/Hutchison Drive Interchange, incorporating information from Volume 1 as relevant.

As described in WVE Mitigation Measures 3.16-4a and 3.16-5 of Volume 2 of the 2018 LRDP EIR, the proposed SR 113/Hutchison Drive interchange modifications are required to minimize the potential for conflicts between pedestrians, bicyclists, and vehicles and to provide dedicated space for each mode to the extent feasible. The mitigation measures stated that, at a minimum, the interchange modifications shall remove the existing channelized vehicular movements and square-up all on- and off-ramps with Hutchison Drive at a 90-degree angle. Specific ramps, as described in WVE Mitigation Measures 3.16-4a and 3.16-5 of Volume 2 of the 2018 LRDP EIR, shall include the following:

- northbound diagonal on-ramp;
- ■ northbound slip off-ramp;
- southbound diagonal on-ramp; and
- southbound loop on-ramp.

Additionally, WVE Mitigation Measures 3.16-4a and 3.16-5 in Volume 2 of the 2018 LRDP EIR state that new traffic signals or roundabouts shall be installed at the northbound and southbound ramp terminal intersections, sidewalks and bike lanes shall be provided on both sides of Hutchison Drive between Sage Street and Health Science Drive, and marked crosswalks shall be provided across all on- and off-ramps at the northbound and southbound ramp terminal intersections.

As stated in Volume 2 of the 2018 LRDP EIR, implementation of WVE Mitigation Measures 3.16-4a and 3.16-5, if successfully implemented, would reduce potential significant impacts associated with bicycle and pedestrian facilities by supporting bicycling and walking to and from the West Village Expansion site and minimizing conflicts between travel modes.

As described previously in this document under "SR 113/Hutchinson Drive Interchange Improvements Modifications," UC Davis has conducted additional engineering work to design the interchange improvements which has resulted in modifications to the SR 113/Hutchinson Drive interchange improvements identified in WVE Mitigation Measures 3.16-4a and 3.16-5 of Volume 2 of the 2018 LRDP EIR. However, the overall objectives of the project to improve bicycle and pedestrian safety and provide enhanced multi-modal connections have remained the same.

SB 743, passed in 2013, required the Governor's Office of Planning and Research to develop new CEQA Guidelines that address traffic metrics under CEQA. As stated in the legislation (and Public Resources Code [PRC] Section 21099[b][2] of CEQA), upon adoption of the new CEQA guidelines, "automobile delay, as described solely by LOS or similar measures of vehicular capacity or traffic congestion shall not be considered a significant impact on the environment pursuant to this division, except in locations specifically identified in the CEQA guidelines, if any." The Office of Administrative Law approved the updated CEQA Guidelines on December 28, 2018, and the changes are reflected in new CEQA Guidelines (Section 15064.3). Therefore, automobile delay no longer constitutes a significant impact on the environment under CEQA.

Pursuant to the new CEQA Guidelines vehicle miles traveled (VMT) will replace congestion as the metric for determining transportation impacts. As stated in the CEQA Guidelines Section 15064.3(c), beginning on July 1, 2020 the provisions of this section shall apply statewide. Thus, lead agencies have an opt-in period until July 1, 2020 to implement the updated guidelines now that they have been formally adopted.

Section 15064.3(b)(2) of the CEQA Guidelines addresses transportation projects. The Project consists of various roadway and ramp improvements to the SR 113/Hutchinson Drive

interchange; and thus, the criteria detailed in CEQA Guidelines Section 15064.3(b)(2) would apply to the Project. Section 15064.3(b)(2) describes that generally, a project that reduces or has no impact on VMT should be presumed to cause a less-than-significant transportation impact.

In support of CEQA Guidelines Section 15064.3, the Governor's Office of Planning and Research (OPR) has issued the Technical Advisory on Evaluating Transportation Impacts in CEQA (OPR 2018). The OPR Technical Advisory outlines recommended procedures and methods for evaluating transportation impacts for residential, office, retail, and transportation projects.

The OPR Technical Advisory notes that transportation projects which lead to additional vehicle travel on the roadway network, commonly referred to as "induced vehicle travel," would need to quantify the amount of additional vehicle travel in order assess transportation impacts. As stated in the OPR Technical Advisory, if a project would likely lead to a measurable and substantial increase in vehicle travel, the lead agency should conduct an analysis assessing the amount of vehicle travel the project will induce. Additionally, the OPR Technical Advisory lists the following project types that would generally lead to a measurable and substantial increase in vehicle travel:

Addition of through lanes on existing or new highways, including general purpose lanes, HOV lanes, peak period lanes, auxiliary lanes, or lanes through grade-separated interchanges.

The OPR Technical Advisory also states that projects that would not likely lead to a substantial or measurable increase in vehicle travel generally would not require an induced travel analysis. These include, but are not limited to the following project types:

- Rehabilitation, maintenance, replacement, safety, and repair projects designed to improve the condition of existing transportation assets (e.g., highways; roadways; bridges; culverts; Transportation Management System field elements such as cameras, message signs, detection, or signals; tunnels; transit systems; and assets that serve bicycle and pedestrian facilities) and that do not add additional motor vehicle capacity;
- Installation, removal, or reconfiguration of traffic lanes that are not for through traffic, such as left, right, and U-turn pockets, two-way left turn lanes, or emergency breakdown lanes that are not utilized as through lanes;
- Conversion of existing general-purpose lanes (including ramps) to managed lanes or transit lanes, or changing lane management in a manner that would not substantially increase vehicle travel; and
- ▲ Addition of new or enhanced bike or pedestrian facilities on existing streets/highways or within existing public rights-of-way.

Finally, the OPR Technical Advisory notes that transit and active transportation projects generally reduce VMT and therefore are presumed to cause a less-than-significant impact on transportation.

The Project includes various roadway and ramp improvements to the intersection of SR 113 and Hutchison Drive to control motorist turning movements that conflict with bicycle and pedestrian movements, thereby improving the interchange to enhance safety for bicyclists, pedestrians, and motorists; construct a network of bike paths/lanes to promote bicycle use between West Village and central campus; increase the capacity of the SR 113 on- and off-ramps; and improve multi-

modal connectivity. The proposed roadway improvements include widening the existing northbound and southbound loop on-ramps from one lane to two lanes, removing the existing northbound and southbound diagonal on-ramps, signalizing the two ramp intersections, and providing additional storage for left turn movements from Hutchison Drive to the SR 113 on-ramps. The widening of the existing northbound and southbound loop on-ramps relative to lane expansion would be off-set by the removal of the existing northbound and southbound diagonal on-ramps; thus, resulting in no net increase in lane-miles. Further, the widening of the existing northbound and southbound loop on-ramps and the proposed new left-turn storage along Hutchinson Drive to the SR 113 on-ramps would not add through lanes or serve through traffic. Therefore, based on OPR guidance, the Project would not result in a measurable increase in the number of automobile trips or VMT.

The proposed multi-modal connectivity improvements include a 14-foot cycle track facility connecting the West Village to the UC Davis main campus via Hutchison Drive, a 6-foot bike lane on the south side of the Hutchison Drive overcrossing for eastbound bicyclists, and 5-foot sidewalks on both sides of the Hutchison Drive overcrossing. These components of the project are considered active transportation improvements that support bicycle and pedestrian movement; and thus, based on OPR guidance, would likely reduce automobile trips and VMT.

Therefore, the SR 113/Hutchison Drive Interchange Improvements Project would not result in an increase in vehicle trips or VMT. No new significant impacts or substantially more severe impacts would occur and no additional mitigation is required.

- c) The SR 113/Hutchison Drive Interchange Improvements Project would result in no change to air traffic patterns. The UC Davis airport is the closest airport and the Project and would have no effect on the number of flights or the operation of the airport. This issue is not relevant to the SR 113/Hutchison Drive Interchange Improvements Project.
- d) The 2018 LRDP EIR does not address hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment) as it relates to the SR 113/Hutchison Drive Interchange Improvements Project. However, all roadway improvements would be subject to review by the UC Davis Design Review Committee and Caltrans. The Design Review Committee serves an advisory role to the Campus Architect, and recommendations from the committee are reported to the Chancellor's Committee on Campus Planning and Design, the body responsible for reviewing most campus-based projects.

The interchange is owned by Caltrans; and thus, in addition to UC Davis review and approval, any improvements will be subject to Caltrans review, project development procedures, and approval. Therefore, the UC Davis and Caltrans review and approval processes would ensure that the Project is designed and constructed in accordance with industry standards and all applicable design and safety standards. Thus, no new or substantially more severe impacts would occur and no additional mitigation is required.

e) 2018 LRDP EIR Impact 3.9-6 (less than significant with mitigation) identified that implementation of the 2018 LRDP could interfere with the campus' Emergency Operations Plan through construction-related road closures. The SR 113/Hutchison Drive interchange is owned by Caltrans; and thus, any improvements will be subject to Caltrans review, project development procedures, and approval which would include the implementation of work zone traffic controls consistent with Caltrans guidance and requirements. This would include the completion and implementation of a Transportation Management Plan to minimize traffic delays and improve mobility and safety that may result from lane restrictions or closures in a work zone. The Transportation Management Plan would be required to meet all the requirements detailed in the

Caltrans Transportation Management Plan Guidelines. Additionally, emergency access would be subject to review by the responsible emergency service agencies, Caltrans, and the UC Davis Design Review Committee; thus, ensuring the project would be designed to meet all applicable emergency access and design standards. Therefore, no new or substantially more severe impacts would occur and no mitigation would be required.

f) Impacts to Transit Service and Facilities: 2018 LRDP EIR Volume 2 Impact 3.16-3, "Impacts to transit service and facilities," did not specifically address the impact to transit related to the SR 113/Hutchison Drive Interchange Improvements Project.

However, as disclosed in 2018 LRDP EIR Impacts 3.16-3 (less than significant with mitigation), 3.16-4 (less than significant with mitigation), and 3.16-5 (less than significant with mitigation), implementation of the 2018 LRDP would increase automobile, transit, bicycle, and pedestrian trips to, from, and within the UC Davis campus, which would increase the competition for physical space between the modes to meet both operational and safety objectives related to transit. This could increase the risk of collisions. UC Davis is implementing improvements per Mitigation Measures 3.16-3, 3.16-4, and 3.16-5 to reduce potential significant impacts associated with transit service and facilities, pedestrian facilities, and bicycle facilities to a less than significant level by supporting transit, walking, and biking and minimizing conflicts between travel modes.

Additionally, as stated in the West Village Expansion Project Connectivity Improvements CEQA Findings, implementation of the project elements and required mitigation measures would not result in any new significant environmental impacts, will not increase the severity of significant impacts previously identified in the 2018 LRDP EIR, and will not cause any environmental effects not previously examined in the 2018 LRDP EIR.

The SR 113/Hutchison Drive Interchange Improvements Project would improve bicycle and pedestrian safety and provide enhanced multimodal connections. The Project would not increase population of students or employees and therefore would not increase transit ridership. Additionally, the Project does not include any proposed physical changes to existing transit service or facilities. Therefore, the Project would not interfere with the implementation of planned transit service or facilities identified in the City of Davis General Plan, the City of Davis Short Range Transit Plan, the Yolobus Short Range Transit Plan, or SACOG MTP/SCS. Additionally, the Project would not conflict with any adopted policies, plans, or programs regarding transit facilities, or otherwise decrease the performance of transit service. No new or substantially more severe transit impacts would occur and no additional mitigation would be required.

Impacts to Bicycle and Pedestrian Facilities: 2018 LRDP EIR Volume 2 Impact 3.16-4, "Impacts to bicycle facilities," did not specifically address the associated impacts related to the SR 113/Hutchison Drive Interchange Improvements Project. Similarly, 2018 LRDP EIR Volume 2 Impact 3.16-5, "Impacts to pedestrian facilities," did not specifically address the associated impacts related to the Project.

However, as disclosed in 2018 LRDP EIR Impacts 3.16-3 (less than significant with mitigation), 3.16-4 (less than significant with mitigation), and 3.16-5 (less than significant with mitigation), implementation of the 2018 LRDP would increase automobile, transit, bicycle, and pedestrian trips to, from, and within the UC Davis campus, which would increase the competition for physical space between the modes to meet both operational and safety objectives related to bicycle and pedestrian facilities. This could increase the risk of collisions. UC Davis is implementing improvements per Mitigation Measures 3.16-3, 3.16-4, and 3.16-5 to reduce

potential significant impacts associated with transit service and facilities, pedestrian facilities, and bicycle facilities to a less than significant level by supporting transit, walking, and biking and minimizing conflicts between travel modes.

Additionally, as stated in the West Village Expansion Project Connectivity Improvements CEQA Findings, implementation of the project elements and required mitigation measures would not result in any new significant environmental impacts, will not increase the severity of significant impacts previously identified in the 2018 LRDP EIR, and will not cause any environmental effects not previously examined in the 2018 LRDP EIR.

The SR 113/Hutchinson Drive interchange improvements identified in WVE Mitigation Measure 3.16-4a and 3.16-5 of Volume 2 of the 2018 LRDP EIR would reduce significant impacts associated with bicycle and pedestrian facilities by minimizing the potential for conflicts between pedestrians, bicyclists, and vehicles. Therefore, WVE Mitigation Measure 3.16-4a and 3.16-5 would improve bicycle safety through the provision of enhanced multi-modal connections.

The multi-modal connectivity improvements of the Project include providing a 14-foot cycle track facility connecting the West Village to the UC Davis main campus via Hutchison, a 6-foot bike lane on the south side of the Hutchison Drive overcrossing for eastbound bicyclists, and 5-foot sidewalks on both sides of the Hutchison Drive overcrossing. Additionally, the two ramp intersections would be signalized and pedestrian crossings would be included. The *Traffic Engineering Performance* Assessment for the project determined that the Project would improve pedestrian and bicycle circulation (Fehr & Peers 2019). Therefore, consistent with WVE Mitigation Measure 3.16-4a and 3.16-5 of Volume 2 of the 2018 LRDP EIR, the Project would result in a beneficial impact to bicycle and pedestrian facilities by providing improved connectivity, safety, and facilities. Therefore, no new or substantially more severe impacts would occur and no additional mitigation would be required.

4.5.17 Utilities and Service Systems

Section 3.17 of Volume 1 of the 2018 LRDP EIR addresses the effects of campus growth on utility systems under the 2018 LRDP by providing regulatory setting information, environmental setting information, analysis methodology, significance criteria, and a detailed environmental impact evaluation. Section 3.17 of Volume 2 of the 2018 LRDP EIR evaluates the potential impacts of the West Village Expansion component.

UTILITIES & SERVICE SYSTEMS Would the Project			Do Proposed	Do Any New	Do Mitigation Measures in the 2018	
		Impact Examined in 2018 LRDP EIR	Changes Involve New or Substantially More Severe Significant Impacts?*	Circumstances Involve New or Substantially More Severe Significant Impacts?	LRDP EIR Address/ Resolve Impacts, Including Impacts That Would Otherwise be New or Substantially More Severe?	
a)	Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	Yes	No	No	N/A	
b)	Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	Yes	No	No	N/A	
c)	Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	Yes	No	No	Yes	
d)	Have sufficient water supplies available to serve the Project from existing entitlements and resources, or are new or expanded entitlements needed?	Yes	No	No	N/A	
e)	Result in a determination by the wastewater treatment provider which serves or may serve the Project that it has adequate capacity to serve the project's projected demand in addition to the providers existing commitments?	Yes	No	No	N/A	
f)	Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	Yes	No	No	N/A	
g)	Comply with federal, state, and local statutes and regulations related to solid waste?	Yes	No	No	N/A	
h)	Require or result in the construction or expansion of electrical, natural gas, chilled water, or steam facilities, which would cause significant environmental impacts?	Yes	No	No	N/A	
i)	Require or result in the construction or expansion of telecommunication facilities, which would cause significant environmental impacts?	No	N/A	N/A	N/A	
*De	termination is related to pre-mitigation conditions, including	g implemer	ntation of prev	iously adopted	mitigation.	

- a,e)As described in Volume 1 of the 2018 LRDP Impact 3.17-2 (less than significant), UC Davis has capacity to provide sufficient wastewater treatment to serve the campus with implementation of the 2018 LRDP, which includes the West Village Expansion. The SR 113/Hutchison Drive Interchange Improvements would not require additional or expanded facilities; no new or substantially more severe impacts would occur and no mitigation would be required.
- b,c) Consistent with Impact 3.17-3 of Volume 1 of the 2018 LRDP EIR, reconfiguration of the SR 113/Hutchison Drive intersection would not increase the amount of wastewater runoff generated in the immediate area. The Project would implement a temporary water pollution control plan for construction and an erosion control plan to capture, infiltrate, and offset increases in stormwater runoff generated during construction and operation-related activities. The Project would connect to the existing wastewater collection system along SR 113 and Hutchinson Drive that currently serves the project site. As discussed in Impact 3.17-3 of Volume 1 of the 2018 LRDP EIR, projected wastewater flows would remain below the current design capacity of the UC Davis wastewater treatment plant and adequate capacity would be available within the wastewater collection system to serve the Project. New or expanded stormwater facilities or a wastewater treatment plant would not be necessary.

Construction-related activities and installation of the project-specific inlets would require ground-disturbance, which would result in typical construction-related impacts. These types of impacts are addressed throughout this environmental checklist (e.g., within 3.1.3, "Air Quality;" 3.1.5, "Biological Resources," 3.1.10, "Hydrology and Water Quality"); none of which would result in new or substantially more severe impacts and no new mitigation would be required.

- d) As described in Impact 3.17-1 (less than significant) of Volume 1 of the 2018 LRDP EIR, UC Davis has capacity to provide sufficient water supplies to serve the campus population's demand through 2030-2031. The Project would not change campus population and would not result in additional water use over what was previously analyzed in Volume 1 of the 2018 LRPD EIR. Therefore, no new or substantially more severe impacts would occur and no mitigation would be required.
- f) Consistent with the discussion under Impact 3.17-4 (less than significant) of Volume 1 of the 2018 LRDP EIR, there is sufficient capacity at Yolo County Landfill to handle the solid waste demands of UC Davis with implementation of the 2018 LRDP. The Project would reconfigure the existing interchange and would not generate new long-term sources of solid waste. Volume 1 of the 2018 LRDP EIR determined that Yolo County Central Landfill could accommodate any waste generated by implementation of the 2018 LRDP, which includes the West Village Expansion. Because of increased diversion rate requirements, landfilled quantities are anticipated to be substantially decreased by 2030-2031 (as described in 3.17.1 "Regulatory Setting" of Volume 1 of the 2018 LRDP EIR). Therefore, no new or substantially more severe impacts would occur and no mitigation would be required.
- g) Materials generated during the demolition phase of the Project would be separated into different categories for reuse, relocation or landfill disposal. Several existing light poles would be relocated to different areas of the project site. . Construction and reconfiguration of existing infrastructure would be preceded by abatement of hazardous materials such as lead and asbestos. The geotechnical investigation for the Project included soil samples from three borings for naturally occurring asbestos analysis and reported that the three samples contained chrysotile asbestos at concentrations ranging from less than 0.1 percent to 0.5 percent. Materials with this type of low concentration of asbestos can be sent to certain landfills that are certified to accept low levels of asbestos. The closest landfill that accepts asbestos contaminated material is Recology Hay Road Landfill in Vacaville, which is approximately 18

miles to the south of the project site. No new or substantially more severe impacts would occur and no mitigation would be required

- h) The project area is currently served by the existing Central Heating and Cooling Plant and existing lines for electricity and natural gas. Existing infrastructure would continue to serve the project during operation. Volume 1 of the 2018 LRDP EIR identified that campus development under the 2018 LRDP would require extension of electrical utilities as well as expansion of chilled water and steam infrastructure to serve specific projects and determined impacts would be less than significant (Volume 1 of the 2018 LRDP EIR Impacts 3.17-5 and 3.17-6 [less than significant]). Therefore, no new or substantially more severe impacts would occur and no mitigation would be required.
- i) The Project would not require connection to the campus telecommunications system. No additional capacity would be needed to serve the Project and no off-site construction would be required. Therefore, no new or substantially more severe impacts would occur and no mitigation would be required.

4.5.18 Conclusion

As described in Chapter 3 of this document, "Project Description," and Chapter 4, "Environmental Checklist for Supplemental Environmental Review," none of the conditions described in CEQA Guidelines Section 15162 calling for preparation of a subsequent document have occurred. As documented throughout the environmental checklist and discussion, changes to the SR 113/Hutchison Drive Interchange Improvements Project, which is required mitigation as identified in WVE Mitigation Measure 3.16-4a and 3.16-5 of Volume 2 of the 2018 LRDP EIR and any altered conditions since certification of the LRDP EIR in July 2018 would:

- ▲ not result in any new significant environmental effects, and
- not substantially increase the severity of previously identified significant effects.

In addition, no new information of substantial importance has arisen that shows that:

- ▲ the Project would have new significant effects,
- ▲ the Project would have substantially more severe effects,
- mitigation measures or alternatives previously found to be infeasible would in fact be feasible, or
- mitigation measures or alternatives that are considerably different from those analyzed in the EIR would substantially reduce one or more significant effects on the environment.

Therefore, the differences between the SR 113/Hutchison Drive Interchange Improvements component of the LRDP, as described in WVE Mitigation Measure 3.16-4a and 3.16-5 of Volume 2 of the certified 2018 LRDP EIR, and the intersection modifications now being considered constitute changes consistent with CEQA Guidelines Section 15164. Through this addendum, UC Davis has determined that no subsequent EIR or negative declaration is required for the SR 113/Hutchison Drive Interchange Improvements Project.

5 APPLICABLE 2018 LRDP EIR MITIGATION MEASURES

The following mitigation measures were adopted upon approval of the 2018 LRDP EIR and would be applicable to the SR 113/Hutchison Drive Interchange Improvements Project.

5.1 AESTHETICS

2018 LRDP Mitigation Measure 3.1-3b: Lighting fixtures.

UC Davis shall require all new outdoor lighting to utilize directional lighting methods with shielded and cutoff type light fixtures to minimize glare and upward directed lighting such that light spillover onto adjacent structures does not occur. Verification of inclusion in Project design shall be provided at the time of design review.

5.2 AIR QUALITY

2018 LRDP Mitigation Measure 3.3-1: Reduce construction-generated emissions of ROG, NO_X , and PM_{10} .

Land use development Project implemented under the 2018 LRDP shall require its prime construction contractor to implement the following measures:

- 1) Use construction equipment with engines rated at Tier 3 or better prior to 2025 and Tier 4 or better beginning in 2025.
- 2) Use no- or low-solids content (i.e., no- or low-VOC) architectural coatings with a maximum VOC content of 50 g/L.
- 3) Limit passenger vehicles (i.e., non-vendor and non-hauling vehicles) from being driven on extended unpaved portions of Project construction sites. UC Davis shall provide offsite paved parking and compliant site-transport arrangements for construction workers, as needed.
- 4) Water all active construction sites at least twice daily.
- 5) Plant vegetative ground cover in disturbed areas as soon as possible.
- 6) Apply soil stabilizers on unpaved roads and inactive construction areas (disturbed lands within construction Projects that are unused for at least four consecutive days).
- 7) Establish a 15 mile-per-hour speed limit for vehicles driving on unpaved portions of Project construction sites.

UC Davis shall ensure that the implementation of this mitigation measure is consistent with the UC Davis stormwater program and the California Stormwater Quality Association Stormwater BMP Handbook for New Development/Redevelopment and does not result in offsite runoff as a result of watering for dust control purposes.

OPR Mitigation Measure 3.3-2: Reduce emissions of ROG and NO_X from mobile sources. Implement 2018 LRDP Mitigation Measures 3.3-2.

2018 LRDP Mitigation Measure 3.3-2: Reduce emissions of ROG and NO_X from mobile sources.

Mobile emissions at 2018 LRDP implementation account for nearly 10 tons per year of ROG and NO_X , respectively, with most emissions coming from trucks with two or more axles, including buses. UC Davis shall implement measures the following measures to the extent feasible:

- Promote use of EV, carpool, transit vehicles to decrease emissions from passenger vehicles.
- Provide carpool only parking spaces at close, desired parking locations to provide a premium parking location for carpool users and increase carpool-only parking spaces to meet demand.
- 3) Conversion of Unitrans buses to electric or other clean fuel to reduce criteria air pollutant emissions,
- 4) Promote EV or other clean fuel for vendors, especially those using trucks, to reduce ROG and NO_x emissions.
- 5) Work with vendors, especially those using trucks, to reduce the number of vendor trips made to the 2018 LRDP area through trip chaining, reducing the number of shipments, or other methods.

WVE Mitigation Measure 3.3-3: Reduce short-term construction-generated TAC emissions. Implement 2018 LRDP Mitigation Measure 3.3-4.

2018 LRDP Mitigation Measure 3.3-4: Reduce short-term construction-generated TAC emissions.

UC Davis shall require construction activities under the 2018 LRDP to follow YSAQMD recommended mitigation measures for construction exhaust emissions. To ensure sensitive receptors are not exposed to substantial TAC concentrations, UC Davis shall require its prime construction contractor to implement the following measures prior to Project approval:

- 1) Locate operation of diesel-powered construction equipment as far away from sensitive receptors as possible;
- 2) Limit excess equipment idling to no more than 5 minutes;
- 3) Use construction equipment with engine ratings of Tier 3 or better (included in Mitigation Measure 3.3-1); and
- 4) Use electric, compressed natural gas, or other alternatively fueled construction equipment instead of the diesel counterparts, where available.

In addition, for any construction onsite located within 150 feet of a childcare center or park/recreation field, UC Davis shall schedule the use of heavy construction equipment to times when children are not present. Alternatively, UC Davis shall arrange for temporary relocation of childcare facilities to areas outside of a 150-foot buffer or temporarily close available park space within the 150-foot buffer during operation of heavy construction equipment.

5.3 CULTURAL RESOURCES

WVE Mitigation Measure 3.4-1: Identify and protect archaeological resources.

Implement 2018 LRDP Mitigation Measure 3.4-1a(1) and 2018 LRDP Mitigation Measure 3.4-1a(3). If the site is determined to contain a unique archaeological resource(s), implement 2018 LRDP Mitigation Measure 3.4-1b.

2018 LRDP Mitigation Measure 3.4-1a: Identify and protect unknown archaeological resources.

During Project-specific environmental review of development under the 2018 LRDP, the campus shall define each Project's area of effect for archaeological resources. The campus shall determine the potential for the Project to result in cultural resource impacts, based on the extent of ground disturbance and site modification anticipated for the proposed Project. The campus shall determine the level of archaeological investigation that is appropriate for the Project site and activity, as follows:

- Minimum: excavation less than 18 inches deep and less than 1,000 sf of disturbance (e.g., a trench for lawn irrigation, tree planting, etc.). Implement Mitigation Measure 3.4-1a(1).
- ▲ Moderate: excavation below 18 inches deep and/or over a large area on any site that has not been characterized as sensitive and is not suspected to be a likely location for archaeological resources. Implement Mitigation Measure 3.4-1a(1) and (2).
- ✓ Intensive: excavation below 18 inches and/or over a large area on any site that is within the zone of archaeological sensitivity identified in Exhibit 3.4-1, or that is adjacent to a recorded archaeological site. Implement Mitigation Measure 3.4-1a(1), (2), and (3).

UC Davis shall implement the following steps to identify and protect archaeological resources that may be present in the Project's area of effects:

- 1) For Project sites at all levels of investigation, contractor crews shall be required to attend a training session prior to the start of earth moving, regarding how to recognize archaeological sites and artifacts and what steps shall be taken to avoid impacts to those sites and artifacts. In addition, campus employees whose work routinely involves disturbing the soil shall be informed how to recognize evidence of potential archaeological sites and artifacts. Prior to disturbing the soil, contractors shall be notified that they are required to watch for potential archaeological sites and artifacts and to notify the UC Davis Office of Campus Planning and Environmental Stewardship if any are found. In the event of a find, the campus shall implement item (5), below.
- 2) For Project sites requiring a moderate or intensive level of investigation, a surface survey shall be conducted by a qualified archaeologist once the area of ground disturbance has been identified and prior to soil disturbing activities. For sites requiring moderate

investigation, in the event of a surface find, intensive investigation will be implemented, as per item (3), below. Irrespective of findings, the qualified archaeologist shall, in consultation with the UC Davis Office of Campus Planning and Environmental Stewardship, develop an archaeological monitoring plan to be implemented during the construction phase of the Project. If the Project site is located within the zone of archaeological sensitivity or it is recommended by the archaeologists, the campus shall notify the appropriate Native American tribe and extend an invitation for monitoring. The frequency and duration of monitoring shall be adjusted in accordance with survey results, the nature of construction activities, and results during the monitoring period. A written report of the results of the monitoring will be prepared and filed with the appropriate Information Center of the California Historical Resources Information System. In the event of a discovery, the campus shall implement item (5), below.

3) For Project sites requiring intensive investigation, irrespective of surface finds, the campus shall retain a qualified archaeologist to conduct a subsurface investigation of the Project site, to ascertain whether buried archaeological materials are present and, if so, the extent of the deposit relative to the Project's area of effects. If an archaeological deposit is discovered, the archaeologist will prepare a site record and a written report of the results of investigations and filed with the appropriate Information Center of the California Historical Resources Information System.

If it is determined that the resource extends into the Project's area of effects, the resource will be evaluated by a qualified archaeologist, who will determine whether it qualifies as a historical resource or a unique archaeological resource under the criteria of CEQA Guidelines § 15064.5. If the resource does not qualify, or if no resource is present within the Project's area of effects, this will be noted in the environmental document and no further mitigation is required unless there is a discovery during construction. In the event of a discovery item (5), below shall be implemented.

- 4) If archaeological material within the Project's area of effects is determined to qualify as an historical resource or a unique archaeological resource (as defined by CEQA), the UC Davis Office of Campus Planning and Environmental Stewardship shall consult with the qualified archaeologist to consider means of avoiding or reducing ground disturbance within the site boundaries, including minor modifications of building footprint, landscape modification, the placement of protective fill, the establishment of a preservation easement, or other means that will permit avoidance or substantial preservation in place of the resource. If avoidance or substantial preservation in place is not possible, the campus shall implement Mitigation Measure 3.4-1b.
- 5) If archaeological material is discovered during construction (whether or not an archaeologist is present), all soil disturbing work within 100 feet of the find shall cease. The UC Davis Office of Campus Planning and Environmental Stewardship shall contact a qualified archaeologist to provide and implement a plan for survey, subsurface investigation as needed to define the deposit, and assessment of the remainder of the site within the Project area to determine whether the resource is significant and would be affected by the Project. Mitigation Measure 3.4-1a, steps (3) and (4) shall be implemented.

2018 LRDP Mitigation Measure 3.4-1b: Protect known unique archaeological resources.

For an archaeological site that has been determined by a qualified archaeologist to qualify as a unique archaeological resource through the process set forth under Mitigation Measure 3.4-1a, and where it has been determined under Mitigation Measure 3.4-1a that avoidance or preservation in place is not feasible, a qualified archaeologist, in consultation with the UC Davis Office of Campus Planning and Environmental Stewardship, and Native American tribes as applicable, shall:

- 1) Prepare a research design and archaeological data recovery plan for the recovery that will capture those categories of data for which the site is significant, and implement the data recovery plan prior to or during development of the site.
- 2) Perform appropriate technical analyses, prepare a full written report and file it with the appropriate information center, and provide for the permanent curation of recovered materials.
- 3) If, in the opinion of the qualified archaeologist and in light of the data available, the significance of the site is such that data recovery cannot capture the values that qualify the site for inclusion on the CRHR, the UC Davis Office of Campus Planning and Environmental Stewardship shall reconsider project plans in light of the high value of the resource, and implement more substantial modifications to the proposed project that would allow the site to be preserved intact, such as project redesign, placement of fill, or project relocation or abandonment. If no such measures are feasible, the campus shall implement Mitigation Measure 3.4-1c.

5.4 BIOLOGICAL RESOURCES

2018 LRDP Mitigation Measure 3.5-4a: Avoidance of Swainson's hawk and other nesting raptors.

For any Projects implemented under the 2018 LRDP that would require the removal of mature trees, the following measures will be implemented prior to initiation of construction to avoid, minimize, and fully mitigate impacts to Swainson's hawk, as well as other special-status raptors:

- 1) Before tree removal occurs, a qualified biologist will determine whether it has been previously recorded or used as a Swainson's hawk or other special-status raptors nest tree. If it is not known to have supported Swainson's hawks or other special-status raptors in the past, the tree will be removed when no active nests are present, generally between September 2 and February 14 if feasible. If the tree to be removed is known to have supported nesting Swainson's hawk or other special-status raptors in the past, UC Davis will implement measures to prevent the potential the net loss of Swainson's hawk or other special-status raptors territories, which may include providing alternative nest trees or protected habitat. UC Davis will consult with CDFW prior to removal of the nest tree and obtain take authorization under Section 2081 of the Fish and Game Code if needed.
- 2) For construction activities, including tree removal, that begin between February 15 and September 1, qualified biologists will conduct preconstruction surveys for Swainson's hawk and other nesting raptors to identify active nests on and within 0.5 mile of the

Project site. The surveys will be conducted before the beginning of any construction activities between February 15 and September 1.

- 3) Impacts to nesting Swainson's hawks and other raptors will be avoided by establishing appropriate buffers around active nest sites identified during preconstruction raptor surveys. Project activity will not commence within the buffer areas until a qualified biologist has determined, in coordination with CDFW, that the young have fledged, the nest is no longer active, or that reducing the buffer would not likely result in nest abandonment. CDFW guidelines recommend implementation of 0.25-mile-wide buffer for Swainson's hawk and 500 feet for other raptors, but the size of the buffer may be adjusted if a qualified biologist and UC Davis, in consultation with CDFW, determine that such an adjustment would not be likely to adversely affect the nest. Monitoring of the nest by a qualified biologist during and after construction activities will be required if the activity has potential to adversely affect the nest.
- 4) Trees will not be removed during the breeding season for nesting raptors unless a survey by a qualified biologist verifies that there is not an active nest in the tree.

2018 LRDP Mitigation Measure 3.5-6: Tricolored blackbird avoidance.

With respect to any construction activities undertaken for a particular project under the 2018 LRDP, the following measures will be implemented to avoid or minimize loss of active tricolored blackbird or other bird nests:

- To minimize the potential for loss of tricolored blackbird or other bird nests, vegetation removal activities will commence during the nonbreeding season (September 1 - January 31). If all suitable nesting habitat is removed during the nonbreeding season, no further mitigation would be required.
- Prior to removal of any vegetation, or any ground-disturbing activities between February 1 and August 31, a qualified biologist will conduct preconstruction surveys for nests on any or vegetation slated for removal, as well as for potential tricolored blackbird nesting habitat. The surveys will be conducted no more than 14 days before construction commences. If no active nests or tricolored blackbird colonies are found during focused surveys, no further action under this measure will be required. If active nests are located during the preconstruction surveys, the biologist will notify CDFW. If necessary, modifications to the project design to avoid removal of occupied habitat while still achieving project objectives will be evaluated and implemented to the extent feasible. If avoidance is not feasible or conflicts with project objectives, construction will be prohibited within a minimum of 100 feet of the outer edge of the nesting colony to avoid disturbance until the nest colony is no longer active.

2018 LRDP Mitigation Measure 3.5-11: Tree surveys and tree removal mitigation.

Before a project is approved, UC Davis will perform a tree survey of the project site. The Office of Campus Planning and the Office of Environmental Stewardship and Design and Construction Management will provide input about tree classifications and will modify project design to avoid important trees if feasible. If a project cannot avoid an important tree, the following measures will apply:

- 1) If a project would necessitate removal of a Heritage Tree, replacement plantings of the same species will be provided by UC Davis at a ratio of 3:1 within two years of removal.
- 2) If a project would necessitate removal of a Specimen Tree, the project will relocate the tree if feasible, or will replace the tree with the same species or species of comparable value (relocation or replacement will occur within the project site if feasible).

5.5 GEOLOGY, SOILS, AND SEISMICITY

2018 LRDP Mitigation Measure 3.7-4: Manage stormwater flows to reduce soil erosion.

Prior to approval of individual Projects proposed under the 2018 LRDP, UC Davis shall conduct a drainage study in the vicinity of the site proposed for development to determine if the development could produce additional runoff that may exceed the capacity of campus stormwater infrastructure, cause localized ponding to worsen, or increase the potential for property damage from flooding. Recommendations identified in the drainage study shall be incorporated into Project design such that any projected increase in surface water runoff is detained/retained in accordance with applicable requirements and does not exceed current flow rates. Measures may include, but are not limited to, installation of detention/retention basins to capture and manage water, installation of water-retaining landscaping or green-roof features, modifications to existing stormwater capture/conveyance systems, and/or other measures at Project-level or campus-wide to capture and manage stormwater.

5.6 HAZARDS AND HAZARDOUS MATERIALS

2018 LRDP Mitigation Measure 3.9-2a: Site-specific investigation and work plan implementation.

Where initial investigations indicate the potential for contamination, UC Davis shall conduct soil sampling within the boundaries of the plan area prior to initiation of grading or other groundwork. This investigation will follow the American Society for Testing and Materials standards for preparation of a Phase II Environmental Site Assessment and/or other appropriate testing guidelines. If the results indicate that contamination exists at levels above regulatory action standards, then the site will be remediated in accordance with recommendations made by applicable regulatory agencies, including YCEHD, RWQCB, and DTSC. The agencies involved shall depend on the type and extent of contamination.

Based on the results and recommendations of the investigation described above, UC Davis shall prepare a work plan that identifies any necessary remediation activities, including excavation and removal of on-site contaminated soils, and redistribution of clean fill material within the plan area. The plan shall include measures that ensure the safe transport, use, and disposal of contaminated soil removed from the site.

2018 LRDP Mitigation Measure 3.9-2b: Hazardous materials contingency plan.

Prior to initiation of grading or other groundwork, UC Davis shall provide a hazardous materials contingency plan to Campus Safety Services and YCEHD, as appropriate. The plan will describe the necessary actions that would be taken if evidence of contaminated soil or groundwater is

encountered during construction. The contingency plan shall identify conditions that could indicate potential hazardous materials contamination, including soil discoloration, petroleum or chemical odors, and presence of underground storage tanks or buried building material.

If at any time during the course of construction, evidence of soil and/or groundwater contamination with hazardous material is encountered, UC Davis shall immediately halt construction and contact Campus Safety Services and YCEHD. Work shall not recommence until the discovery has been assessed/treated appropriately (through such mechanisms as soil or groundwater sampling and remediation if potentially hazardous materials are detected above threshold levels) to the satisfaction of YCEHD, RWQCB, and DTSC (as applicable).

The plan, and obligations to abide by and implement the plan, shall be incorporated into the construction and contract specifications of the Project.

2018 LRDP Mitigation Measure 3.9-6. Prepare and implement site-specific construction traffic management plans.

UC Davis shall prepare and implement site-specific construction traffic management plans for any construction effort that would require work within existing roadways. To the extent feasible, the campus shall maintain at least one unobstructed lane in both directions on campus roadways during construction activities. At any time only a single lane is available due to construction-related road closures, the campus shall provide a temporary traffic signal, signal carriers (i.e., flag persons), or other appropriate traffic controls to allow travel in both directions. If construction activities require the complete closure of a roadway, the campus shall provide appropriate signage indicating alternative routes. To ensure adequate access for emergency vehicles when construction projects would result in temporary lane or roadway closures, the campus shall inform emergency services, including the UC Davis Police Department, UC Davis Fire Department, and American Medical Response, of the closures and alternative travel routes.

5.7 NOISE

2018 LRDP Mitigation Measure 3.12-1: Reduce construction noise.

For all construction activities, UC Davis shall implement or incorporate the following noise reduction measures into construction specifications for contractor(s) implementation during Project construction:

- 1) Construction activity shall be limited to the daytime hours between 7:00 a.m. and 7:00 p.m. on weekdays and between 8:00 a.m. and 8:00 p.m. on weekends and holidays, where possible.
- 2) All construction equipment and equipment staging areas shall be located as far as possible from nearby noise-sensitive land uses, and/or located to the extent feasible such that existing or constructed noise attenuating features (e.g., temporary noise wall or blankets) block line-of-site between affected noise-sensitive land uses and construction staging areas.
- 3) All construction equipment shall be properly maintained and equipped with noise-reduction intake and exhaust mufflers and engine shrouds, in accordance with manufacturer recommendations. Equipment engine shrouds shall be closed during equipment operation.

- 4) Individual operations and techniques shall be replaced with quieter procedures (e.g., using welding instead of riveting, mixing concrete offsite instead of onsite) where feasible and consistent with building codes and other applicable laws and regulations.
- 5) Stationary noise sources such as generators or pumps shall be located 100 feet away or more from noise-sensitive land uses, as feasible.
- 6) Loud construction activity (i.e., construction activity such as jackhammering, concrete sawing, asphalt removal, and large-scale grading operations) shall not be scheduled during finals week and preferably during holidays, summer/winter break, Thanksgiving break, and spring break.
- 7) No less than one week prior to the start of construction activities at a particular location, notification shall be provided to academic, administrative, and residential uses located within 100 feet of the construction site.
- 8) When construction would occur within 100 feet of on-campus housing and may result in temporary noise levels in excess of 86 dBA L_{max} at the exterior of the adjacent housing structure, temporary noise barriers (e.g., noise-insulating blankets or temporary plywood structures) shall be erected that reduce construction-related noise levels to less than 86 dBA L_{max} at the receptor.
- 9) For any construction activity that must extend beyond the daytime hours of 7:00 a.m. and 7:00 p.m. on weekdays and between 8:00 a.m. and 8:00 p.m. on weekends and occur within 1,120 feet of a building where people sleep, UC Davis shall ensure that interior noise levels of 45 dBA L_{max} are not exceeded at any receiving land use by not exceeding 70 dBA L_{max} at the receiving land use property line. Typical residential structures with windows closed achieve a 25-30 dBA exterior-to-interior noise reduction (Caltrans 2002). Thus, using the lower end of this range, an exterior noise level of 70 dBA L_{max} would ensure interior noise levels do not result in an increased risk for sleep disturbance. To achieve this performance standard, the following measures shall be implemented:
 - a) Use of noise-reducing enclosures and techniques around stationary noise-generating equipment (e.g., concrete mixers, generators, compressors).
 - b) Installation of temporary noise curtains installed as close as possible to the boundary of the construction site within the direct line of sight path of the nearby sensitive receptor(s) and consist of durable, flexible composite material featuring a noise barrier layer bounded to 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.
 - c) Retain a qualified noise specialist to conduct noise monitoring to ensure that noise reduction measures are achieved the necessary reductions such that levels at the receiving land uses do not exceed exterior noise levels of 70 dBA L_{max}. Exceedances of noise standards shall result in immediate halt of construction until additional noise-reduction measures are implemented.

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